

Last updated: 2 July 2010

## **CERCERIS**

- Cerceris* Latreille, 1802b:367. Type species: *Philanthus ornatus* Fabricius, 1790 [= *Sphex rybyensis* Linnaeus, 1771], designated by Latreille, 1810:438.
- Nectanebus* Spinola, 1839:489. Type species: *Nectanebus fischeri* Spinola, 1839, junior secondary homonym of *Cerceris fischeri* Spinola, 1839 [= *Nectanebus histerisnicus* Spinola, 1839], designated by Pate, 1937c:42 (said to be by original designation). Synonymized with *Cerceris* Latreille, 1802, by R. Bohart and Menke, 1976:55.
- Diamma* Dahlbom, 1844:225. Type species: *Diamma spinolae* Dahlbom, 1844 [= *Cerceris binodis* Spinola, 1841], by monotypy. Junior homonym of *Diamma* Westwood, 1835.
- Didesmus* Dahlbom, 1845:502 Substitute name for *Diamma* Dahlbom, 1844.
- Apiratrix* Shestakov, 1923:101. Type species: *Cerceris rybyensis* (Linnaeus, 1771) [= *Sphex rybyensis* Linnaeus, 1771], by original designation. – *Apiratrix* Balthasar, 1972:387 and 397 (lapsus).
- Paracerceris* Brèthes, 1913b:127. Type species: *Paracerceris tridentifera* Brèthes, 1913 [= *Cerceris pollens* Schletterer, 1887], by monotypy.
- Apicerceris* Minkiewicz, 1934:253. Not available: type species not designated (Article 13.3 of the Code).
- Bucerceris* Minkiewicz, 1934:253. Type species: *Cerceris bupresticida* Dufour, 1841, by monotypy.
- Stercobata* Gussakovskij, 1935:445. Type species: *Cerceris bupresticida* Dufour, 1841, by monotypy. Synonymized with *Cerceris* by Pate, 1943c:2.
- Apicerceris* Pate, 1937c:8. Type species: *Sphex rybyensis* Linnaeus, 1771, by original designation. Validation of *Apicerceris* Minkiewicz, 1934.

Revisions: van der Vecht, 1964 (Java); Krombein, 1969b, 1974a (Melanesia); Sielfeld, 1971 (Chile); Evans, 1982a (Eastern Australia); Kazenas, 1984a (Kazakhstan and Central Asia, no key); Guichard, 1993a (Arabian Peninsula); Sk. Yamane and Tano, 1995:11 (Japan: Ryukyu Islands); K. Schmidt, 2000 (western Palearctic).

Keys: Shestakov, 1923 (subgenus *Apiratrix*); Tsuneki, 1968e (Australia); Alayo Dalmau, 1976:15 (Cuba); Tsuneki et al., 1992c (Philippines); Kazenas, 2001d (Kazakhstan and Central Asia).

Nest: Barth, 1910:119.

Prey: Pagden, 1934b (*Hingstoniola fimbriata*); Valentine, 1994 (Anthribidae in Madagascar, species of *Cerceris* unknown).

Origin of communal behavior: Willmer, 1985a (*arenaria*)

Size and nest defense: Mueller et al., 1992 (*fumipennis*).

Communal nesting: Evans and Hook, 1982a, b

Orientation flight: Zeil, 1993a, b.

Review of biology: Kazenas, 2001b:246.

### **1. *abac* Fritz and Mariluis**

*Cerceris abac* Fritz and Mariluis, 1976:100, ♀. Holotype: ♀, Argentina: Córdoba: La Granja (M. Fritz collection). – Amarante, 2002:57 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

### **2. *abacta* Shestakov**

*Cerceris abacta* Shestakov, 1915:13, ♀. Holotype or syntypes: ♀, Algeria: Aïn-Fezza (ZIN). – Giner Marí, 1941b:216 (in revision of North African *Cerceris*); de Beaumont, 1951f:346 (Algeria: Ain Fezzan, Biskra; redescription); R. Bohart and Menke, 1976:576 (listed); K. Schmidt, 2000:22 (in revision of Western Palearctic *Cerceris*).

### 3. *abatanensis* Reyes

*Cerceris abatanensis* Reyes, 1986:106, ♀, ♂. Holotype: ♀, Philippines: Luzon: Abatan 60 km S Bontoc (BISH). – Tsuneki et al., 1992c:48, 52 (in key), 67 (Philippines, redescription of ♂).

### 4. *abdita* Kazenas

*Cerceris abdita* Kazenas, 1984a:128, ♂. Holotype: ♂: Kazakhstan: 60 km E Kustanai (ZIN). – Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:118 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:138 (geographic distribution, collecting localities in Kazakhstan).

### 5. *abdominalis* (Fabricius)

*Philanthus abdominalis* Fabricius, 1804:306, sex not indicated. Syntypes: ♀, Morocco: Tanger (ZMK). – Thunberg, 1815b:287 (diagnostic characters), 290 (redescription). – W. Schulz, 1912:70 (Thunberg's specimens not preserved in his collection), 90 (redescription of Fabricius's only specimen); Giner Mari, 1941b:284 (original description copied, comments); de Beaumont, 1950c:318 (interpretation of species). – As *Cerceris abdominalis*: F. Smith, 1856:445 (new combination, in catalog of Hymenoptera in British Museum); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); de Beaumont, 1951b:177 (synonymy cited), 1951f:371 (Morocco; redescription), 1953g:123 (Morocco), 1957d:336 (recorded from Spain by Radoszkowski, 1870, otherwise from North Africa); van der Vecht, 1961a:65 (type material studied); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); R. Bohart and Menke, 1976:576 (listed); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:318 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:17 (in revision of Western Palearctic *Cerceris*).

*Cerceris hispanica* Radoszkowski, 1870:105, ♀, ♂, junior secondary homonym of *Cerceris hispanica* (Gmelin, 1790). Syntypes: Spain: Andalusia: no specific locality (Kraków). Synonymized with *Cerceris abdominalis* by de Beaumont, 1950c:319, 324. – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Shestakov, 1928:266 (as senior synonym of *Cerceris nigrocincta*); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris radoszkowskyi* Schletterer, 1887:423 (in revision of world *Cerceris*). Substitute name for *Cerceris hispanica* Radoszkowski, 1870. – Schletterer, 1887:500 (listed); Ed. Ed. André, 1889:277, 318 (in revision of Sphecidae of Europe and Algeria, as *radoszkowskii* on p. 318), 1891:29\* (bibliographic references); Mercet, 1914:445 (listed from Spain); Kohl, 1916:121 (specimens in O. Radoszkowski collection); von Schulthess, 1926b:211 (Morocco); Dollfuss, 1989:11 (type material in NHMW, as *radoszkowskii*).

*Cerceris ceballosi* Giner Mari, 1941b:278, ♀. Holotype or syntypes: ♀, Morocco: Laguna Guedira (MNCN). Synonymized with *Cerceris abdominalis* by de Beaumont, 1951f:371.

As *Cerceris nigrocincta*: Giner Mari, 1941a:62 (in revision of Spanish *Cerceris*), 1941b:278 (in revision of North African *Cerceris*), and 1943a:103 (in Sphecid Fauna of Spain), corrected to *Cerceris abdominalis* by de Beaumont, 1957d:336; Ceballos, 1956:370 (in catalog of Hymenoptera of Spain), present correction.

### 6. *aborlana* Tsuneki

*Cerceris aborlana* Tsuneki in Tsuneki et al., 1992c:77, ♀. Holotype: ♀, Philippines: Palawan: Aborlan (USNM). – Tsuneki et al., 1992c:46, 49 (in key); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### 7. *abuensis* R. Turner

*Cerceris abuensis* R. Turner, 1912e:807, ♀, ♂. Syntypes: India: Rajasthan: Mount Abu (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); Giner Mari, 1945c:850 (India: Maharashtra: Khandala); R. Bohart and Menke, 1976:576 (listed).

### 8. *acanthophila* Cockerell

*Cerceris acanthophila* Cockerell, 1897b:135, ♂ (as *acanthophilus*, incorrect original termination). Lectotype: ♂, USA: New Mexico: Deming (ANSP), designated by Cresson, 1928:48. – Ashmead, 1899d:296 (in checklist of North American Crabronidae, as *acanthophilus*); Cockerell, 1899a:142 (New Mexico, as *acanthophilus*); Viereck and Cockerell, 1904b:138 (in revision of New Mexico *Cerceris*); Banks, 1947:30 (in revision of western U.S. *Cer-*

*ceris*); Scullen in Muesebeck et al., 1951:1004 (in catalog of North American Hymenoptera); nec Scullen, 1960:75 and 1965b:355 (= *Cerceris cockerelli*), 1965b:355 (in revision of North American *Cerceris*); Krombein, 1967:414 (synonymy recorded); Scullen, 1972:17 (in revision of Mexican and Central American *Cerceris*); nec R. Bohart and Grissell, 1975:38 (= *Cerceris cockerelli*); R. Bohart and Menke, 1976:576 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:469 (listed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Hook, 1987:103 (nesting habits); Frommer, 1988:93 (California: Riverside County: Deep Canyon); Melo, 2000:100 (female associations for use of natal nest); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris chilopsidis* Viereck and Cockerell, 1904b:136, ♀. Holotype: ♀, USA: New Mexico: Rincon (ANSP). Synonymized with *Cerceris acanthophila* by Banks, 1947:30. – Cresson, 1928:48 (holotype in ANSP, as *chilopsides*); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera, as valid species); Scullen, 1965b:365 (in revision of North American *Cerceris*, as valid species); R. Bohart and Grissell, 1975:42 (in revision of North American Philanthinae, description of ♂); R. Bohart and Menke, 1976:578 (listed as valid species); Krombein, 1979b:1731 (in catalog of North American Hymenoptera, as valid species); G. Ferguson, 1983c:235 (synonymy with *Cerceris acanthophila* confirmed); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 9. *acolhua* de Saussure

*Cerceris acolhua* de Saussure, 1867, 90, ♂. Holotype or syntypes: ♂, Mexico: Chapultepec near Mexico City (NHMW). – Schletterer, 1887:485 (listed); Cameron, 1890a:124 (listed); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:68 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:576 (listed); G. Ferguson, 1984b:431 (illegal designation of lectotype: Article 72.4.1, 1984c:469 (listed); Dollfuss, 1989:8 (type material in NHMW); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 10. *acuta* Radoszkowski

*Cerceris acuta* Radoszkowski, 1877:54, ♀. Syntypes: ♀, Kazakhstan: Mount Karak near Bairakum (ZMMU). – Schletterer, 1887:464 (original description copied), 485 (listed); Ed. Ed. André, 1889:315 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); nec R. Turner, 1912e:489 (= *Cerceris nana*); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Shestakov, 1918a:122 (redescription); R. Bohart and Menke, 1976:576 (listed); Kazenas, 1978b:64, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:160 (revision); Islamov, 1986:521 (Uzbekistan: Surkhandarya and Tashkent Oblast's); Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:138 (geographic distribution, collecting localities in Kazakhstan).

### 11. *adae* R. Turner

*Cerceris adae* R. Turner, 1936:535, ♀, ♂. Syntypes: Western Australia: 10 mi SW Perth (BMNH). – Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:576 (listed); Cardale, 1985:296 (in catalog of Australian Sphecidae).

### 12. *adelpha* Kohl

*Cerceris adelpha* Kohl in Schletterer, 1887:447, ♀. Lectotype: ♀, Korea: no specific locality (Kraków), designated by Kohl, 1916:107 (Article 74.6). – Schletterer, 1887:485 (listed); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Kohl, 1916:107 (study of holotype); Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E); Tsuneki, 1961c:12, 18 (in key), 42 (Korea), 57 (China: Heilungkiang: Harbin), 69 (China: Nei Mongol: Apaka), 1967e:2 (China: Heilungkiang), 1971i:442 (Mongolia; discussion), 1971m:18 (China: Nei Mongol:

Apaka); R. Bohart and Menke, 1976:576 (listed); Kazenas, 1979d:77 (Russia: Primorskiy Kray; redescription), 85 (in key); Tsuneki, 1982b:12 (Korea), 18 (known from Korea); Nemkov, 1992b:250 (Russia: Far East: Khingan Nature Reserve); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:473, 479 (in key to Sphecidae of Russian Far East); Hua, 2006:277 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:144 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

### 13. *aemula* Arnold

*Cerceris aemula* Arnold, 1945:37, ♀, ♂. Syntypes: Madagascar: Bekily, Ivondro (MNHN). – Empey, 1969a:300 (listed); R. Bohart and Menke, 1976:576 (listed); Empey, 1983:163 (type examined, reference to holotype incorrect); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

### 14. *aemuloides* Leclercq

*Cerceris aemuloides* Leclercq, 1962b:209, ♀. Holotype: ♀, Madagascar: Rogez (MRAC). – R. Bohart and Menke, 1976:579 (listed); Empey, 1983:163 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

### 15. *aequalis* Provancher

*Cerceris aequalis* Provancher, 1888:417, ♀. Lectotype: ♀, USA: California: Los Angeles (USNM), designated by Gahan and Rohwer, 1917:335. – Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Banks, 1947:16 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1004 (in catalog of North American Hymenoptera); Scullen, 1965b:452 (in revision on North American *Cerceris* as *aequalis aequalis*); R. Bohart and Grissell, 1975:38 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:576 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:469 (listed).

*Cerceris aequalis idahoensis* Scullen, 1965b:454, ♀. Holotype: ♀, Idaho: Craig's Mountain (ANSP). Synonymized with *Cerceris aequalis* by G. Ferguson, 1984c:469. – Evans, 1970:501 (Wyoming: Jackson Hole); R. Bohart and Menke, 1976:576 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); Zack, 1984:40 (paratype in James Entomological Collection, Washington State University).

### 16. *aerata* Kazenas

*Cerceris aerata* Kazenas, 1972a:454, ♀ (as *aeratus*, incorrect original termination). Holotype: ♀, Kazakhstan: 20 km N Mount Talgar (ZIN). – **As *Cerceris aerata***: R. Bohart and Menke, 1976:576 (listed); Kazenas, 1978b:60 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:95 (redescription), 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:139 (geographic distribution, collecting localities in Kazakhstan), 2004b:111 (Kazakhstan: western Tien Shan); Yildirim and Ljubomirov, 2005:1801 (first record from Turkey: Erzurum: Şenkaya: Turnalı); Kazenas, 2008a:106 (South-eastern Kazakhstan: 20 km N Talgar); Ljubomirov and Yildirim, 2008:131 (in catalog of Crabronidae of Turkey).

### 17. *africanula* Brauns

*Cerceris africanula* Brauns, 1926:307, ♀, ♂. Lectotype: ♀, South Africa: Cape Province: Willowmore (TMP), designated by Empey, 1983:163. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:143 and 148 (in key); Empey, 1969a:300 (listed); R. Bohart and Menke, 1976:576 (listed).

### 18. *agnata* R. Turner

*Cerceris agnata* R. Turner, 1912e:493, ♀. Holotype or syntypes: ♀, Burma: Tenasserim:Thaung-yin Valley. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:576 (listed).

### 19. *alacris* Mickel

*Cerceris alacris* Mickel, 1918a:334, ♀. Holotype: ♀, USA: Nebraska: Mitchell (UNL). Synonymized with *Cerceris halone* by Scullen, 1951:1005. – Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); Scullen *in* Muesebeck et

al., 1951:1005 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 24 (paratype in UNL); Scullen, 1965b:483 (as new synonym of *Cerceris halone*); R. Bohart and Menke, 1976:581 (listed as synonym of *Cerceris halone*); G. Ferguson, 1984c:470 (raised species from synonymy).

## 20. *alamos* Scullen

*Cerceris alamos* Scullen, 1972:18, ♀, ♂. Holotype: ♀, Mexico: Sonora: 10 mi SE Alamos (CAS). – R. Bohart and Menke, 1976:576 (listed); G. Ferguson, 1984c:470 (listed); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

## 21. *alaope* Banks

*Cerceris alaope* Banks, 1912:22, ♀, ♂. Lectotype: ♂, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:225. – J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae: Sea Cliff); Brimley, 1938:447 (North Carolina: Raleigh); Scullen, 1942:188 (as new synonym of *Cerceris prominens*); R. Bohart and Menke, 1976:579 (as synonym of *Cerceris clypeata prominens*); Krombein, 1979b:1731 (in catalog of North American Hymenoptera, as synonym of *Cerceris clypeata prominens*). – G. Ferguson, 1984c:470 (listed).

*Cerceris banksi* Scullen, 1965b:461, ♀. Holotype: ♀, USA: Virginia: Falls Church (MCZ). Synonymized with *Cerceris alaope* by G. Ferguson, 1984c:470. – R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1730 (in catalog of North American Hymenoptera); Ahlstrom, 1995:113 (in checklist of insects of North Carolina).

## 22. *alastoroides* R. Turner

*Cerceris alastoroides* R. Turner, 1914a:619, ♀. Holotype: ♀, Australia: Northern Territory: Borrolola (BMNH). – Tsuneki, 1968e:4 (in key; as *alastroides*); R. Bohart and Menke, 1976:576 (listed); Cardale, 1985:296 (in catalog of Australian Sphecidae).

## 23. *albicincta* Klug

*Cerceris albicincta* Klug, 1845:[28], plate 47, fig. 10, ♂. Syntypes: ♂, Sudan: Ambukohl on Nile W Korti and Doebbe in Dongola (ZMHU). – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Magretti, 1884c:598 (Sudan: Kassala); Schletterer, 1887:373 (revision, description of ♀), 485 (listed); Ed. Ed. André, 1889:267 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:903 (Savigny, 1817, pl. X, Fig. 9 represents *albicincta*); Ed. André, 1891:27\* (bibliographic references); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Longstaff, 1911:125 (Sudan: Mogran); Giner Mari, 1941b:218 (in revision of North African *Cerceris*, description of ♂), 1945e:220 (Western Sahara, redescription of ♂); de Beaumont, 1951b:177 (interpretation of species), 1951f:328 (Sahara; redescription), 1953g:121 (Morocco: Goulmina); Balthasar, 1954b:280 (Palestine: Wadi el Kelt near Jericho); de Beaumont, 1956a:186 (Chad: Tibesti), 1958b:59 (Algeria: Tassili des Ajjer); de Beaumont and Bytinski-Salz, 1959:122 (citation of Balthasar, 1954); de Beaumont, 1965b:772 (Chad: Ennedi); Empey, 1969a:300 (listed); R. Bohart and Menke, 1976:576 (listed); Guichard, 1980:230 (Oman); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Guichard, 1993a:157 (Arabian Peninsula); Empey, 1983:163 (listed); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945); K. Schmidt, 2000:142 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia: Jeddah area), 233 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris syrkiti* Dahlbom, 1845:502, ♀ (as *Syrkiti*, incorrect original capitalization). Holotype or syntypes: ♀, Egypt or Sudan: Nubia: Syrkut (NRS). Synonymized with *Cerceris albicincta* by de Beaumont, 1950c:325. – F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:504 (listed); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); not listed by R. Bohart and Menke, 1976.

## 24. *albicolor* Shestakov

*Cerceris albicolor* Shestakov, 1918b:29, ♀. Holotype: ♀, Kazakhstan: 60 verstas (= 64 km) NW Uralsk, now Oral (ZIN). – Shestakov, 1923:104, 114 (in key to subgenus *Apiraptrix*, synonymy, distribution), 1927a:19 (Stalingrad

Oblast', now Volgograd), 20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); de Beaumont, 1967a:283 (Turkey); Kazenas, 1974:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan), 1978b:50, 55 (in key to Sphecidae of Kazakhstan and Central Asia); K. Schmidt, 2000:143 (resurrected to full species status, in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2005:1801 (Turkey: Erzurum: Aşkale; Kars: Kağızman); Ljubomirov and Yildirim, 2008:131 (in catalog of Crabronidae of Turkey). – **As *Cerceris lunata albicolor***: Pulawski, 1965c:565 (new status); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1984a:25 (redescription), 2001d:105, 109 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:148 (geographic distribution, collecting localities in Kazakhstan), 2004b:112 (Kazakhstan: western Tien Shan), 2007a:93 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: occurring in Bulgaria, Caucasus, Ukraine, European Russia, Asia Minor, and central Asia).

### 25. *albifrons* F. Smith

*Cerceris albifrons* F. Smith, 1856:449, ♂. Lectotype: ♂, Africa: no specific locality (BMNH), designated by Empey, 1983:163 (Article 1974b). – Schletterer, 1887:485 (listed); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Bingham, 1903a:67 (South Africa: Johannesburg); Arnold, 1931:184 (original description copied, description of ♀); Empey, 1969a:300 (listed); R. Bohart and Menke, 1976:576 (listed).

*Cerceris hypocritica* Brauns, 1926:315, ♀, ♂. Syntypes: South Africa: Cape Province: Willowmore (TMP). Synonymized with *Cerceris albifrons* by Empey, 1983:163. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae, as *hypocrita*), 1931:152 (correction to original description), 1942:24 (illustration of female gaster); Empey, 1969a:310 (listed); R. Bohart and Menke, 1976:582 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils).

As *Cerceris horus* (♂ only): Arnold, 1931:177, corrected to *Cerceris albifrons* by Empey, 1983:163.

### 26. *albispinosa* Arnold

*Cerceris albispinosa* Arnold, 1952:469, ♀. Holotype: ♀, Kenya: Olgasalic (BMNH). – Empey, 1969a:300 (listed); R. Bohart and Menke, 1976:576 (listed); Empey, 1983:163 (holotype examined).

### 27. *alboatra* Walker

*Cerceris alboatra* Walker, 1871:27, ♂. Syntypes: ♂, Egypt: Sinai Peninsula: Wadi Feiran (lost). – Schletterer, 1887:464 (original description copied), 485 (listed); Ed. André, 1889:340, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); Innes Bey, 1912:113 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Wadi Feiran); nec Mochi, 1939:187 (= *Cerceris tricolorata*); Guiglia, 1940a:284 (Libya: Beni Ulid, El-Hag); nec Honoré, 1941:150 (= *Cerceris tricolorata*); 1942b:231 (Libya); de Beaumont, 1951f:347 (Sinai, Israel; redescription); de Beaumont and Bytinski-Salz, 1959:122 (Israel: Ein Gedi); R. Bohart and Menke, 1976:576 (listed); Guichard, 1980:230 (Oman); Empey, 1983:164 (listed); Guichard, 1993a:158 (Arabian Peninsula); Roche and Zalut, 1994:117 (Egypt: Sinai Peninsula); K. Schmidt, 2000:24 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 233 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris zethiformis* Giordani Soika, 1942:201, ♂. Syntypes: ♂, Sudan: Singa (Univ. Torino). Synonymized with *Cerceris alboatra* by Empey, 1983:163. – Empey, 1969a:326 (type material examine, reference to holotype is incorrect); R. Bohart and Menke, 1976:589 (listed).

### 28. *albofasciata* (Rossi)

NOTE: The name *albofasciata* was incorrectly used for *Cerceris sabulosa* prior to de Beaumont, 1950c:319.

*Vespa albofasciata* Rossi, 1790:87, ♀ (as *albo-fasciata*, incorrect original hyphenation). Holotype or syntypes: ♀, Italy: Etruria, now Toscana: no specific locality (lost). – de Beaumont, 1950c:319 (interpretation of species). – **As *Crabro albofasciatus***: Rossi, 1792:138 (new combination, Italy: Toscana: Pisa area). – **As *Cerceris albofasciata***:

Vander Linden, 1829:118 (new combination, bibliographic references, Italy: Toscana, may be a variety of *Cerceris tricincta* Spinola); nec Dahlbom, 1845:499 (= *Cerceris sabulosa dahlbomi*); F. Smith, 1856:440 (in catalog of Hymenoptera in British Museum); nec A. Costa, 1867c:71 (= *Cerceris eryngii*); Kirchner, 1867:221 (in catalog of European Hymenoptera); nec A. Costa, 1869b:110 (= *Cerceris eryngii*); nec Radoszkowski, 1870:102 (= *Cerceris sabulosa*); nec A. Costa, 1872a:29 (= *Cerceris eryngii*); nec Radoszkowski, 1877:62 (= *Cerceris sabulosa* and *rybyensis*); nec Schletterer, 1887:383 (= *Cerceris sabulosa dahlbomi*); Schletterer, 1887:485 (listed); nec Ed. André, 1889:262 (= *Cerceris sabulosa*); nec Steck, 1890:168, 170 (= *Cerceris sabulosa*); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); nec Łoziński, 1920:121 (= *Cerceris sabulosa dahlbomi*); nec Lauterborn, 1925:355 (= *Cerceris sabulosa*); nec Friese, 1926:154 (= *Cerceris sabulosa*); nec Schmiedeknecht, 1930:699, 702 (= *Cerceris sabulosa*); nec Vorontsovskiy, 1930:66 (= *Cerceris sabulosa dahlbomi*); nec Kolosov, 1937:218 (= *Cerceris sabulosa*); nec Zavادل, Šusterka, and Bat'a, 1937:208 (= *Cerceris sabulosa*); de Beaumont, 1952a:76 (France, redescription), 1954e:87 (Italy: Lido di Venezia); Bajári, 1956a:85 (in catalog of Hungarian *Cerceris*, with list of localities); nec Ceballos, 1956:366 (= *Cerceris sabulosa*); Bajári, 1957a:33, 43 (in key to Hungarian Sphecidae); de Beaumont, 1959a:16 (Italy: Lido di Venezia); Noskiewicz and Puławski, 1960:75, 78 (in key to Polish Sphecidae, not yet found in Poland); Scobiola, 1960a:171 (Romania: several localities); nec Tsuneki, 1961c:9 (= *Cerceris albofasciata navigatrix*); Tsuneki, 1961c:10, 17, 25, 26 (in key); Tsuneki, 1961c:41 (Korea), 49 (China: Peking), 57 (China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka); Tano, 1964:38 (Japan: Kyushu: Yakushima Island); Tsuneki, 1965d:3 (nesting habits review; prey: Chrysomelidae), 28 (nesting habits), 1966a:22 (Japan); Gauss, 1967:551 (Germany: Baden-Württemberg: Kaiserstuhl); Scobiola-Palade, 1967b:40 (Romania); Tsuneki, 1967e:2 (China: Heilungkiang); Benedek, 1968:72 (Hungary, floral records); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Budești, Giurgiu, Jegălia, Măgurele, Turnu); Tano, 1968:34 (Japan); Benedek, 1969a:83 (Hungary; marshy meadow); Haneda, 1969:70 (Japan: Yamanashi Prefecture); Itami, 1969:48 (Japan: Niigata Prefecture); Romanova, 1969:133 (Russia: North Caucasus); Tsuneki, 1969e:27 (Japan); Zangheri, 1969:1700 (Italy: in catalog of flora and fauna of Romagna Region); Haneda, 1970:13 (Japan: Akita Prefecture); Scobiola-Palade, 1971:206 (in review of *Cerceris* of Romania); Tsuneki, 1971m:17 (China: Peking; Nei Mongol: Apaka); Balthasar, 1972:403 (in Sphecidae Fauna of Czechoslovakia); Kazenas, 1972b:125 (Kazakhstan); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman), 1972b:251 (Romania); Benedek, 1975:251 (Hungary: onion pollinator); Nambu, 1975b:73 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:576 (listed); Tsuneki, 1976d:293 (China: Heilungkiang); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:69, 70 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:196, 198 (in key to Sphecidae of European part of former USSR); Benedek, 1979:229 (Hungary: Bakony Hills); Kazenas, 1979d:84, 87 (in key); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, as *albo-fasciata*); Pagliano, 1980:126 (Italy: Veneto); Tsuneki, 1982g:65 (known from Ryukyu archipelago); Dollfuss, 1983a:77 (endangered in Niederösterreich, Austria), 78 (endangered in Burgenland, Austria), 1983b:24 (in catalog of Sphecidae of Austria); Józán, 1983:98 (Hungary); Kazenas, 1984a:187 (redescription); Józán, 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Józán, 1986:374 (Hungary: Kiskunság National Park); Dollfuss, 1987:24 (Austria); Pagliano, 1987:162 and 166 (Italy, in key), 1988:142 (Italy, revision); Dollfuss, 1988:31 (Austria: Niederösterreich: Oberweiden); Karsai, 1988:101 (Hungary: Kiskunság National Park); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pádr, 1990:68 (Czech Republic: Praha area); Pagliano, 1990:95 (in catalog of Italian Sphecidae); Chinin, 1991:111 (Russia: Samara Oblast'); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:219 (in key to Sphecidae of North and Central Europe); Negrisolo, 1991:323 (Italy: Udine Province); Józán, 1992c:290 (Hungary: Zselic Hills); Blagoveshchenskaya, 1994: 92 (Russia: Ul'yanovsk Oblast'); Dollfuss, 1994:100 (endangered in Austria); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:472, 477 (in key to Sphecidae of Russian Far East); Negrisolo,

1995a:22 (Italy: Veneto); Negrisolò *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Sk. Yamane and Tano, 1995:11 (Japan: Ryukyu Islands); Gusenleitner, 1996a:11 (Austria: Burgenland); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:318 (in Sphecidae Fauna of Western Europe); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Yamane, Iku-dome, and Terayama, 1999:546 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); K. Schmidt, 2000:28 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:120, 122 (in key to *Cerceris* of Kazakhstan and Central Asia), 249 (review of known biology); Shkuratov, 2001:17 (prey: *Cassida murraea* L.); Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus': no specific locality); Haneda and Inoue, 2003:50 (Japan: Fukui Prefecture: Katsumi in City of Obama); Kurokawa, 2003:61 (Japan: city of Fukui: Egami-chou); Ohl and Linde, 2003:151 (number of ovarioles); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae, in error); Suda, 2004:47 (Japan: Yamanashi Prefecture); Wiśniewski, 2004:52 and 63 (in checklist of Polish Sphecidae: reported from Kraków by Łoziński, 1920, certainly in error); Gusenleitner, 2005:1204 (Austria: Niedorösterreich: Lassee at 48°12'40"N 16°52'10"E); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:55 (Japan: Gifu Prefecture); Negoro, Haneda, and Tano, 2005:49 (Japan: Toyama Prefecture); Pagliano and Negrisolò, 2005:320 (in Sphecidae Fauna of Italy); Shorenko, 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Terayama and Tano, 2005:2, 4 (in key to Japanese *Cerceris*); Hua, 2006:277 (in list of Chinese insects, geographic distribution); Kazenas, 2007a:93 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Ohkusa, 2007:35 (Japan: central Honshu: Aichi Prefecture); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia), 234 (record of *Cerceris albofasciata* by Pádr, 1990, actually refers to *sabulosa dahlbomi*; first record from Czech Republic: Moravia: Pouzdřany, Šardice); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia); Okusa and Tajima, 2008:75 (Japan: central Honshu: Aichi Prefecture); Zettel, Zimmermann, Wiesbauer, and Schuh, 2008:167 (the only current locality in Austria is Erdpresshöhe in Marchfeld; prey: *Cassida denticollis* Suffrian, *C. nebulosa* Linnaeus, *C. rubiginosa* Müller, *C. vibex* Linnaeus, and *Hypocassida subferruginea* (Schrank)); Nemkov, 2009b:145 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Philanthus albofasciatus* Thunberg, 1815a:137, sex not indicated, junior secondary homonym of *Cerceris albofasciata* (Rossi, 1790), possibly a citation of the latter. Holotype or syntypes: ♀, origin unknown (Uppsala). Synonymized with *Cerceris albofasciata* (Rossi) by de Beaumont, 1950c:320. – Thunberg, 1815a:128 (diagnostic characters), 1815b:289 (diagnostic characters); Dalla Torre, 1897:482 (in catalog of world Hymenoptera). – **As *Cerceris albofasciata***: W. Schulz, 1912:70 (new combination, study of type specimen); de Beaumont, 1950c:320 (study of type specimen).

*Cerceris luctuosa* A. Costa, 18677c:89, ♀. Holotype: ♀, Italy: Piemonte: no specific locality (Napoli). Synonymized with *Cerceris albofasciata* by de Beaumont, 1950c:319 and 326. – Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia: vicinity of Pavia); Schletterer, 1887:416 (in revision of world *Cerceris*), 496 (listed); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige); Ed. André, 1889:286, 297 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); F. Morawitz, 1893b:420 (Uzbekistan: Pyandjikent); Medina, 1894b:262 (Spain: Sevilla); Sickmann, 1894:204 (China: Hopei Province: Tientsin); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Romania and Slovakia); W. Schulz, 1904b:93 (Ukraine: Kharkov; Caucasus: Yekaterinograd); Váγγελ, 1905:167 (Hungary); Móczár and Henter, 1907:205 (Hungary: Hatvan, Tatatóváros. Tiszaalpár; Romania: Caraş-Severin: Mehadia); Schmiedeknecht, 1907:240, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenop-



tera); Mercet, 1914:445 (listed from Spain); Kohl, 1916:116 (specimens in O. Radoszkowski collection); Noskiewicz, 1922b:231 (Poland: Podole Region: Sinków, now Ukraine); Roth, 1923b:143 (France: Drôme: Beaumont-les-Valence; prey: *Hispa testacea* L., a chrysomelid); Berland, 1925d:61 (in Sphecidae Fauna of France); Shestakov, 1927a:7 (Russia: Kursk Oblast'), 9 (Ukraine: Lubni area in Poltava Oblast'), 10 (Poltava Oblast'), 11 (Ukraine: Kherson Oblast'), 19 (Stalingrad Oblast', now Volgograd), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); A. Müller, 1930:181 (Bulgaria: Kaliakra); Schmiedeknecht, 1930:701, 704 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:64 (Russia: Orenburg Oblast'); Giordani Soika, 1932a:21 (Italy: Lido di Venezia; prey: *Cassida nobilis* L.), 1932b:129 (description of larva); Kolosov, 1934b:103 (prey: *Cassida equestris*, *nebulosa*, and *nobilis*); Zavadil, 1934:187 (Slovakia); Grandi, 1935a:110 (Italy); Maneval, 1935:75 (France: Tarn: Alban); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, 1937a:73 (eastern Slovakia); Zavadil, Šusterka, and Baťa, 1937:209 (in catalog of Sphecidae of Czechoslovakia); Giner Marí, 1941a:43 (in revision of Spanish *Cerceris*); Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E); Giner Marí, 1943a:99 (in Sphecidae Fauna of Spain); Guiglia, 1944b:15 (Italy); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Šnoflak in Zavadil and Šnoflak, 1948:90, 96 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1950c:326 (illegal designation of lectotype); Móczár, 1953:310 (Hungary); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956b:405, 408 (is a synonym of *Cerceris albofasciata*); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain).

*Cerceris luctuosa* A. Costa, 1869b:105, ♀. Objective synonym of *Cerceris luctuosa* A. Costa, 1867c:89.

*Cerceris navitatis* F. Smith, 1873a:195, ♀. Holotype or syntypes: ♀, Japan: Hakaodate (BMNH). Synonymized with *Cerceris albofasciata* by Tsuneki, 1961c:26. – Schletterer, 1887:475 (original description copied), 497 (listed, as *navitatis*); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Strand, 1913b:150 (Taiwan, redescription); Yasumatsu and Narisada, 1935:73 (China: Liaodang: Dairen, now Dalian); Yasumatsu, 1942c:109 (China: Beijing); Tsuneki, 1937:186 (nesting habits).

*Cerceris cribrata* Mocsáry, 1879:131, ♀, ♂. Syntypes: Hungary: Budapest, Jassenova, and Nagyvárad (TMB). Synonymized with *Cerceris luctuosa* by Kohl, 1888b:727. – Sajó, 1882:5 (Hungary); Chyzer, 1902:33 (Hungary).

As *Cerceris navitatis*: Costa, F. Smith, 1856, emendation or lapsus (citation after R. Bohart and Menke, 1976:576).

### **ssp. *navigatrix* Strand**

*Cerceris navigatrix*. Strand, 1913:161, ♀, ♂ (name proposed conditionally). Holotype: ♂, Taiwan: Taihorin (DEI). – Oehlke and Wudowenz, 1974:424 (holotype in DEI). – As *Cerceris navitatis navigatrix*: Giner Marí, 1943d:221 (new status, redescription). – As *Cerceris albofasciata navigatrix*: Tsuneki, 1970c:9 (new subspecific combination, Taiwan; as *navigatrix*); Haneda, 1972a:6 (Taiwan; as *navigatrix*); R. Bohart and Menke, 1976:576 (listed); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

As *Cerceris albofasciata*: Tsuneki, 1961c:10, 17, 25, 26 (in key), 41 (Korea), 49 (China: Peking), 57 (China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka, ca. 45°N, 116°E), corrected to *Cerceris albofasciata navigatrix* by Tsuneki, 1970c:9.

### **ssp. *oasicola* Tsuneki**

*Cerceris albofasciata oasicola* Tsuneki, 1971:433, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Ehingol Oasis (TMB). – R. Bohart and Menke, 1976:576 (listed); Wu and Zhou, 1996a:172 (in revision in Economic Insect Fauna of China, as *oasicola*); Li and He, 2004:1110 (in hymenopterous fauna of Zhejiang Province, China, as *cacicola*); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

## **29. *albolineata* (Cameron)**

*Trachypus albolineatus* Cameron, 1908a:279, ♀. Lectotype: ♀: Kenya: Mt. Kilimanjaro: Kibonoto (NRS), designated by Empey, 1974:101. – As *Cerceris albolineata*: Arnold, 1931:196 (new combination, revision, description of ♂); Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:576 (listed); Empey, 1983:164 (listed).

**30. *albopectoris* Empey**

*Cerceris albopectoris* Empey, 1973:16, ♂. Holotype: ♂, Yemen: Lodar, also spelled Lawdar (BMNH). – R. Bohart and Menke, 1976:576 (listed); Guichard, 1980:230 (Oman), 1993a:158 (Arabian Peninsula, description of ♀); Empey, 1983:164 (listed); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 233 (in catalog of Sphecidae of Saudi Arabia).

**31. *albopicta* F. Smith**

*Cerceris albopicta* F. Smith, 1873c:412, ♀, ♂. Syntypes: India: Bombay Presidency, now Maharashtra and Gujarat: no specific locality (BMNH). – Schletterer, 1887:485 (listed); Cameron, 1890b:248 (listed); Bingham, 1897:301 (listed); Dalla Torre, 1897:450 (in catalog of world Hymenoptera, as *albipicta*); R. Turner, 1912e:798 (in revision of British India species); R. Bohart and Menke, 1976:576 (listed, as *albipicta*); Kazenas, 2001d:106 (in key to *Cerceris* of Kazakhstan and Central Asia).

**32. *alcyone* Arnold**

*Cerceris alcyone* Arnold, 1951:114, ♂. Holotype: ♂, Ethiopia: Moggio (BMNH). – Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:164 (listed).

**33. *alexandrae* F. Morawitz**

*Cerceris alexandrae* F. Morawitz, 1889a:156, ♀ (as *Alexandrae*, incorrect original capitalization). Syntypes: ♀, China: Nei Mongoln: Tala-u-lju and Djin-Tasy (ZIN). – Schletterer, 1889b:1128 (redescription); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:577 (listed); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

**34. *amakosa* Brauns**

*Cerceris amakosa* Brauns, 1926:305, ♀, ♂. Lectotype: ♀, South Africa: North-West Province: Lichtenburg (TMP), designated by Empey, 1983:164. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1942:5 (recognition characters); Empey, 1969a:301 (listed), 1970:185 (Zaire: Garamba National Park); R. Bohart and Menke, 1976:577 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown); Guichard, 1980:230 (Oman); Gess, 1981:21 (South Africa: Hilton Farm 18 km WNW Grahamstown; nesting in sandy soils); Empey, 1983:164 (listed); Guichard, 1993a:162 (Arabian Peninsula); Gadallah and Assery, 2004a:233 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris vansoni* Arnold, 1935a:499 ♀, ♂ (as *van soni*, incorrect original division). Lectotype: ♀, Botswana: Ngami (TMP), designated by Empey, 1983:164. Synonymized with *Cerceris amakosa* by Empey, 1969a:301.

*Cerceris celaeno* Arnold, 1951:118, ♂. Holotype: ♂, Ethiopia: Moggio (BMNH). Synonymized with *Cerceris amakosa* by Empey, 1983:164. – Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:579 (listed).

*Cerceris amakosa* var. *luteofascialis* Giner Mari: Empey, 1969:327. Nomen nudum.

**35. *amamiensis* Tsuneki**

*Cerceris hortivaga amamiensis* Tsuneki, 1961c:30, ♀. Holotype: ♀, Japan: Ryukyu Islands: Amami-Oshima Islands: Nishinakama (originally K. Tsuneki coll., now Hyogo Mus.). – Tsuneki, 1962a:7 (Amami-Oshima Islands); R. Bohart and Menke, 1976:582 (listed); Tsuneki, 1982g:64 (known from the Ryukyu archipelago); Tano, 1994a: (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.). – **As *Cerceris amamiensis***: Sk. Yamane and Tano, 1995:11 (new status, Japan: Ryukyu Islands; translation into English of Haneda's description of ♂); Yamane, Ikudome, and Terayama, 1999:545 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:3, 5 (in key to Japanese *Cerceris*).

***ssp. geboharti* Tsuneki**

*Cerceris boharti* Tsuneki, 1968b:107, ♂, junior primary homonym of *Cerceris boharti* Scullen, 1965. Holotype: Japan: Okinawa: no specific locality (BISH).

*Cerceris geboharti* Tsuneki, 1969h:39. Substitute name for *Cerceris boharti* Tsuneki, 1968. – Tsuneki, 1982g:65 (known from the Ryukyu archipelago); R. Bohart and Menke, 1976:581 (listed). – **As *Cerceris amamiensis geboharti***: Sk. Yamane and Tano, 1995:16 (new status; Ryukyu Islands).

### **ssp. *tokunosimana* Tsuneki**

*Cerceris tokunosimana* Tsuneki, 1973a:7, ♂. Holotype: ♂, Ryukyus Islands: Tokunoshima Island: San (T. Nambu coll.). – R. Bohart and Menke, 1976:588 (listed); Tsuneki, 1982g:65 (known from the Ryukyu archipelago). – **As *Cerceris amamiensis tokunoshimana***: Sk. Yamane and Tano, 1995:11 (new status; Japan: Ryukyu Islands; description of ♀, as *tokunoshimana*).

### **36. *amathusia* de Beaumont**

*Cerceris amathusia* de Beaumont, 1958d:281, ♀, ♂. Holotype: ♀, Cyprus: Moni River (Lausanne). – R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:143 (in revision of Western Palearctic *Cerceris*).

### **37. *amatoria* Arnold**

*Cerceris amatoria* Arnold, 1931:173, ♀, ♂. Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Empey, 1983:164. – Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:577 (listed).

### **38. *andalgalensis* Fritz and Toro**

*Cerceris andalgalensis* Fritz and Toro, 1969:158, ♀. Holotype: ♀, Argentina: Catamarca: M. Fritz coll.). – R. Bohart and Menke, 1976:577 (listed); Fritz, 1993:17 (holotype in M. Fritz coll., species description dated 1969); Amaranter, 2002:57 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

### **39. *andersoni* R. Turner**

*Cerceris andersoni* R. Turner, 1918c:467, ♀. Holotype: ♀, Kenya: east side of forest of Aberdare Mts (BMNH). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:1188 (original description copied); Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:164 (listed).

### **40. *andina* Brèthes**

*Cerceris andina* Brèthes, 1910a:276, ♂. Holotype or syntypes: ♂, Argentina: Jujuy: Jujuy (MACN). – Schrottky, 1913a:229 (Argentina: Juyuy); Brèthes, 1920a:407 (Argentina); Fritz, 1968b:168 (specimens from Jujuy not found in MACN); R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (type material in MACN); Amaranter, 2002:57 (in catalog of Neotropical Crabronidae).

### **41. *andrei* Gussakovskij**

*Cerceris andrei* Gussakovskij, 1952:280, ♀, ♂. Syntypes: Tajikistan: Stalinabad, now Dushanbe, Kangurt (ZIN). – R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:53, 55 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:58 (redescription); Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan).

### **42. *angelica* Kazenas**

*Cerceris angelica* Kazenas, 1977b:432, ♀. Holotype: ♀, Kazakhstan: Panfilov area (ZIN). – Kazenas, 1978b:52 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:40 (redescription), 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Kazenas, 2008a:106 (Southeastern Kazakhstan: 20 km N Aydarly, 17 km NW Bakanas, 35-45 km E Chilik, near Dubun', 5 km SW village Kazakhstan, 8 km S Zharkent).

*Cerceris valentinae* Kazenas, 1978b:54 and 55, ♀, ♂. Syntypes: Central Asia: no specific locality. Synonymized with *Cerceris angelica* by Kazenas, 1984a:40.

**43. *angustata* F. Morawitz**

*Cerceris angustata* F. Morawitz, 1893b:418, ♀. Holotype: ♀, Tajikistan: Varzaminor 70 km E Samarkand (ZIN). – Dalla Torre, 1897:450 (in catalog of world Hymenoptera); Shestakov, 1916b:230 (Armenia: Ordubad; description of ♂), 1918a:124 (Tajikistan and Turkmenistan); de Beaumont, 1967a:284 (Turkey); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:56, 59 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:83 (redescription); K. Schmidt, 2000:25 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:110, 111 (in key to *Cerceris* of Kazakhstan and Central Asia); Yildirim and Ljubomirov, 2007:119 (Turkey: İçel: Aydıncık); Ljubomirov and Yildirim, 2008:132 (in catalog of Crabronidae of Turkey).

***ssp. herodias* K. Schmidt**

*Cerceris angustata herodias* K. Schmidt, 2000:26, ♀, ♂. Holotype: ♀, Israel: Wadi Quelet: St. Georg 5 km W Jericho (C. Schmid-Egger coll.).

**44. *angustifrons* Tsuneki**

*Cerceris angustifrons* Tsuneki, 1971:429, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Ekhingol oasis (TMB). – R. Bohart and Menke, 1976:577 (listed).

**45. *angustirostris* Shestakov**

*Cerceris angustirostris* Shestakov, 1918b:7, ♀. Syntypes: Kazakhstan: Lake Inder (ZIN). – Shestakov, 1927a:20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:63, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:194, 195 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:121 (redescription); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); K. Schmidt, 2000:44 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:53 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve).

**46. *annulata* (Rossi)**

*Vespa annulata* Rossi, 1790:88, sex not indicated, junior secondary homonym in *Crabro* of *Crabro annulatus* Fourcroy, 1785. Holotype or syntypes: Italy: Etruria, now Toscana: no specific locality (lost). – **As *Crabro annulatus***: Rossi, 1794:123 (new combination, redescription). – **As *Cerceris annulata***: Vander Linden, 1829:117 (new combination, bibliographic references, Italy: Toscana); Dahlbom, 1844:214 (in revision of Sphecidae and Pompilidae); F. Smith, 1856:440 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); de Beaumont, 1950c:320 (unrecognizable from the description); R. Bohart and Menke, 1976:577 (listed); Pagliano, 1988:171 (unrecognizable), 1990:96 (in catalog of Italian Sphecidae, as nomen dubium); Pagliano and Negrisola, 2005:489 (in Sphecid Fauna of Italy, as nomen dubium).

**47. *annuligera* Taschenberg**

*Cerceris annuligera* Taschenberg, 1875:394, ♀, ♂. Syntypes: Argentina: Mendoza: no specific locality (Halle). – Schletterer, 1887:486 (listed); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Jörgensen, 1912:287 (Argentina: Mendoza Province; floral records); Schrottky, 1913a:229 (Argentina: Catamarca, Chaco, Mendoza); R. Bohart and Menke, 1976:577 (listed); Fritz and Mariluis, 1976:101 (revision); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

*Cerceris diademata* Holmberg, 1903:480, ♀. Lectotype: ♀, Argentina: Chaco: no specific locality (originally MACN, now destroyed: Fritz, 1968b:163), designated by Fritz, 1968b:163 (Article 74.6). Synonymized with *Cerceris annuligera* by Schrottky, 1911:28.

**48. *ansa* Shestakov**

*Cerceris ansa* Shestakov, 1914a:98, ♀. Holotype or syntypes: ♀, Uzbekistan: Mynbulag (ZIN). – Shestakov, 1918a:124 (Uzbekistan: Myn-Bulag); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:60 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:102 (redescription), 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan), 2008a:106 (Southeastern Kazakhstan: 17 km NW Bakanas).

**49. *antennata* F. Morawitz**

*Cerceris antennata* F. Morawitz, 1890:598, ♂. Holotype: ♂, Turkmenistan: Küren-Dagh (ZIN). – Dalla Torre, 1897:450 (in catalog of world Hymenoptera); Shestakov, 1918a:124 (Turkmenistan); Kazenas, 1972b:131 (Kazakhstan: Taldy-Kurgan Oblast': vicinity of Basshiy in Ili River valley); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:60, 69 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:201 (redescription); Islamov, 1986:519 (Uzbekistan: Tashkent Oblast'); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119, 121 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:139 (geographic distribution, collecting localities in Kazakhstan), 2004b:111 (Kazakhstan: western Tien Shan), 2008a:106 (Southeastern Kazakhstan: 15 km S Bashi, Borandysu).

*Cerceris nursei* R. Turner, 1912e:512, ♀, ♂. Syntypes: Pakistan: Baluchistan: Quetta (BMNH). Synonymized with *Cerceris antennata* by Kazenas, 2000a:49. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:584 (listed).

*Cerceris virgata* Shestakov, 1915:10, ♀. Holotype or syntypes: ♀, Turkmenistan: Imam Baba (ZIN). Synonymized with *Cerceris antennata* by Kazenas, 1984a:102. – Shestakov, 1918a:162 (Turkmenistan: Imam Baba); R. Bohart and Menke, 1976:589 (listed).

**50. *anthicivora* Evans**

*Cerceris anthicivora* Evans 1982a:369, ♀. Holotype: Australia: Northern Territory: Elisabeth River 40 km S Darwin (ANIC). Paratypes: Australia: Queensland. – Evans and Hook, 1982b:160 (communal nesting); Cardale, 1985:296 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:296 (nesting habits), 1986b:1303 (prey: *Anthicus scutellatus* Lea, anthicid beetle); Naumann, 1998:186 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E).

**51. *antilope* Tsuneki**

*Cerceris antilope* Tsuneki, 1971:443, ♀, ♂. Holotype: ♀, Mongolia: Hovd Aymag: Somon Bulgan (TMB). – R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:64, 65 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:122 (redescription), 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:115, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), Kazenas, 2002a:140, 2002a:140 (geographic distribution, collecting localities in Kazakhstan) (geographic distribution, collecting localities in Kazakhstan).

**52. *antipodes* F. Smith**

*Cerceris antipodes* F. Smith, 1856:451, ♀, ♂. Syntypes: Australia: no specific locality (BMNH). – Schletterer, 1887:486 (listed); Froggatt, 1892:221 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); R. Turner, 1910b:422 (in key), 1912d:676 (in revision of Australian *Cerceris*); Tsuneki, 1968e:6 (in key); Evans and Matthews, 1970:155 (nesting habits); R. Bohart and Menke, 1976:577 (listed); Alcock, 1980a:223 (communal nesting); Evans, 1982a:356 (revision); Evans and Hook, 1982b:160 (communal nesting); Cardale, 1985:296 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:28 (nesting habits), 1986b:1300 (prey: mainly Chrysomelidae, but also Curculionidae, Scarabaeidae, and Dermestidae); Bernhardt, 1987:48 (visiting flowers of *Acacia*); McCorquodale, 1988b:93 (possible reasons for nest sharing), 1988c:401 (relatedness among nestmates); McCorquodale and Thomson, 1988:9 (nest shared with *Cerceris australis*);

McCorquodale, 1989a:267 (nest defense), 1989b:191 (nesting habits), 1989c:42 (nest sharing, nest switching, longevity, generations overlap); Melo, 2000:100 (female associations for use of natal nest, detailed review).

*Cerceris saeva* F. Smith, 1873c:414, ♀. Syntypes: ♀, Australia: Victoria: Lower Plenty, now Melbourne (BMNH). Synonymized with *Cerceris antipodes* by Evans, 1982:356. – Schletterer, 1887:501 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); R. Turner, 1910b:422 (in key), 1912:675 (in revision of Australian *Cerceris*); Tsuneki, 1968e:6 (in key; as *saeba*), 10 (Australia; additional description); R. Bohart and Menke, 1976:587 (listed).

*Cerceris brisbanensis* Cockerell, 1930:35, ♀. Syntypes: ♀, Australia: Queensland: Darra (Queensland Museum, Brisbane). Synonymized with *Cerceris antipodes* by Evans, 1982:356. – Tsuneki, 1968e:7 (in key); R. Bohart and Menke, 1976:578 (listed).

*Cerceris goodwini* Cockerell, 1930:35. Holotype: ♀, Australia: Queensland: Stanthorpe (Queensland Museum, Brisbane). Synonymized with *Cerceris antipodes* by Evans, 1982:356. – Tsuneki, 1968e:6 (in key); R. Bohart and Menke, 1976:587 (as questionable synonym of *Cerceris saeva*).

*Cerceris zieglerei* Rayment, 1947:256, ♀. Holotype: ♀, Australia: Victoria: Emerald (ANIC). Synonymized with *Cerceris antipodes* by Evans, 1982:356. – Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:589 (listed).

*Cerceris sculleni* Tsuneki, 1968e:15, ♀, ♂ (♂ = *Cerceris australis*). Holotype: ♀, Australia: New South Wales: no specific locality (AMNH). Synonymized with *Cerceris antipodes* by Evans, 1982:356. – Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:587 (listed).

### 53. *apakensis* Tsuneki

*Cerceris arenaria apakensis* Tsuneki, 1961c:65. ♂. Holotype: ♂, China: Nei Mongol: Apaka, ca. 45°N, 116°E (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:19 (key). – **As *Cerceris apakensis***: Tsuneki, 1971:434 (new status, Mongolia), 1971m:17 (China: Nei Mongol: Apaka); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1979d:89 (key); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:480 (in key to Sphecidae of Russian Far East); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

### 54. *apix* Fritz and Mariluis

*Cerceris apex* Fritz and Mariluis, 1979:34, [♀]. Lectotype: origin not indicated (M. Fritz coll.), designated by Fritz, 1993:17 (Article 74.6). – Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

### 55. *aquilina* F. Smith

*Cerceris aquilina* F. Smith, 1856:457, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Villa Nova, now Parintins (BMNH). – Schletterer, 1887:486 (listed); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:577 (listed); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

### 56. *arechavaletai* Brèthes

*Cerceris arechavaletai* Brèthes, 1909b:65, [♀] (as *Arechavaletai*, incorrect original capitalization). Holotype: ♀, origin unknown, probably Uruguay: no specific locality (Mus. Montevideo). – R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (type material in Museo de Montevideo); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

### 57. *arelate* Banks

*Cerceris arelate* Banks, 1912:18, ♀. Lectotype: ♀, USA: Virginia: Great Falls (MCZ), designated by G. Ferguson, 1983b:225 (Article 74.6). – Rohwer, 1916b:696 (New Hampshire and Virginia, probable in Connecticut); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Scullen, 1965b:495 (as *Cerceris nigrescens arelate*, new status; in revision of North American *Cerceris*); R. Bohart and Grissell, 1975:49 (as new synonym of *Cerceris nigrescens*); R. Bohart and Menke, 1976:577 (as new synonym of *Cerceris nigrescens* by R. Bohart); G. Ferguson, 1984c:470 (restored to

species status; diagnostic characters); Buck, 2004:27 (in checklist of Crabronidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:43, 48 (in key to eastern Canadian *Cerceris*).

*Cerceris nigrifula* Banks, 1915:402, ♂ (as *nigritulus*, incorrect original termination). Lectotype: ♂, USA: New York: Colden (MCZ), designated by G. Ferguson, 1983b:226 (Article 74.6). Synonymized with *Cerceris nigrescens arelate* by Scullen, 1965b:495. – J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae, as *nigritulus*); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera, as *nigritulus*).

*Cerceris crawfordi* Brimley, 1928:199, ♂. Holotype: ♂, USA: North Carolina: Raleigh (North Carolina Department of Agriculture). Synonymized with *Cerceris nigrescens arelate* by Scullen, 1965b:495. – Brimley, 1938:447 (North Carolina: Cruso, Raleigh); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).

As *Cerceris finitima*: Fennimore, 1982:253 (in Sphecid Fauna of Southern Quebec), corrected to *Cerceris arelate* by Buck, 2004:72

### 58. *arenaria* (Linnaeus)

*Sphex arenarius* Linnaeus, 1758:571, sex not indicated (as *arenaria*, incorrect original termination). Holotype: ♀, Sweden: Fahlun (Linnean Society, London). – O. Müller, 1764:72 (Denmark: Zeeland: Fridrichsdal near Copenhagen); Linnaeus, 1771:13 (Sweden: Södermanland: Ryby at 59°28'N 15°46'E); de Villers, 1789:235 (redescription); Christ, 1791:272 (redescription); Richards, 1935a:50 (study of holotype); Day, 1979:50 (study of holotype); Day and Fitton, 1978:193 (recuration of Linnean type material). – As *Crabro arenarius*: Fabricius, 1787:297 (new combination, redescription); Olivier, 1792:516 (redescription). – As *Philanthus arenarius*: Fabricius, 1790:225 (new combination, redescription), 1793:290 (redescription), 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:303 (redescription); Jurine, 1807:202 (listed); Thunberg, 1815a:128 (diagnostic characters), 136 (redescription), 1815b:289 (diagnostic characters), 294 (redescription); Dahlbom, 1845:XXIV (specimens in collection Fabricius examined). – As *Cerceris arenaria*: Billberg, 1829:107 (new combination, specimens from Sweden in collection Billberg); Vander Linden, 1829:111 (bibliographic references, redescription, Belgium: Bruxelles, large part of Europe); Shuckard, 1837a:233 (in revision of British Aculeata); von Siebold, 1839:52 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); Dufour, 1841a:509 and 1841b:245 (digestive tract), 1841a:511 and 1841b:247 (male reproductive system), 1841a:512 and 1841b:248 (female reproductive system); Dahlbom, 1842a:16 (in review of Scandinavian aculeates), 1844:205 (in revision of Sphecidae and Pompilidae), 1845:499 (in key); Lepeletier de Saint Fargeau, 1845:16 (in revision of world Hymenoptera); Eversmann, 1849:403 (Russia: between Ural Mts. and Volga); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden, Leipzig); F. Smith, 1849a:2373 (Great Britain: Devonshire); Wissmann, 1849:13 (Germany: Kingdom of Hannover: Regenstein in Harz Mts.); Tischbein, 1850:9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Wesmael, 1852:263 (Belgium); Kirschbaum, 1853:46 (Germany: Herzogtum Nassau: Mainz-Mombach); Kirchner, 1854:312 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Fabre, 1856a:138 (France: Vaucluse: Avignon area), 1856b:184 (list of prey); F. Smith, 1856:436 (in catalog of Hymenoptera in British Museum); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:147 (in revision of fossorial wasps of Nassau Region, Germany); A. Costa, 1858:20 (Italy: Campania: Monti Partenii in Benevento Region); Lucas, 1858:398 (nest structure, curculionid prey); Taschenberg, 1858:81 (in key to Sphecidae of Germany); Assmus, 1859:613 (Russia: Moscow Oblast!); Belke, 1859:70 (Ukraine: Kamienec Podolski); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:147 (Germany: Nassau Region); Sichel, 1861:752 (Italy: Sicilia); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Brown, 1863:182 (Great Britain: Burton-on-Trent); A. Costa, 1864c:124 (Italy: Campania: Benevento area); Belke, 1866:512 (Ukraine: Zhytomyr Oblast!: Radomyshl!); Taschenberg, 1866:190 (in revision of Hymenoptera of Germany); A. Costa, 1867a:23 (Italy: Campania: Montagne di Cava), 1867c:71 (in revision of Italian Sphecidae); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area); Kirchner, 1867:221 (in catalog of European Hymenoptera); Palma, 1867:43 (Italy: Sicilia settentrionale, as *arenaria* Vander Linden); Schenck,

1867a:354 (Germany: Nassau Region); Dietrich, 1868:363 (Switzerland: Zurich Canton); Jaenicke, 1868:9 (Germany: Hessen: Rüsselsheim, Taunus); Wierzejski, 1868:117 (Ukraine: Podole Region: Janów); A. Costa, 1869b:103 (in revision of Italian Sphecidae); Radoszkowski, 1870:102 (synonyms listed); Aichinger, 1870:317 (Austria: Tirol); Thomson, 1870:248 (in revision of Swedish wasps); A. Costa, 1872a:20 (in revision of Sphecidae of Kingdom of Naples, Italy); P. Ivanov, 1872:152 (Ukraine: Khar'kov Oblast': Kupyansk area); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Dours, 1874:143 (in catalog of Hymenoptera of France); Thomson, 1874:245 (in revision of Hymenoptera of Scandinavia); Wierzejski, 1874:260 (Poland: Lubaczów, Żegiastów; Ukraine: Podole Region: Kalinowce, Janów); Marquet, 1875:204 (France: Languedoc); Taschenberg, 1875:390 (Germany: Halle; Italy: Liguria: La Spezia); Beuthin, 1876:231 (Germany: Hamburg area); Frivaldszky, 1876:354 (Hungary: Temes Komitat: Grebenáč, now in Timiș District in Romania); nec Radoszkowski, 1877:58 (= *Cerceris media*); Girard, 1879:919 (morphology and habits); Kohl, 1880:155 (Austria: Tirol, and Italy: Trentino–Alto Adige), 226 (prey: *Brachyderes incanus* L., a curculionid); Siebke, 1880:66 (Norway); Marquet, 1881:190 (southern France, coleopterous prey); E. Saunders, 1881:165 (Portugal: Silves); Yaroshevskiy, 1881:123 (Ukraine: Khar'kiv Oblast': Khar'kiv, Kupyansk, Zmiyev District); De Stefani Perez, 1882:39 (Italy: Sicilia: Sciacca); A. Costa, 1883:57 (Italy: Sardegna); Friese, 1883:201 (Germany: Thüringen: Gumperda); Kohl, 1883e:664 (Switzerland); Sickmann, 1883:82 (Germany: Niedersachsen: Wellingholthausen); Harwood, 1884:211 (England: Essex: Colchester area); von Heyden, 1884:118 (Germany: Frankfurt am Main); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Wüstnei, 1886:40 (Germany: Schleswig-Holstein: Husum); Gasperini, 1887:17 (Dalmatia: Brusije and San Giorgio on Lesina Island, Spalato, now Croatia: Brusje and Sućuraj on Hvar Island, Split); Schletterer, 1887:413 (in revision of world *Cerceris*), 486 (listed); Brischke, 1888b:98 (Germany: Preussen Province, now Poland: Pomorze Region); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige); Ed. André, 1889:292, 296, 309 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:901 (faunal records), 1889b:1126 (Armenia: Arax Valley); Steck, 1890:169, 170 (in key to *Cerceris* of Switzerland); Ed. André, 1891:25\* (bibliographic references); F. Morawitz, 1891a:215 (Russia: Astrakhan Government); Wüstnei, 1891a:26 (Germany: Schleswig-Holstein: Glücksburg); A. Costa, 1893b:8 (Tunisia); Kohl, 1893a:35 (Austria: Niederösterreich); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus); Sickmann, 1893:92 (Germany: Niedersachsen: Iburg, analysis of color variation); Westerlund, 1893:26 (Russia: Karelian Republic: northern shore of Lake Ladoga); Baldini, 1894:57 (Italy: Modena area); De Stefani Perez, 1894:216 (Italy: Sicilia); Krieger, 1894:12 (Germany: Kingdom of Saxony); Medina, 1894b:262 (Spain); F. Morawitz, 1894:353 (Turkmenistan: Kheirabad); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Laboulbène, 1895:180 (preying on Curculionidae); Meunier, 1896:272 (Belgium: Bruxelles area); Acloque, 1897:82 (in Sphecid Fauna of France and Algeria); Borries, 1897:57 (nesting habits); Dalla Torre, 1897:450 (in catalog of world Hymenoptera); Lüderwaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Strand, 1898b:94 (Norway); Alfken, 1899:106 (nesting habits); Nevinson, 1900:62 (Great Britain: Wales: Towyn); Adlerz, 1901:180 (nesting habits); Nevinson, 1901:72 (Great Britain: Wales: Criccieth); N. Arnold, 1902:89 (Russia: Mohilev Province, now Belarus); Barnes, 1902:266 (Great Britain: Berkshire: Wellington College in Crowthorne); R. Bradley, 1902:267 (Great Britain: northern Wales); Chyzer, 1902:33 (Hungary); Nevinson, 1902:12 (Great Britain: Cornwall: Newquay); E. Saunders, 1902:143 (British Channel Islands: Alderney, Guernsey, and Jersey Islands; France: Bretagne: St. Briac); de Cobelli, 1903:109 (Italy: Province of Trentino); E. Saunders, 1903b:17 (Great Britain: North Wales: Harlech); Strand, 1903:7 (Norway: Austad); Adlerz, 1904:66 (nesting habits); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); E. Aurivillius, 1904:274 (in revision of Swedish Sphecidae); E. Saunders, 1904c:607 (Spain: Mayorca), 639 (Spain); W. Schulz, 1904b:93 (Greece); Zilahi Kiss, 1904:77 (Hungary: Peér, Tasnád, Zovány); Kubes, 1905:83 (Czech Republic: Kolín, Sušice); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); W. Schulz, 1905b:38 (Algeria: Philippeville); von Heyden, 1905:82 (Germany: Hessen: Frankfurt); Dusmet y Alonso, 1906:7 (Spain);



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Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Bouwman, 1928a:360 (in revision of Sphecidae of Netherlands); Jones, 1928b:14 (Great Britain: Hampshire: Milford-on-Sea); Vorontsovskiy, 1928:45 (Russia: vicinity of Orenburg); Grandi, 1929:288 (Italy: Toscana: valle della Limentra), 1930:340 (Italy: Toscana: Maremma); Hamm and Richards, 1930:110 (summary of nesting habits), 123 (list of prey); Schmiedeknecht, 1930:701, 705 (in keys to Hymenoptera of North and Central Europe); Vorontzovskiy, 1930:63 (Russia: Orenburg Oblast'); Bischoff, 1931:9 (Spain); Dusmet y Alonso, 1931:7 (Portugal: Mitra); Bondroit, 1932:38 (Belgium: common in Bruxelles area); Giordani Soika, 1932a:21 (Italy: Lido di Venezia); Motaş, 1932:14 (nest parasite: *Hedychrum nobile* Scopoli, a chrysidid); Bondroit, 1934:60 (Belgium: Ostende); Drogoszewski, 1933:118 (Poland: Włocławek); Molitor, 1933a:165 (list of prey); Spooner, 1933:203 (Great Britain: Bedfordshire: Sandy); Balles, 1934:21 (Germany: Baden-Württemberg: Achern, Fautenbach, Mannheim-Rheinau, Oberachern); Giner Mari, 1934:131 (Spain); Grandi, 1934:129 (Italy: Lazio: Acilia, and Toscana: San Vincenzo); Jansson, 1934:290 (Sweden); Minkiewicz, 1934:190 (preying on *Brachyderes incanus* Linnaeus, a curculionid); Nadig, 1934:33 (Italy: Sardegna: Aritzo); Spooner, 1934b:278 (Great Britain: Devon: Branton Burrows); Bernard, 1935:62 (France: Var: Fréjus area); Forsius in Forsius and Hellén, 1935:12 (in checklist of Hymenoptera of Finland); Grandi, 1935a:110 (Italy); Minkiewicz, 1935:213 (Poland: Piaski-Gardzienice, 51°05'N 22°50'E); Vergne, 1935:117 (France: Auvergne: common); Yasumatsu and Narisada, 1935:73 (China: Liaodang: Dairen, now Dalian); Crèvecoeur and Maréchal, 1936:254 (in cata-

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tion of Yasumatsu and Narisada, 1935), 41 (Korea), 49 (China: Peking); de Beaumont, 1962b:21 (Spain); Togashi, 1962a:63 (Japan: Ishikawa Prefecture); Valkeila, 1962b:67 (southwestern Finland); Erlandsson, 1963:66 (Denmark: Bornholm Island); Felton, 1963:179 (Great Britain: Kent County); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt); Babiý, 1964:117 (Austria: Land Salzburg); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 199 (preying on curculionids *Brachyderes incanus* L., and *Otiorynchus squamosus* Miller); Richards, 1964:25 (heath-lands in southern England); de Beaumont, 1965a:20 (Greece); Fæster, 1965:194 (Denmark: Hansted Nature Reserve); Roberti, Frilli, and Pizzaghi, 1965:109 (Italy: Emilia-Romagna: Piacenza and Bobbio in Piacenza Province); Tsuneki, 1965d:24 (nesting habits); Bonelli, 1966c:217 (Italy: Trentino–Alto Adige: Piazzòl); Diniz, 1966:7 (Portugal: twenty five localities); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: C.A. Rosetti, Chilia Veche, Periprava); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:286 (Turkey); Eck and Eck, 1967:299 (nesting habits); Felton, 1967:107 (Great Britain: Bushy Park in Middlesex County, now part of London); Gauss, 1967:551 (Germany: Baden-Württemberg); J Heinrich, 1967:71 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Comarova), 1967b:41 (Romania); Tsuneki, 1967e:2 (China: Heilungkiang); Benedek, 1968:71 (Hungary: floral records); Haneda, 1968a:46 (Japan); Leclercq, 1968b:39 (Great Britain: Kent); Nagy, 1968:378 (nest parasite in Romania: *Smicromyrme septentrionalis* Hoffer, a mutillid, now *Erimyrme sicana* (De Stefani Perez, 1887)); Parré, 1968:122 (Germany: Sachsen-Anhalt: Staßfurt); Scobiola Palade, 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: thirteen localities); Tano, 1968:34 (Japan); Benedek, 1969a:83 (Hungary: marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); Bonelli, 1969b:167 (nesting habits); T. Iida, 1969b:285 (description of mature larva); Itami, 1969:47 (Japan: Niigata Prefecture); Lefeber, 1969c:233 (Netherlands: St. Pietersberg = Montagne Saint Pierre); Romanova, 1969:133 (Russia: North Caucasus); Zangheri, 1969:1700 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:96 (Hungary: Tapolca); Oehlke, 1970:680 (Democratic Germany); Dathe, 1971:234 (Germany Zoological Garden; phenology), 237 (Germany: Berlin); R. Eck, 1971:337 (nesting habits, larva); Schmidt, 1971b:26 (Germany: Mainz area); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Tsuneki, 1971i:433 (Mongolia), 1971m:17 (China: Beijing); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 37, 50 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:413 (in Sphecid Fauna of Czechoslovakia); Haeseler, 1972:155, 168, 171, 175, 189, 197 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:126 (Kazakhstan); Kofler, 1972:105 (Austria: eastern Tirol); Lomhold, 1972:122 (Denmark: Læsø Island); Oehlke, 1972:135 (Germany: Hiddensee Island); Scobiola-Palade, 1972b:252 (Romania); Simon Thomas, 1972:178 (France); R. Eck, 1973:185 (*as Cerceris arenaria arenaria*; new status, description); Fain, 1973:175 (parasite: *Crabrovidia concellaria* (Cooreman), a saprogllyphid mite); Erlandsson, 1974:61 (France, Greece, Italy, Spain, Yugoslavia); Kazenas, 1974b:109 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Kofler, 1974:319 (Austria: Kärnten); Scobiola-Palade, 1974:144 (Romania: Sărăturile sandbank in Danube delta); Simon Thomas, 1974:57 (Netherlands: Limburg); Lomholdt, 1975bc:31 (Denmark: Anholt Island); Lomholdt, 1975c:176 (in Sphecid Fauna of Fennoscandia and Denmark); Benedek, 1975:251 (Hungary: onion pollinator); R. Bohart and Menke, 1976:577 (listed); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Simon Thomas, 1976:4 (France: Lot-et-Garonne); Georghiou, 1977:189 (Cyprus); Guichard, 1977:254 (Great Britain: Surrey); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Guichard, 1978:270 (Greece); Kazenas, 1978b:60, 65 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1194 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Petit, 1978:86 (Belgium: Vance); Pulawski, 1978:192, 195 (in key to Sphecidae of European part of former USSR); Schwamberger, 1978:416 (Germany: Württemberg); Benedek, 1979:228 (Hungary: Bakony Hills); Kazenas, 1979d:71 (Russia: Primorskiy Krai; discus-

sion), 84, 89 (in key); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 24 (Netherlands: distribution map); Richards, 1979:402 (British Channel Islands); Schmidt, 1979a:54 (Germany: Ost-Holstein), 1979b:298 (Germany); Schwammbberger, 1979:114 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Tsuneki, 1979d:10 (Japan); Valetta, 1979:215 (Malta); Pagliano, 1980:125 (Italy: Piemonte); Richards, 1980:84, 85 (in key to Sphecidae of British Isles); Haeseler, 1981:50 (Germany: Friesian Island: Amrum Island); Verdcourt, 1981:30 (Great Britain: Surrey: Kew); Donath, 1982:212 (Germany: Cottbus Bezirk); Gayubo, 1982b:51 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:109 (Spain: Provincia Cádiz); Skibińska, 1982:123 (Poland: Warszawa area); Tsuneki, 1982b:18 (known from Korea); Dollfuss, 1983b:24 (in catalog of Sphecidae of Austria); Gayubo, 1983a:126 (prey of *Synaema globosum* (Fabricius), a thomisid spider), 1983e:237 (Spain: Salamanca Province); Islamov and Kazenas, 1983:44 (Uzbekistan), 45 (nest and prey: two species of curculionid *Sitona*); Józán, 1983:98 (Hungary); Kvamme and Axelsson, 1983:58 (Norway); Lefeber, 1983a:85 (Netherlands: Waddendistrict: Texel, Terschelling, and Ameland islands); Piek, Buitenhuis, Veldsema-Currie, and Mantel, 1983:153-159 (venom contains histamine, but no acetylcholine); Rasmont and Pauly, 1983:59 (Spain: Lerida: Caldes de Bohi: member of sleeping aggregation); Riemann, 1983:83 (Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:125 (Greece); Chevin and Silvestre de Sacy, 1984:10 (France: Yvelines Department); Gayubo, 1984c:382 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:24 (Spain: Valencia); Haack, Tschamtké, and Vidal, 1984:124 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Öland Island); Kazenas, 1984a:91 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1985c:172 (Spain: Valladolid: Hornillos, Quintanilla de Abajo); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985a:181 (Hungary), 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Willmer, 1985a:151-160 (origins of communal behavior), 1985b:469-479 (small females become active later than large ones during cold weather, but last active longer during hot weather); Wolf, 1985b:496 (intersex); Brechtel, 1986:57 (Germany: Südpfalz); Gayubo, 1986a:66 (Spain: Provincia Ciudad Real), 1986b:41 (Spain: Andalucía), 1986d:122 (Spain: Zamora Province), 1986e:994 (teratological specimen); Gayubo and Heras, 1986:70 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:85 (Spain: Burgos, Soria); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Islamov, 1986:519 (Uzbekistan: Surkhandarya and Tashkent Oblast's); Nemkov, 1986:108 (Russia: Siberia: Irkutsk Oblast'); Józán, 1986:374 (Hungary: Kiskunság National Park); Vikberg, 1986:78 (Finland); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Pagliano, 1987:164 and 167 (Italy, in key); Riemann, 1987b:34 (Germany: Niedersachsen: Nature Reserve Voßberge); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Schmidt and Westrich, 1987:358 (Germany: Mainz area); Tormos and Jiménez, 1987a:127 (Spain: Valencia); Asís and Jiménez, 1988:276 (Spain: Castellón Province); Dollfuss, 1988:19, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:101 (Hungary: Kiskunság National Park); Kowalczyk, 1988a:45 (Poland: Rogów); Kowalczyk, 1988b:64 (Poland: environs of Łódź); Nilssen, 1988:98 (Sweden); Pagliano, 1988:145 (Italy: revision); Riemann, 1988:222 (Germany: Bremen area); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Jacobs, 1989:28 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:94 (Belarus': Berezinskiy Nature Reserve); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Gayubo, Asís, and Tormos, 1990b:80 (Spain); Jacobs and Oehlke, 1990:216 (new records from Democratic Germany); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pagliano, 1990:96 (in catalog of Italian Sphecidae); Schwammbberger and Priesner, 1990:553 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Chinin, 1991:111 (Russia: Samara Oblast'); Dollfuss, 1991:219 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:419 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Jakubzik, 1991:74 (Germany: Köln); Józán, 1991:605 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:89, 93, 99 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Kuhlmann et al.,

1991:87 (Germany: Senne Region); Negrisolo, 1991:323 (Italy: Gorizia, Trieste, Udine, and Venezia Provinces); Schembri, 1991:178 (recorded from Malta by Valetta, 1979); H.-J. Schulz, 1991:30 (Germany: Oberlausitz: 5 km SW Wittichenau); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:290 (Greece); Józán, 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); Nemkov, 1992b:250 (Russia: Far East: 40 km NNW Svobodnyi near Khingan Nature Reserve); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Kuhlmann, 1993:75 (Germany: known from Westfalen); Torregrosa, Gayubo, Tormos, and Asís, 1993:20 (Spain: Alicante Province); Zeil, 1993a:198 (orientation flight), 1993b:207 (orientation and return flights); Blagoveshchenskaya, 1994:91 (Russia: Ul'yanovsk Oblast'); Field, 1994:113 (nest usurpation); Gayubo and Borsato, 1994:220 (Italy: Veneto, Toscana); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź); Theunert, 1994:33 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:190, 225 (Spain: Albacete Province); Field and Foster, 1995:99 (nest usurpation, Willmer's co-occupation hypothesis not confirmed); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:473, 480 (in key to Sphecidae of Russian Far East); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills NW Samara); Negrisolo, 1995a:18 (visiting flowers of *Eryngium maritimum* L.), 19 (visiting flowers of *Echinophora spinosa* L.), 22 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:92 (Italy: Ferrara Province); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:30 (Germany: Bayern: Kahl, Mainfranken, Niedersachsen: Ohlendorf; Slovenia: Portorož); Schmid-Egger, Risch, and Niehuis, 1995:167 (summary of records from Germany: Rheinland-Pfalz Province); Skibińska, 1995:424, 425 (Poland: pine forest in Białowieża Primeval Forest); Archer, 1996a:59 (Great Britain: Channel Islands); Arens, 1996:442 (Germany: Bayern: Bayreuth area); Blösch, 1996:7 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Doronin, 1996:18 (Latvia: Vecāei, nest parasitized by *Hedychrum nobile* Scopoli, a chrysidid); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:80 (Great Britain: summary of records from Essex); Jakubzik, 1996:251 (Germany: Köln); Jakubzik and Cölln, 1996b:398 (Germany: Rheinland-Pfalz); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Pawlikowski and Kruszyński, 1996:86 (Poland: Toruń Basin); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: probably endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg), 107 (locality records); Woydak, 1996:99 (Germany: Westfalen: summary of distribution and nesting habits); Archer, 1997b:98 (Great Britain: Watsonian Yorkshire; Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:320 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Haeseler and Ritzau, 1998:50 (Germany: Bremen: Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Lefebvre, 1998:181, 182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Mauss and Schindler, 1998:136 (Germany: Schleswig-Holstein: Nordfriesland District); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); van der Smissen, 1998:53 (Germany: Schleswig-Holstein, Niedersachsen); K. Weber, 1998:134 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); González, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Gusenleitner, 1999:601 (Austria: Vorarlberg: Runkeline NW Bludesch); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (endangered in Nordrhein-Westfalen State of Germany); Majzlan, Rychlik, and Deván, 1999:145 (Slovakia: Čenkovská Step Nature Reserve); Mandery, 1999:104 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten); Pagliano and Scaramozzino, 1999:158 (Italy: Piemonte: Borgomale); Pauly, 1999:111 (in catalog of Bel-

gian aculeates); Riemann, 1999:834 (Germany: Niedersachsen: sand pits near Bremen); Salzmänn-Wandeler and Rezbanyai-Reser, 1999:101 (Switzerland: Tessin: Monte Generoso); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Sörensen, Mauss, and Schindler, 1999:503 (Germany: Schleswig-Holstein); Tüzün, Gülmez, and Bağrıaçık, 1999:386 (Turkey: Aegean Region); Yamane, Ikudome, and Terayama, 1999:545 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:415 (in Sphecidae Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); González, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Jacobs, 2000:6 (Germany: Land Mecklenburg-Vorpommern: not endangered); Melo, 2000:98 (nest usurpation and temporary association with nest owner); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:45 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Basset, 2001:85 (France: Département de Gironde); Ivanov and Ljubomirov, 2001:213 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 249 (review of known biology); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:137 (distribution in Germany by provinces); Salzmänn-Wandeler and Rezbanyai-Reser, 2001:158 (Switzerland: Tessin Canton: Meride area); Shkuratov, 2001:17 (prey: *Otiorrhynchus asphaltinus* Germ., a curculionid); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Archer, 2002b:130 (Great Britain: Watsonian Yorkshire: distribution map); Archer and Edwards, 2002:103 (Great Britain: West Sussex: Ambersham and Iping commons); Beavis, 2002:111 (Great Britain: Kent: Tunbridge Wells area, prey: *Curculio nucum* Linnaeus, *C. venosus* (Gravenhorst), and *Otiorrhynchus sulcatus* (Fabricius)); Kazenas, 2002a:140 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:155 (Poland: Kampinos National Park near Warszawa); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:35 (Belarus': no specific locality); von der Dunk and Amos, 2002:158 (Germany: Bayern: Schwaig near Nürnberg); Ziska, 2002:7 (Germany: Berlin-Köpenick: Krumme Lake); Cölln, Esser, and Jakubzik, 2003:61 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:134 (Croatia, Germany, Hungary, Italy: miscellaneous locality records); Esser and Jakubzik, 2003:290 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:62 (Spain: Soria: Chavaler); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warnecke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:751 (Italy: Sicilia: Castelammare, Citelli, Linguaglossa); Tischendorf and Treiber, 2003:120 (Germany: Hessen: 15 km SW Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:101 (Germany: Niedersachsen: Emsland area); Archer, 2004a:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004e:76 (Great Britain: Yorkshire: Pollington quarry); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:261 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Hellrigl, 2004a:172 (Italy: Trentino-Alto Adige, as Südtirol: Vinschgau = Val Venosta: St. Martin in Kofel); Kazenas, 2004b:111 (Kazakhstan: western Tien Shan); Litt, 2004:222 (Switzerland: Valais: Vissoie); Salzmänn-Wandeler and Rezbanyai-Reser, 2004:27 (central Switzerland); Szczepko and Kowalczyk, 2004:127 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004a:52 and 63 (in checklist of Polish Sphecidae); Blösch, 2005:5 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs,

2005a:440 (Bulgaria); Kofler, 2005:184 (Austria: Tirol: Lienz District: several localities); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisolo, 2005:321 (in Sphecidae Fauna of Italy); Polidori, Boesi, Isola, and Andrietti, 2005:801 (larger females select larger prey); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Terayama and Tano, 2005:2, 4 (in key to Japanese *Cerceris*); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1801 (Turkey: Artvin, Balıkesir, Bayburt, Bilecik, Erzincan, Erzurum, Iğdir, İçel, Kahramanmaraş, Konya, Malatya, and Niğde provinces); Archer, 2006b:84 (Great Britain: Yorkshire: Blaxton), 2006c:217 (Great Britain: Staffordshire: Highgate Common); Dathe, 2006:37, 38 (*Sphex arenaria* and *Philanthus arenarius*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, are now *Cerceris arenaria*); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); Gadoum and Barbier, 2006:44 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Ennery and Villers-en Arthies); Ljubomirov, 2006:537 (Bulgaria and Greece: previous records from Rhodope Mountains summarized, as *arenaria arenana*); Magdalou, 2006b:110 (France: Pyrénées-Orientales: Mas Larrieu Nature Reserve near Argelès-sur-Mer); Kaltenpoth et al, 2006:1405 (streptomyces bacteria absent in female antennal glands); Polidori and Andrietti, 2006:455 (nest abandonment); Polidori, Casisraghi, Di Lorenzo, Valarani, and Andrietti, 2006:155 (philopatry, nest choice, aggregation temporal-spatial change); Polidori, Papadia, Disney, and Andrietti, 2006:1971 (behavior of *Megaselia oxybelorum* Schmitz, a phorid nest parasite, at nest aggregations); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Tezcan, Yildirim, Anlaş, and Beyaz, 2006:58 (Turkey: Manisa: Turgutlu, on flowers of *Origanum* sp.); Vepřek, 2006:508 (Czech Republic: Kokořínsko area); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge), 2007c:152 (Great Britain: South Devon coast); Guldemon, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:183, 186 (in key to Crabronidae of Germany); Kazenas, 2007a:93 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Polidori, Boesi, Pesarini, Papadia, Bevacqua, Federici, and Andrietti, 2007:83 (temporal relationship between prey spectrum and population structure); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Venne, Bleidorn, and Lauterbach, 2007:300 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:119 (Turkey: Konya Province); Archer, 2008b:145 (Great Britain: South Essex: East Tilbury and West Tilbury), 2008c:145 (Great Britain: Lincolnshire: Whisby Nature Park); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Haeseler, 2008:307 (Germany: Friesian Islands); Ljubomirov and Ban-Calefariu, 2008:204 (Romania: recorded from Maramureş District by Szilády, 1914); Ljubomirov and Yildirim, 2008:132 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:145 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:238 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); Pagliano, 2009:183 (Italy: Molise: Campolieto); Archer, 2010:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent biological observations reported; France: first record from Hautes-Alpes: Gap); Ghazi-Soltani, Khaghaninia, and Shahim, 2010:638 (Iran: East Azerbaijan: Horand Forests); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: relatively common).

*Sphex xanthocephalus* J. Forster, 1770:14. Nomen nudum.

*Sphex xanthocephalus* J. Forster, 1771:86, sex not indicated (as *xanthocephala*, incorrect original termination). Holotype: ♂, England: no specific locality (Linnean Society, London). Synonymized with *Cerceris arenaria* by Morice, 1914:286. – Gmelin, 1790:2734 (redescription); van der Vecht, 1959a:67 (incorrectly identified the species with *Philanthus triangulum*); Day and Fitton, 1977:37 (study of holotype); Day and Fitton, 1978:197 (recuration of type material).

*Vespa exulta* Harris, 1776:... Synonymized with ...

*Vespa petulans* Harris, 1776:... Synonymized with ...

*Vespa serripes* Fabricius, 1781:464. Holotype: ♀, "America borealis", actually Europe (BMNH, Banks coll.). Synonymized with *Cerceris arenaria* by Ferguson and Vardy, 1984:55. – Fabricius, 1787:289 (redescription); Olivier, 1791:686 (...); Fabricius, 1793:266 (redescription), 1804:262 (redescription); de Saussure, 1853:265 (probably not a vespid); Cresson, 1863:331 (listed), 1887:291 (listed); Dalla Torre, 1897:155 (placement questionable); Lewis, 1897:181 (...); Dalla Torre, 1904:67 (placement questionable). – **As *Cerceris serripes***: Bequaert, 1928:62 (new combination, incorrectly synonymized *Cerceris bicornuta*); nec Brimley, 1938:448 (= *Cerceris bicornuta*); nec Scullen, 1942:188 (= *Cerceris bicornuta*); nec Strandmann, 1945a:311 (= *Cerceris bicornuta*); van der Vecht, 1961a:67 (unrecognizable species); Scullen, 1965b:503 (in revision on North American *Cerceris*); van der Vecht, 1967 (study of type, unrecognizable species); R. Bohart and Menke, 1976:587 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); Ferguson and Vardy, 1984:55 (taxonomic history, synonymized with *Cerceris arenaria*).

*Vespa arenosa* Gmelin, 1790:2764. Substitute name for *Vespa arenaria* (Linnaeus, 1758), nec Fabricius, 1775 (now in *Vespula*).

*Philanthus auritus* Fabricius, 1794:459, sex not indicated. Lectotype: ♀, Italy: no specific locality (ZMK), designated by van der Vecht, 1961a:64. Synonymized with *Cerceris arenaria* by Dahlbom, 1845:XXIV. – Fabricius, 1796:137 (in Index to his Entomologia Systematica, 1794), 1798:268 (redescription), 1799:40 (in Index to his Supplementum, 1798), 1804:301 (redescription); Jurine, 1807:202 (listed); Thunberg, 1815b:289 (diagnostic characters), 294 (redescription); de Beaumont, 1950c:318 (identity of holotype). – **As *Vespa aurita***: Turton, 1801:528 (new combination, Italy). – **As *Cerceris aurita***: Germar, 1817:262 (new combination, Dalmatia: Arbe and Cherso, now Croatia: Rab and Cres); Vander Linden, 1829:113 (bibliographic references, may be synonym of *Cerceris arenaria*); Vergne, 1935:117 (France: Auvergne: Billom, Pont-du-Chateau, as *aurita* Latreille).

*Cerceris striolata* Schletterer, 1887:393, ♂. Lectotype: ♂, Hungary: Budapest (TMB), designated by de Beaumont, 1959b:91. Synonymized with *Cerceris arenaria* by de Beaumont, 1959b:91. – Schletterer, 1887:503 (listed); Ed. André, 1889:284, 299 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Hungary); Schmiedeknecht, 1907:242 (in key to Hymenoptera of Central Europe), 1930:703 (in keys to Hymenoptera of North and Central Europe); Šnoflak in Zavadil and Šnoflak, 1948:95 (in key to Sphecidae of Czechoslovakia); Bajári, 1956a:81 (Hungary: Budapest), 1957a:42 (in key to Hungarian Sphecidae); de Beaumont, 1957d:3.337 (unrecognizable species); Balthasar, 1972:403 (in Sphecid Fauna of Czechoslovakia: may be expected in the country).

*Cerceris arenaria* var. *iberica* Schletterer, 1887:415, sex not indicated. Holotype or syntypes: Iberian Peninsula (NHMW). – Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Giner Marí, 1941a:76 (in revision of Spanish *Cerceris*); K. Schmidt, 2000:48 (in revision of Western Palearctic *Cerceris*). – **As *Cerceris arenaria iberica***: R. Bohart and Menke, 1976:577 (new status, listed).

### **ssp. *erlandssoni* R. Eck**

*Cerceris arenaria erlandssoni* R. Eck, 1973:187, ♀, ♂. Holotype: ♀, Denmark: Bornholm Island: Hammaren (NRS). – R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:46 (in revision of Western Palearctic *Cerceris*).



**ssp. *flavescens* Schletterer**

*Cerceris flavescens* Schletterer, 1889a:891, ♀. Holotype: ♀, "Kirgisensteppe", now Kazakhstan: no specific locality (NHMW). – Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Shestakov, 1918a:132 (Turkmenistan: Farab); Kazenas, 1972b:127 (Kazakhstan), 1974b:109 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 1978b:60, 64 (in key to Sphecidae of Kazakhstan and Central Asia); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region). – **As *Cerceris arenaria flavescens***: Pulawski, 1965c:570 (new status); R. Bohart and Menke, 1976:577 (listed); Dollfuss, 1989:8 (type material in NHMW); Kazenas, 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia).

**ssp. *gotlandica* R. Eck**

*Cerceris arenaria gotlandica* R. Eck, 1973:186, ♀, ♂. Holotype: ♀, Sweden: Gotlånd: Lojsta (NRS). – R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:46 (in revision of Western Palearctic *Cerceris*).

**ssp. *incognita* R. Eck**

*Cerceris arenaria incognita* R. Eck, 1973:189, ♀, ♂. Holotype: ♀, Democratic Germany: Oberlausitz: Daubitz (Dresden). – R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:47 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia).

**ssp. *nadigi* Shestakov**

*Cerceris nadigi* Shestakov in Nadig, 1933:98, ♀, ♂ (as *Nadigi*, incorrect original capitalization). Syntypes: Maroc: Ifrane (originally Nadig coll., now Zurich, and ZIN). – Giner Marí, 1941b:230 (in revision of North African *Cerceris*). – **As *Cerceris arenaria nadigi***: de Beaumont, 1951f: 352 (new status, redescription), 1953g:122 (Morocco); R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:47 (in revision of Western Palearctic *Cerceris*).

**ssp. *schulzi* de Beaumont**

As *Cerceris onophora*: Schulz, 1905b:57 (Tunisia: Sfax; ♀), corrected to *Cerceris arenaria schulzi* by de Beaumont, 1951b:178.

*Cerceris arenaria schulzi* de Beaumont, 1951b:178. Holotype: ♀, Tunisia: Sfax (Berne). – de Beaumont, 1951f:354 (Tunisia; redescription), 1956a:186 (Libya), 1960b:233 (Libya); R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:47 (in revision of Western Palearctic *Cerceris*).

**ssp. *stecki* Schletterer**

*Cerceris stecki* Schletterer, 1889:887, ♀. Holotype: ♀, Russia: Sarepta, now Krasnoarmeysk near Volgograd (Bern). – Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Shestakov, 1927a:17 (Russia: Orenburg Oblast'); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg). – **As *Cerceris arenaria stecki***: Pulawski, 1965c:569 (new status); R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:48 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia).

**ssp. *yanoi* Tsuneki**

*Cerceris quinquecincta* Ashmead, 1904b:66, ♂, junior secondary homonym of *Cerceris quinquecincta* (Fabricius, 1787) = *Cerceris contigua* (Villers, 1789). Holotype: ♂, Japan: no specific locality (USNM). Synonymized with *Cerceris arenaria* by Tsuneki, 1961c:26. – Tsuneki, 1937:187 (nesting habits).

*Cerceris arenaria yanoi* Tsuneki, 1971d:18. Substitute name for *Cerceris quinquecincta* Ashmead, 1904. – R. Bohart and Menke, 1976:577 (listed); Sk. Yamane and Tano, 1995:11 (Japan: Ryukyu Islands); Suda, 2004:47 (Japan: Yamanashi Prefecture).

As *Cerceris arenaria* (= *quinquecincta* Ashmead, nec Fabricius): Tsuneki, 1961c:11, 19, 25, 26 (in key), 1965d:3, 4 (prey record summary: Curculionidae, ? Chrysomelidae), 1968f:3 (Japan: Yokohama).

**59. *argentifrons* Guérin-Méneville**

*Cerceris argentifrons* Guérin-Méneville, 1844:445, [♀]. Lectotype: ♀, Madagascar: no specific locality (Genova), designated by Guiglia, 1948b:179 (Article 74.6). – F. Smith, 1856:450 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:486 (listed); de Saussure, 1892:555 (original description copied); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Guiglia, 1948b:179 (lectotype in Genova), 187 (redescription). – Leclercq, 1961d:102 (Madagascar), 1962b:211 (Madagascar: Bekily); Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:164 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris albotegulata* Arnold, 1945:40, ♀, ♂. Syntypes: Madagascar: Antanimora, Bekily, Behara, Ivondro (MNHN). Synonymized with *Cerceris argentifrons* by Guiglia, 1948b:187, by Leclercq, 1961d:102, and conditionally by Empey, 1969a:301. – R. Bohart and Menke, 1976:577 (as questionable synonym of *Cerceris argentifrons*); Empey, 1983:164 (reference to holotype is incorrect); Hancock, Chahwanda, and Mhlanga, 1995:37 (syntypes in Bulawayo Museum).

**60. *argentina* Brèthes**

*Cerceris argentina* Brèthes, 1910a:263, ♀. Holotype: ♀, Argentina: Pampa Central: no specific locality (originally MACN, now lost?). – Schrottky, 1913a:229 (Argentina: Pampa); Fritz, 1968b:165 (study of holotype); R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

**61. *argentosa* Shestakov**

*Cerceris argentosa* Shestakov, 1912:509, ♂. Holotype or syntypes: ♂, Uzbekistan: Tashkent (ZIN). – Shestakov, 1918a:124 (Uzbekistan: Tashkent); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:68 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:189 (redescription); Islamov, 1986:521 (Uzbekistan: Tashkent Oblast'); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:140 (geographic distribution, collecting localities in Kazakhstan), 2008a:106 (Southeastern Kazakhstan: 65 km W Bakanas, 35-60 km E Chilik, near Dubun', 30 km S Koktal).

**62. *ariadne* R. Turner**

*Cerceris ariadne* R. Turner, 1912e:815, ♀. Holotype or syntypes: ♀, Tibet: Gyantse (BMNH). – R. Bohart and Menke, 1976:577 (listed); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

**63. *armata* de Beaumont**

*Cerceris armata* de Beaumont in de Beaumont an Bytinski-Salz, 1959:128, ♀, ♂. Holotype: ♀, Israel: Herzlia Dunes (H. Bytinski-Salz coll.). – R. Bohart and Menke, 1976:577 (listed); K. Schmidt, 2000:98 (in revision of Western Palearctic *Cerceris*).

**64. *armaticeps* Cameron**

*Cerceris armaticeps* Cameron, 1910:149, ♀. Lectotype: ♀, South Africa: Transvaal: Warmberg farm near Chuni-espoort (TMP), designated by Empey, 1983:164 (Article 74.6). – Brauns, 1917:239 (lectotype in TMP), 1926:325 (in revision of South African *Cerceris*); Arnold, 1942:15 (as southern subspecies of *Cerceris rufiscutis*); Empey, 1969a:301 (listed), 1974:101 (holotype in TMP), 102 (description of ♂); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:164 (listed); Gess and Gess, 1994:100 (visiting flowers of *Aspalathus chortophila*).

As *Cerceris arnoldi*: Arnold, 1931:151 (description of ♂), corrected to *Cerceris armaticeps* by Arnold, 1942:14.

***ssp. caffrariae* Empey**

*Cerceris armaticeps caffrariae* Empey, 1974:102, ♀, ♂. Holotype: ♀, South Africa: Cape Province: Port Elisabeth (TMP). – R. Bohart and Menke, 1976:629 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Gra-

hamstown), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils); Empey, 1983:165 (listed); Callan, 1987:102 (prey: *Ablabera* sp., Scarabaeidae Melolonthinae).

### 65. *armigera* R. Turner

*Cerceris armigera* R. Turner, 1917a:104, ♀. Holotype or syntypes: ♀, Australia: Queensland: Darra near Brisbane (BMNH). – Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:577 (listed); Evans 1982a:360 (revision); Evans and Hook, 1982b:160 (communal nesting); Cardale, 1985:297 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:293 (nesting habits), 1986b:1302 (prey: Chrysomelidae and Curculionidae).

*Cerceris armigera* subsp. *rufofusca* R. Turner, 1936:538, ♀. Holotype or syntypes: ♀, Western Australia: Mundaring Weir (BMNH). Synonymized with *Cerceris armigera* by Evans, 1982a:360. – As *Cerceris armigera rufofusca*: R. Bohart and Menke, 1976:577 (listed).

### 66. *arnoldi* Brauns

*Cerceris arnoldi* Brauns, 1926:299, ♀ (as *Arnoldi*, incorrect original capitalization). Holotype: ♀, Zimbabwe: Sawmills (SAM). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); nec Arnold, 1931:151 (= *Cerceris armaticeps*); Arnold, 1942:14 (description of ♂); Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:165 (listed).

### 67. *arrogans* Arnold

*Cerceris arrogans* Arnold, 1931:164, ♀, ♂ (♂ = *Cerceris languida* Cameron). Lectotype: Namibia: Okahandja (BMNH), designated by Empey, 1983:165. – Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:165 (listed).

### 68. *associa* Kohl

*Cerceris associa* Kohl, 1898a:348, ♀. Holotype: ♀, Russia: Siberia: Irkutsk (NHMW). – R. Bohart and Menke, 1976:577 (listed); Dollfuss, 1989:8 (holotype in NHMW); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009a:66 (is an endemic of Irkutsk Oblast', Russia), 2009b:146 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

### 69. *astarte* Banks

*Cerceris astarte* Banks, 1913b:424, ♀. Lectotype: ♀, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:226. – Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Scullen, 1965b:456 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:470 (listed); Ahlstrom, 1995:113 (in checklist of insects of North Carolina); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 70 (first record from Ontario: list of localities); Buck, Paiero, and Marshall, 2006:46, 48 (in key to eastern Canadian *Cerceris*).

### 70. *astrieta* Reyes

*Cerceris astrieta* Reyes, 1988:18, ♀ (as *astieta*, as *astrieta* under etymology on p. 19). Holotype: ♀, Philippines: Mindanao: Zamboanga del Sur: Lamesahan (BISH).

### 71. *aterrima* Arnold

*Cerceris aterrima* Arnold, 1942:18, ♂. Holotype: ♂, Uganda: Behungi (SAM). – Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:577 (listed), Empey, 1983:165 (listed).

*Cerceris flavobilineolata* Giordani Soika, 1942:199, ♀. Holotype: ♀, Tanzania: NW part of country: no specific locality (A. Giordani Soika coll.). Synonymized with *Cerceris aterrima* by Empey, 1969a:302.

*Cerceris rama* Leclercq, 1955i:411, ♂. Holotype: ♂, Burundi: Bururi (MRAC). Synonymized with *Cerceris aterrima* by Empey, 1969a:302.

*Cerceris styrax* Leclercq, 1955i:415, ♀. Holotype: ♀, Burundi: Bururi (MRAC). Synonymized with *Cerceris aterima* by Empey, 1969a:302.

### 72. *atramontensis* Banks

*Cerceris atramontensis* Banks, 1913b:425, ♀. Holotype: ♀, USA: North Carolina: Valley of Black Mountains (AMNH). – Brimley, 1938:447 (North Carolina: Valley of Black Mountain, Elizabeth City); Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Krombein, 1956a:43 (prey: veewils of the genus *Conotrachelus* that breeds chiefly in acorns), 1963f:277 (Maryland: Plummers Island near Washington, D.C.); Scullen, 1965b:458 (in revision on North American *Cerceris*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen and Wold, 1970:210 (distribution and summary of prey records); Evans, 1971:512 (nesting habits), 1975a:264 (unsuccessful colonizer of a new habitat); R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera, nesting sites, list of prey); Finnamore, 1982:248 (in Sphecidae Fauna of Southern Quebec); G. Ferguson, 1983b:226 (study of holotype), 1984c:471 (listed); Ahlstrom, 1995:113 (in checklist of insects of North Carolina); Sugar *et al.*, 1998:16 (Canada: southern Ontario); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:45, 47 (in key to eastern Canadian *Cerceris*); Giles and Ascher, 2006:231 (New York: Black Rock Forest Preserve).

*Cerceris arbuscula* Mickel, 1916a:410, ♀. Holotype: ♀, USA: Nebraska: Omaha (UNL). Synonymized with *Cerceris atramontensis* by Scullen in Muesebeck et al., 1951:1005. – Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Muma, 1952:17 (holotype in UNL).

### 73. *aurantiaca* F. Smith

*Cerceris aurantiaca* F. Smith, 1873c:414. Holotype or syntypes: ♀, South Australia: no specific locality (BMNH). – Schletterer, 1887:486 (listed); Froggatt, 1892:221 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); R. Turner, 1910b:420 (in key), 1912d:665 (in key), 666 (in revision of Australian *Cerceris*); Tsuneki, 1968e:3 (in key), 7 (Australia; redescription); R. Bohart and Menke, 1976:577 (listed); Evans, 1982a:334 (revision); Cardale, 1985:297 (in catalog of Australian Sphecidae).

### 74. *australis* de Saussure

*Cerceris australis* de Saussure, 1854:6, ♀, ♂. Syntypes: Australia: Van Diemen's Land, now Tasmania: no specific locality (MHNG). – de Saussure, 1867:93 (Australia: Sydney; redescription); Schletterer, 1887:486 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); R. Turner, 1908:473 (Australia: Melbourne to Mackay), 1910b:422 (in key), 1912d:673 (in revision of Australian *Cerceris*); Tsuneki, 1968e:5 (in key), 23 (Australia; redescription); Evans and Matthews, 1970:153 (prey: Scarabaeidae Melolonthinae); R. Bohart and Menke, 1976:577 (listed); Evans, 1982a:348 (revision); Evans and Hook, 1982a:557 (communal nesting), 1982b:160 (communal nesting); Cardale, 1985:297 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:283 (nesting habits), 1986b:1299 (prey: Scarabaeidae Melolonthinae); Evans, 1988:9 (nesting habits); McCorquodale and Thomson, 1988:9 (nest shared with *Cerceris antipodes*); Dollfuss, 1989:8 (type material in NHMW); Melo, 2000:100 (female associations for use of natal nest, detailed review).

*Cerceris nigrocincta* F. Smith, 1856:450, ♀ (as *nigro-cincta*, incorrect original hyphenation), junior primary homonym of *Cerceris nigrocincta* Dufour, 1853. Holotype or syntypes: ♀, Australia: South Australia: Adelaide (BMNH). Synonymized with *Cerceris australis* by Schletterer, 1887:486. –A. Costa, 1864a:61 (one specimen from Adelaide, Australia, in Napoli Museum).

As *Cerceris sculleni*: Tsuneki, 1968e:15 (♂ only). Synonymized with *Cerceris australis* by Evans, 1982a:348.

*Cerceris* sp. no. 2: Tsuneki, 1968:31 (Australia: Queensland: Mossman). Synonymized with *Cerceris australis* by Evans, 1982a:348.

**75. *azteca* de Saussure**

*Cerceris azteca* de Saussure, 1867:97, ♀. Lectotype: ♀, Mexico: Nayarit: Cuantla (NHMW), designated by G. Ferguson, 1984b:432. – Schletterer, 1887:486 (listed, as *azteka*); Cameron, 1890a:117 (listed); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Kohl, 1916:107 (specimens in coll. Radoszkowski); Scullen, 1965b:459 (in revision on North American *Cerceris*); Krombein, 1967:414 (synonymy with *seminigra* recorded); Scullen, 1972:70 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:577 (listed); Fritz and Mariluis, 1976:108 (revision); Krombein, 1979b:1730 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:471 (listed); Dollfuss, 1989:8 (lectotype in NHMW); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris seminigra* Banks, 1947:33, ♂, junior primary homonym of *Cerceris seminigra* Taschenberg, 1875. Holotype: ♂, USA: Arizona: Patagonia (MCZ). Synonymized with *Cerceris azteca* by Scullen, 1961:45. – Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:232 (study of holotype).

**76. *bakeri* Cameron**

*Cerceris bakeri* Cameron, 1904h:67, ♀ (as *Bakeri*, incorrect original capitalization). Lectotype: ♀, Nicaragua: Chinandega (BMNH), designated by G. Ferguson, 1984b:432. – G. Ferguson, 1984c:471 (listed); Maes, 1989:941 (in catalog of Nicaraguan Sphecidae, prey: Curculionidae); Amarante, 2002:57 (in catalog of Neotropical Crabronidae). – **As *Cerceris kennicotti bakeri***: Scullen, 1972:28 (new status, in revision of Mexican and Central American *Cerceris*, new status); R. Bohart and Menke, 1976:583 (listed).

**ssp. *parkeri* Scullen**

*Cerceris parkeri* Scullen, 1972:35, ♀, ♂. Holotype: ♀, Mexico: Oaxaca: 48 mi NW Tehuantepec (USNM). – R. Bohart and Menke, 1976:585 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State); Horta Vega, Pinson Dominguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas). – **As *Cerceris bakeri parkeri***: G. Ferguson, 1984c:471 (new status); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

**77. *balteata* Evans**

*Cerceris balteata* Evans, 1982a:314, ♀, ♂. Holotype: ♀, Australia: Australian Capital Territory: Bendora (ANIC). – Cardale, 1985:297 (in catalog of Australian Sphecidae).

**78. *baluchistanensis* Cameron**

*Cerceris baluchistanensis* Cameron, 1907d:85, ♂. Lectotype: ♂, Pakistan, designated by Empey, 1984:75 (BMNH). – R. Turner, 1912e:516 (revision, description of ♀); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:577 (listed).

**79. *banahawensis* Reyes**

*Cerceris banahawensis* Reyes, 1986:102, ♀, ♂. Holotype: ♀, Philippines: Mt. Banahaw (USNM). – Tsuneki et al., 1992c:46, 50 (in key, as *banahanensis* on p.46), 67 (bibliographic reference, as *banawensis*).

**80. *bannisteri* Empey**

*Cerceris bannisteri* Empey, 1971b:251, ♀. Holotype: ♀, South Africa: Gauteng: Florida in Strubens Valley at 26°08'S 27°54'E (originally H. Empey coll., now TMP). – R. Bohart and Menke, 1976:577 (listed); Empey, 1983:165 (listed).

**81. *bantamensis* van der Vecht**

*Cerceris bantamensis* van der Vecht, 1964:367, ♂. Holotype: ♂, Indonesia: Java: Bantam: Malingping (RMNH). – R. Bohart and Menke, 1976:577 (listed).

**82. *barchanica* Kazenas**

*Cerceris barchanica* Kazenas, 1984a:47, ♀, ♂. Holotype: ♀, Turkmenistan: Uch-Adzhi (ZIN). – Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia).

**83. *barnardi* Brauns**

*Cerceris barnardi* Brauns, 1926:317, ♀ (as *Barnardi*, incorrect original capitalization). Holotype: ♀, Namibia: Narebis (TMP). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:166 (listed).

**84. *basalis* F. Smith**

*Cerceris basalis* F. Smith, 1856:458, ♀. Holotype or syntypes: ♀, Brazil: no specific locality (BMNH). – Schletterer, 1887:486 (listed); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); W. Fox, 1899:200 (Brazil: Rio Grande do Sul); R. Bohart and Menke, 1976:577 (listed); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

**85. *basimacula* Cameron**

*Cerceris basimacula* Cameron, 1907d:87, ♂. Holotype: ♂, India: Sikkim: no specific locality (BMNH). – R. Turner, 1912e:497 (original description copied, may be the male of *Cerceris pentadonta*); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:577 (listed); Empey, 1984:76 (listed, type examined).

**86. *beharensis* Leclercq**

*Cerceris beharensis* Leclercq, 1967b:63, ♂. Holotype: ♂, Madagascar: Behara (MNHN). – R. Bohart and Menke, 1976:577 (listed); Empey, 1983:166 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

**87. *bella* Brèthes**

*Cerceris bella* Brèthes, 1910a:264, ♂. Lectotype: ♂, Argentina: Córdoba: Córdoba (depository unknown), designated by Fritz, 1968b:166 (Article 74.6). – Schrottky, 1913a:229 (Argentina: Córdoba); R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:57 (in catalog of Neotropical Crabronidae).

**88. *belli* R. Turner**

*Cerceris belli* R. Turner, 1912e:808, ♀. Holotype or syntypes: ♀, India: Karnataka: Belgaum (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:577 (listed).

**89. *bellona* Mercet**

*Cerceris bellona* Mercet, 1914:448 and 449, ♀, ♂. Syntypes: Spain: Madrid Province: Aranjaz, Montarco; Alicante and Orihuela Provinces: no specific locality (MNCN). – Mercet, 1914:445 (listed from Spain); Giner Marí, 1941a:58 (in revision of Spanish *Cerceris*), 1943a:102 (in Sphecid Fauna of Spain); de Andrade, 1949:11 (Portugal: Lisboa); Ceballos, 1956:366 (in catalog of Hymenoptera of Spain); de Beaumont, 1957d:334 (diagnostic characters); Diniz, 1959:28 (Portugal: Algés, Cascais, Estoril, Lisboa, Massorra); de Beaumont, 1962b:21 (Spain: Sevilla); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); R. Bohart and Menke, 1976:577 (listed); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:323 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:48 (in revision of Western Palearctic *Cerceris*); Martin Albaladeo and Izquierdo Moya, 2006:117 (type in Museo Nacional de Ciencias Naturales); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent records from France and Spain reported).

**90. *berenice* de Beaumont**

*Cerceris berenice* de Beaumont, 1966:206, ♀, ♂. Holotype: ♀, SE Egypt: Gebel Elba (Lausanne). – R. Bohart and Menke, 1976:577 (listed); Dollfuss, 1989:8 (paratype in NHMW); K. Schmidt, 2000:144 (in revision of Western Palearctic *Cerceris*).

**91. *betpakdalensis* Kazenas**

*Cerceris betpakdalensis* Kazenas, 1984a:173, ♀, ♂. Holotype: ♀, S Kazakhstan: 70 km NW village Furmanovka (ZIN). – Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:140 (geographic distribution, collecting localities in Kazakhstan).

**92. *bicarinata* Arnold**

*Cerceris bicarinata* Arnold, 1935a:500, ♂. Holotype: ♂, Botswana: Kaotwe (TMP). – Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:166 (listed).

**93. *bicava* Shestakov**

*Cerceris bicava* Shestakov, 1917a:316, ♂. Holotype or syntypes: ♂, Eritrea: Ihinda (ZIN). – Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:166 (listed).

**94. *bicincta* Klug**

*Cerceris bicincta* Klug in Walth, 1835:100, ♂. Holotype: ♂, Spain: Andalusia: no specific locality (ZMHU). – Klug in Walth, 1835:87 (in list of Hymenoptera of Andalusia); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:375 (as synonym of *Cerceris rybyensis*); de Beaumont, 1950c:321 (study of holotype), 1951f:350 (Algeria, Morocco, Tunisia; discussion), 1952a:53 (France; redescription), 1953g:122 (Morocco), 1954e:87 (Italy); Bajári, 1956a:81 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:31, 39 (in key to Hungarian Sphecidae); Balthasar, 1958:338 (first record from Slovakia: Štúrovo); de Beaumont, 1958d:272 (Greece); Scobiola Palade, 1960a:169 (first record from Romania: Craiova Region: Braniște); Balthasar and Hrubant, 1961:15 (Slovakia: Mužla); de Beaumont, 1961b:273 (Afghanistan; local race); Tsuneki, 1961c:10, 16 (in key), 41 (Korea), 49 (China: Peking), 57 (China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka, ca. 45°E, 116°E); de Beaumont, 1962b:21 (Spain: Almería); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:20 (Greece); Tsuneki, 1965d:3 (prey record summary: Chrysomelidae), 35 (nesting habits); Diniz, 1966:7 (Portugal: Serra de Estrela); de Beaumont, 1967a:285 (Turkey); Scobiola-Palade, 1967b:40 (Romania); Tsuneki, 1967e:2 (China: Heilungkiang); Scobiola-Palade, 1968c:383 (Romania: Budești); Tsuneki, 1968f:5 (China: Szechuan: Mouchow); Suárez, 1969:28 (Spain: Almería Province); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Tsuneki, 1971l:430 (Mongolia), 1971m:17 (China: Peking; Nei Mongol: Apaka); Balthasar, 1972:409 (in Sphecid Fauna of Czechoslovakia); R. Bohart and Menke, 1976:577 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:56, 58 (in key to Sphecidae of Kazakhstan and Central Asia), 1979d:84, 87 (in key); Gayubo, 1982b:53 (Spain: Salamanca Province), 1982e:109 (Spain: Provincia Cádiz); Tsuneki, 1982b:18 (known from Korea); Dollfuss, 1983a:78 (endangered in Burgenland, Austria), 79 (endangered in Salzburg area, Austria), 1983b:24 (in catalog of Sphecidae of Austria); Gayubo, 1983e:237 (Spain: Salamanca Province); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:69 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1985c:172 (Spain: Valladolid: Quintanilla de Abajo); Józán, 1985b:62 (Hungary S Lake Balaton), 72 (map of distribution in Hungary), 82 (floral records), 85 (ecological and zoogeographic characteristics); Gayubo, 1986a:66 (Spain: Ciudad Real Province), 1986d:122 (Spain: Zamora Province); Gayubo and Sanza, 1986:85 (Spain: Burgos, Segovia); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast); Pagliano, 1987:162 and 165 (Italy, in key), 1988:153 (Italy; revision); Pádr in Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Cáceres and Zamora Provinces); Nemkov, 1990c:84 (Russia: Maritime Province); Pagliano, 1990:96 (in catalog of Italian Sphecidae); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:220 (in key to

- Sphecidae of North and Central Europe); Asís, Gayubo, and Tormos, 1991d:6 (nest and prey: Chrysomelidae), 8 (larva); Gayubo, Borsato, and Osella, 1991:420 (Italy: Lombardia: Mantova), 1992:91 (Greece); Tormos, Asís, and Gayubo, 1994:190, 225 (Spain: Albacete Province); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:472, 477 (in key to Sphecidae of Russian Far East); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:323 (in Sphecidae Fauna of Western Europe); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: Burgenland: Winden am See); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); Pagliano and Scaramozzino, 1999:159 (Italy: Piemonte: Borgomale); K. Schmidt, 2000:85 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 250 (reported biological observations of Tsuneki, 1965), 2001d:110, 111 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:140 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:134 (Greece: Attiki: Nea Makre); Kazenas, 2004b:111 (Kazakhstan: western Tien Shan); Jacobs, 2005a:441 (Bulgaria: Banya near Hissarya); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisoló, 2005:330 (in Sphecidae Fauna of Italy); Yildirim and Ljubomirov, 2005:1802 (Turkey: Erzurum: Dulçu, University Campus, Olur; Kars: Digor); Hua, 2006:277 (in list of Chinese insects, geographic distribution); Kazenas, 2007a:93 (Kazakhstan: Akmalá Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only), 234 (Schmidt's 2000 record from Czech Republic is not supported by evidence, not occurring there); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:133 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:146 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).
- Cerceris interrupta* Klug *in* Waltl, 1835:100, ♀, junior secondary homonym of *Cerceris interrupta* (Panzer, 1799). Holotype: ♀, Spain: Andalusia: no specific locality (ZMHU). Synonymized with *Cerceris bicincta* by de Beaumont, 1950c:321. – Klug *in* Waltl, 1835:87 (in list of Hymenoptera of Andalusia); Schletterer, 1887:375 (as synonym of *Cerceris rybyensis*).
- Cerceris sesquicincta* Klug *in* Waltl, 1835:100. Holotype: ♂, Spain: Andalusia: no specific locality (ZMHU). Synonymized with *Cerceris bicincta* by de Beaumont, 1950c:321. – Klug *in* Waltl, 1835:87 (in list of Hymenoptera of Andalusia); Kirchner, 1867:221 (in catalog of European Hymenoptera).
- Cerceris quadrimaculata* Dufour, 1849:92, ♀ (as *4 maculata*, incorrect original spelling). Syntypes: Spain: Madrid (MNHN). Synonymized with *Cerceris bicincta* Klug by de Beaumont, 1950c:321, 324. – Kirchner, 1867:221 (in catalog of European Hymenoptera); Marquet, 1881:181 (France: Bouches-du-Rhône: Marseille; Hérault: Béziers); Schletterer, 1887:400 (in revision of world *Cerceris*, description of ♂), 500 (listed); Ed. André, 1889:258 (in revision of Sphecidae of Europe and Algeria), 1891:26\* (bibliographic references); Baldini, 1894:58 (Italy: Modena area); Schmiedeknecht, 1896:159 (Algeria: Hammam-Bou-Hadjar); Dalla Torre, 1897:472 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (occurring in Mediterranean Hungary); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); E. Saunders, 1904c:638 (Spain); Schmiedeknecht, 1907:237, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Strand, 1910e:217 (Algeria: Constantine Province); Morice, 1911:90 (Algeria: Constantine); Mercet, 1914:445 (listed from Spain); Zilahi Kiss, 1915:80 (Hungary: Simontornya); Kohl, 1916:120 (specimens in O. Radoszkowski collection); Shestakov, 1918a:148 (Transcaspia); Maidl, 1922:68 (Croatia); Berland, 1925d:62 (in Sphecidae Fauna of France); Shestakov, 1928:267 (study of syntypes); Berland, 1926a:53 (prey); Schmiedeknecht, 1930:698, 704 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Shestakov *in* Nadig, 1933:97 (Morocco: Asni); Giner Marí, 1934:131 (in revision of Spanish *Cerceris*); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Bat'a, 1937:207 (in catalog of Sphecidae of Czechoslovakia); Giner Marí, 1941b:251 (in revision of North African *Cerceris*); Yasumatsu, 1942c:108 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Giner



Marí, 1943a:107 (in Sphecidae Fauna of Spain); Yasumatsu, 1942:108 (China); Šnoflak *in* Zavadil and Šnoflak, 1948:91, 96 (in key to Sphecidae of Czechoslovakia); Ceballos, 1956:370 (in catalog of Hymenoptera of Spain); Babiý, 1964:117 (Austria: Land Salzburg).

*Cerceris klugi* Kirchner, 1867:221, junior primary homonym of *Cerceris klugii* F. Smith, 1856. Substitute name for *Cerceris interrupta* Klug *in* Waltl, 1835:100. – Shestakov, 1923:103, 104, 105 (in key to subgenus *Apiraptrix*), 115 (citations, distribution); Giner Marí, 1941b: 157 (in revision of North African *Cerceris*).

*Cerceris variolosa* A. Costa, 1867c:95, ♂. Holotype or syntypes: ♂, Italy: Benevento (lost). Synonymized with *Cerceris bicincta* by de Beaumont, 1950c:326. – A. Costa, 1872a:30 (in revision of Italian Sphecidae); Schletterer, 1887:482 (original description copied), 505 (listed); Ed. André, 1889:261, 266 (in revision of Sphecidae of Europe and Algeria), 1891:26\* (bibliographic references); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); Mercet, 1914:445 (listed from Spain); Giner Marí, 1941a:84 (original description translated into Spanish); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain); Balthasar, 1972:411 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country).

*Cerceris variolosa* A. Costa, 1869b:111, ♂. Objective synonym of *Cerceris variolosa* A. Costa, 1867c:95

*Cerceris fuscina* Shestakov, 1914:95, ♀. Holotype or syntypes: ♀, Turkmenistan: Imam Baba (ZIN). Synonymized with *Cerceris bicincta* by Kazenas, 1984a:69. – R. Bohart and Menke, 1976:581 (listed).

*Cerceris clythrochtonus* Berland, 1926a:53 (authorship attributed to Guérin-Méneville). Name proposed as synonym of *Cerceris quadrimaculata* Dufour. Not available (Article 11e).

As *Cerceris quadricincta* var. *schulthessi* (corrected to *Cerceris bicincta* by de Beaumont, 1951f:350): von Schulthess, 1926b:211 (Tunisia: Le Kef); Giner Marí, 1941b:251 (in revision of North African *Cerceris*).

*Cerceris bimaculata* Vogrin, 1954:12, ♀, junior primary homonym of *Cerceris bimaculata* Cameron, 1905. Holotype: ♀, Yugoslavia: Skoda = Scutari (Croatian National Zool. Mus.?). Synonymized with *Cerceris bicincta* by de Beaumont, 1957d:328. – Vogrin, 1955:32 (Yugoslavia).

### **ssp. leucozonica Schletterer**

*Cerceris leucozonica* Schletterer, 1887:405, ♀, ♂. Syntypes: Hungary: no specific locality; and Romania (as Bulgaria): Tultscha, now Tulcea (NHMW). – Schletterer, 1887:496 (listed); Ed. André, 1889:259, 275, 296, 300 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Slovakia); Vängel, 1905:167 (Hungary); Schmiedeknecht, 1907:240, 243 (in key to Hymenoptera of Central Europe); Mercet, 1914:445 (listed from Spain); Kohl, 1916:120 (as a color form of *Cerceris quadrimaculata*); R. Turner, 1912e:511 (Pakistan: Baluchistan: Quetta; revision); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); Schmiedeknecht, 1930:701, 704 (in keys to Hymenoptera of North and Central Europe); Giner Marí, 1941a:82 (original description translated into Spanish), 1943a:107 (in Sphecidae Fauna of Spain); Šnoflak *in* Zavadil and Šnoflak, 1948:91, 96 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Bajári, 1956b:406, 408 (is a subspecies of *bicincta*); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain); Balthasar, 1958:338 (first record from Slovakia: Štúrovo); Balthasar and Hrubant, 1961:15 (Slovakia: Štúrovo). – **As *Cerceris bicincta leucozonica***: de Beaumont, 1951b:178 (new status, ...); Bajári, 1956a:82 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:31, 40 (in key to Hungarian Sphecidae); de Beaumont and Bytinski-Salz, 1959:123 (Israel: Jerusalem); Pulawski, 1965c:567 (synonymy); R. Bohart and Menke, 1976:577 (listed); Dollfuss, 1989:8 (type material in NHMW); K. Schmidt, 2000:86 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:110, 111 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris schulthessi* Schletterer, 1889a:885, ♀, ♂. Syntypes: Russia: Sarepta, now Krasnoarmeysk near Volgograd (Bern). Synonymized with *Cerceris bicincta leucozonica* by Pulawski, 1965c:567. – Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Shestakov, 1917c:46 (Ukraine: Crimea, as *schulthesi*), 1918a:151 (Kazakhstan and Uzbekistan); nec von Schulthess, 1926b:211 (= *Cerceris bicincta*); Shestakov, 1927a:17 (Russia: Stalingrad

Oblast', now Volgograd, as *schulthesi*), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); nec Giner Mari, 1941b:251 (= *Cerceris bicincta*); Giner Mari, 1945a:248 (Yugoslavia: Split, Skopije; as *Cerceris quadrimaculata* var. *schulthesi*); Dollfuss, 1989:8 (type material in NHMW). – As *Cerceris bicincta schulthesi*: Kazenas, 1974b:109 (new status, feeding on flowers of *Tamarix* sp. in Kazakhstan), 110 (feeding on flowers of *Nitraria schoberi* L., Zygophyllaceae, in Kazakhstan); Pulawski, 1978:192 (in key to Sphecidae of European part of former USSR); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E), 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E).

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Uzbekistan), corrected to *Cerceris schulthesi* by Shestakov, 1918a:161.

### 95. *bicornuta* Guérin-Méneville

*Cerceris bicornuta* Guérin-Méneville, 1844:443, [♀]. Lectotype: ♀, USA: Louisiana: New Orleans (Genova), designated by Guiglia, 1948b:179 (Article 74.6). – F. Smith, 1856:466 (in catalog of Hymenoptera in British Museum); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:117 (in revision of North American Philanthinae); Packard, 1866:61 (listed); de Saussure, 1867:100 (Louisiana, Carolina, Mexico; redescription); Cresson, 1873:227 (Texas), 1875:717 (Colorado, Nevada, New Mexico), 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:486 (listed); Cameron, 1890a:127 (listed); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae, as *bicornis*); Bridwell, 1899:209 (Kansas: no specific locality); Cockerell, 1899a:142 (New Mexico); Viereck, 1903d:120 (Maryland: Chestertown); Viereck and Cockerell, 1904b:130 (New Mexico); Banks, 1912:16 (in revision of eastern U.S. *Cerceris*); Kohl, 1916:108 (specimens in coll. Radoszkowski); Mickel, 1918b:447 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Cartwright, 1929:31 (preying on *Calendra maidis* Chittenden, now *Sphenophorus maidis*, a curculionid); Scullen, 1942:189 (as synonym of *Cerceris serripes*); Guiglia, 1948b:179 (lectotype in Genova); Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera, as *bicornuta bicornuta*); Krombein, 1953a:295 (visiting foliage of *Pinus serotina*), 336 (North Carolina), 1953b:118 (nest, prey: *Calendra* weevils), 123 (visiting foliage of *Quercus virginiana*), 124 (visiting flowers of *Pluchea* sp.), 125 (attracted to a grass), 134 (North Carolina: Kill Devil Hills); Krombein and Evans, 1954:235 (Florida); Guiglia and Pasteels, 1961:19 (type material in Genova Mus.); Scullen, 1965b:462 (in revision on North American *Cerceris*, as *bicornuta bicornuta*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen and Wold, 1970:210 (distribution and summary of prey records, as *bicornuta bicornuta*); Evans, 1971:513 (nesting habits, as *bicornuta bicornuta*); Scullen, 1972:71 (in revision of Mexican and Central American *Cerceris*, as *bicornuta bicornuta*); R. Bohart and Grissell, 1975:39 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:577 (listed); L. Davis, 1978:216 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Evans and Rubink, 1978:60 (nesting habits); Krombein, 1979b:1730 (in catalog of North American Hymenoptera, nesting sites, list of prey); G. Ferguson, 1984c:471 (listed); Ahlstrom, 1995:113 (in checklist of insects of North Carolina); Evans, 1996:70 (nest, prey); Meagher and Mitchell, 1999:368 (collected in pheromone- and synthetic floral volatile-baited traps); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Amarante, 2005a:12 (correction to his 2002 catalog); Buck, Paiero, and Marshall, 2006:41 (first record from Canada: Ontario: Essex County: Windsor; Lambton County: Walpole Island), 45 and 47 (in key to eastern Canadian *Cerceris*).

*Cerceris dufourii* Guérin-Méneville, 1844:444, sex not indicated (as *Dufourii*, incorrect original capitalization). Lectotype: USA: Louisiana: New Orleans (Genova), designated by Guiglia, 1948b:179 (Article 74.6). Synonymized with *Cerceris serripes* and *Cerceris bicornuta* by Cresson, 1875:... **check**. – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:131 (original description copied); Packard, 1866:641 (listed); Cresson,

1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:490 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Guiglia, 1948b:179 (lectotype in Genova); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris venator* Cresson, 1865c:116, ♂. Lectotype: ♂, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1916:101. Synonymized with *Cerceris bicornuta* by Cresson, 1875:717. – Cresson, 1873:228 (Texas), 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:505 (listed); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: Baldwin); Cockerell, 1899a:142 (New Mexico), 1901:41 (visiting flowers of *Petalostemon candidus* (Willd.)); Viereck and Cockerell, 1904b:130 (New Mexico); Hart, 1907:255 (Illinois); H. Smith, 1908b:364 (in revision of Nebraskan Sphecidae); Mickel, 1918b:447 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Hendrickson, 1930:160 (Iowa).

*Cerceris curvicornis* Cameron, 1890a:124, ♂. Holotype: ♂, Mexico: Mazatlán: Presidio (BMNH). Synonymized with *Cerceris bicornuta* by Scullen, 1961:45. – Packard, 1866:611 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae).

*Cerceris fidelis* Viereck and Cockerell, 1904b:132, ♀. Holotype: ♀, USA: New Mexico: Santa Fe (ANSP). Synonymized with *Cerceris bicornuta* by R. Bohart and Grissell, 1975:39, and by R. Bohart in R. Bohart and Menke, 1976:577. – Cresson, 1928:49 (holotype in ANSP); Banks, 1947:15 (in revision of western U.S. *Cerceris*). – **As *Cerceris bicornuta fidelis***: Scullen in Muesebeck et al., 1951:1005 (new status, in catalog of North American Hymenoptera); Krombein, 1960b:75 (nest and prey), 1961:300 (prey: large weevils of genus *Eupagoderes*); Scullen, 1965b:465 (in revision on North American *Cerceris*); Scullen and Wold, 1970:210 (distribution and summary of prey records); Scullen, 1972:72 (in revision of Mexican and Central American *Cerceris*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris venatrix* W. Schultz, 1906:195. Unjustified emendation of *Cerceris venator* Cresson, 1865.

As *Cerceris serripes* (corrected to *Cerceris bicornuta* by Ferguson and Vardy, 1984:57): Bequaert, 1928:62 (incorrectly synonymized *Cerceris bicornuta*); Brimley, 1938:448 (North Carolina: Bryson City, Raleigh, Southern Pines); Scullen, 1942:188 (as senior synonym of *Cerceris bicornuta*); Strandtmann, 1945a:311 (nest and prey).

#### 96. *bicuspidata* Arnold

*Cerceris bicuspidata* Arnold, 1931:154, ♂. Holotype: ♂, Namibia: Okahandja (BMNH). – Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:578 (listed); Empey, 1983:166 (listed, illegal designation of lectotype).

#### 97. *bidentula* Maidl

*Cerceris bidentula* Maidl, 1926:231, ♀. Holotype: ♀, Indonesia: Sulawesi: Samanaga (NHMW). – R. Bohart and Menke, 1976:578 (listed); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris langkasukae* Pagden, 1934b:472, ♀, ♂. Holotype: ♀, Malaysia: Kedah: Bukit Panchor (BMNH). Prey: Buprestidae and also *Hingstoniola pagdeni* Leclercq. Synonymized with *Cerceris bidentula* by Krombein, 1981:30. – R. Bohart and Menke, 1976:583 (listed).

*Cerceris spiniventris* Pagden, 1934:486, nomen nudum (predator of *Crabro fimbriata*), another name used for *Cerceris langkasukae*.

#### **ssp. *spiniventris* Tsuneki**

*Cerceris spiniventris* Tsuneki, 1963c:34, ♂. Holotype: ♂, Thailand: Chiang Mai (Sasayama Univ.). – R. Bohart and Menke, 1976:587 (listed). – **As *Cerceris bidentula spiniventris***: Krombein, 1981:10 (new status, nesting habits), 30 (in revision of Sri Lanka Philanthinae).

**98. bifasciata Guérin-Méneville**

*Cerceris bifasciata* Guérin-Méneville, 1835:pl. 71 fig. 9,[♀]. Holotype or syntypes: India: Bengal: no specific locality (Genova). – Guérin-Méneville, 1844:443 (description); F. Smith, 1856:451 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:487 (listed); Cameron, 1890b:248 (listed); Bingham, 1897:312 (original description copied); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); R. Turner, 1912e:806 (original description copied); Guiglia, 1948b:179 (lectotype in Genova); R. Bohart and Menke, 1976:578 (listed); Krombein, 1981:13 (nesting habits), 39 (in revision of Sri Lanka Philanthinae); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

*Cerceris instabilis* F. Smith, 1856:452, ♀, ♂. Syntypes: India and China: no specific localities (BMNH). Synonymized with *Cerceris bifasciata* by Krombein, 1981:39. – F. Smith, 1858b:18 (Indonesia: Sulawesi); de Saussure, 1867:92 (Sri Lanka: Trincomelee; redescription); Schletterer, 1887:494 (listed); Cameron, 1890b:249 (India: Barrackpore, Poona), 253 ("common and variable"); Bingham, 1896a:446 (references), 1897:307 (redescription); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Paiva, 1907:15 (Nepal: Soondrijal); R. Turner, 1912e:806 (in revision of British India species); R. Bohart and Menke, 1976:582 (listed); S. Gupta, 1995:87 (India: Uttar Pradesh).

*Cerceris velox* F. Smith, 1875:41, ♂. Syntypes: ♂, India: no specific locality (OXUM). Synonymized with *Cerceris instabilis* by Cameron, 1890b:249, synonymy confirmed by Krombein, 1981:40. – Schletterer, 1887:505 (listed); Dalla Torre, 1897:480 (in catalog of world Hymenoptera).

*Cerceris varia* Maidl, 1926:222, ♀. Holotype: ♀, Indonesia: Java: no specific locality (NHMW). Synonymized with *Cerceris bifasciata* by Krombein, 1981:40. – van der Vecht, 1964:356 (in revisions of Javan species); Haneda, 1972a:6 (Taiwan); nec Tsuneki, 1970c:20 (= *Cerceris varia kalensis*); R. Bohart and Menke, 1976:588 (listed).

*Cerceris obtusedentata* Maidl, 1926:235, ♂. Holotype: ♂, Indonesia: Java: no specific locality (NHMW). Synonymized with *Cerceris varia* by van der Vecht, 1964:356. – Dollfuss, 1989:8 (type material in NHMW, as *obtusedentata*).

*Cerceris maculiceps* Tsuneki, 1963:30, ♂. Holotype: ♂, Thailand: Patalung (Sasayama Univ.). Synonymized with *Cerceris varia* by Tsuneki, 1970c:20, synonymy confirmed by Krombein, 1981:40.

*Cerceris varia kalensis* Tsuneki, 1972c:4, ♂. Holotype: ♂, Taiwan: Hualien Prefecture: Liyuchih (originally K. Tsuneki coll., now USNM). Synonymized with *Cerceris bifasciata* by Krombein, 1981:40. – Murota, 1973b:117 (Taiwan); R. Bohart and Menke, 1976:589 (listed); Tsuneki, 1977j:254 (Taiwan); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

As *Cerceris varia*: Tsuneki, 1970c:20 (Taiwan), corrected to *Cerceris varia kalensis* by Tsuneki, 1972c:4.

**99. bifurcata Empey**

*Cerceris bifurcata* Empey, 1970:183, ♀. Holotype: ♀, Zaire: Garamba National Park (MRAC). – R. Bohart and Menke, 1976:578 (listed).

**100. bimaculata Cameron**

*Cerceris bimaculata* Cameron, 1905c:219, ♀. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:76. – R. Turner, 1912e:505 (revision); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:578 (listed); Empey, 1984:76 (listed, type examined).

*Cerceris canaliculata* Cameron, 1905c:219, ♂, junior primary homonym of *Cerceris canaliculata* Pérez, 1895. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:76 (Article 74.6). Synonymized with *Cerceris bimaculata* by R. Turner, 1912e:505.

*Cerceris cameroni* W. Schulz, 1906:194 (as *Cameroni*, incorrect original capitalization). Substitute name for *Cerceris canaliculata* Cameron, 1905 nec *Cerceris canaliculata* (Say, 1823) Schletterer, 1887. – G. Ferguson, 1982:155 (removed from synonymy of *Eucerceris canaliculata*).

**101. *binghami* R. Turner**

As *Cerceris ferox*: Bingham, 1897:310 (redescription), corrected to *Cerceris binghami* by R. Turner, 1912e:503, probably also Bingham, 1905:46 (Malaysia: Biserat).

*Cerceris binghami* R. Turner, 1912:503, ♀. Holotype or syntypes: Burma: Tenasserim: Ataran (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:578 (listed).

**102. *binodis* Spinola**

*Cerceris binodis* Spinola, 1841:117, ♂. Lectotype: ♂, French Guiana: Cayenne (Torino), designated by G. Ferguson, 1984b:432. – F. Smith, 1856:464 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:487 (listed); Cameron, 1890a:107 (Mexico, redescription); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Fritz, 1970:159 (synonymy); Evans, 1971:513 (nesting habits); R. Bohart and Menke, 1976:578 (listed); Nascimento and Overal, 1980:4 (Brazil, Peru); G. Ferguson, 1984c:472 (listed); Callan, 1990d:194 (nest and prey), 1991a:12 (Trinidad); D. Banks, 1995:77 (nest defense by males); Amarante, 2002:57 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies). – As *Philanthus binodis*: Casolari and Casolari Moreno, 1980:122 (new combination, specimens in M. Spinola collection, Torino). – As *Didesmus binodis*: Ashmead, 1899d:296 (new combination, in checklist of North American Crabronidae).

*Diamma spinolae* Dahlbom, 1844:225, ♂ (as *Spinolae*, incorrect original capitalization). Substitute name for *Cerceris binodis* Spinola, 1841. Holotype or syntypes: ♂, French Guiana: Cayenne (LUND). Synonymized with *Cerceris binodis* by F. Smith, 1856:464. – As *Didesmus spinolae*: Dahlbom, 1845:502 (new combination, type species of *Didesmus*). – As *Cerceris spinolae*: Schletterer, 1887:503 (new combination, listed)

*Cerceris viduata* F. Smith, 1856:463, ♀. Holotype or syntypes: ♀, Brazil: Pará: Belém (BMNH). Synonymized with *Cerceris binodis* by Fritz, 1970:159. – Schletterer, 1887:483 (original description copied), 506 (listed); Dalla Torre, 1897:481 (in catalog of world Hymenoptera).

*Cerceris singularis* Brèthes, 1910a:265, ♀. Holotype: ♀, Argentina: Córdoba: Córdoba (MACN). Synonymized with *Cerceris binodis* by Fritz, 1970:159. – Schrottky, 1913a:230 (Argentina: Córdoba); Fritz, 1968b:166 (study of holotype); Genise, 1990:26 (type material in MACN).

**103. *biplicatula* Gussakovskij**

*Cerceris biplicatula* Gussakovskij, 1938:8, ♀. Holotype: ♀, China: Kiangsu Province: no specific locality (NRS). – R. Bohart and Menke, 1976:578 (listed); Wu and Zhou, 1996a:169 (in revision in Economic Insect Fauna of China); Hua, 2006:277 (in list of Chinese insects, geographic distribution).

**104. *bituberculata* Tsuneki**

*Cerceris bituberculata* Tsuneki, 1963c:29, ♀, ♂. Holotype: ♀, Thailand: Muangfang (Sasayama Univ.). – R. Bohart and Menke, 1976:578 (listed).

**105. *blakei* Cresson**

*Cerceris elegans* F. Smith, 1856:467, ♂, junior primary homonym of *Cerceris elegans* Eversmann, 1849. Lectotype: ♂, USA: Florida: St. John's Bluff, now in Jacksonville (BMNH), designated by G. Ferguson, 1984b:434. Synonymized with *Cerceris blakei* by Scullen, 1961:45. – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:131 (original description copied); Packard, 1866:64 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:26 (in revision of eastern U.S. *Cerceris*).

*Cerceris blakei* Cresson, 1865b:121, ♀ (as *Blakei*, incorrect original capitalization). Holotype: ♀, USA: Georgia: no specific locality (ANSP). – Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:487 (listed, as *blackii*); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Cresson, 1916:99 (holotype in ANSP); Brimley, 1938:447

(North Carolina: Laurel Hill, McCullers, Southern Pines); Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Krombein, 1953a:295 (visiting foliage of *Pinus serotina*), 297 (visiting foliage of *Quercus virginiana*), 336 (North Carolina), 1953b:122 (visiting foliage of *Quercus marilandica*), 123 (visiting foliage of *Quercus virginiana*), 125 (attracted to a grass), 134 (North Carolina: Kill Devil Hills); Krombein and Evans, 1954:235 (Florida); Krombein, 1963c:72 (nesting habits); Scullen, 1965b:359 (in revision of North American *Cerceris*); Tsuneki, 1965d:3, 4 (prey record summary: Chrysomelidae, Curculionidae, Tenebrionidae); Scullen and Wold, 1970:210 (distribution and summary of prey records); R. Bohart and Menke, 1976:578 (listed); L. Davis, 1978:216 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1730 (in catalog of North American Hymenoptera, nest, list of prey); G. Ferguson, 1984c:472 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species).

*Cerceris elegantissima* Schletterer, 1887:490. Substitute name for *Cerceris elegans* F. Smith, 1856. – Dalla Torre, 1897:458 (in catalog of world Hymenoptera); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).

#### 106. *boetica* Pérez

*Nectanebus boeticus* Pérez, 1913:72, ♀, ♂ (as *Boeticus*, incorrect original capitalization). Syntypes: Spain: Andalusia and Sierra Nevada: no specific localities (depository?). – Mercet, 1914:445 (in key to Philanthinae of Spain, as *baeticus*); Giner Marí, 1943a:107 (in Sphecid Fauna of Spain, as *baeticus*); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain, as *baeticus*). – **As *Cerceris boetica***: R. Bohart and Menke, 1976:578 (new combination, listed); Tormos and Jiménez, 1985:... (...: Benidorm); Gayubo, Tormos, and Asís, 1993a:205 (Spain: Almería Province: Rioja; Granada: Guadix); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:326 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:125 (in revision of Western Palearctic *Cerceris*).

*Cerceris lorcai* Guichard, 1990a, ♀, ♂. Holotype: ♀, Spain: Granada: Yegen NE Orgiva in Sierra Nevada (M. Schwarz coll.). Synonymized with *Cerceris boeticus* by Gayubo, Tormos, and Asís, 1993a:205.

#### 107. *boharti* Scullen

*Cerceris boharti* Scullen, 1965b:466, ♀. Holotype: ♀, Arizona: Santa Catalina Mountains: Mount Lemmon Lodge (UCD). – Scullen, 1972:72 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1730 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:472 (listed); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Amarante, 2005a:5 (in addendum to his 2002 catalog of Neotropical Crabronidae and Sphecidae).

#### 108. *bohariana* Fritz and Toro

*Cerceris bohariana* Fritz and Toro, 1969:152, ♀. Holotype: ♀, Argentina: La Rioja: Iliar (MACN). – R. Bohart and Menke, 1976:578 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

#### 109. *bolanica* R. Turner

*Cerceris bolanica* R. Turner, 1912e:515, ♀, ♂. Syntypes: Pakistan: Baluchistan: Quetta (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:578 (listed).

#### 110. *bolingeri* Scullen

*Cerceris aequalis bolingeri* Scullen, 1965b:453, ♀. Holotype: ♀, USA, Oregon: Lake County: Hart Mountain: Jacob's Cabin (USNM). – R. Bohart and Menke, 1976:576 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera). – **As *Cerceris bolingeri***: G. Ferguson, 1984c:472 (full species status); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**111. *bolingeriana* Krombein**

*Cerceris bolingeri* Scullen, 1972:72, ♀, junior primary homonym of *Cerceris bolingeri* Scullen, 1965. Holotype: ♀, Mexico: Durango: 40 mi NW Gomez Palacio (USNM). – R. Bohart and Menke, 1976:578 (listed).

*Cerceris bolingeriana* Krombein, 1979b:1730. Substitute name for *Cerceris bolingeri* Scullen, 1972. – G. Ferguson, 1984c:472 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Amarante, 2005a:12 (correction to his 2002 catalog).

**112. *bonaerensis* Holmberg**

*Cerceris bonaerensis* Holmberg, 1903:486, ♀ (as *bonaërensis*, incorrect original diacritic mark). Lectotype: ♀, Argentina: Buenos Aires: Buenos Aires (MACN), designated by Fritz, 1968b:165 (Article 74.6) and 1983a:25. – Schrottky, 1913a:229 (Argentina: Buenos Aires); R. Bohart and Menke, 1976:578 (listed); Fritz, 19883a (re-description); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

*Cerceris pedestris* Brèthes, 1910a:266, ♀. Holotype or syntypes: ♀, Argentina: Entre Rios: Paraná (MACN). Synonymized with *Cerceris bonaerensis* by Fritz, 1983a:25. – Schrottky, 1913a:230 (Argentina: Entre Rios); Fritz, 1968b:166 (holotype missing in MACN); R. Bohart and Menke, 1976:585 (listed); Genise, 1990:26 (type material in MACN).

*Cerceris ameghinoi* Brèthes, 1910a:275, ♀ (as *Ameghinoi*, incorrect original capitalization). Holotype or syntypes: ♀, Argentina: Entre Ríos: Paraná (depository unknown: Fritz, 1968b:168). Synonymized with *Cerceris bonaerensis* by Fritz, 1983a:25. – Schrottky, 1913a:229 (Argentina: Entre Ríos); R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (location of type material unknown); Amarante, 2005a:12 (correction to his 2002 catalog).

*Cerceris lynx* Brèthes, 1913:124, ♀. Holotype: ♀, Argentina: Córdoba: Arias (MACN). Synonymized with *Cerceris bonaerensis* by Fritz, 1983a:25. – Fritz, 1968b:169 (study of holotype); R. Bohart and Menke, 1976:583 (listed); Genise, 1990:26 (type material in MACN).

**113. *borealis* Mocsáry**

*Cerceris borealis* Mocsáry in Mocsáry and Szépligeti, 1901:161, ♂. Holotype or syntypes: ♂, Russia: Siberia: Krasnoyarsk (TMB). – R. Bohart and Menke, 1976:578 (listed); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009a:66 (is an endemic of Krasnoyarskiy Kray, Russia), 2009b:146 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**114. *boschmai* van der Vecht**

*Cerceris boschmai* van der Vecht, 1964:359, ♀, ♂. Holotype: ♀, Indonesia: Java: Banten, Tjilegon (RMNH). – R. Bohart and Menke, 1976:578 (listed).

**115. *bothavillensis* Brauns**

*Cerceris bothavillensis* Brauns, 1926:327, ♀. Lectotype: ♀, South Africa: Orange Free State: Bothaville (TMP), designated by Empey, 1983:166. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1942:23 (Lesotho: Mamathes; ♂); Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:578 (listed); Empey, 1983:166 (listed).

**116. *bothriophora* Schletterer**

*Cerceris bothriophora* Schletterer, 1887:456, ♀, ♂. Lectotype: ♂, Mexico: no specific locality (NHMW), designated by G. Ferguson, 1984b:432. Designation of neotype by Scullen, 1972:73 was illegal (G. Ferguson, 1984b:432). – Schletterer, 1887:487 (listed); Cameron, 1890a:127 (listed); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:73 (in revision of Mexican and Central American *Cerceris*); and Menke, 1976:578 (listed); G. Ferguson, 1984c:473 (listed); Dollfuss, 1989:8 (neotype in NHMW); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris geniculata* Cameron, 1890:113, ♀. Lectotype: ♀, Mexico: Nayarit: Cuantla (BMNH), designated by G. Ferguson, 1984b:435. Synonymized with *Cerceris bothriophora* by G. Ferguson, 1984c:473. – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae). – **As *Cerceris compar geniculata***: Scullen, 1962:57 (new status), 1965b:442 (in revision on North American *Cerceris*), 1972:60 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris feralis* Cameron, 1890:113, ♂. Lectotype: ♂, Mexico: Nayarit: Cuantla (BMNH), designated by G. Ferguson, 1984b:434. Synonymized with *Cerceris geniculata* by Scullen, 1962:57. – Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:60 (as synonym of *Cerceris compar geniculata*).

*Cerceris orestes* Banks, 1947:13, ♀, ♂. Lectotype: ♀, Arizona: Patagonia (MCZ), designated by G. Ferguson, 1983b:231. Synonymized with *Cerceris bothriophora* by G. Ferguson, 1984c:473. – Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera). – **As *Cerceris compar orestes***: Scullen, 1962:57 (new status), 1965b:444 (in revision on North American *Cerceris*), 1972:61 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 117. *bougainvillensis* Tsuneki

*Cerceris bougainvillensis* Tsuneki, 1968e:8, ♀, ♂. Holotype: ♀, Solomon Islands: Bougainville Island (AMNH). – Tsuneki, 1968e:4 (in key); Krombein, 1969a:32 (diagnostic characters), 35 (description of nominotypical subspecies); Tsuneki, 1982a:56 (Bismarck Archipelago); R. Bohart and Menke, 1976:578 (listed).

### *ssp. solomonis* Krombein

*Cerceris bougainvillensis solomonis* Krombein, 1969b:32, ♀, ♂. Holotype: ♀, Solomon Islands: Guadalcanal: Haitete (USNM). – R. Bohart and Menke, 1976:578 (listed).

### *ssp. lavellensis* Krombein

*Cerceris bougainvillensis lavellensis* Krombein, 1969b:34, ♀, ♂. Holotype: ♀, Solomon Islands: Vella Lavella (USNM). – R. Bohart and Menke, 1976:578 (listed).

### *ssp. novogeorgica* Krombein

*Cerceris bougainvillensis novogeorgica* Krombein, 1969b:34, ♀, ♂. Holotype: ♀, Solomon Islands: Nova Georgia Island: Munda Point (USNM). – R. Bohart and Menke, 1976:578 (listed).

### 118. *boysi* R. Turner

*Cerceris boysi* R. Turner, 1912e:805, ♀. Holotype: ♀, British India: no specific locality, probably Pakistan: North-West Province (OXUM). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:578 (listed).

### 119. *bracteata* Eversmann

*Cerceris bracteata* Eversmann, 1849:405, ♀. Holotype: ♀, Russia: "in promontoribus Uralensibus" [labeled Spasskoye, 120 km E Orenburg] (Kraków). – Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867); Schletterer, 1887:434 (in revision of world *Cerceris*), 487 (listed); Ed. André, 1889:289, 299, 303 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); F. Morawitz, 1889a:158 (China: Gansu, as *braccata*); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, Grebenáz is in today's Romania); Schmiedeknecht, 1907:239, 243 (in key to Hymenoptera of Central Europe); Mercet, 1914:445 (listed from Spain, determination probably erroneous); Kohl, 1913b:15 (Russia: Voronezh



Oblast': Valuyki at 50°14'N 38°08'E); Zilahi Kiss, 1915:80 (Hungary: Hadad); Kohl, 1916:108 (holotype in O. Radoszkowski collection); Schmiedeknecht, 1930:700, 703 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:63 (Russia: Orenburg Oblast'); Zavadil, Šustera, and Bat'a, 1937:209 (in catalog of Sphecidae of Czechoslovakia); Giner Marí, 1941a:55 (in revision of Spanish *Cerceris*), 1943a:102 (in Sphecidae Fauna of Spain); Šnoflak in Zavadil and Šnoflak, 1948:89, 95 (in key to Sphecidae of Czechoslovakia); Balthasar, 1954d:182 (Slovakia); Bajári, 1956a:84 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:366 (in catalog of Hymenoptera of Spain); Bajári, 1957a:36, 43 (in key to Hungarian Sphecidae); de Beaumont, 1957d:334 (diagnostic characters); Balthasar, 1958:339 (Slovakia: Štúrovo); Pulawski, 1965c:570 (synonymy); Scobiola-Palade, 1967b:41 (Romania), 1971:205 (in review of *Cerceris* of Romania); Balthasar, 1972:407 (in Sphecidae Fauna of Czechoslovakia); R. Bohart and Menke, 1976:578 (listed); Kazenas, 1978b:63, 65 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:194, 195 (in key to Sphecidae of European part of former USSR); Dollfuss, 1983b:24 (in catalog of Sphecidae of Austria); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:119 (revision); Józán, 1985b:62 (Hungary S Lake Balaton), 85 (ecological and zoogeographic characteristics); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast'); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr in Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast'); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:326 (in Sphecidae Fauna of Western Europe); Ljubomirov, 2000:13 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:49 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 115 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:141 (geographic distribution, collecting localities in Kazakhstan), 2004b:111 (Kazakhstan: western Tien Shan); Yildirim and Ljubomirov, 2005:1802 (Turkey: Bingöl: Bilaloğlu; Erzurum: University Campus); Kazenas, 2007a:93 (Kazakhstan: Akmalá Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Ljubomirov and Yildirim, 2008:133 (in catalog of Crabronidae of Turkey); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent record from Bulgaria reported).

*Cerceris penicillata* Mocsary, 1879:130, ♀, ♂. Syntypes: Hungary: Budapest (TMB). Synonymized with *Cerceris bracteata* by Schletterer, 1887:434. – Sajó, 1882:6 (Hungary); Kohl, 1916:120 (specimens in O. Radoszkowski collection); Pulawski, 1965c:570 (synonymy confirmed).

*Cerceris mirabilis* Shestakov, 1927a:17, ♀. Holotype: ♀, Russia: Orenburg (ZIN). Synonymized with *Cerceris bracteata* by Pulawski, 1965c:570. – Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg), 1930:64 (Russia: Orenburg Oblast').

### 120. *bradleyi* Scullen

*Cerceris bradleyi* Scullen, 1972:73, ♀. Holotype: ♀, Nicaragua: La Calera ? (USNM). – R. Bohart and Menke, 1976:578 (listed); G. Ferguson, 1984c:473 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 121. *brandti* Krombein

*Cerceris brandti* Krombein, 1969b:17, ♂. Holotype: Papua New Guinea: New Ireland: Lelet Plateau in Schleinitz Mountains (BISHOP). – R. Bohart and Menke, 1976:578 (listed).

### 122. *brevibarbata* Tsuneki

*Cerceris brevibarbata* Tsuneki, 1976b:40, ♂. Holotype: ♂, Philippines: Tawi Tawi: Tarawakan (ZMK). – Tsuneki et al., 1992c:50 (in key), 65 (bibliographic reference).

**123. *brethesi* Fritz and Mariluis**

*Cerceris brethesi* Fritz and Mariluis, 1979:34, ♀. Holotype: ♀, Brazil: Rio Grande do Sul: Pelotas (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

**124. *bridwelli* Scullen**

*Cerceris bridwelli* Scullen, 1965b:361, ♀, ♂. Holotype: ♀, USA: California: Imperial County: no specific locality (USNM). – Scullen, 1972:19 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Grissell, 1975:40 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1730 (in catalog of North American Hymenoptera); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); G. Ferguson, 1984c:473 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**125. *bucculata* A. Costa**

*Philanthus lunulatus* Thunberg, 1815:137, sex not indicated, possibly a citation *Crabro lunulatus* Rossi, 1792, possibly a junior secondary homonym of the latter in *Cerceris*. Holotype or syntypes: ♀, origin unknown (Uppsala). Synonymized with *Cerceris laminifera* by W. Schulz, 1912:70, and with *Cerceris bucculata* by de Beaumont, 1950c:320. – Thunberg, 1815a:128 (diagnostic characters), 1815b:289 (diagnostic characters); Dalla Torre, 1897:488 (in catalog of world Hymenoptera).

*Cerceris bucculata* A. Costa, 1860:11, ♀. Lectotype: ♀, Italy: vicinity of Napoli (Napoli), designated by de Beaumont, 1950c:325. – A. Costa, 1867c:83 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); A. Costa, 1869b:99 (in revision of Italian Philanthinae), A. Costa, 1882b:23 and 35 (Italy: Sardegna), 1883:57 (Italy: Sardegna: Alghero, Porto Torres, Simaxis); nec Schletterer, 1887:438 (= *Cerceris impercepta*); Schletterer, 1887:487 (listed); nec Kohl, 1893a:34 (= *Cerceris somotorensis*); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Schmiedeknecht, 1907:240 (in key to Hymenoptera of Central Europe); nec Morice, 1911:88 (= *Cerceris escalerae*); Schmiedeknecht, 1930:700 (in keys to Hymenoptera of North and Central Europe); Šnoflak in Zavadil and Šnoflak, 1948:89 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Beaumont, 1954e:87 (Italy: Campania); Bajári, 1956b:405, 408 (not collected in Hungary for 70 years); de Beaumont, 1957d:335 (diagnostic characters), 1959a:15 (Italy: Lazio, Sicilia; description of ♂); Grandi, 1957:387 (Italy: Gargano); Balthasar, 1972:407 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:578 (listed); Dollfuss, 1983b:24 (records from Austria questionable); Pagliano, 1988:170 (Italy; revision), 1990:96 (in catalog of Italian Sphecidae); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:327 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:51 (in revision of Western Palearctic *Cerceris*); Pagliano and Negrisolò, 2005:322 (in Sphecid Fauna of Italy); Pagliano, 2009:183 (Italy: recorded from Lombardia by Schmidt, 2000); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent record from Sicily reported).

As *Cerceris laminifera*: Schletterer, 1887:439 (in revision of world *Cerceris*), corrected to *Cerceris bucculata* by de Beaumont, 1950c:320, 325, 1951b:177, 1957d:335; Dusmet y Alonso, 1915:87 (Spain: Aragón: Albarracín, Vera de Moncayo), present correction; Ceballos, 1956:369 (in catalog of Hymenoptera of Spain), present correction.

As *Cerceris bucculenta*: Ed. Ed. André, 1889:301 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references), emendation of or lapsus for *Cerceris bucculata*; Mocsáry, 1897:80 (occurring in Hungary according to Schletterer, 1887).

**126. *bulawayoensis* Brauns**

*Cerceris bulawayoensis* Brauns, 1926:281, ♀, ♂. Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Empey, 1983:166. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:145 (in key); Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:578 (listed); Empey, 1983:166 (listed).

**127. bulganensis Tsuneki**

*Cerceris fulviventris* Tsuneki, 1961:427, ♂, junior primary homonym of *Cerceris fulviventris* Guérin-Méneville, 1844.

Holotype: ♂, Mongolia: Hovd Aymag: Somon Bulgan (TMB).

*Cerceris bulganensis* Tsuneki, 1971m:37. Substitute name for *Cerceris fulviventris* Tsuneki, 1971, nec Guérin-Méneville, 1845. – R. Bohart and Menke, 1976:578 (listed).

**128. bupresticida Dufour**

*Cerceris bupresticida* Dufour, 1841c:353, ♀, ♂. Syntypes: France: St. Séver and Spain: no specific locality (MNHN).

– Dahlbom, 1845:498 (in key); F. Smith, 1856:438 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); A. Costa, 1867c:93 and 1869b:109 (in revision of Italian Sphecidae), 1872a:27 (in revision of Sphecidae of Kingdom of Naples, Italy); Dours, 1874:144 (in catalog of Hymenoptera of France); Kohl, 1880:154 (Italy: Trentino–Alto Adige), 226 (list of buprestid prey); Marquet, 1881:190 (France: Hérault: Béziers, description of ♂); Marquet, 1875:205 (France: Hérault: Montpellier); Girard, 1879:920 (morphology and habits); Schletterer, 1887:397 (revision), 487 (listed); Ed. André, 1889:269 (in revision of Sphecidae of Europe and Algeria); Gasperini, 1889:69 (Dalmatia: Lesina and Spalato, now Croatia: Hvar and Split); Schletterer, 1889b:1126 (Armenia: Arax Valley); Steck, 1890:168, 170 (in key to *Cerceris* of Switzerland); Ed. André, 1891:28\* (bibliographic references); F. Morawitz, 1891a:215 (Russia: Astrakhan Government), 1893b:420 (Tajikistan: Varzaminor); Baldini, 1894:59 (Italy: Modena area); Medina, 1894b:263 (Spain: Sevilla, Pozuelo de Calatrava); F. Morawitz, 1894:351 (Turkmenistan: Koshlagar); Nicolas, 1894:39 (preying on variety of buprestids); Laboulbène, 1895:180 (preying on Buprestidae); O. Schultz, 1896:361 (L. Dufour's observation reported); Borries, 1897:51 (review of nesting habits); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, localities are in today's Croatia and Romania); de Cobelli, 1903:110 (Italy: Province of Trentino: Levico); Adlerz, 1904:138 (known prey: Buprestidae); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); E. Saunders, 1904c:638 (Spain); W. Schulz, 1904b:93 (Greece: Epirus; Kazakhstan: Semipalatinsk); Móczár and Henter, 1907:205 (Romania: Caraș-Severin: Mehadia); Schmiedeknecht, 1907:237, 242 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Morice, 1911:77 (Algeria: Biskra, Le Tarf); Szilády, 1913:89 (Hungary: Torda); Mercet, 1914:445 (listed from Spain); Zilahy Kiss, 1915:80 (Hungary: Hadad); Shestakov, 1916b:230 (Caucasus), 1917c:46 (Ukraine: Crimea), 1918a:125 (Transcaspia; synonymy), 146 and 148 (synonymy); Honoré, 1919:268 (France: Seine-et-Oise: Bouray); Morice, 1921:288 (Iraq: Baquba); Berland, 1925:56 (in Sphecid Fauna of France); Coulon, 1925:117 (France: Marseille; list of prey); Friese, 1926:154 (in key to Sphecidae of Central Europe, short morphological and biological characteristics, list of prey); von Schulthess, 1926b:211 (Tunisia); Shestakov, 1927a:17 (Russia: Orenburg Oblast'), 19 (Stalingrad Oblast', now Volgograd), 19, 20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Picard, 1928:310 (list of prey); Shestakov, 1928:266 (study of syntypes); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:698, 703 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:66 (Russia: Orenburg Oblast'); Bernard, 1933:62 (France: Drôme: Dieulefit); Shestakov *in* Nadig, 1933:97 (Morocco: Asni, Marrakech); Giner Marí, 1934:131 (Spain); Grandi, 1934:129 (Italy: Lazio: Acilia, and Toscana: San Vincenzo); Bernard, 1935:62 (France: Var: Fréjus area); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Kolosov, 1937:218 (Ukraine: Kupyansk); Giner Marí, 1941a:40 (in revision of Spanish *Cerceris*), 1941b:217 (in revision of North African *Cerceris*); Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E); Giner Marí, 1943a:98 (in Sphecid Fauna of Spain); Giordani Soika, 1944:12 (Italy: Sicilia:Falcone, Messina); Guiglia, 1944b:13 (Italy); Giner Marí, 1945a:248 (Greece: Rhodes Island; Liban), 1945b:359 (Morocco: Ain Zorah); Šnoflak *in* Zavadil and Šnoflak, 1948:90, 95 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Andrade, 1949:11 (Portugal); Balthasar, 1950:37 (additions to description of Zavadil and Šnoflak, 1948); de Beaumont, 1950c:324 (study of syntypes), 1950d:8 (Egypt: Siwa oasis), 1950f:397 (Algeria), 1951f:337 (North Africa; geographic variation), 1952a:52 (France; redescription), 1953g:122 (Morocco); Balthasar,

1954b:280 (Palestine: Jerusalem); de Beaumont, 1954e:87 (Italy); Grandi, 1954:236 (Italy); Vogrin, 1955:32 (Yugoslavia); Bajári, 1956a:81 (in catalog of Hungarian *Cerceris*, with list of localities); Bytinski-Salz, 1956:225 (Turkey: Acı Gol, Beykoz, Elmali); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:186 (Libya); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:30, 39 (in key to Hungarian Sphecidae, not yet found in Hungary); de Beaumont, 1957b:132 (n. Iran); Grandi, 1957:388 (Italy); de Beaumont, 1958d:272 (Greece); Nouvel and Ribaut, 1958:9 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:166 (Bulgaria: Kurilo, Sandanski, Varna); Ceballos, 1959:229 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1959a:14 (Italy); de Beaumont and Bytinski-Salz, 1959:122 (Israel); Suárez, 1959:54 (Spain: Almería Province); Tsuneki, 1961c:10, 16 (in key), 49 (China: Peking); de Beaumont, 1962b:21 (Spain), 1963c:417 (Afghanistan); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:19 (Greece); Roberti, Frilli, and Pizzaghi, 1965:109 (Italy: Emilia-Romagna: Marsaglia in Piacenza Province); Tsuneki, 1965d:3 (prey record summary: Buprestidae), 33 (nesting habits); Diniz, 1966:7 (Portugal: Aljustrel, Cascais, Coimbra, Lisboa, Rezende); de Beaumont, 1967a:284 (Turkey); Scobiola-Palade, 1967b:40 (Romania); de Beaumont, 1969:82 (Turkey), 1970c:7 (Iran: Khorassan); Kazenas, 1971:161 (Kazakhstan: Zailiyskiy Alatau Range; widely distributed in Kazakhstan); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Tsuneki, 1971:430 (Mongolia), 1971m:16 (China: Peking: Tiendang); Balthasar, 1972:401 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:126 (Kazakhstan); Erlandsson, 1974:62 (Spain); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan), 110 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, *Cynanchum sibiricum* Willd., Asclepiadaceae, *Euphorbia* spp., Euphorbiaceae, and *Nitraria schoberi* L., Zygophyllaceae, in Kazakhstan); R. Bohart and Menke, 1976:578 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:58 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:190, 192 (in key to Sphecidae of European part of former USSR); Benedek, 1979:229 (Hungary: Bakony Hills); Kazenas, 1979d:84, 87 (in key); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Pagliano, 1980:125 (Italy: Piemonte); Gayubo, 1982b:53 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:109 (Spain: Cádiz Province), 1983e:237 (Spain: Salamanca Province); Kazenas, 1984a:72 (redescription); Gayubo, 1986a:66 (Spain: Ciudad Real Province), 1986d:122 (Spain: Zamora Province); Gayubo and Heras, 1986:71 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:85 (Spain: Burgos); Pagliano, 1987:160 and 165 (Italy, in key), 1988:154 (Italy; revision); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Almería, Cáceres, and Zamora Provinces); Pagliano, 1990:96 (in catalog of Italian Sphecidae); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:420 (Italy: Veneto: Montello); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Guichard, 1991a:339 (Jordan); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Blagoveshchenskaya, 1994:91 (Russia: Ul'yanovsk Oblast'); Gayubo and Borsato, 1994:220 (Italy: Toscana); Tormos, Asís, and Gayubo, 1994:190, 226 (Spain: Albacete Province); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:472, 477 (in key to Sphecidae of Russian Far East); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Scharrer, 1995:30 (Croatia: Island of Krk); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:328 (in Sphecid Fauna of Western Europe); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Pagliano and Scaramozzino, 1999:159 (Italy: Piemonte: Borgomale); Tüzün, Gülmez, and Bağriaçık, 1999:386 (Turkey: Aegean Region); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); K. Schmidt, 2000:91 (in revision of Western Palearctic *Cerceris*); Hanot, 2001:659 (France: Ardèche: Chauzon, list of buprestid prey); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia). 250 (review of known biology), 2001d:110, 111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:141 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:134 (Spain: Tarragona); Kazenas, 2004b:111 (Kazakhstan: western Tien Shan); Nazarova, 2004:108 (Tajikistan: Badakhshan Region: village Langar in Shakh dara River valley; Rushan District: villages Dasht and Visav in Bartang River valley); Jacobs, 2005a:441 (Bulgaria: Sandanski); Nazarova, 2005:94

- (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisolo, 2005:331 (in Sphecidae Fauna of Italy); Shorenko, 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1802 (Turkey: Balıkesir, Bilecik, Erzurum, Iğdir, Kahramanmaraş, Kars, Konya, Malatya, and Niğde provinces); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Ljubomirov, 2006:537 (Bulgaria: Rhodope Mountains: Peshtera, as *bupresticida bupresticida*); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Kazenas, 2007a:93 (Kazakhstan: Akmalı Oblast': Kurgandzhin Nature Reserve and vicinity); Yildirim and Ljubomirov, 2007:119 (Turkey: Erzurum: Çat; İçel: Aydıncık); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:133 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:146 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: list of buprestid prey by Hanot, 2001, reported).
- Cerceris cristata* Dufour, 1841a:510 and 1841b:246, sex not indicated. Syntypes: France: Saint-Séver (depository?). Synonymized with *Cerceris bupresticida* by .... – Dufour, 1841a:509 and 1841b:245 (digestive tract), 1841a:511 and 1841b:247 (male reproductive system), 1841a:512 and 1841b:248 (female reproductive system); Lepeletier de Saint Fargeau, 1845:27 (name used formerly by Dufour for *Cerceris argentifrons*).
- Cerceris argentifrons* Lepeletier de Saint Fargeau, 1845:25, ♀, ♂, junior primary homonym of *Cerceris argentifrons* Guérin-Méneville, 1844. Syntypes: France: Saint-Séver (MNHN). Synonymized with *Cerceris bupresticida* by de Beaumont, 1950c:323. – Belke, 1853:433 (Ukraine: Kamieniec Podolski, as *argontifrons*); Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867); Schletterer, 1887:419 (as synonym of *Cerceris rubida*); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria).
- Cerceris frontalis* F. Smith, 1856:438. Substitute name for *Cerceris argentifrons* Lepeletier de Saint Fargeau, 1845, nec Guérin-Méneville, 1844.
- Cerceris brutia* A. Costa, 1867c:93, ♀. Holotype or syntypes: ♀, Italy: Calabria: Brancaleone (lost). Synonymized with *Cerceris bupresticida* by de Beaumont, 1950c:326. – A. Costa, 1872a:39 (in revision of Sphecidae of Kingdom of Naples, Italy); De Stefani Perez, 1884b:201 (Costa's description copied; description of ♂); Schletterer, 1887:465 (original description copied), 487 (listed); Ed. André, 1889:300 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:454 (in catalog of world Hymenoptera).
- Cerceris brutia* A. Costa, 1869b:109. Objective synonym of *Cerceris brutia* A. Costa, 1867c:93
- Cerceris mixta* Radoszkowski, 1877:58, ♂. Syntypes: ♂, Uzbekistan: Zeravshan valley, Djisak, Sokha river; Kyrgyzstan: Gulcha (ZMMU). Synonymized with *Cerceris bupresticida* by Kohl, 1916:119 and Shestakov, 1918a:146. – Schletterer, 1887:474 (original description copied), 497 (listed); Ed. André, 1889:338, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Kohl, 1916:118 (specimens in O. Radoszkowski collection).
- Cerceris quadripunctata* Radoszkowski, 1877:58, ♀. Syntypes: ♀, Kyrgyzstan: Gulcha (ZMMU). Synonymized with *Cerceris bupresticida* by Shestakov, 1918a:148. – Schletterer, 1887:477 (original description copied), 500 (listed); Ed. André, 1889:339, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:472 (in catalog of world Hymenoptera).
- Cerceris bupresticida* var. *nigrina* Giner Mari, 1941a:42, sex not indicated. Syntypes: Spain: no specific locality (MNCN). Synonymized with *Cerceris bupresticida* by K. Schmidt, 2000:91. – **As *Cerceris bupresticida nigrina***: R. Bohart and Menke, 1976:578 (new status, listed).
- As *Cerceris ornata*: Fabre, 1854:... (nesting habits), corrected to *Cerceris bupresticida* by Dufour, 1855:262.
- Le *Cerceris bupresticida*: Fabre, 1879:39 (nesting habits, list of prey).

**ssp. *libyca* de Beaumont**

*Cerceris bupresticida libyca* de Beaumont, 1960b:232, ♀. Holotype: ♀, Libya: Cyrenaica: Bersis (BMNH). – R. Bohart and Menke, 1976:578 (listed); K. Schmidt, 2000:92 (in revision of Western Palearctic *Cerceris*).

**129. *butleri* Scullen**

*Cerceris butleri* Scullen, 1965b:363, ♀. Holotype: ♀, USA: Arizona: 30 mi S Safford (USNM). – Scullen, 1972:20 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1730 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:473 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**130. *cacaloapana* Scullen**

*Cerceris cacaloapana* Scullen, 1972:74, ♀. Holotype: ♀, Mexico: Puebla: Cacaloapán 17 mi NW Puebla (UCD). – R. Bohart and Menke, 1976:578 (listed); G. Ferguson, 1984c:473 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**131. *caelebs* Giner Marí**

*Cerceris caelebs* Giner Marí, 1942b:133, ♂, ♀. Syntypes: China: Kuantun (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:578 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**132. *caiman* Fritz and Mariluis**

*Cerceris caiman* Fritz and Mariluis, 1976:100, ♀. Holotype: ♀, Argentina: Jujuy: Caimancito (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

**133. *calida* R. Turner**

*Cerceris calida* R. Turner, 1915a:62, ♀, ♂. Syntypes: Australia: Queensland: Kuranda (BMNH). – Cockerell, 1930:34 (Queensland: Babinda, comments of morphology); Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:578 (listed); Evans, 1982a:358 (revision); Cardale, 1985:297 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:293 (nest structure), 1986b:1301 (prey: Chrysomelidae); Evans, 1988:8 (nesting habits; prey: four families of beetles); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York).

**134. *californica* Cresson**

*Cerceris californica* Cresson, 1865c:128, ♂. Holotype: ♂, USA: California: no specific locality (ANSP). – Packard, 1866:63 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:487 (listed); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Cresson, 1916:99 (holotype in ANSP); Rohwer, 1917a:244 (California: Calaveras County); Banks, 1947:20 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Linsley and MacSwain, 1956:71 (nest and prey); Spencer, 1957:23 (Canada: British Columbia: Kamloops); Scullen, 1965b:401 (in revision of North American *Cerceris*, as *californica californica*); Tsuneki, 1965d:3 (prey record summary: Buprestidae); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); Scullen and Wold, 1970:210 (distribution and summary of prey records); Scullen, 1972:38 (in revision of Mexican and Central American species, as *californica californica*); R. Bohart and Grissell, 1975:41 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:578 (listed); Evans and Rubink, 1978:62 (nesting habits); Krombein, 1979b:1730 (in catalog of North American Hymenoptera, list of parasites and prey); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); G. Ferguson, 1984c:473 (listed); Hook, 1987:96 (nesting habits); Frommer, 1988:93 (California: Riverside County: Deep Canyon); Melo, 2000:100 (female associations for use of natal nest); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Can-

- cino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); J. Davidson, 2003:13 (preying on buprestid *Acmaeodera maculifera* Horn); Ruiz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State, as *californica californica*); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas, as *californica californica*).
- ? *Cerceris texensis* de Saussure, 1867:89, ♀. Holotype or syntypes: ♀, USA: Texas: no specific locality (NHMW or MHNG). Tentatively synonymized with *Cerceris californica* by G. Ferguson, 1984c:473. – Schletterer, 1887:504 (listed); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Scullen *in* Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1961:47 (as new synonym of *Cerceris frontata*); Amarante, 2005a:12 (correction to his 2002 catalog).
- Cerceris ferruginior* Viereck and Cockerell, 1904b:134, ♂. Holotype: ♂, USA: New Mexico: Deming (ANSP). Synonymized with *Cerceris californica* by Scullen, 1960:75. – Johnson and Ledig, 1918:24 (California: Claremont); Cresson, 1928:49 (holotype in ANSP); Banks, 1947:25 (in revision of western U.S. *Cerceris*, as *ferruginior*); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).
- Cerceris garciana* Viereck and Cockerell, 1904b:135, ♂. Holotype: ♂, USA: New Mexico: Las Cruces (ANSP). Synonymized with *Cerceris californica* by Scullen, 1960:75. – Cresson, 1928:49 (holotype in ANSP); Scullen *in* Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera).
- Cerceris populorum* Viereck and Cockerell, 1904b:135, ♂. Lectotype: ♂, USA: New Mexico: Albuquerque (ANSP), designated by Cresson, 1928:49. Synonymized with *Cerceris californica* by Scullen, 1960:75. – Cresson, 1928:49 (holotype in ANSP); Banks, 1947:25 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera).
- Cerceris argyrotricha* Rohwer, 1908e:324, ♀. Holotype or syntypes: ♀, USA: New Mexico: Las Cruces (USNM). Synonymized with *Cerceris californica arno* by Scullen, 1965b:404, and with *Cerceris californica* by R. Bohart and Grissell, 1975:41. – Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Tsuneki, 1965d:3 (prey record summary: Buprestidae); Krombein, 1967:414 (synonymy with *californica* recorded). – **As *Cerceris californica argyrotricha***: Scullen, 1972:39 (new status, revision), 1972:39 (in revision of Mexican and Central American species, as *californica argyrotrichia* [sic]); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae, as *californica argyrotrichia*).
- Cerceris cognata* Mickel, 1916:408, ♀. Holotype: ♀, USA: Wyoming: Worland (UNL). Synonymized with *Cerceris californica* by Scullen, 1960:75. – Scullen *in* Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL).
- Cerceris denticularis* Banks, 1917:113, ♀, ♂. Holotype: ♀, USA: Oregon: Umatilla (MCZ); designation of lectotype by G. Ferguson, 1983b:228, was unnecessary. Synonymized with *Cerceris californica* by Scullen, 1960:75. – Banks, 1947:20 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).
- Cerceris interjecta* Banks, 1919:84, ♂. Holotype: ♂, USA: Utah: Lake Point (MCZ). Synonymized with *Cerceris populorum* by Scullen *in* Muesebeck et al., 1951:1009 (listed). – G. Ferguson, 1983b:226 (study of holotype).
- Cerceris arno* Banks, 1947:19, ♀. Holotype: ♀, USA: California: mountains near Claremont (MCZ); designation of lectotype by G. Ferguson, 1983b:225, was unnecessary. Synonymized with *Cerceris californica* by Scullen, 1960:75, R. Bohart and Grissell, 1975:41, and R. Bohart *in* R. Bohart and Menke, 1976:578. – Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera). – **As *Cerceris californica arno***: Scullen, 1965b:404 (new status, in revision of North American *Cerceris*), 1972:39 (as synonym of *Cerceris californica argyrotricha*).
- Cerceris calodera* Banks, 1947:22, ♂. Holotype: ♂, USA: California: Jacumba (MCZ). Synonymized with *Cerceris californica* by Scullen, 1961:46. – Scullen *in* Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:226 (study of holotype)

*Cerceris illota* Banks, 1947:23, ♂. Holotype: ♂, USA: Arizona: Tucson (MCZ); designation of lectotype by G. Ferguson, 1983:230, was unnecessary. Synonymized with *Cerceris californica* by Scullen, 1960:75. – Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera).

### 135. *callani* Krombein

*Cerceris callani* Krombein, 1972a:435, ♀. Holotype: ♀, Trinidad: Talparo (USNM). – R. Bohart and Menke, 1976:578 (listed); Fritz and Mariluis, 1976:112 (revision); Callan, 1990d:195 (nest and prey), 1991a:12 (Trinidad); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies).

### 136. *calochorti* Rohwer

*Cerceris calochorti* Rohwer, 1908e:322, ♀. Holotype or syntypes: ♀, USA: Colorado: Boulder (USNM). – Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:468 (in revision on North American *Cerceris*); Evans, 1973c:149 (Wyoming: Jackson Hole, as *calochorti*); R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:474 (listed).

*Cerceris varians* Mickel, 1918a:336, ♀, ♂. Holotype: ♀, USA: California: Placer County: Donner Lake (UNL). Synonymized with *Cerceris calochorti* by G. Ferguson, 1984c:474. – Banks, 1947:18 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 24 (paratypes in UNL); Scullen, 1965b:514 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:589 (listed); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 137. *campestris* Holmberg

*Cerceris campestris* Holmberg, 1903:484, ♂. Lectotype: ♂, Argentina: Buenos Aires: Buenos Aires, Flores (MACN), designated by Fritz, 1968b:164. – Schrottky, 1913a:229 (Argentina: Buenos Aires); R. Bohart and Menke, 1976:578 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

### 138. *campicola* Arnold

*Cerceris monticola campicola* Arnold, 1942:14, ♀. Holotype: ♀, Zaire: Walikale (SAM). – As *Cerceris campicola*: Empey, 1969a:303 (full species status, listed); R. Bohart and Menke, 1976:578 (listed).

### 139. *campsomeroideus* Arnold

*Cerceris campsomeroideus* Arnold, 1951:109, ♂. Holotype: ♂, Ghana: Accra (BMNH). – Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:578 (listed); Empey, 1983:166 (listed, type examined).

### 140. *capito* Lepeletier de Saint Fargeau

*Cerceris capito* Lepeletier de Saint Fargeau, 1845:15, ♀. Syntypes: Algeria: Oran (MNHN). – Lucas, 1849:251 (Algeria: Oran, original description copied with modification, description of ♂); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:410 (in revision of world *Cerceris*; *Cerceris fulva* incorrectly regarded as synonym), 488 (listed); Ed. André, 1889:306, 334 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:900 (male midbasitarsus curved); Ed. André, 1891:25\* (bibliographic references); Schmiedeknecht, 1896:159 (Algeria: Hammam-Bou-Hadjar); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Morice, 1911:87 (Algeria: Biskra); von Schulthess, 1926b:211 (Tunisia); Bischoff, 1933:5 (Morocco); Shestakov in Nadig, 1933:97 (Morocco); Guiglia, 1937:185 (Libya: Cyrenaica: Zoulet Msus); nec Mochi, 1939:150 (= *Cercers spinipectus spinolica*); Guiglia, 1940a:282 (Libya: El-Hag); Giner Mari, 1941b:233 (in revision of North African *Cerceris*); Guiglia, 1942b:230 (Libya); de Beaumont, 1950c:322 (study of syntypes), 1951f:384 (discussion), 1953g:124 (Morocco; prey: tenebrionids *Tenty-*



*ria* and *Zophosis*); R. Bohart and Menke, 1976:578 (listed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, as *capita*); K. Schmidt, 2000:99 (in revision of Western Palearctic *Cerceris*).

Nec following authors (= *Cerceris straminea komarovii*): Radoszkowski, 1877:64; F. Morawitz, 1893b:420, 1894:353; Shestakov, 1914b:408, 1918a:125, 130; Kazenas, 1972b:131, 1974:109; Myartseva, 1963b:61, 1965:92, 1972a:92.

#### 141. *carinalis* Pérez

*Cerceris carinalis* Pérez, 1905:153, ♀. Holotype or syntypes: ♀, Japan: Yokohama (MNHN). – Tsuneki, 1961c:8, 14, 22, 23 (in key), 1964c:10 (Japan: Kyushu); Haneda, 1965:19 (Japan: Fukui Prefecture); Tsuneki, 1965d:3 (prey record summary: Curculionidae), 32 (nesting habits); Haneda, 1967:1 (recognition characters in male); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Tsuneki, 1968f:3 (Japan), 1968n:58 (discussion); Itami, 1969:47 (Japan: Niigata Prefecture); Tsuneki, 1969k:64 (Japan: Mount Hyonosen); Haneda, 1970:13 (Japan: Akita Prefecture); Nambu, 1973d:152 (Japan: Saitama Prefecture); Suda, 1973:123 (Japan: Yamanashi Prefecture); Nambu, 1975b:72 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:578 (listed); Kazenas, 1979d:81, 86 (in key); Miyatake, 1996:103 (specimens in Hiroshi Aoki collection); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470, 476 (in key to Sphecidae of Russian Far East); Haneda and Inoue, 2003:50 (Japan: Fukui Prefecture: Katsumi in City of Obama); Tano, Kurokawa, Murota, and Nozaka, 2003:33 (Japan: Nagasaki Prefecture: Tsushima); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:38 (Japan: Gifu Prefecture); Suda, 2004:47 (Japan: Yamanashi Prefecture); Haneda, Inoue, Nozaka, Tano, Kurokawa, and H. and T. Murota, 2005:67 (Japan: Fukui Prefecture: Mount Monju); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:55 (Japan: Gifu Prefecture); Negoro, Haneda, and Tano, 2005:49 (Japan: Toyama Prefecture); Terayama and Tano, 2005:4, 6 (in key to Japanese *Cerceris*); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006:30 (Japan: Toyama Prefecture); Nambu, 2006:247 (Japan: Tokyo: Imperial Palace garden).

#### 142. *carrascoi* Fritz and Toro

*Cerceris carrascoi* Fritz and Toro, 1973:187, ♀, ♂. Holotype: ♀, Peru: Cuzco: Ollantaimbo (M. Fritz coll.). – R. Bohart and Menke, 1976:629 (listed); Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005:12 (erroneous correction to his 2002 catalog).

#### 143. *carrizonensis* Banks

*Cerceris carrizonensis* Banks, 1915:403, ♂. Lectotype: ♂, USA: Texas: Walde, now Uvalde (MCZ), designated by G. Ferguson, 1983b:227. – Scullen *in* Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:365 (in revision of North American *Cerceris*); R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:474 (listed).

*Cerceris poculum* Scullen, 1965b:391, ♀. Holotype: ♀, USA: Arizona: 23 mi NE Douglas (USNM). Synonymized with *Cerceris carrizonensis* by G. Ferguson, 1984c:474. – R. Bohart and Menke, 1976:585 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); .

#### 144. *caura* Fritz and Mariluis

*Cerceris caura* Fritz and Mariluis, 1976:111, ♂. Holotype: ♂, Bolivia: Santa Cruz: San Antonio (M. Fritz collection). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

#### 145. *cavagnaroi* Scullen

*Cerceris cavagnaroi* Scullen, 1972:75, ♀. Holotype: ♀, El Salvador: Quezaltepeque (UCD). – R. Bohart and Menke, 1976:578 (listed); G. Ferguson, 1984c:475 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

#### 146. *ceciliapanogadiae* Reyes

*Cerceris ceciliapanogadiae* Reyes, 1986:105, ♀. Holotype: ♀, Philippines: Mindanao: Agco on Mt. Apo (Univ. Philippines at Los Baños). – Tsuneki et al., 1992c:46 (in key), 67 (bibliographic reference).

**147. *celebensis* Maidl**

*Cerceris celebensis* Maidl, 1926:221, ♀. Syntypes: ♀, Indonesia: Sulawesi: Bua-Kraeng (NHMW). – R. Bohart and Menke, 1976:578 (listed); Dollfuss, 1989:8 (type material in NHMW).

**148. *cerussata* Shestakov**

*Cerceris cerussata* Shestakov, 1918a:126, ♀. Holotype or syntypes: ♀, Uzbekistan: Tshardar (ZMMU). – R. Bohart and Menke, 1976:578 (listed); Kazenas, 1984a:115 (redescription), 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan).

**149. *erverae* Giner Marí**

*Cerceris erverae* Giner Marí, 1941c:333, ♂. Holotype: ♂, Cuba: Havana (MNCN). – Alayo Dalmau, 1968a:15 (in revision of Cuban Sphecidae), 1973:192 (in catalog of Cuban Hymenoptera), 1976:15, 16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:578 (listed); de Zayas, 1981:80 (illustration of habitus); G. Ferguson, 1984c:475 (listed); Genaro and Sanchez, 1993:39 (nesting habits); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae).

**150. *chacoana* Brèthes**

*Cerceris chacoana* Brèthes, 1910a:271, ♀. Holotype: ♀, Argentina: Chaco: Las Mercedes (MACN). – Schrottky, 1913a:229 (Argentina: Chaco); Fritz, 1968b:167 (study of holotype); R. Bohart and Menke, 1976:578 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

**151. *changi* Tsuneki**

*Cerceris changi* Tsuneki, 1972c:11, ♀, ♂. Holotype: ♀, Taiwan: Taoyuan Prefecture: Paling (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:578 (listed); (Nuhn and Menke, 1994:25 (holotype transferred to USNM); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**152. *cheops* de Beaumont**

As *Cerceris pulchella*: Mochi, 1939:175 (in revision of Egyptian *Cerceris*), corrected to *Cerceris cheops* by de Beaumont, 1951b:179; Giner Marí, 1941b:190 (in revision of North African *Cerceris*), corrected to *Cerceris cheops* by de Beaumont, 1951f:326; Giner Marí, 1945b:362 (Western Sahara), 1945e:224 (Western Sahara), and 1947:19 (Western Sahara), present correction; de Beaumont, 1950f:397 (Algeria; as *Cerceris pulchella* (Spinola) Mochi).

*Cerceris cheops* de Beaumont, 1951b:179, ♀, ♂. Holotype: ♀, Algeria: Biskra (Lausanne). – de Beaumont, 1951f:326 (Algeria, Egypt; discussion), 1953a:174 (Mauretania: Fort Gouraud); de Beaumont and Bytinski-Salz, 1959:121 (Israel: Wadi Fukra); Pulawski, 1964:73 (Egypt: Saqqara); R. Bohart and Menke, 1976:578 (listed); K. Schmidt, 2000:145 (in revision of Western Palearctic *Cerceris*).

**153. *cheskesiana* Giner Marí**

*Cerceris cheskesiana* Giner Marí, 1945a:252, ♂. Holotype (or syntypes?): ♂, Cyprus: Cherkas, misspelled as Cheskes (MNCN). – Giner Marí, 1945a:248 (Cyprus); de Beaumont, 1947b:386 (Cyprus, as *Cerceris cherkasiana*); Pittioni, 1950:22 (Cyprus, as *Cerceris cherkasiana*); de Beaumont, 1958d:287 (Cyprus); de Beaumont and Bytinski-Salz, 1959:124 (Israel, ♀); de Beaumont, 1969:82 (Turkey); R. Bohart and Menke, 1976:578 (listed); Georghiou, 1977:189 (Cyprus; as *Cerceris cherkasiana*); K. Schmidt, 2000:105 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:134 (in catalog of Crabronidae of Turkey).

**154. *chilensis* Spinola**

*Cerceris chilensis* Spinola, 1851a:344, ♀, ♂. Syntypes: Chile: Concepción, Coquimbo, Santiago (ZMHU). – F. Smith, 1856:464 (in catalog of Hymenoptera in British Museum); de Saussure, 1867:93 (Chile, redescription); Schletterer,

1887:488 (listed); Reed, 1894:642 (revision); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Brèthes, 1910b:145 (Chile); Kohl, 1916:108 (specimen in O. Radoszkowski collection); Brèthes, 1925:34 (Chile: San José de Maipo); Janvier, 1928:152 (nesting habits), 1929:419 (sleeping habits); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes"); Gutiérrez, 1940:34 (Chile: Río Blanco); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Fritz and Toro, 1969:155 (in revision of Chilean and Patagonian *Cerceris*); Sielfeld, 1971:255 (in key to Chilean *Cerceris*); Zapata, 1974:37 (Chile: Lampa near Santiago); R. Bohart and Menke, 1976:578 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Nascimento and Overall, 1980:4 (Brazil, Chile); Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

### 155. *chirindensis* Arnold

*Cerceris chirindensis* Arnold, 1932:12, ♀. Holotype: ♀, Zimbabwe: Chirinda Forest (SAM). – Empey, 1969a:303 (listed), 1970:186 (Zaire: Upemba National Park); R. Bohart and Menke, 1976:578 (listed); Empey, 1983:166 (listed, type examined); Hancock, Chahwanda, and Mhlanga, 1995:37 (syntypes in Bulawayo Museum).

### 156. *chiriquensis* Cameron

*Cerceris chiriquensis* Cameron, 1890a:114, ♀. Holotype or syntypes: ♀, Panama: Volcan de Chiriqui (BMNH). – Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Cheesman, 1929:151 (Panama); Ferguson, 1984c:475 (revised status; listed); Callan, 1990d:197 (nest and prey), 1991a:12 (Trinidad); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies). – **As *Cerceris insolita chiriquensis***: Scullen, 1972:63 (new status, in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:578 (listed); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

### 157. *chlorotica* Spinola

*Cerceris chlorotica* Spinola, 1839:496, ♀, ♂. Syntypes: Egypt: no specific locality (Torino). – Schletterer, 1887:467 (original description copied), 488 (listed); Ed. André, 1889:332 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Guiglia, 1932b:100 (Libya: Fezzan: Murzuk), 1934b:297 (Libya: bibliography and summary of locality records); Giner Marí, 1941b:285 (original description copied, comments); de Beaumont, 1951b:176 (study of syntypes), 1951f:382 (Sahara), 1952c:188 (Algeria: Hoggar); de Beaumont and Bytinski-Salz, 1959:126 (Israel); Pulawski, 1964:74 (Egypt: Dahshur, Ghiza); R. Bohart and Menke, 1976:578 (listed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); K. Schmidt, 2000:107 (in revision of Western Palearctic *Cerceris*).

*Cerceris lutea* Taschenberg, 1875:402, ♀, ♂. Syntypes: Sudan: Khartum (Halle). Synonymized with *Cerceris chlorotica* by de Beaumont, 1951b:176. – Schletterer, 1887:408 (in revision of world *Cerceris*), 496 (listed); Ed. André, 1889:333 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:903 (Savigny, 1817, pl. X, Fig. 18 represents *lutea*); Ed. André, 1891:29\* (bibliographic references); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Morice, 1897:304 (Egypt), 1911:85 (Algeria: Biskra); Kohl, 1916:117 (synonymy, redescription); Morice, 1921:822 (Iraq: Amara); von Schulthess, 1926b:211 (Tunisia); Mochi, 1939:169 (in revision of Egyptian *Cerceris*); Giner Marí, 1941b:197 (in revision of North African *Cerceris*); Honoré, 1941a:149 (Egypt: Cairo area).

*Cerceris nilotica* Schletterer, 1887:421, ♂. Holotype or syntypes: ♂, Egypt: Al Jizah (= Ghiza) Province: Thebes (NHMW). Synonymized with *Cerceris lutea* by Morice, 1897:304 and Kohl, 1916:117. – Schletterer, 1887:498 (listed); Ed. André, 1889:332 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:903 (Savigny, 1817, pl. X, Fig. 23 represents *nilotica*); Ed. André, 1891:30\* (bibliographic references); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); de Beaumont, 1951b:177 (synonymy confirmed); Empey, 1972:67 (type material

in NHMW); Dollfuss, 1989:8 (holotype in NHMW); Smit, 2007:653 (first record from Canary Islands: Fuertaventura: N Costa Calma).

*Cerceris mateui* Giner Mari, 1945e:228, ♀, ♂ (as *Mateui*, incorrect original capitalization). Holotype (sex not indicated): Western Sahara: Tantan (MNCN). Synonymized with *Cerceris chlorotica* by K. Schmidt, 2000:107. – Giner Mari, 1945e:228 (Western Sahara, redescription). – **As *Cerceris chlorotica mateui***: de Beaumont, 1951f:383 (new status); de Beaumont and Bytinski-Salz, 1959:126 (Israel).

### 158. *chromatica* Schletterer

*Cerceris chromatica* Schletterer, 1887:422, ♂. Lectotype: ♂, Egypt: El Alag (NHMW), designated by Empey, 1972:67 (Article 74.6). – Schletterer, 1887:488 (listed), 1889a:903 (Savigny, 1817, pl. X, Fig. 24 represents *chromatica*); Ed. André, 1889:333 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Giner Mari, 1941b:196 (in revision of North African *Cerceris*); de Beaumont, 1950f:397 (Algeria), 1951b:178 (interpretation of species), 1951f:368 (Sahara); de Beaumont and Bytinski-Salz, 1959:124 (Israel: Wadi Fukra); Pulawski, 1964:73 (Egypt: Abu Rawash, Dahshur, Ghiza, Saqqara); Empey, 1972:67 (type material in NHMW), 1973:22 (Egypt, West Aden Protectorate); R. Bohart and Menke, 1976:578 (listed); Guichard, 1980:230 (Oman); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Empey, 1983:167 (listed); Dollfuss, 1989:8 (holotype in NHMW); Guichard, 1993a:153 (Arabian Peninsula); K. Schmidt, 2000:110 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 233 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris lateriproducta* var. *flava* Mochi, 1939:185, ♀, ♂. Syntypes: Egypt: El Alag and Gebel Asfar near Cairo (? USNM). – Synonymized with *Cerceris chromatica* by de Beaumont, 1951b:178, 179.

*Cerceris rufofacies* Empey, 1973:19, ♂. Holotype: ♂, Oman: Trucial Oman Coast: no specific locality (BMNH). Synonymized with *Cerceris chromatica* by Empey, 1983:167. – R. Bohart and Menke, 1976:586 (listed).

### 159. *chrysothemis* R. Turner

*Cerceris saussurei* Radoszkowski var. *chrysothemis* R. Turner, 1912e:488, ♀, ♂. Syntypes: Pakistan: Baluchistan: Quetta (BMNH). – **As *Cerceris chrysothemis***: Shestakov, 1918a:150 (full species status); R. Bohart and Menke, 1976:578 (listed).

### 160. *circularis* (Fabricius)

*Philanthus circularis* Fabricius, 1804:304, sex not indicated. Holotype: ♂, Morocco: Tanger (ZMK). – Thunberg, 1815b:288 (diagnostic characters), 292 (redescription); Giner Mari, 1941b:286 (original description copied, comments); de Beaumont, 1950c:318 (study of type). – **As *Cerceris circularis***: Dalla Torre, 1897:455 (new combination, in catalog of world Hymenoptera); de Beaumont, 1951f:324 (Algeria to Morocco; geographic variation), 1953g:121 (Morocco), 1956a:186 (Libya); Bytinski-Salz, 1956:224 (Turkey: Aydın, Finike, Kemer); de Beaumont, 1957b:132 (n. Iran); Grandi, 1957:388 (Libya: Tripolitania: Wadi Kaam); de Beaumont, 1958d:284 (Cyprus); de Beaumont and Bytinski-Salz, 1959:119 (Israel); de Beaumont, 1960a:7 (Greece: Rhodes Island); van der Vecht, 1961a:63 (study of type); de Beaumont, 1962b:30 (discussion of Spanish populations), 1965a:19 (Greece); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:281 (Turkey), 1969:82 (Turkey); R. Bohart and Menke, 1976:578 (listed); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:12 (revision); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast'); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:330 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:146 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (prey: *Tiphia* sp., review of known biology), 2002a:142 (geographic distribution, collecting localities in Kazakhstan).

*Cerceris clitellata* Lepeletier de Saint Fargeau, 1845:28, ♀, ♂. Syntypes: Algeria: Oran (MNH). Synonymized with *Cerceris circularis* by de Beaumont, 1950c:323. – Lucas, 1849:255 (Algeria: Alger, Bône, Constantine, La Calle;

original description copied with modifications); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria).

*Cerceris elegans* Dufour, 1854a:379, ♀, ♂, junior primary homonym of *Cerceris elegans* Eversmann, 1849. Syntypes: Algeria: Pontéba, now Oumm ed Drou (MNHN). Synonymized with *Cerceris opulenta* by Shestakov, 1928:267, and with *Cerceris circularis* by de Beaumont, 1950c:324. – Ed. André, 1889:337 and 1891:30\* (unrecognizable species).

*Cerceris dacica* var. *opulenta* Morice, 1911:82, ♀, ♂. Syntypes: Algeria: Biskra (OXUM). Synonymized with *Cerceris elegans* Dufour by Shestakov, 1928:267, and with *Cerceris circularis* by de Beaumont, 1951f:324. – Shestakov, 1923:103, 112 (in key to subgenus *Apiraptrix*, citations, distribution).

*Cerceris elegantula* Shestakov, 1918a:147. Substitute name for *Cerceris elegans* Dufour, 1853. Synonymized with *Cerceris opulenta* by Shestakov, 1928:267. – As *Cerceris dacica elegantula*: Giner Mari, 1941b:177 (new status, in revision of North African *Cerceris*), 1945b:359 (e. Morocco: Muley Rechid, Ain Zorah).

### **ssp. *dacica* Schletterer**

*Cerceris dacica* Schletterer, 1887:387, ♀, ♂. Syntypes: Hungary: no specific locality (NHMW). – Schletterer, 1887:489 (listed); Ed. André, 1889:274, 275, 306 (in revision of Sphecidae of Europe and Algeria); F. Morawitz, 1889a:158 (China or Mongolia: Ta-wan); Schletterer, 1889b:1126 (Armenia: Arax Valley); Ed. André, 1891:25\* (bibliographic references); F. Morawitz, 1891a:213 (Russia: Astrakhan Government); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Romania); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); Móczár and Henter, 1907:205 (Hungary: Putnok, Tiszaalpár); Schmiedeknecht, 1907:238, 241 (in key to Hymenoptera of Central Europe); Mercet, 1914:445 (listed from Spain); Shestakov, 1916:232 (Armenia: Arax valley), 1918a:130 (Kazakhstan); Morice, 1921:822 (Iran: Qazvin); Shestakov, 1923:103, 105, 112 (in key to subgenus *Apiraptrix*, synonymy, distribution); Berland, 1925d:56 (in Sphecidae Fauna of France), 1926a:52 (France: Montpellier); Shestakov, 1927a:20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:45 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:699, 702 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Bernard, 1935:62 (France: Var: Fréjus area, determination questionable); Zavadil, 1937a:73 (eastern Slovakia); Zavadil, Šusterka, and Bat'a, 1937:207 (in catalog of Sphecidae of Czechoslovakia); Giner Mari, 1941a:31 (in revision of Spanish *Cerceris*), 1943a:96 (in Sphecidae Fauna of Spain), 1945a:248 (Cyprus, Greece: Rhodes Island), 1945b:359 (Morocco); de Beaumont, 1947b:385 (Cyprus); Šnoflak in Zavadil and Šnoflak, 1948:86, 93 (in key to Sphecidae of Czechoslovakia); Pittioni, 1950:22 (Cyprus); Scobiola, 1951:273 (first record from Romania: Frătești, București); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Atanassov, 1955:203 (Bulgaria: Sofia area); Lehrer, 1955:262 (Romania: Moldova: Iași); Bajári, 1956a:81 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain); Bajári, 1957a:31, 41 (in key to Hungarian Sphecidae); Balthasar, 1958:338 (Slovakia); de Beaumont, 1962b:20 (Spain); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: C.A. Rosetti), 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: București, Fratești); Atanassov, 1972a:191 (Bulgaria: Stara Planina Mountains), 1972b:32, 37, 41, 48 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:398 (in Sphecidae Fauna of Czechoslovakia); Georgiou, 1977:189; Józán, 1983:98 (Hungary). – As *Cerceris circularis dacica*: de Beaumont, 1950c:318 (new status), 1951b:177 (status confirmed), 1952a:51 (France; redescription), 1954e:86 (Italy); Grandi, 1954:236 (Italy); Diniz, 1966:7 (Portugal: Castelo Branco, Monte Gordo); de Beaumont, 1962b:20 (Spain: Segovia); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Kazenas, 1972b:126 (Kazakhstan); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Kazenas, 1974:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan); R. Bohart and Menke, 1976:579 (listed); Kazenas, 1978b:49, 54 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:185, 190 (in key to Sphecidae of European part of former USSR); Pagliano, 1980:126 (Italy: Calabria); Ga-

yubo, 1982e:109 (Spain: Provincia Cádiz); Dollfuss, 1983b:24 (in catalog of Sphecidae of Austria); Schmidt and Westrich, 1983:125 (Greece); Gayubo, 1985c:172 (Spain: Toledo: Corchuela); Józán, 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Gayubo and Sanza, 1986:86 (Spain: Burgos); Józán, 1986:374 (Hungary: Kiskunság National Park); Pagliano, 1987:160 and 165 (Italy, in key), 1988:161 (Italy; revision); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:420 (Italy: Veneto); Negrisolo and Pagliano, 1993:93 (Italy: Sardegna); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); K. Schmidt, 2000:147 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001d:105, 107 (in key to *Cerceris* of Kazakhstan and Central Asia); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:134 (Spain: Tarragona); Pagliano and Negrisolo, 2005:335 (in Sphecida Fauna of Italy); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Ljubomirov and Yildirim, 2008:134 (in catalog of Crabronidae of Turkey); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero).

*Cerceris dacica slovacica* Balthasar, 1954d:186, ♂. Holotype: ♂, Slovakia: Seleška (coll. V. Balthasar, now Natl. Mus. Praha). Synonymized with *Cerceris dacica* by Balthasar, 1972:398. – Balthasar, 1954d:182 (Slovakia: Seleška), 1958:338 (Slovakia). – As *Cerceris circularis slovacica*: R. Bohart and Menke, 1976:579 (listed).

### **ssp. *magnifica* Schletterer**

*Cerceris dacica* var. *magnifica* Schletterer, 1887:388, sex not indicated, Hungary: no specific locality (? NHMW). – Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Bajári, 1956a:81 (Hungary: Gyűjtési), 1957a:31 (in key to Hungarian Sphecidae); de Beaumont, 1957 (north Iran), 1967a:281 (Turkey); R. Bohart and Menke, 1976:579 (listed). – As *Cerceris magnifica*: Ferton, 1905:65 (France: Corse: Bonifacio; list of prey).

As *Cerceris rybyensis* (part): Ferton, 1899:345 and 1901a:109 (France: Corse: Bonifacio; list of prey), corrected to *Cerceris magnifica* by Ferton, 1905:65.

### **161. *circumcincta* R. Turner**

*Cerceris circumcincta* R. Turner, 1912e:513, ♀, ♂. Syntypes: India: Kashmir: no specific locality (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897, as *curcumcincta*); R. Bohart and Menke, 1976:579 (listed).

### **162. *cisplatina* Amarante**

*Cerceris dichroa* Brèthes, 1909b:65, sex not indicated (as *dichrous*, incorrect original termination), junior primary homonym of *Cerceris dichroa* Dalla Torre, 1890 (now in *Eucerceris*). Syntypes: origin unknown, probably Uruguay (Mus. Montevideo). – Fritz, 1968b:165 (specimens in MACN); R. Bohart and Menke, 1976:579 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

*Cerceris cisplatina* Amarante, 2005:1 and 12. Substitute name for *Cerceris dichroa* Brèthes, 1909.

### **163. *citrinella* F. Smith**

*Cerceris citrinella* F. Smith, 1856:442, ♀. Holotype or syntypes: ♀, Russia: Siberia: no specific locality (BMNH). – Schletterer, 1887:466 (original description copied), 488 (listed); Ed. André, 1889:339, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:579 (listed).

**164. *clarebaltazarae* Reyes**

*Cerceris clarebaltazarae* Reyes, 1986:112, ♀, ♂. Holotype: ♀, Philippines: Negros: Ara-al in La Carlota District (Univ. of Philippines at Los Baños). – Tsuneki et al., 1992c:47, 52 (in key), 71 (Philippines, redescription).

**165. *clypearis* de Saussure**

*Cerceris clypearis* de Saussure, 1887:25, ♀. Holotype or syntypes: ♀, Madagascar: no specific locality (MNHN, now probably lost: Empey, 1983:167). – de Saussure, 1892:541 (Madagascar, redescription); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Arnold, 1945:22 (Madagascar; redescription); Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:579 (listed); Empey, 1983:167 (type material missing); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

**166. *clypeata* Dahlbom**

*Cerceris clypeata* Dahlbom, 1844:221, ♀, ♂ (♂ = *Cerceris halone*). Lectotype: ♀, USA: e. South Carolina: no specific locality (LUND), designated by G. Ferguson, 1984b:433. – Dahlbom, 1845:500 (in key); F. Smith, 1856:465 (in catalog of Hymenoptera in British Museum); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:114 (in revision of North American Philanthinae); Packard, 1866:61 (listed); Cresson, 1873:229 (Texas); Provancher, 1883:644 (in revision of Canadian Hymenoptera); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:488 (listed); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); nec Harrington, 1902:222 = *Cerceris prominens*); H. Smith, 1908b:368 (in revision of Nebraskan Sphecidae); Banks, 1912:18 (in revision of eastern U.S. *Cerceris*); Faull, 1913:384 (Canada: Toronto region); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:448 (in catalog of Nebraskan Sphecidae); Rau, 1922:21 (USA: Missouri: Kimmswick); J.Ch. Bradley, 1926:175 (New York: Lloyd-Cornell Reservation near McLean), 1928:1017 (in catalog of New York Sphecidae); Brimley, 1938:447 (North Carolina: statewide); Scullen, 1942:189 (efforts to identify the species), 1949b:70 (species correctly interpreted); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Krombein, 1952a:95 (USA: Virginia: Westmoreland State Park), 1952b:181 (USA: West Virginia: Lost River State Park; prey: adult chrysomelid *Chalepus dorsalis* Thunberg), 1954a:6 (West Virginia: Lost River State Park); Evans, 1957b:86 (description of larva); Krombein, 1963f:277 (Maryland: Plimmers Island near Washington, D.C.); Scullen, 1965b:469 (in revision on North American *Cerceris*, as *clypeata clypeata*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen and Wold, 1970:211 (distribution and summary of prey records, as *clypeata clypeata*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera, nesting site, parasite, list of prey); Finnamore, 1982:249 (in Sphecid Fauna of Southern Quebec); G. Ferguson, 1984c:475 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada), 77 (specimen listed from Toronto by Faull, 1913:384 actually comes from Pennsylvania); Buck, Paiero, and Marshall, 2006:45, 47 (in key to eastern Canadian *Cerceris*).

*Cerceris imitator* Cresson, 1865c:125, ♂, junior primary homonym of *Cerceris imitator* F. Smith, 1856. Lectotype: ♂, USA: Illinois, designated by Cresson, 1916:100. (ANSP). Synonymized with *Cerceris deserta* by Packard, 1866:63, and with *Cerceris clypeata* by Scullen, 1960:77. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae).

*Cerceris imitatoria* Schletterer, 1887:494. Substitute name for *Cerceris imitator* Cresson, 1865. – Dalla Torre, 1897:463 (in catalog of world Hymenoptera); H. Smith, 1908b:367 (in revision of Nebraskan Sphecidae); Banks, 1912:20 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:697 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:449 (in catalog of Nebraskan Sphecidae); Brimley, 1938:448 (North Carolina: Bryson City, Fayetteville, Highlands, Raleigh); Strickland, 1947:130 (Canada: Alberta: St. Paul); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera).

*Cerceris chryssipe* Banks, 1912:18, ♀, ♂. Lectotype: ♀, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:227. Synonymized with *Cerceris clypeata* by Scullen in Muesebeck et al., 1951:1006. – Stevens, 1917:421 (North Dakota, as *chryssipe*); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae, as *chryssipe*).

*Cerceris clymene* Banks, 1912:20, ♀, ♂. Lectotype: ♀, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:227. Synonymized with *Cerceris clypeata* by Scullen in Muesebeck et al., 1951:1006. – Brimley, 1938:447 (North Carolina: Raleigh).

*Cerceris zobeide* Brimley, 1929:194, ♂. Holotype: ♂, USA: North Carolina: Raleigh (North Carolina Department of Agriculture). Synonymized with *Cerceris clypeata* by Scullen, 1960:77. – Brimley, 1938:448 (North Carolina: Raleigh); Scullen in Muesebeck et al., 1951:1011 (in catalog of North American Hymenoptera).

*Cerceris zosma* Brimley, 1929:195, ♀. Holotype: ♀, USA: North Carolina: Raleigh (North Carolina Department of Agriculture). Synonymized with *Cerceris clypeata* by Scullen, 1960:77. – Brimley, 1938:448 (North Carolina: Raleigh); Scullen in Muesebeck et al., 1951:1011 (in catalog of North American Hymenoptera).

### 167. *clytia* de Beaumont

*Cerceris clytia* de Beaumont in de Beaumont and Bytinski-Salz, 1959:116, ♀, ♂. Holotype: ♀, Israel: Beersheba (Lausanne). – de Beaumont, 1960b:230 (Algeria, Libya; redescription); R. Bohart and Menke, 1976:579 (listed); Guichard, 1993a:154 (Arabian Peninsula); K. Schmidt, 2000:148 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:233 (in catalog of Sphecidae of Saudi Arabia).

### 168. *cochisi* Scullen

*Cerceris cochisi* Scullen, 1965b:414, ♀, ♂. Holotype: ♀, USA, New Mexico: Lordsburg to Silver City (USNM). – Scullen, 1972:42 (in revision of Mexican and Central American species, as *cochise*); R. Bohart and Grissell, 1975:42 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:476 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Amarante, 2005a:12 (correction to his 2002 catalog).

### 169. *cockerelli* Viereck

*Cerceris cockerelli* Viereck, 1903b:731, ♂. Lectotype: ♂, USA: California: La Jolla (ANSP), designated by Cresson, 1928:48. – Banks, 1947:31 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:367 (in revision of North American *Cerceris*); R. Bohart and Menke, 1976:576 (as new synonym of *Cerceris acanthophila*); G. Ferguson, 1983c:236 (synonymy), 1984c:476 (valid species; listed).

*Cerceris minax* Mickel, 1918a:339, ♀, ♂. Holotype: ♀, USA: California: Sacramento (UNL). Synonymized with *Cerceris acanthophila* by Scullen, 1965b:355 and with *Cerceris cockerelli* by G. Ferguson, 1983c:236. – Banks, 1947:34 (in revision of western U.S. *Cerceris*); Muma, 1952:17 (holotype in UNL), 24 (paratypes in UNL).

As *Cerceris acanthophila* (corrected to *Cerceris cockerelli* by G. Ferguson, 1983c:236): Scullen, 1965:335 in part (in revision of North American *Cerceris*); R. Bohart and Grissell, 1975:38 (in revision of Philanthinae of California).

### 170. *coelicola* Giner Marí

*Cerceris coelicola* Giner Marí, 1942b:116, ♂. Holotype: ♂, China: Shaowu (Mus. A. Koenig, Bonn). – Tsuneki, 1970c:18 (Taiwan); Haneda, 1972a:6 (Taiwan); Murota, 1973b:117 (Taiwan); R. Bohart and Menke, 1976:579 (listed); Tsuneki, 1984b:55 (diagnostic characters); Tsuneki et al., 1992c:45, 49 (in key), 57 (discussion of status), 64 (redescription of male); Wu and Zhou, 1996a:176 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Li and He, 2004:1110 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).



**171. *colorata* Schletterer**

*Cerceris colorata* Schletterer, 1889a:896, ♀. Holotype: "Turkestan": no specific locality (NHMW). – Shestakov, 1918a:129 (citation of Schletterer, 1889), 1923:103 (in key), 110 (citation, distribution); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Gussakovskij, 1952:283 (Uzbekistan and Tajikistan; prey: exclusively *Halictus marginatus* Brullé); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); R. Bohart and Menke, 1976:579 (listed); Kazenas, 1978b:53, 55 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:56 (redescription); K. Schmidt, 2000:149 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:54 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (preys upon *Halictus* according to Gussakovskij, 1952), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan, determination tentative), 2004b:112 (Kazakhstan: western Tien Shan).

**172. *comberi* R. Turner**

*Cerceris comberi* R. Turner, 1912e:798, ♀, ♂. Syntypes: Pakistan Karachi (BMNH); and India: Karnatakak: Mysore (OXUM). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:579 (listed).

**173. *compacta* Cresson**

*Cerceris compacta* Cresson, 1865c:127, ♀, ♂. Lectotype: ♀, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1916:99. – Cresson, 1873:230 (Texas); Packard, 1866:63 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:488 (listed); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:17 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:448 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Brimley, 1938:447 (North Carolina: Salisbury eastward); Scullen *in* Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Krombein, 1959e:199 (USA: North Carolina: Kill Devil Hills), 1963f:277 (Maryland: Plummers Island near Washington, D.C.); Scullen, 1965b:418 (in revision of North American *Cerceris*, as *compacta compacta*); Scullen and Wold, 1970:211 (distribution and summary of prey records, as *compacta compacta*); Scullen, 1972:42 (in revision of Mexican and Central American species, as *compacta compacta*); R. Bohart and Grissell, 1975:43 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:579 (listed); L. Davis, 1978:216 (North Carolina: Kill Devil Hills, data from Krombein, 1959e); Krombein, 1979b:1731 (in catalog of North American Hymenoptera, prey); G. Ferguson, 1984c:476 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 71 (first record from Canada: Ontario: Chatham); Buck, Paiero, and Marshall, 2006:41, 47 (in key to eastern Canadian *Cerceris*).

*Cerceris huastecae* de Saussure, 1867:102, ♀, ♂. Syntypes: Tamaulipas: Tampico (NHMW?). Synonymized with *Cerceris compacta* by G. Ferguson, 1984c:476. – Schletterer, 1887:494 (listed); Cameron, 1890a:118 (Mexico); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae, as *huastecae*); Scullen, 1972:48 (in revision of Mexican and Central American species); R. Bohart and Menke, 1976:582 (listed); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruiz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

*Cerceris aureofacialis* Cameron, 1890:112, ♂ (as *aureo-facialis*, incorrect original hyphenation). Holotype: ♂, Mexico: Orizaba (BMNH). Synonymized with *Cerceris compacta* by Scullen, 1972:42. – Dalla Torre, 1897:453 (in

catalog of world Hymenoptera, as *aureofascialis*); Ashmead, 1899d:296 (in checklist of North American Crabronidae, as *ureofascialis*).

*Cerceris solidaginis* Rohwer, 1908e:323, ♂. Holotype or syntypes: ♂, USA: New Mexico: Las Cruces (USNM). Synonymized with *Cerceris compacta* by Scullen, 1960:77. – Banks, 1947:15 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera).

*Cerceris belfragei* Banks, 1917:114, ♀, ♂. Holotype: ♀, USA: Texas: no specific locality (MCZ); designation of lectotype by Ferguson, 1983b:226, was unnecessary. Synonymized with *Cerceris compacta* by Scullen, 1960:77. – Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera).

*Cerceris costarica costarica* Scullen, 1972:44, ♀, ♂. Holotype: ♀, Costa Rica: 3 mi NW Liberia (USNM). Synonymized with *Cerceris compacta* by G. Ferguson, 1984c:476. – R. Bohart and Menke, 1976:579 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris costarica mitla* Scullen, 1972:46, ♀, ♂. Holotype: ♀, Mexico: Oaxaca: Mitla (USNM). Synonymized with *Cerceris compacta* by G. Ferguson, 1984c:476. – R. Bohart and Menke, 1976:579 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

#### 174. *compar* Cresson

*Cerceris compar* Cresson, 1865c:126, ♂. Lectotype: ♂, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1916:99. – Packard, 1866:62 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:488 (listed); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); H. Smith, 1908b:368 (in revision of Nebraskan Sphecidae); Banks, 1912:25 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Hendrickson, 1930:160 (Iowa); Brimley, 1938:447 (North Carolina: Cruso, Flat Rock, Hendersonville, Hoffman, Judson, Lumberton, Swannanoa); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:440 (in revision on North American *Cerceris*, as *compar compar*), 1972:59 (in revision of Mexican and Central American *Cerceris*, as *compar compar*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:476 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris catawba* Banks, 1912:25, ♀, ♂. Lectotype: ♀, USA: North Carolina: Southern Pines (MCZ), designated by G. Ferguson, 1983b:227. Synonymized with *Cerceris compar* by Scullen, 1960:77. – Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); Brimley, 1938:447 (North Carolina: Southern Pines, Swannanoa); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera).

*Cerceris jucunda carolina* Banks, 1912:26, sex not indicated. Lectotype: ♂, USA: North Carolina, Southern Pines (MCZ), designated by G. Ferguson, 1983b:226. Synonymized with *Cerceris compar* by Scullen in Muesebeck et al., 1951:1006. – Brimley, 1938:448 (North Carolina: Raleigh. Southern Pines, Willard).

*Cerceris rufa* Scullen, 1965b:449, ♀, ♂, junior primary homonym of *Cerceris rufa* Taschenberg, 1875. Holotype: ♀, USA: Florida: South Miami (USNM). Synonymized with *Cerceris compar* by G. Ferguson, 1984c:476.

*Cerceris compar albinota* Scullen, 1972:60, ♀, ♂. Holotype: ♀, USA: Arizona: Cochise County: 2 mi NE Portal (USNM). Synonymized with *Cerceris compar* by G. Ferguson, 1984c:476. – R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris rubrata* R. Bohart and Menke, 1976:586. Substitute name for *Cerceris rufa* Scullen, 1965. – Krombein, 1979b:1737 (in catalog of North American Hymenoptera); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species).

**175. completa Banks**

*Cerceris completa* Banks, 1919:83, ♂. Holotype: ♂, USA: California: Claremont (MCZ). – Banks, 1947:17 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:405 (in revision of North American *Cerceris*); R. Bohart and Grissell, 1975:44 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:227 (study of holotype), 1984c:477 (listed).

*Cerceris grandis percna* Scullen, 1965b:415, ♀. Holotype: ♀, USA: California: San Diego County: Werner's (USNM). Synonymized with *Cerceris completa* by R. Bohart and Grissell, 1975:44, and by R. Bohart in R. Bohart and Menke, 1976:579 (as new synonym).

**176. concinna Brullé**

*Cerceris concinna* Brullé, 1839:90, ♀, ♂. Syntypes: ♀, Canary Islands: no specific locality (MNHN). – F. Smith, 1856:442 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:466 (original description copied), 489 (listed), 1889b:1126 (redescription); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Shestakov, 1923:104, 114 (in key to subgenus *Apiraptrix*, citations, distribution); Bischoff, 1937b:2 (Canary Islands); Giner Marí, 1941b:152 (in revision of North African *Cerceris*); de Beaumont, 1950c:322 (study of type), 1951f:313 (Canary Islands; discussion), 1954b:2 (Canary Islands: Tenerife), 1968a:255 (Canary Islands: Lanzarote, Gran Canaria, Tenerife, Gomera, Hierro); Simon Thomas, 1969a:120 (Canary Islands: Tenerife); R. Bohart and Menke, 1976:579 (listed); Kardas and Arozarena, 1977:145 (original description translated into Spanish), 146 (nesting habits, prey: *Halictus viridis* Brullé and *H. laetus* Brullé); Báez and Ortega, 1978:192 (Canary Islands); Erlandsson, 1978a:205 (Canary Islands); Wolf, 1980:72 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:255 (detailed locality records from Canary Islands); K. Schmidt, 2000:150 (in revision of Western Palearctic *Cerceris*).

*Cerceris lepida* Brullé, 1840:90, ♂. Holotype: ♂, Canary Islands: no specific locality (lost). Synonymized with *Cerceris concinna* by de Beaumont, 1968a:255. – Schletterer, 1887:399 (in revision of world *Cerceris*), 496 (listed), 1889a:901 (Russia: Sarepta, an obvious misdetermination), 902 (Savigny, 1817, pl. X, Fig. 2 probably represents *lepida*, clearly a misinterpretation); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Giner Marí, 1941b:217 (in revision of North African *Cerceris*); de Beaumont, 1950c:322 (type lost, species unrecognizable), 1951f:342 (discussion); R. Bohart and Menke, 1976:579 (listed); Kardas and Arozarena, 1977:145 (original description translated into Spanish); Báez and Ortega, 1978:192 (Canary Islands); Ljubomirov, 2008:256 (known from La Palma, Canary Islands).

**177. confraga Shestakov**

*Cerceris confraga* Shestakov, 1914a:98, ♂. Holotype: ♂, Kazakhstan: Semipalatinsk (ZIN). – R. Bohart and Menke, 1976:579 (listed); Kazenas, 1984a:151 (redescription); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:116 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan).

**178. confusa Giner Marí**

*Cerceris confusa* Giner Marí, 1942b:118, ♂. Holotype: ♂, China: Shaowu (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:579 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**179. conica Shestakov**

*Cerceris conica* Shestakov, 1918b:12, ♀. Holotype or syntypes: ♀, Armenia: Yerevan (ZIN). – R. Bohart and Menke, 1976:579 (listed); Kazenas, 1984a:168 (redescription); K. Schmidt, 2000:51 (in revision of Western Palearctic *Cerceris*, description of ♂); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113 (in key to *Cerceris* of Kazakhstan and Central Asia); Yildirim and Ljubomirov, 2005:1802 (Turkey: Erzurum: Oltu: Çamlıbel and Tortum), 2007:119 (Turkey: Erzurum: University campus and Hinis: Söleymez); Ljubomirov and Yildirim, 2008:135 (in catalog of Crabronidae of Turkey).

**180. *conifera* Krombein**

*Cerceris conifera* Krombein, 1981:47, ♀, ♂. Holotype: ♀, Sri Lanka: Sabaragamuwa Province: Gilimale (USNM). – Krombein, 1981:14 (nesting habits; prey: Eucharitidae).

**181. *conifrons* Mickel**

As *Cerceris rufinoda crucis*: H. Smith, 1908:370, part (in revision of Nebraskan Sphecidae), corrected to *Cerceris conifrons* by Mickel, 1916a:410.

*Cerceris conifrons* Mickel, 1916a:410, ♀. Holotype: ♀, USA: Nebraska: Harrison (UNL). – Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Banks, 1947:31 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 24 (paratypes in UNL); Scullen, 1965b:367 (in revision of North American *Cerceris*); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Scullen, 1972:20 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Grissell, 1975:44 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:579 (listed); Evans and Rubink, 1978:61 (nesting habits); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); G. Ferguson, 1984c:477 (listed); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

**182. *constricta* Guichard**

*Cerceris constrictus* Guichard, 1993a:162, ♀, ♂ (as *constrictus*, incorrect original termination). Holotype: ♀, Saudi Arabia: Wadi Majarish below Taif (BMNH). – Gadallah and Assery, 2004a:233 (in catalog of Sphecidae of Saudi Arabia).

**183. *contigua* (Villers)**

*Crabro quinquecinctus* Fabricius, 1787:295, sex not indicated. Syntypes: Germany: Kiel; Spain: no specific locality (ZMK). – As *Philanthus quinquecinctus*: Fabricius, 1790:225 (new combination, redescription); Olivier, 1792:514 (redescription); Fabricius, 1793:291 (redescription), 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:304 (redescription); Jurine, 1807:202 (listed); Thunberg, 1815a:128 (diagnostic characters), 138 (redescription), 1815b:289 (diagnostic characters), 294 (redescription); Dahlbom, 1845:XXIV (specimens in collection Fabricius examined, treated as new synonym of *Cerceris arenaria*); van der Vecht, 1961a:64 (discussion of type material); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino). – As *Cerceris quinquecincta*: Dalla Torre, 1897:451 (new combination, as doubtful synonym of *Cerceris arenaria*); van der Vecht, 1961a:64 (discussion of type material).

*Sphex contigua* Villers, 1789:246. Substitute name for *Sphex quinquecincta* (Fabricius, 1787) de Villers, 1789, nec *Sphex quinquecincta* (Fabricius, 1775) de Villers, 1789 (described in *Tiphia*, now in *Myzinum*). – As *Cerceris contigua*: R. Bohart and Menke, 1976:579 (new combination, listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Vespa cingulata* Gmelin, 1790:2762. Substitute name for *Vespa quinquecincta* (Fabricius, 1787) nec *Vespa quinquecincta* Fabricius, 1775. – Klug in Waltl, 1835:87 (in list of Hymenoptera of Andalusia, as *cingulata* Klug).

*Vespa quinquelineata* Turton, 1801:529. Substitute name for *Vespa quinquecincta* (Fabricius, 1787) nec *Vespa quinquecincta* Fabricius, 1775. – van der Vecht, 1960:6 (history of the name).

? *Crabro quinquecinctus* Schrank, 1802:... Tentatively synonymized with ...

**184. *convergens* Viereck and Cockerell**

*Cerceris convergens* Viereck and Cockerell, 1904b:136, ♀. Holotype: ♀, USA: New Mexico: Alamogordo (ANSP). – Cresson, 1928:49 (holotype in ANSP); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hy-

menoptera); Scullen, 1965b:369 (in revision of North American *Cerceris*); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); Scullen, 1972:20 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Grissell, 1975:45 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:477 (listed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Frommer, 1988:93 (California: Riverside County: Deep Canyon); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

*Cerceris rinconis* Viereck and Cockerell, 1904b:137, ♀. Holotype: ♀, USA: New Mexico: Rincon (ANSP). Synonymized with *Cerceris convergens* by Scullen, 1942:188. – Cresson, 1928:49 (holotype in ANSP).

*Cerceris hesperina* Banks, 1917:115, ♀, ♂. Holotype: ♀, USA: Washington: Ainsworth (MCZ); designation of lectotype by G. Ferguson, 1983b:229, was unnecessary. Synonymized with *Cerceris convergens* by Scullen in Muesebeck et al., 1951:1006. – Banks, 1947:34 (in revision of western U.S. *Cerceris*).

*Cerceris pudorosa* Mickel, 1918a:338, ♀, ♂. Holotype: ♀, USA: California: Auburn (UNL). Synonymized with *Cerceris convergens* by Scullen, 1942:188. – Muma, 1952:17 (holotype in UNL).

*Cerceris snowi* Banks, 1919:84, ♂. Lectotype: ♂, USA: Arizona: Tucson (MCZ), designated by G. Ferguson, 1983b:232. Synonymized with *Cerceris convergens* by Scullen in Muesebeck et al., 1951:1006. – Banks, 1947:31 (in revision of western U.S. *Cerceris*).

#### 185. *cooperi* Scullen

*Cerceris cooperi* Scullen, 1972:43, ♀, ♂. Holotype: ♀, Costa Rica: 6 mi W Turrialba (USNM). – R. Bohart and Menke, 1976:579 (listed); G. Ferguson, 1984c:477 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

#### 186. *copiapoensis* Sielfeld

*Cerceris copiapoensis* Sielfeld, 1971:256, ♀. Holotype: ♀, Chile: Atacama Desert: Copiapó (W. Sielfeld collection). – not listed by Bohart and Menke, 1976; Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

#### 187. *cordillera Pérez d'Angello and Toro*

*Cerceris cordillera* Pérez d'Angello and Toro, 1972:189, ♀. Holotype: ♀, Chile: Santiago: Cajón del Yeso (Mus. Nac. Hist. Nat., Chile). – R. Bohart and Menke, 1976:579 (listed, incorrectly dated 1973); Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

#### 188. *coreensis* Tsuneki

*Cerceris coreensis* Tsuneki, 1961c:45, ♀, ♂. Holotype: ♀, Korea: Shoyozan (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:11, 18 (in key), 1982b:19 (known from Korea); R. Bohart and Menke, 1976:579 (listed); Kazenas, 1979d:76 (Russia: Primorskiy Krai; discussion), 84, 88 (in key); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:472, 479 (in key to Sphecidae of Russian Far East); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:147 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

#### 189. *cornigera* (Gmelin)

*Crabro cornutus* Fabricius, 1787:294, ♀. Holotype: ♀, India: no specific locality (ZMK). – Olivier, 1792:512 (redescription); Fabricius, 1793:293 (redescription), 1804:308 (redescription); Lepeletier de Saint Fargeau and Brullé, 1835:807 (discussion of species identity); Dahlbom, 1844:219 (tentatively placed in *Cerceris*); W. Schulz, 1906:205 (omitted by Bingham, 1897). – *As Vespa cornuta*: Gmelin, 1790:2761 (new combination). – *As Cerceris cornutus*: W. Schulz, 1912:90 (new combination, runs to *Cerceris wroughtoni* in Bingham, 1897 key, but other-

wise conspicuously different, redescription); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); van der Vecht, 1961a:66 (study of type material).

*Vespa cornigera* Gmelin, 1790:2761 (Art. 59c). Substitute name for *Vespa cornuta* (Fabricius, 1787) Gmelin, nec Linnaeus, 1758 (now in *Synagris*). – As *Cerceris cornigera*: R. Bohart and Menke, 1976:579 (new combination, listed); Empey, 1984:76 (listed).

#### 190. *cornigena* Tsuneki

*Cerceris cornigena* Tsuneki in Tsuneki et al., 1992c:73, ♀. Holotype (Tsuneki, 1993:38): ♀, Philippines: Mindanao: Bukidnon: Sungeo (USNM). – Tsuneki et al., 1992c:47 (in key).

#### 191. *cortezii* Scullen

*Cerceris insolita cortezii* Scullen, 1972:64, ♀, ♂. Holotype: ♀, Mexico: Morelos: Cuernavaca (USNM). – R. Bohart and Menke, 1976:582 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae). – As *Cerceris cortezii*: G. Ferguson, 1984c:477 (full species status); Amarante, 2002:58 (in catalog of Neotropical Crabronidae), 2005a:12 (correction to his 2002 catalog).

#### 192. *crandalli* Scullen

*Cerceris crandalli* Scullen, 1965b:372, ♀, ♂. Holotype: ♀, USA: Arizona: Tucson (USNM). – Scullen, 1968a:157-158 (illustrations), 1972:22 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:478 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

#### 193. *crenulifer* Kazenas

*Cerceris crenulifer* Kazenas, 1974a:♀, ♂. Holotype: ♀, Kazakhstan: Semirechye: 17 km NW Bakanas (ZIN or V.L. Kazenas coll.?). – R. Bohart and Menke, 1976:629 (listed); Kazenas, 1978b:69, 70 (in key to Sphecidae of Kazakhstan and Central Asia, as *crenulifera*), 1984a:199 (redescription), 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (preys on curculionids), 2001d:121, 123 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan).

#### 194. *cribrosa* Spinola

*Cerceris cribrosa* Spinola, 1841:119, ♀, ♂. Lectotype: ♀, French Guyana: Cayenne (Torino). Designation of neotype by Scullen, 1972:23, was invalid (see G. Ferguson, 1984b:433). – F. Smith, 1856:464 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:489 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Scullen, 1972:22 (in revision of Mexican and Central American *Cerceris*, as *cribrosa*); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); G. Ferguson, 1984c:478 (listed); R. Bohart and Menke, 1976:579 (listed); Elliott and Elliott, 1987:397 (Panama: Gamboa; nest usurpation); Callan, 1990d:197 (nest and prey), 1991a:12 (Trinidad); Cambra and Santos, 2000:50 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Melo, 2000:98 (nest usurpation and temporary association with nest owner, as *cribrosa*); Amarante, 2002:58 (in catalog of Neotropical Crabronidae, as *cribrosa*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae, as *cribrosa*); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies); Amarante, 2005a:12 (correction to his 2002 catalog); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State, as *cribrosa*); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas, as *cribrosa*).

*Cerceris subpetiolata* de Saussure, 1867:95, ♀, ♂. Lectotype: ♀, Mexico: Veracruz: Cordoba (NHMW), designated by G. Ferguson, 1984b:439. Synonymized with *Cerceris cribrosa* by Scullen, 1961:46. – Schletterer, 1887:503 (listed); Cameron, 1890a:120 (Guatemala, Mexico; redescription); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Dollfuss, 1989:8 (lectotype in NHMW).

*Cerceris pullata* F. Smith, 1873b:105, ♀ (as *pullatus*, incorrect original termination). Lectotype: ♀, Brazil: Amazonas: São Paulo de Olivença (BMNH), designated by G. Ferguson, 1984b:438. Synonymized with *Cerceris cribrosa* by Scullen, 1962:57. – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera).

*Cerceris albimana* Taschenberg, 1875:395, ♀. Lectotype: ♀, Venezuela: no specific locality (Halle), designated by Scullen, 1962:57. Synonymized with *Cerceris cribrosa* by Scullen, 1962:57. – Schletterer, 1887:485 (listed); Dalla Torre, 1897:450 (in catalog of world Hymenoptera).

#### 195. *cristovalensis* Krombein

*Cerceris cristovalensis* Krombein, 1969b:14, ♀. Holotype: ♀, Solomon Islands: San Critoval: Bweinaniawarikiapu (BISHOP). – R. Bohart and Menke, 1976:579 (listed).

#### 196. *crotonella* Viereck and Cockerell

*Cerceris crotonella* Viereck and Cockerell, 1904b:139, ♀. Holotype: ♀, USA: New Mexico: Las Cruces (ANSP). – Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Scullen, 1965b:374 (in revision of North American *Cerceris*); Evans, 1971:510 (preying on Nitidulidae); Scullen, 1972:24 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Evans and Rubink, 1978:61 (nesting habits); Krombein, 1979b:1732 (in catalog of North American Hymenoptera, prey); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); G. Ferguson, 1984b:433 (comments on holotype), 1984c:478 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

#### 197. *crucis* Viereck and Cockerell

*Cerceris rufinoda* var. *crucis* Viereck and Cockerell, 1904b:139, ♀. Lectotype: ♀, USA: New Mexico: Las Cruces (ANSP), designated by G. Ferguson, 1984b:433. – nec H. Smith, 1908:370, partly (= *Cerceris confrons* and *echo*); Mickel, 1918b:453 (in catalog of Nebraskan Sphecidae); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); R. Bohart and Grissell, 1975:50 (as new synonym of *Cerceris rufinoda*); R. Bohart and Menke, 1976:586 (as new synonym of *Cerceris rufinoda* by R. Bohart). – **As *Cerceris rufinoda crucis***: Stevens, 1917:422 (new status, North Dakota); Scullen, 1965b:395 (in revision of North American *Cerceris*, new status); Amarante, 2005a:12 (addition to his 2002 catalog), 2005a:13 (correction to his 2002 catalog). – **As *Cerceris crucis***: G. Ferguson, 1984c:478 (full species status, listed); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 71 (first record from Ontario: Chatterton, Leamington, Windsor); Buck, Paiero, and Marshall, 2006:41, 46 (in key to eastern Canadian *Cerceris*).

*Cerceris cleomae* Rohwer, 1908e:325, ♂. Holotype or syntypes: USA: Colorado: Denver (USNM). Synonymized with *Cerceris crucis* by G. Ferguson, 1984c:478. – Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Scullen, 1965b:366 (in revision of North American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera).

*Cerceris finitima nigroris* Banks, 1912:27, ♂. Lectotype: ♂, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:230. Synonymized with *Cerceris finitima* by Scullen, 1965b:378, and with *Cerceris crucis* by G. Ferguson, 1984c:478. – Mickel, 1918b:453 (in catalog of Nebraskan Sphecidae); Brimley, 1938:447 (North Carolina: Raleigh); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera, as *finitima* var. *nigroris*); R. Bohart and Menke, 1976:580 (listed as synonym of *Cerceris finitima*).

As *Cerceris rufinoda* (collectively corrected to *Cerceris crucis* by G. Ferguson, 1984c:478): Viereck and Cockerell, 1904b:138 (in revision of New Mexico *Cerceris*); H. Smith, 1908b:370 (in revision of Nebraskan Sphecidae); Banks, 1912:26 (in revision of eastern U.S. *Cerceris*); Stevens, 1917:422 (North Dakota); Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); Strandtmann, 1945a:311 (nest and prey); Scullen, 1965b:392 (in revision of North American *Cerceris*, as *rufinoda rufinoda*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen, 1972:36 (in revision of Mexican and Central American species); R. Bohart and Grissell, 1975:50 (in revision of

North American Philanthinae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles).

### 198. *cucullata* Bingham

*Cerceris cucullata* Bingham, 1912:375, ♂. Holotype: ♂, Australia: Northern Australia: Port Essington (OXUM). – R. Bohart and Menke, 1976:579 (listed, as *culcullata*); Cardale, 1985:298 (in catalog of Australian Sphecidae).

### 199. *cuernavaca* Scullen

*Cerceris cuernavaca* Scullen, 1972:46, ♀. Holotype: ♀, Mexico: Morelos: Cuernavaca (USNM). – R. Bohart and Menke, 1976:579 (listed); G. Ferguson, 1984c:479 (listed); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 200. *cuica* Fritz and Mariluis

*Cerceris cuica* Fritz and Mariluis, 1976:109, ♀. Holotype: ♀, Bolivia: Santa Cruz de la Sierra (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2005a:5 (in addendum to his 2002 catalog of Neotropical Crabronidae and Sphecidae).

### 201. *cunnamulla* Evans

*Cerceris cunnamulla* Evans, 1982a:366, ♀, ♂. Holotype: ♀, Australia: Queensland: 30 km S Cunnamulla (ANIC). Paratypes: Australia: New South Wales, Northern Territory, South Australia, Western Australia. – Cardale, 1985:298 (in catalog of Australian Sphecidae).

### 202. *cupes* Shestakov

*Cerceris cupes* Shestakov, 1918a:127, ♀. Holotype or syntypes: ♀, Kyrgyzstan: Talass Ala-Tau (ZIN). – R. Bohart and Menke, 1976:579 (listed); Kazenas, 1978b:64 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:111 (redescription), 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (nest and curculionid prey), 2001d:113, 115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan), 2004b:112 (Kazakhstan: western Tien Shan); Yildirim and Ljubomirov, 2005:1802 (first record from Turkey: Erzurum: Pasinler); Ljubomirov and Yildirim, 2008:135 (in catalog of Crabronidae of Turkey).

*Cerceris pulawskii* Kazenas, 1972b:136, ♀, junior primary homonym of *Cerceris pulawskii* Tsuneki, 1971. Holotype: ♀, Kazakhstan: Alma-Ata Oblast': Chiilik River valley (V.L. Kazenas coll.).

*Cerceris kazenasi* Pulawski in R. Bohart and Menke, 1976:583. Substitute name for *Cerceris pulawskii* Kazenas, 1972. Synonymized with *Cercerisa cupes* by Kazenas, 1978b:61.

### 203. *curculioncida* Krombein

*Cerceris curculioncida* Krombein, 1981:49, ♀, ♂. Holotype: ♀, Sri Lanka: Central Province: Kandy (USNM).

### 204. *curita* Fritz and Mariluis

*Cerceris curita* Fritz and Mariluis, 1979:30, ♀, ♂. Holotype: ♀, Argentina: Entre Ríos: Arroyo Urquiza in Colón Departamento (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:58 (in catalog of Neotropical Crabronidae).

### 205. *curo* Tsuneki

*Cerceris curo* Tsuneki in Tsuneki et al., 1992c:75, ♂. Holotype: ♂, Philippines: Mindanao: Cagayan de Oro, Malaybalay (USNM). – Tsuneki et al., 1992c:50 (in key); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### 206. *curvitaris* Schletterer

*Cerceris curvitaris* Schletterer, 1887:499, ♂. Holotype: ♂, South Africa: Cape Province: no specific locality (NHMW). – Brauns, 1911a:239 (South Africa, floral records); Bischoff, 1913b:119 (Botswana: Sekuma in Kafia



District); Brauns, 1926:308 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:142 and 147 (in key), 1935a:499 (South Africa: Kalahari); de Beaumont, 1967b:506 (South Africa: Cape Province); Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:579 (listed); Empey, 1983:167 (listed, study of holotype); Dollfuss, 1989:8 (holotype in NHMW); S. Gess, 1996:274 (floral records).

*Cerceris oneili* Cameron, 1905m:220, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:167. Synonymized with *Cerceris curvitaris* by Brauns, 1911a:239, W. Schulz, 1911b:1170, and Brauns, 1926:308. – Cameron, 1910:150 (South Africa: Transvaal: Pretoria).

#### 207. *cuthbertsoni* Arnold

*Cerceris cuthbertsoni* Arnold, 1946:86, ♀. Holotype: ♀, Zimbabwe: Silozi (SAM). – Empey, 1969a:304 (listed); R. Bohart and Menke, 1976:579 (listed); Empey, 1983:167 (listed, holotype examined).

#### 208. *cyclops* Krombein

*Cerceris cyclops* Krombein, 1969b:15, ♀. Holotype: ♀, Indonesia: Irian Jaya (= Indonesian New Guinea): Sabron in Cyclops Mountains (BMNH). – R. Bohart and Menke, 1976:579 (listed).

#### 209. *darrensis* Cockerell

*Cerceris darrensis* Cockerell, 1930:34, ♀. Holotype: ♀, Australia: Queensland, Brisbane: Darra (Queensland Museum, Brisbane). – Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:579 (listed); Evans, 1982a:363 (revision); Cardale, 1985:298 (in catalog of Australian Sphecidae).

#### 210. *decorata* Brèthes

*Cerceris decorata* Brèthes, 1910a:268, ♂. Holotype: ♂, Argentina: Mendoza: Mendoza (depository unknown: Fritz, 1968b:166). – Jörgensen, 1912:287 (Argentina: Mendoza Province); Schrottky, 1913a:229 (Argentina: Mendoza); R. Bohart and Menke, 1976:579 (listed); Genise, 1990:26 (depository of type material unknown).

#### 211. *dedariensis* R. Turner

*Cerceris dedariensis* R. Turner, 1936:534, ♀. Holotype or syntypes: ♀, Western Australia: Dedari 40 mi W Coolgardie (BMNH). – Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:579 (listed); Cardale, 1985:298 (in catalog of Australian Sphecidae).

#### 212. *dejecta* Arnold

*Cerceris dejecta* Arnold, 1931:162, ♀. Holotype: ♀, Kenya: Makinda (BMNH). – Empey, 1969a:304 (listed); R. Bohart and Menke, 1976:579 (listed); Empey, 1983:167 (listed, holotype examined).

#### 213. *delhiensis* Coumar and Dey

*Cerceris delhiensis* Coumar and Dey, 2008:339, ♀, ♂. Holotype: ♂, India: Delhi (NATIONAL PUSA COLLECTION, DIVISION OF ENTOMOLOGY, INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DALHI, INDIA).

#### 214. *dentata* Cameron

*Cerceris dentata* Cameron, 1890:260, ♀. Lectotype: ♀, India: Barrackpore or Poona (OXUM), designated by Empey, 1984:76. – Cameron, 1890b:248 (Barrackpore, Poona); Bingham, 1897:303 (redescription); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); R. Turner, 1912e:796 (in revision of British India species); R. Bohart and Menke, 1976:579 (listed).

#### 215. *dentifrons* Cresson

*Cerceris dentifrons* Cresson, 1865c:124, ♀. Lectotype: ♀, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1916:100. – Packard, 1866:63 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:489 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in

checklist of North American Crabronidae); Banks, 1912:18 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Stevens, 1917:422 (North Dakota); Mickel, 1918b:448 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Brimley, 1938:447 (North Carolina: Blowing Rock); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Scullen, 1965b:476 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Finnamore, 1982:251 (in Sphecid Fauna of Southern Quebec); G. Ferguson, 1984c:479 (listed); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:46, 48 (in key to eastern Canadian *Cerceris*).

### 216. *dentiventris* Arnold

*Cerceris dentiventris* Arnold, 1945:35, ♀, ♂. Syntypes: Madagascar: Behara, Bekily, Ivondro (MNHN). – R. Bohart and Menke, 1976:579 (listed); Empey, 1983:167 (listed, holotype examined); Madl, 1997:821 (Madagascar: Nosy Boraha Island, as *dentriventris*), 822 (in checklist of Nosy Boraha Sphecidae, as *dentriventris*); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

### 217. *deserta* Say

*Cerceris deserta* Say, 1824:343, ♂. Syntypes: ♂, USA: Northwest Territory (now area around Great Lakes and between the Ohio and Mississippi Rivers), Missouri, and Pennsylvania: no specific localities (destroyed). Neotype: ♂, South Dakota (MCZ), designated by Scullen, 1965a:479, see also G. Ferguson, 1984b:434. – F. Smith, 1856:465 (in catalog of Hymenoptera in British Museum); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:125 (in revision of North American Philanthinae); Packard, 1866:63 (listed); Cresson, 1876:207 (Colorado: Denver, as *deserta* Cresson); Provancher, 1883:645 (in revision of Canadian Hymenoptera); Taylor, 1884:80 (Canada: British Columbia: Vancouver Island); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:489 (listed); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Bridwell, 1899:209 (Kansas: no specific locality); H. Smith, 1908b:367 (in revision of Nebraskan Sphecidae); Banks, 1912:18 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Stevens, 1917:422 (North Dakota); Mickel, 1918b:449 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Brimley, 1938:447 (North Carolina: Boone, Swannanoa); Strickland, 1947:130 (Canada: Alberta: Lethbridge, Medicine Hat); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Scullen, 1965b:477 (in revision on North American *Cerceris*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera, prey); Finnamore, 1982:252 (in Sphecid Fauna of Southern Quebec); G. Ferguson, 1984c:479 (listed); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:45, 48 (in key to eastern Canadian *Cerceris*).

*Cerceris fulvipes* Cresson, 1865c:125, ♀, junior primary homonym of *Cerceris fulvipes* Eversmann, 1849. Lectotype: ♀, USA: Delaware: no specific locality (ANSP), designated by Cresson, 1916:100. Synonymized with *Cerceris deserta* by Scullen, 1942:187. – Packard, 1866:62 (listed); Patton, 1879d:360 (USA: nw. Kansas); Cresson, 1887:282 (in catalog of North American Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Gibson, 1913:124 (Canada: Ontario: Ottawa).

*Cerceris fulvipediculata* Schletterer, 1887:492. Substitute name for *Cerceris fulvipes* Cresson. – Dalla Torre, 1897:461 (in catalog of world Hymenoptera); H. Smith, 1908b:368 (in revision of Nebraskan Sphecidae); Banks, 1912:24 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Stevens, 1917:422 (North Dakota); Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Brimley, 1938:447 (North Carolina: Swannanoa); Strickland, 1947:130 (Canada: Alberta: Medicine Hat).

**218. *deserticola* F. Morawitz**

*Cerceris deserticola* F. Morawitz, 1890:593, ♀, ♂. Syntypes: Turkmenistan: Tedjen (ZIN). – Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Shestakov, 1914b:409 (Kazakhstan: Kulanda on Aral Lake), 1918a:130 (Transcaspia; nesting habits); Gussakovskij, 1952:285 (prey: a curculionid *Bothyneodera obliquefasciatus* Mén.); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:93 (Turkmenistan: Akibay, Mary district, Bayram-Ali district, Murgab district, Tedjen, Krasnovodsk, list of prey); de Beaumont, 1967a:292 (Turkey); Myartseva, 1972a:92 (Turkmenistan); R. Bohart and Menke, 1976:579 (listed); Kazenas, 1978b:69, 70 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:212 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (review of known prey: curculionids), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:142 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Kazenas, 2008a:106 (Southeastern Kazakhstan: near Bakanas, 65 km W Bakanas, 10 km W Chundza, 5 km SW village Kazakhstan); Ljubomirov and Yildirim, 2008:136 (in catalog of Crabronidae of Turkey).

*Cerceris murgabica* Radoszkowski, 1893a:66, ♀, ♂. Syntypes: Turkmenistan: Murgab (Kraków). Synonymized with *Cerceris solskii* by Kohl, 1916:124 and with *Cerceris deserticola* by Kazenas, 1984a:212. – Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Shestakov, 1918a:146 (citation); K. Schmidt, 2000:187 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:57 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia).

**219. *diabolica* Giner Mari**

*Cerceris diabolica* Giner Mari, 1942b:139, ♂ (as *diabolicus*, incorrect original termination). Holotype: ♂, China: Kwangtseh (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:579 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**220. *diana* Kazenas**

*Cerceris diana* Kazenas, 1984a:170, ♀, ♂. Holotype: ♀, Turkmenistan: Askhabad (ZIN). – Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 118 (in key to *Cerceris* of Kazakhstan and Central Asia).

**221. *difficilis* Guichard**

*Cerceris difficilis* Guichard, 1993a:161, ♂. Holotype: ♂, United Arab Emirates: Hatta, 24°50'N, 56°10'E (BMNH).

**222. *dilatata* Spinola**

*Cerceris dilatata* Spinola, 1841:118, ♀, ♂. Lectotype: ♀, French Guiana: Cayenne (Torino), designated by G. Ferguson, 1984b:434 (Scullen, 1961:46 designated a ♂ as neotype). – F. Smith, 1856:464 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:490 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Scullen, 1962:58 (invalid designation of neotype; see G. Ferguson, 1984b:434), 1965b:407 (in revision of North American *Cerceris*, as *dilatata dilatata*); Fritz, 1970:158 (synonymy); Scullen, 1972:40 (in revision of Mexican and Central American species, as *dilatata dilatata*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); G. Ferguson, 1984c:479 (listed); Hook, 1987:100 (nesting habits); Callan, 1990d:195 (nest and prey), 1991a:12 (Trinidad); Melo, 2000:100 (female associations for use of natal nest); Amarante, 2002:58 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies); Amarante, 2005a:12 (correction to his 2002 catalog); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State, as *dilatata dilatata*); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas, as *dilatata dilatata*).

- Cerceris atriceps* F. Smith, 1856:458, ♀. Holotype: ♀, Brasil: Pará: Belém (BMNH). Synonymized with *Cerceris dilatata* by G. Ferguson, 1984c:479. – Schletterer, 1887:486 (listed); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:577 (listed).
- Cerceris maximiliani* de Saussure, 1867:94, ♀. Lectotype: ♀, Mexico: Sierra Madre Oriental: no specific locality (MHNG), designated by Scullen, 1961:46. Synonymized with ... – Schletterer, 1887:497 (listed); Cameron, 1890a:111 (Guatemala, Mexico, Panama; redescription); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae).
- Cerceris contracta* Taschenberg, 1875:396, ♀. Lectotype: ♀, Brasil: no specific locality (Halle), designated by Scullen, 1962:58. Synonymized with *Cerceris dilatata* by Scullen, 1962:58. – Schletterer, 1887:489 (listed); Dalla Torre, 1897:456 (in catalog of world Hymenoptera).
- Cerceris caridei* Holmberg, 1903:478, ♀ (as *Caridei*, incorrect original capitalization). Lectotype: ♀, Argentina: Pampa Centralis (MACN), designated by Fritz, 1968b:163 (Article 74c). Synonymized with *Cerceris dilatata* by Fritz, 1970:158. – Schrottky, 1913a:229 (Argentina: Pampa).
- Cerceris vigili* Brèthes, 1910a:270, ♀, actually ♂, see Fritz, 1968b:167 (as *Vigili*, incorrect original capitalization). Lectotype: ♂, Argentina: Cordoba: Alta Gracia (MACN), designated by Fritz, 1968b:167. Synonymized with *Cerceris dilatata* by Fritz, 1970:158. – Jörgensen, 1912:287 (Argentina: Mendoza Province); Brèthes, 1913:125 (description of ♂, Argentina: Mendoza); Schrottky, 1913a:230 (Argentina: Córdoba); Fritz, 1968b:170 (study of ♂ described by Brèthes, 1913); Genise, 1990:26 (type material in MACN).
- Cerceris divisa* Brèthes, 1910a:270, ♀. Holotype: ♀, Argentina: Chaco: Las Mercedes (MACN). Synonymized with *Cerceris dilatata* by Fritz, 1970:158. – Schrottky, 1913a:229 (Argentina: Chaco); Fritz, 1968b:167 (study of holotype); Genise, 1990:26 (type material in MACN).
- Cerceris olynponis* Strand, 1910a:140, ♀. Holotype: ♀, Paraguay: Asunción (ZMHU). Synonymized with *Cerceris dilatata* by Scullen, 1962:58.
- Cerceris semiatra* Banks, 1947:25, ♂. Holotype: ♂, USA: Arizona: Patagonia (MCZ). Synonymized with *Cerceris dilatata* by Scullen, 1961:46. – Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:232 (study of holotype).
- Cerceris dilatata chisosensis* Scullen, 1965b:409, ♀, ♂. Holotype: ♀, USA: Texas: Big Bend National Park: Chisos Mountains (USNM). Synonymized with *Cerceris dilatata* by G. Ferguson, 1984c:480. – Scullen, 1972:41 (in revision of Mexican and Central American species); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 223. *diodonta* Schletterer

- Cerceris diodonta* Schletterer, 1887:451, ♂. Lectotype: ♂, South Africa: Cape Province: no specific locality (NHMW), designated by Empey, 1983:167 (Article 74.6). – Schletterer, 1887:490 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Brauns, 1911a:239 (South Africa), 1914:222 (revision), 1926:278 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire); Arnold, 1931:138 and 145 (in key); Leclercq, 1962a:397 (Tanzania: Mziha 70 km S Handeni); Empey, 1969a:304 (listed), 1974:304 (synonymy); R. Bohart and Menke, 1976:580 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils (as *diodonta diodonta*); Empey, 1983:167 (listed, holotype examined); Dollfuss, 1989:8 (holotype in NHMW).
- Cerceris mitrata* Bingham, 1902:215, ♂. Lectotype: ♂, South Africa: Transvaal: Middelburg (BMNH), designated by Empey, 1983:167. Synonymized with *Cerceris diodonta* by Empey, 1969a:304. – Arnold, 1930:13 (in checklist of Afrotropical Sphecidae), 1931:204 (original description copied).
- Cerceris melanospila* Cameron, 1905m:221, ♀. Lectotype: ♀, South Africa: Cape Province: Dunbrody, 33°29'S 25°33'E (AMG), designated by Empey, 1983:167. Synonymized with *Cerceris diodonta* by Brauns, 1911a:239

and 1917:239. – Cameron, 1910:150 (comparison with *Cerceris jansei*); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Empey, 1974:108 (condition and identity of holotype).

*Cerceris jansei* Cameron, 1910:149, ♂, actually ♀ (Brauns, 1917:239). Holotype: ♂, South Africa: Transvaal: Watterval (TMP). Synonymized with *Cerceris didonta* by Brauns, 1917:239. – Brauns, 1917:239 (holotype is a ♀); Empey, 1974:108 (condition and identity of holotype).

**ssp. *barbifera* Bischoff**

*Cerceris barbifera* Bischoff, 1912:222, ♀. Holotype: ♀, Zaire: Kasindi N Lake Edward (ZMHU). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:187 (revision). – As *Cerceris didonta barbifera*: Empey, 1969a:304 (new status, listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:168 (listed).

*Cerceris bagandarum* R. Turner, 1918c:465, ♀, ♂. Lectotype: ♀, Uganda: Kafu River near Hoima-Kampala Road (BMNH), designated by Empey, 1983:168. Synonymized with *Cerceris barbifera* by R. Turner, 1919d:50.

**ssp. *sodalis* R. Turner**

*Cerceris bagandarum* var. *sodalis* R. Turner, 1918c:466, ♀, ♂. Lectotype: ♀, Kenya: 30 mi from Magadi Junction (BMNH), designated by Empey, 1983:168. – As *Cerceris barbifera* var. *sodalis*: Turner, 1919:50 (new status); Arnold, 1931:188 (original description copied). – As *Cerceris sodalis*: Arnold, 1930:12 (full species status, in checklist of Afrotropical Sphecidae). – As *Cerceris didonta sodalis*: Empey, 1969a:304 (new subspecific combination, listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:168 (listed).

**224. *dione* Fritz**

*Cerceris dione* Fritz, 1960:67, ♀. Holotype: ♀, Argentina: Río Negro: Lamarque (M. Fritz coll.). – R. Bohart and Menke, 1976:580 (listed); Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**225. *discrepans* Brauns**

*Cerceris discrepans* Brauns, 1926:314, ♀. Lectotype: ♀, South Africa: Oudtshoorn (TMP), designated by Empey, 1983:168 (Article 74.6). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:151 (description of ♂); Empey, 1969a:300 (listed as synonym of *Cerceris albigena*), 1972:45 (valid species, redescription, as *discrepans discrepans*); R. Bohart and Menke, 1976:580 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils; (as *discrepans discrepans*); Empey, 1983:168 (listed); S. Gess, 1996:280, 282 (floral records, as *discrepans discrepans*).

**ssp. *grata* Arnold**

*Cerceris grata* Arnold, 1931:170, ♀. Holotype: ♀, Namibia: Okahandja (BMNH). – Empey, 1969a:309 (listed); R. Bohart and Menke, 1976:581 (listed). – As *Cerceris discrepans grata*: Empey, 1983:167 (new status).

**226. *dispar* Dahlbom**

*Cerceris dispar* Dahlbom, 1845:499, ♀. Holotype: ♀, "Egypt", probably Greece: Rhodes Island (NRS). – F. Smith, 1856:444 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:467 (original description copied), 490 (listed); Ed. André, 1889:337, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Giner Mari, 1941b:286 (original description copied, comments); de Beaumont, 1950c:324 (type study); Bytinski-Salz, 1956:225 (Turkey: Fethiye, İzmir, Kemer, Konya); de Beaumont, 1957b:132 (n. Iran); Pulawski, 1958a: 165 (Bulgaria: Aitos, Sandanski); de Beaumont, 1958d:280 (Cyprus; redescription); de Beaumont and Bytinski-Salz, 1959:111 (Israel); de Beaumont, 1960a:7 (Greece: Rhodes Island), 1965a:19 (Greece), 1967a:284 (Turkey), 1969:82 (Turkey); Balthasar, 1972:400 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:580 (listed); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:27 (redescription; *Cerceris denticulata* possibly a synonym); Islamov, 1986:519 (Uzbekistan: Tashkent Oblast'); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:332 (in Sphecid Fauna of Western Europe);

K. Schmidt, 2000:150 (in revision of Western Palearctic *Cerceris*); Kazakhstan, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:143 (geographic distribution, collecting localities in Kazakhstan); Ljubomirov and Yildirim, 2008:136 (in catalog of Crabronidae of Turkey).

*Cerceris lunata* var. *cypriaca* Giner Mari, 1945a:248, ♂, ♀. Syntypes: Cyprus: Limassol (MNCN). Synonymized with *Cerceris dispar* by de Beaumont, 1950c:324. – Giner Mari, 1945a:247 (Cyprus). – **As *Cerceris cypriaca***: de Beaumont, 1947b:384 (full species status); Pittioni, 1950:21 (Cyprus); Georghiou, 1977:189 (Cyprus).

As *Cerceris denticulata*: Schletterer, 1889a:894, ♀ only, corrected to *Cerceris dispar* by K. Schmidt, 2000:150; and Shestakov (corrected to *Cerceris dispar* by Kazenas, 1984a:27): 1918a:130 (citation), 1923:103, 104 (in key), 115 (citation, distribution).

### 227. *dissecta* (Fabricius)

*Philanthus dissectus* Fabricius, 1798:269, sex not indicated. Syntypes: ♀, ♂, India: no specific locality (ZMK). – Fabricius, 1799:40 (in Index to his Supplementum, 1798), 1804:306 (redescription); Thunberg, 1815b:287 (diagnostic characters), 291 (redescription); Dahlbom, 1845:XXIV (type material not examined); Cameron, 1890b:264 (original description copied); Dalla Torre, 1897:485 (in catalog of world Hymenoptera); W. Schulz, 1912:70 (Thunberg's specimens not preserved in his collection), 90 (type specimens of Fabricius are not identical with any of species treated by Bingham, 1897); R. Turner, 1912e:813 (may be identical with *Cerceris pallidopicta*). – **As *Cerceris dissecta***: Cameron, 1890b:249 (new combination, listed), 264 (unrecognizable species); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); van der Vecht, 1961a:66 (type material studied, redescription); R. Bohart and Menke, 1976:580 (listed); Krombein, 1981:12 (nesting habits), 34 (in revision of Sri Lanka Philanthinae); Empey, 1984a:77 (listed).

*Cerceris tristis* Cameron, 1890b:255, ♀, ♂. Lectotype: ♀, India: Barrackpore or Tirhoot (OXUM), designated by Krombein, 1981:34. Synonymized with *Cerceris dissecta* by Krombein, 1981:34. – Cameron, 1890b:250 (India: Barrackpore, Tirhoot); Bingham, 1897:309 (redescription); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); R. Turner, 1912e:810 (in revision of British India species); R. Bohart and Menke, 1976:588 (listed).

### 228. *dissona* Arnold

*Cerceris dissona* Arnold, 1955:753, ♀. Holotype: ♀, Namibia: Cnambeke (TMP). – Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:168.

### 229. *distinguenda* Shestakov

*Cerceris distinguenda* Shestakov, 1918b:27, ♀. Holotype or syntypes: ♀, China: N Kansu: Shan-sy-hu (ZIN). – Shestakov, 1923:102, 113 (in key to subgenus *Apiraptrix*, citation, distribution); Yasumatsu, 1942c:109 (China: Nei Mongol: Apaka at 44°N 114.96°E); Tsuneki, 1961c:9 (in key), 46: (China: Peking), 1971m:16 (China: Peking); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:52 (in key to Sphecidae of Kazakhstan and Central Asia), 1979d:82 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:471 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### 230. *doederleini* W. Schulz

*Cerceris doederleini* W. Schulz, 1905b:35, ♂ (as *Döderleini*, incorrect original capitalization and diacritic mark). Syntypes: Algeria: Biskra and Lambessa (Mus. Strasbourg). – W. Schulz, 1911b:169 (as new synonym of *Cerceris canaliculata* Pérez, 1905); nec von Schulthess, 1926b:211 (= *Cerceris berlandi*); nec Mochi, 1939:164 (= *Cerceris sinaitica*); Giner Mari, 1941b:259 (in revision of North African *Cerceris*), 1945a:248 (Algeria: Biskra); de Beaumont, 1951f:395 (Algeria, Morocco; discussion), 1953g:124 (Morocco); R. Bohart and Menke, 1976:580 (listed); K. Schmidt, 2000:114 (in revision of Western Palearctic *Cerceris*).

**231. *dogonensis* Krombein**

*Cerceris dogonensis* Krombein, 1974a:464, ♀. Holotype: ♀, Papua New Guinea: Dogon in Amazon Bay area (ANIC). – R. Bohart and Menke, 1976:580 (listed).

**232. *dominicana* Brauns**

*Cerceris dominicana* Brauns, 1926:302, ♀. Lectotype: ♀, South Africa: Cape Province: Willowmore (TMP), designated by Empey, 1969a:305. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:142 (in key), 1942:24 (female head and gastral base illustrated); Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils); Empey, 1983:168 (listed).

**233. *dondoensis* Brauns**

*Cerceris dondoensis* Brauns, 1926:275, ♀. Holotype: ♀, Mozambique: Dondo (TMP). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:137 (in key); Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:168 (listed, as *dondoensis dondoensis*).

*Cerceris ephippiorryncha* Arnold, 1940:109, ♀, ♂. Lectotype: ♀, Zimbabwe: Mt. Selinda in Chirinda Forest (TMP), designated by Empey, 1983:168. Synonymized with *Cerceris dondoensis* by Empey, 1969a:305. – As *Cerceris dondoensis* var. *ephippiorryncha*: Arnold, 1942:15 (new status).

**234. *dorsalis* Eversmann**

*Cerceris dorsalis* Eversmann, 1849:402, ♂. Holotype: ♂, "in campis Kirgisorum" (labeled "Songaria") = Kazakhstan: no specific locality (Kraków). – Kirchner, 1867:221 (in catalog of European Hymenoptera); Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867), 1877:61 (Kazakhstan: Bairakum, Syr-Daria steppe; Uzbekistan: Zaravshan valley; partly *Cerceris funerea*); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Kohl, 1916:110 (holotype in O. Radoszkowski collection); Shestakov, 1918a:130 (Uzbekistan), 1927a:20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:93 (Turkmenistan: Akibay and Murgab district); Pulawski, 1965c:566 (synonymy); R. Bohart and Menke, 1976:580 (listed); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:15 (re-description); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); K. Schmidt, 2000:151 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (review of known biology), 2002a:143 (geographic distribution, collecting localities in Kazakhstan); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Yildirim and Ljubomirov, 2007:119 (first record from Turkey: Elazığ: Kovancılar, İçel: Aydıncık); Ljubomirov and Yildirim, 2008:137 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:147 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Cerceris solskii* Radoszkowski, 1877:59, ♀, ♂ (as *Solskii*, incorrect original capitalization). Syntypes: Uzbekistan: Samarkand; Kazakhstan: Chardara (ZMMU). Synonymized with *Cerceris dorsalis* by Kohl, 1916:110 and 124, and Kazenas, 1984a:17. – Radoszkowski, 1886a:35 (Turkmenistan (as *Solskyi*); Kohl, 1916:124 (specimens in O. Radoszkowski collection); Shestakov, 1918a:130 (synonymy), 152 (Transcaspia; syntype ♂ of *Cerceris sirdariensis*; as *solskyi*), 1922:81 (Russia: Stavropol' area), 1923:103, 105, 113 (in key, synonymy, distribution), 1927a:11 (Ukraine: Kherson Oblast'); de Beaumont, 1961b:273 (Afghanistan); Tsuneki, 1961c:9, 15 (in key), 53 (China, previous record); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River, as *solskyi*), 1965:93 (Turkmenistan: Akibay, Sakar-Chagin district, Murgab district, Mary district); Tsuneki, 1971:426 (Mongolia; synonymy); Kazenas, 1972b:131 (Kazakhstan); Myartseva, 1972a:93 (Turkmenistan); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. and *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan, as *solskyi*), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan, as *solskyi*), 112 (feeding on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan, as *solskyi*), 1979d:83, 87 (in key), 1984a:17 (individual color form of

*Cerceris dorsalis*). – **As *Cerceris dorsalis solskii***: Pulawski, 1965b:567 (new status); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:50, 54 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:471, 476 (in key to Sphecidae of Russian Far East, as *solskyi*); Wu and Zhou, 1996a:173 (in revision in Economic Insect Fauna of China); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001d:105, 107 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris nobilis* Radoszkowski, 1877:61, ♂. Holotype or syntypes: ♂, Uzbekistan: Samarkand (ZMMU), synonymized with *Cerceris solskii* by Shestakov, 1918a:147 (but listed as synonym of *Cerceris circularis* by R. Bohart and Menke, 1976:578). – Schletterer, 1887:476 (original description copied), 498 (listed); Ed. André, 1889:338 and 1891:30\* (unrecognizable species); Dalla Torre, 1897:469 (in catalog of world Hymenoptera).

*Cerceris excavata* Schletterer, 1889a:884, ♀. Holotype: ♀, Russia: Sarepta = Krasnoarmeysk near Volgograd (Bern). Synonymized with *Cerceris dorsalis* by Pulawski, 1965c:566. – Shestakov, 1923:103, 112 (in key to subgenus *Api-raptrix*, citation, distribution).

*Cerceris caspica* F. Morawitz, 1891a:213, ♀, ♂. Syntypes: European Kazakhstan: Ryn-Peski: no specific locality (ZIN). Synonymized with *Cerceris dorsalis* by Kohl, 1916:110 and 124, and Pulawski, 1965c:566, and with *Cerceris solskii* by Shestakov, 1918a:125. – F. Morawitz, 1893b:419 (Tajikistan: Zeravshan River valley: Darkh), 1894:351 (Turkmenistan: Ashkhabad); Sickmann, 1894:204 (China: Hopei Province: Tientsin); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Shestakov, 1914b:408 (Kazakhstan: Kazalinsk), 1916:232 (Armenia: Aralykh and Ordubad).

### 235. *dowi* Tsuneki

*Cerceris dowi* Tsuneki, 1968f:25, ♂. Holotype: ♂, Philippines: Luzon: Rees Road (MCZ). – R. Bohart and Menke, 1976:580 (listed); Tsuneki, 1976b:36 (Philippines; description of ♀), 1984b:53 (Philippines); Tsuneki et al., 1992c:45, 49 (in key), 64 (Philippines, coloration); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris crassicollis* Tsuneki, 1968f:15, ♀. Holotype: ♀, China: Kiangsu: Loto-shan (originally Univ. of Minnesota, now USNM). Synonymized with *Cerceris dowi* by Tsuneki, 1971b:426, but listed as synonym of *Cerceris dorsalis solskii* by R. Bohart and Menke, 1976:580. – Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### 236. *downsivora* R. Turner

*Cerceris downsivora* R. Turner, 1912e:507, ♀. Holotype or syntypes: ♀, Burma: Pegu Hills (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:580 (listed).

### 237. *dreisbachi* Scullen

*Cerceris dreisbachi* Scullen, 1972:77, ♀, ♂. Holotype: ♀, Mexico: Morelos: Cuernavaca (USNM). – R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:480 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 238. *duchesnei* Arnold

*Cerceris duchesnei* Arnold, 1945:31, ♀, ♂ (as *Duchesnei*, incorrect original capitalization). Syntypes: Madagascar: Ambovimbi, Antananarivo, Bekily (MNHN). – Leclercq, 1961d:102 (Madagascar); Empey, 1969a:305 (listed, as *duchesei*); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed, holotype examined); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

### 239. *duplicata* Brèthes

*Cerceris duplicata* Brèthes, 1910a:268, ♀. Holotype: ♀, Argentina: Catamarca: Catamarca (MACN). – Schrottky, 1913a:229 (Argentina: Catamarca); Fritz, 1968b:166 (study of holotype); R. Bohart and Menke, 1976:580 (listed);



Fritz and Mariluis, 1979:27 (in revision of *gaudebunda* group, description of ♂); Genise, 1990:26 type material in MACN); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

#### 240. *durango* Scullen

*Cerceris durango* Scullen, 1972:78, ♀, ♂. Holotype: ♀, Mexico: Durango: 15 mi N Durango (USNM). – R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:480 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

#### 241. *dusmeti* Giner Marí

*Cerceris dusmeti* Giner Marí: Dusmet y Alonso, 1935:65 (Spain: Avila: Las Navas del Marqués), nomen nudum.

*Cerceris dusmeti* Giner Marí, 1941a:71, ♀, ♂. Holotype: ♀, Spain: Provincia Madrid: Sierra de Guadarrama (MNCN). – Giner Marí, 1943a:105 (in Sphecid Fauna of Spain); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain); de Beaumont, 1957d:331 (diagnostic characters, sex association, possible synonymy); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); R. Bohart and Menke, 1976:580 (listed); Tormos and Jiménez, 1987a:127 (Spain: Valencia); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:333 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:53 (in revision of Western Palearctic *Cerceris*); Martin Albaladeo and Izquierdo Moya, 2006:120 (type in Museo Nacional de Ciencias Naturales); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent records from Portugal and Spain reported).

*Cerceris moroderi* Giner Marí, 1941a:76, ♀, ♂. Holotype: ♀, Spain: Valencia: Cañada (MNCN). Synonymized with *Cerceris dusmeti* by Schmidt and Bitsch in Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:333. – Giner Marí, 1943a:105 (in Sphecid Fauna of Spain); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain); de Beaumont, 1957d:330 (diagnostic characters, sex association); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); R. Bohart and Menke, 1976:584 (listed); Tormos and Jiménez, 1987a:128 (Spain: Valencia), 1987b:317 (Spain: Valencia Province: Dehesa de El Saler); Martin Albaladeo and Izquierdo Moya, 2006:125 (type in Museo Nacional de Ciencias Naturales).

#### *ssp. guichardi* de Beaumont

*Cerceris guichardi* de Beaumont, 1951f:357, ♀, ♂. Holotype: ♀, S Algeria: Taouiiala (BMNH). – de Beaumont, 1950f:397 (Algeria; nomen nudum), 1953g:123 (Morocco); R. Bohart and Menke, 1976:581 (listed). – **As *Cerceris dusmeti guichardi***: K. Schmidt, 2000:55 (new status, in revision of Western Palearctic *Cerceris*).

#### 242. *eburneofasciata* Brauns

*Cerceris eburneofasciata* Brauns, 1926:273, ♀, ♂. Lectotype: ♀, South Africa: Gauteng: Johannesburg (TMP), designated by Empey, 1983:169. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed).

#### 243. *echo* Mickel

As *Cerceris rufinoda crucis*: H. Smith, 1908:370, part (in revision of Nebraskan Sphecidae), corrected to *Cerceris echo* by Mickel, 1916a:412.

*Cerceris echo* Mickel, 1916a:412, ♀. Holotype: ♀, USA: Nebraska: Sioux County: Monroe Canyon (UNL). – Mickel, 1918b:453 (in catalog of Nebraskan Sphecidae); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 23 (paratypes in UNL); Scullen, 1965b:376 (in revision of North American *Cerceris*); Evans, 1971:509 (nesting habits); Scullen, 1972:24 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Grissell, 1975:45 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:580 (listed); Evans and Rubink, 1978:61 (nesting habits); Krombein, 1979b:1733 (in catalog of North American Hymenoptera); Hilchie, 1982:107 (Alberta: Empress); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain; (as *echo echo*); G. Ferguson, 1984c:480 (listed);

McCorquodale, 1986:1624 (flight characteristics as defense against *Senotainia trilineata*); Hook, 1987:106 (nesting habits); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Melo, 2000:100 (female associations for use of natal nest); Amarante, 2002:59 (in catalog of Neotropical Crabronidae) Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 71 (first record from British Columbia and Ontario: list of localities; description of ♂); Buck, Paiero, and Marshall, 2006:42, 47 (in key to eastern Canadian *Cerceris*).

*Cerceris echo atrata* Scullen, 1965b:377, ♀. Holotype: ♀, USA, New Jersey: Camden County: no specific locality (ANSP). Synonymized with *Cerceris echo* by G. Ferguson, 1984c:480. – R. Bohart and Menke, 1976:580 (listed); Krombein, 1979b:1733 (in catalog of North American Hymenoptera); Noonan, 1984a:6 (a paratype in Milwaukee Public Museum); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

#### 244. *edolata* Shestakov

*Cerceris edolata* Shestakov, 1912:508, ♂. Holotype or syntypes: ♂, Uzbekistan: Tashkent (ZIN). – Shestakov, 1918a:130 (Uzbekistan: Tashkent), 1923:105, 115 (in key, citations, distribution); Gussakovskij, 1952:281 (Tajikistan; description of ♀); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:50, 54 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:30 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 107 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:143 (geographic distribution, collecting localities in Kazakhstan).

#### 245. *egena* Arnold

*Cerceris egena* Arnold, 1931:167, ♀. Holotype: ♀, Malawi: Mlanje (BMNH). – Arnold, 1942:8 (Malawi: Mlanje; description of ♂); Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed, holotype examined).

#### *ssp. mombasae* Arnold

*Cerceris egena mombasae* Arnold, 1942:9, ♀ (November). Lectotype: ♀, Kenya: Mombasa (SAM), designated by Empey, 1983:169 (Article 74.6). – Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed).

*Cerceris morula* Giordani Soika, 1942:202, ♂ (December). Holotype: ♂, Ethiopia: Harar: Fardis (Torino Univ.). Synonymized with *Cerceris egena mombasae* by Empey, 1983:169. – Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed).

#### 246. *electra* Arnold

*Cerceris electra* Arnold, 1951:113, ♀. Holotype: ♀, Ghana: Labadi (BMNH). – Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed, holotype examined).

#### 247. *elegans* Eversmann

*Cerceris elegans* Eversmann, 1849:400, ♀. Lectotype: ♀, Russia: Orenburg Province: no specific locality (Kraków), designated by Kohl, 1916:110 (Article 74.6). – Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867); Radoszkowski, 1876b:137 (Egypt); nec Radoszkowski, 1877:64 (= *Cerceris capito* according to Shestakov, 1918a:130; correction impossible for geographic reasons; actually *straminea komarovii*); Schletterer, 1887:488 (in revision of world *Cerceris*), 490 (listed); Ed. André, 1889:317, 334 (in revision of Sphecidae of Europe and Algeria); Ed. André, 1891:27\* (bibliographic references); Dalla Torre, 1897:457 (in catalog of world Hymenoptera); Shestakov, 1914b:409 (Kazakhstan: Kan-utkul on Aral Lake), 410 (description of ♂); Kohl, 1916:110 (type material in Kraków); Shestakov, 1918a:130 (Kazakhstan: Aral Lake); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:67 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:161 (redescription); K. Schmidt, 2000:56 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Cen-

tral Asia), 2001d:112, 119 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:143 (geographic distribution, collecting localities in Kazakhstan), 2008a:106 (Southeastern Kazakhstan: 5-8 km E Bakanas).

#### 248. *elizabethae* Bingham

*Cerceris elizabethae* Bingham, 1897:312, ♀. Holotype: ♀, Burma: Tenasserim (BMNH). – R. Turner, 1912e:498 (revision); R. Bohart and Menke, 1976:580 (listed).

#### 249. *emeryana* Gribodo

*Cerceris emeryana* Gribodo, 1894c:129, ♀ (as *Emeryana*, incorrect original capitalization). Holotype: ♀, Mozambique: Magnarra River (Mus. Zool. Univ. Bologna). – Gribodo, 1895:354 (Mozambique: Rikatla); Dalla Torre, 1897:458 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Empey, 1969a:305 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed); Tommasini and Marini, 1984:42 (type depository).

#### ssp. *bechuana* Brauns

*Cerceris varilineata* race *bechuana* Brauns, 1926:322, ♀, ♂. Lectotype: ♀, South Africa: Pudimoe (TMP), designated by Empey, 1969a:322. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae). – As *Cerceris emeryana bechuana*: Empey, 1969a:306 (new status, listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed, the type locality is in South Africa, not Botswana).

#### ssp. *varilineata* Cameron

*Cerceris varilineata* Cameron, 1905:218, ♂. Lectotype: ♂, South Africa: Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:169 (Article 79b). – Brauns, 1911a:239 (preying on curculionids), 1926:320 (revision, description of ♂); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:149 (in key). – As *Cerceris emeryana* var. *varilineata*: Arnold, 1931:149 (new status). – As *Cerceris emeryana varilineata*: Empey, 1969a:306 (new status, listed), 1974:120 (taxonomic history); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:169 (listed, type examined).

*Cerceris varilineata* var. *matabele* Brauns, 1926:pl. XLI, fig. 11, ♀, ♂. Syntypes: origin not indicated but presumably Zimbabwe (as indicated by the name *matabele*): no specific locality (depository?). Synonymized with *Cerceris emeryana varilineata* by Empey, 1983:169.

*Cerceris multicolor* Arnold, 1946:85, ♀. Holotype: ♀, Lesotho: Mamathes (SAM). Synonymized with *Cerceris emeryana varilineata* by Empey, 1983:169. – Arnold, 1955:752 (*multicolor* is a variety of *Cerceris emeryana*). – As *Cerceris emeryana multicolor*: Empey, 1969a:306 (new status, listed); R. Bohart and Menke, 1976:580 (listed).

#### 250. *enodans* Brèthes

*Cerceris enodans* Brèthes, 1910a:273, ♂. Holotype: ♂, Argentina: Jujuy: Jujuy (depository unknown). – Schrottky, 1913a:230 (Argentina: Jujuy); Fritz, 1968b:167 (study of holotype); R. Bohart and Menke, 1976:580 (listed, as *enodans*); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

#### 251. *ephippium* R. Turner

*Cerceris ephippium* R. Turner, 1912e:498, ♀, ♂. Syntypes: Pakistan: Karachi and Quetta; Saudi Arabia: S. Othman (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:580 (listed); Gadallah and Assery, 2004a:233 (in catalog of Sphecidae of Saudi Arabia).

#### 252. *errata* Shestakov

As *Cerceris maracandica*: Schletterer, 1887:420 (in revision of world *Cerceris*), corrected to *Cerceris errata* by Shestakov, 1918a:144; Kohl, 1916:124, corrected to *Cerceris errata* by Shestakov, 1926:239.

*Cerceris errata* Shestakov, 1918a:131 and 144, ♀, ♂. Syntypes: specimens examined by Schletterer, 1887:421: Uzbekistan:Samarkand, Gegend, Amu Darya (NHMW). – Shestakov, 1918a:131 (Uzbekistan and Turkmenistan); Kazenas, 1972b:125 (Kazakhstan: vicinity of Ili in Alma Ata Oblast'); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:59 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:88 (redescription), 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:143 (geographic distribution, collecting localities in Kazakhstan).

### 253. *erronea* Giner Marí

*Cerceris erronea* Giner Marí, 1942b:128, ♂, ♀. Syntypes: China: Shaowu (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:580 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### 254. *eryngii* Marquet

As *Cerceris albofasciata*: A. Costa, 1867c:94 and 1869b:110 (in revision of Italian Sphecidae), and 1872a:29 (in revision of Sphecidae of Kingdom of Naples, Italy), corrected to *Cerceris eryngii* by de Beaumont, 1950c:327.

*Cerceris eryngii* Marquet, 1875:205, ♀. Lectotype: ♀, France: Hérault: Béziers (Lausanne), designated by de Beaumont, 1952b:89. – Marquet, 1879:190 (possibly a variety of *Cerceris ornata*), 1881:190 (southern France, possibly a variety of *Cerceris ornata*); Dalla Torre, 1897:458 (in catalog of world Hymenoptera); de Gaulle, 1908:104 (in catalog of French Hymenoptera); de Beaumont, 1950c:327 (study of syntypes), 1951b:177 (synonymy cited), 1952a:49 (France: Haute Garonne, Var; redescription); Bajári, 1956a:81 (in catalog of Hungarian *Cerceris*, with list of localities), 1956b:406, 408 (first records from Hungary); Bytinski-Salz, 1956:225 (Turkey: Konya); Bajári, 1957a:33, 40 (in key to Hungarian Sphecidae); de Beaumont, 1957b:132 (n. Iran); Balthasar, 1958:338 (first records from Slovakia: Čenkov, Gbelce, Štúrovo); de Beaumont, 1958d:271 (Greece); Pulawski, 1958a:166 (Bulgaria: Aitos, Kniazhevo near Sofia, Sandanski); de Beaumont, 1959a:13 (Italy); de Beaumont and Bytinski-Salz, 1959:111 (Israel); de Beaumont, 1960a:7 (Greece: Rhodes Island); Noskiewicz and Puławski, 1960:75, 78 (in key to Polish Sphecidae, not yet found in Poland); de Beaumont, 1961c:46 (Greece: Crete Island), 1962b:20 (first record from Spain: Madrid), 29 (discussion); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:19 (Greece); Pulawski, 1965c:566 (synonymy); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:283 (Turkey); Scobiola-Palade, 1968a:823 (first record from Romania: Teleorman District: Alexandria, and Tulcea District: Tulcea); de Beaumont, 1969:82 (Turkey); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Atanassov, 1972a:191 (Bulgaria: Stara Planina Mountains, as *eryngy*), 1972b:32, 49 (Bulgaria: Stara Planina Mountains, as *eryngy*); Balthasar, 1972:404 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:126 (Kazakhstan); Erlandsson, 1974:62 (Yugoslavia); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:50, 54 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas 1984a:31 (redescription); Józán, 1985b:62 (recorded from Simontornya by Bajári, 1956), 85 (ecological and zoogeographic characteristics); Gayubo and Heras, 1986:71 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:86 (Spain: Burgos); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Islamov, 1986:519 (Uzbekistan: Tashkent Oblast'); Pagliano, 1987:160 and 167 (Italy, in key, as *eryngi*), 1988:161 (Italy; revision, as *eryngii*); Pádr in Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1992:29 (Greece: Euboea); Guichard, 1993a:154 (Arabian Peninsula); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Gayubo and Borsato, 1994:220 (Italy: Toscana), 221 (map of distribution in Italy); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:335 (in Sphecid Fauna of Western Europe); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); K. Schmidt, 2000:152 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area

at 49°37'N 41°45'E); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 107 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:144 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:134 (Spain: Tarragona); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Jacobs, 2005a:441 (Bulgaria: Banya near Hissarya, Shipka); Pagliano and Negrisolo, 2005:335 (in Sphecid Fauna of Italy); Shoreenko, 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1802 (Turkey: Artvin, Baybyurt, Erzurum, and Kars provinces); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Ljubomirov and Yildirim, 2008:137 (in catalog of Crabronidae of Turkey); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Pagliano, 2009:183 (Italy: Piemonte: Tigliole).

*Cerceris haueri* Schletterer, 1887:406, ♀. Holotype or syntypes: ♀, Dalmatia, now Croatia: no specific locality (NHMW). Synonymized with *Cerceris eryngii* by de Beaumont, 1950c:327 and 1951b:177. – Schletterer, 1887:493 (listed); Ed. André, 1889:329 (in revision of Sphecidae of Europe and Algeria); Gasperini, 1889:69 (known only from Dalmatia); Ed. André, 1891:30\* (bibliographic references); Dalla Torre, 1897:462 (in catalog of world Hymenoptera).

*Cerceris robusta* Shestakov, 1915:12, ♀. Holotype: ♀, Bulgaria: Lom Palanka (ZIN). Synonymized with *Cerceris eryngii* by de Beaumont, 1950c:327. – Shestakov, 1917c:47 (Ukraine: Crimea), 1918a:148 (Transcaspia), 1923:102, 114 (in key, citations, distribution), 1927a:10 (Ukraine: Odessa Oblast'), 11 (Ukraine: Kherson Oblast'), 19 (Stalingrad Oblast', now Volgograd and Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:45 (Russia: vicinity of Orenburg); Pulawski, 1965c:566 (study of holotype).

*Cerceris prahenda* Kazenas, 1978b:53 and 56, ♀, ♂. Syntypes: Southern and Central Europe, Kazakhstan: no specific localities (depository?). Synonymized with *Cerceris eryngii* by Kazenas, 1984a:31.

As *Cerceris funerea* (partly): Giner Mari, 1941a:29 (in revision of Spanish *Cerceris*), corrected to *Cerceris eryngii* by de Beaumont, 1962b:29.

### **ssp. cretensis K. Schmidt**

*Cerceris eryngii cretensis* K. Schmidt, 2000:153, ♀, ♂. Holotype: ♀, Greece: Kriti: Iraklion (ZMHU).

### **ssp. ponantina de Beaumont**

*Cerceris lunata* razza *occidentalis* Giner Mari, 1941b:182, ♀, ♂, junior primary homonym of *Cerceris occidentalis* de Saussure, 1867. Syntypes: Morocco: Mogador (MNCN). – As *Cerceris eryngii occidentalis*: de Beaumont, 1950c:327 (new status), 1951f:315 (Tunisia to Morocco; discussion), 1953g:120 (Morocco).

*Cerceris eryngii ponantina* de Beaumont, 1970b:38. Substitute name for *Cerceris occidentalis* Giner Mari, 1941. – R. Bohart and Menke, 1976:580 (listed); K. Schmidt, 2000:153 (in revision of Western Palearctic *Cerceris*).

### **255. erynnis Arnold**

*Cerceris erynnis* Arnold, 1931:159, ♀. Holotype: ♀, Malawi: Mlanje (BMNH). – Empey, 1969a:306 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:170 (listed, unnecessary designation of lectotype).

### **256. erythrogaster Kazenas**

*Cerceris erythrogaster* Kazenas, 1972b:133, ♀, ♂. Holotype: ♀, Kazakhstan: Turaighyr Range 180 km E Alma-Ata (coll. V. Kazenas). – R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:64, 65 (in key to Sphecidae of Kazakhstan and Central Asia, as *erythrogastra*), Kazenas, 1984a:133 (redescription), 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:144 (geographic distribution, collecting localities in Kazakhstan), 2004b:112 (Kazakhstan: western Tien Shan).

**257. erythropoda Cameron**

*Cerceris erythropoda* Cameron, 1890a:126, ♀. Holotype or syntypes: ♀, Mexico: Veracruz: Cordova (BMNH). – Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:79 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:480 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**258. erythrosoma Schletterer**

*Cerceris pictiventris* Gerstaecker in Peters, 1858:509, ♂, junior primary homonym of *Cerceris pictiventris* Dahlbom, 1845. Holotype or syntypes: ♂, Mozambique: no specific locality (ZMHU). – Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Brauns, 1914:219 (revision); Kohl, 1916:120 (specimens in coll. Radoszkowski); Brauns 1926:276 (revision); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire); Arnold, 1931:137 and 145 (in key).

*Cerceris pictiventris* Gerstaecker, 1862:474, ♂. Objective synonym of *Cerceris pictiventris* Gerstaecker, 1858.

*Cerceris erythrosoma* Schletterer, 1887:450, ♀. Lectotype: ♀, South Africa: Cape Province: no specific locality (NHMW), designated by Empey, 1983:170 (Article 74.6). Synonymized with *Cerceris pictiventris* Gerstaecker by Brauns, 1914:219, Kohl, 1916:120, and Brauns, 1926:276. – Schletterer, 1887:490 (listed); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Brauns, 1911a:239 (South Africa, preying on curculionids); Empey, 1969a:306 (listed); R. Bohart and Menke, 1976:580 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 87 (prey: Curculionidae), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils); Empey, 1983:170 (listed, type examined); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris ornativentris* Cameron, 1905m:219, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:170 (Article 74.6). Synonymized with *Cerceris pictiventris* by Brauns, 1911a:239, W. Schulz, 1911b:170, Brauns, 1914:219, and 1926:276. – Empey, 1974:113 (taxonomic history).

*Cerceris rebaptizata* Schulz, 1906:195. Substitute name for *Cerceris pictiventris* Gerstaecker, 1858.

As *Cerceris ulcerosa* Arnold, 1936:4, ♂ only. Corrected to *Cerceris erythrosoma* by Empey, 1969a:324 and 1983:170.

*Cerceris pseudoproteles* Arnold, 1952:467, ♀. Holotype: ♀, Kenya: Makindu (BMNH). Synonymized with *Cerceris erythrosoma* by Empey, 1983:170. – Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed).

**259. erythroua Cameron**

*Cerceris erythroua* Cameron, 1908a:276, ♀, ♂. Lectotype: ♀, Kenya: Mt. Kilimandjaro (BMNH), designated by Empey, 1969a:307. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:191 (revision); Scott in Arnold, 1933a:369 (Ethiopia: Harar District; also Kilimandjaro and Aberdare Mts.); Empey, 1969a:307 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:170 (listed).

**260. escalerae Giner Mari**

As *Cerceris bucculata*: Morice, 1911:88 (Algeria: Biskra), corrected to *Cerceris escalerae* by de Beaumont, 1951f:305.

*Cerceris escalerae* Giner Mari, 1941b:248, ♂, ♀. Syntypes: Morocco: Mogador (MNCN). – Giner Mari, 1945b:362 (Western Sahara: El Aiun), 1945e:227 (Western Sahara, as *escalerae*), 1947:21 (Western Sahara, as *escalerae*); de Beaumont, 1950f:397 (Algeria, as *escalerae*), 1951f:365 (Algeria, Morocco; discussion; as *escalerae*), 1953g:123 (Morocco; as *escalerae*); R. Bohart and Menke, 1976:580 (listed); K. Schmidt, 2000:56 (in revision of Western Palearctic *Cerceris*).

**261. *escalante* Evans**

*Cerceris escalante* Evans, 2002b:91, ♀, ♂. Holotype: ♀, USA: Utah: Kane County: Coral Pink Sand Dunes (USNM).

**262. *eucharis* Schletterer**

*Cerceris eucharis* Schletterer, 1887:394, ♂. Syntypes (as indicated by "Hinterkopf kann gelb gefleckt sein"): ♂, Syria (NHMW, now lost?). – Schletterer, 1887:490 (listed); Ed. André, 1889:312 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); de Beaumont, 1967a:294 (type missing); R. Bohart and Menke, 1976:580 (listed); K. Schmidt, 2000:115 (in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2005:1803 (Turkey: Ağrı: Patnos); Ljubomirov and Yildirim, 2008:138 (in catalog of Crabronidae of Turkey).

*Cerceris fraterna* de Beaumont in de Beaumont and Bytinski-Salz, 1959:132, ♀. Holotype: ♀, Israel: Jerusalem (Lausanne). Synonymized with *Cerceris eucharis* by K. Schmidt, 2000:115. – R. Bohart and Menke, 1976:581 (listed)

**263. *euchroma* R. Turner**

*Cerceris euchroma* R. Turner, 1910b:424, ♀. Holotype or syntypes: ♀, Australia: Queensland: Cairns (BMNH). – R. Turner, 1910b:421 (in key), 1912d:672 (in revision of Australian *Cerceris*); Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:580 (listed); Evans, 1982a:343 (revision); Cardale, 1985:298 (in catalog of Australian Sphecidae).

**264. *eulalia* Brauns**

*Cerceris eulalia* Brauns, 1926:326, ♀. Holotype: ♀, South Africa: Transvaal: Johannesburg (TMP). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:149 and 1942:15 (is a color variety of *Cerceris rufiscutis*); Empey, 1969a:307 (listed, good species), 1971b:266 (redescription); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:170 (listed, type examined).

***ssp. transkeica* Empey**

*Cerceris eulalia transkeica* Empey, 1971b:270, ♀, ♂. Holotype: ♀, South Africa, Transkei, now Eastern Cape Province: Umtata (originally H. Empey coll., now TMP). – R. Bohart and Menke, 1976:580 (listed); Empey, 1983:170 (listed, holotype in TMP).

**265. *eumolpicida* Krombein**

*Cerceris eumolpicida* Krombein, 1981:38, ♀, ♂. Holotype: ♀, Sri Lanka: Monaragala District: Angunakolapelessa (USNM). – Krombein, 1981:13 (nesting habits; prey: Chrysomelidae).

**266. *eungella* Evans**

*Cerceris eungella* Evans, 1982a:353, ♀, ♂. Holotype: ♀, Australia: Queensland: Eungella National Park 80 km NW Mackay (Queensland Museum, Brisbane). Paratypes: Australia: New South Wales, Northern Territory, Queensland. – Cardale, 1985:298 (in catalog of Australian Sphecidae); Evans and Hook, 1986b:1300 (prey: Chrysomelidae).

**267. *euryanthe* Kohl**

*Cerceris euryanthe* Kohl, 1888a:137, [♀]. Syntypes: Caucasus: no specific locality (NHMW). – Ed. André, 1889:285, 312 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:889 (redescription); Ed. André, 1891:24\* (bibliographic references); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Kohl, 1916:111 (specimens in O. Radoszkowski collection); Shestakov, 1916:234 (Georgia: Lagodekhi); de Beaumont, 1967a:293 (Turkey; discussion), 1969:83 (Turkey); R. Bohart and Menke, 1976:580 (listed); Dollfuss, 1989:8 (type material in NHMW); K. Schmidt, 2000:117 (in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2005:1803 (Turkey: Erzurum: University campus); Ljubomirov and Yildirim, 2008:138 (in catalog of Crabronidae of Turkey).

**ssp. canaliculata Pérez**

*Cerceris canaliculata* Pérez, 1895d:179, ♂. Holotype or syntypes: ♂, Algeria: Méchéria (MNHN). – Giner Mari, 1941b:263 (in revision of North African *Cerceris*); de Beaumont, 1951f:399 (incorrectly regarded *canaliculata* as secondary junior homonym of *Philanthus canaliculatus* Say, 1823, now in *Eucerceris*); R. Bohart and Menke, 1976:578 (listed). – **As *Cerceris euryante canaliculata***: K. Schmidt, 2000:119 (new status, in revision of Western Palearctic *Cerceris*).

As *Cerceris Döderleini*: von Schulthess, 1926b:211 (Tunisia: Sfax), corrected to *Cerceris berlandi* by de Beaumont, 1951f:400.

*Cerceris berlandi* Giner Mari, 1941b:265, ♀ (authorship attributed to Shestakov). Holotype: ♀, Algeria: El Kantara (MNHN). Synonymized with *Cerceris canaliculata* by de Beaumont, 1951f:399. – de Beaumont, 1951f:399 (Algeria, Tunisia; discussion), 1956a:215 (Libya), 1967a:294 (Turkey; discussion), 1969:83 (Turkey; discussion).

**ssp. palaestina de Beaumont**

*Cerceris berlandi palaestina* de Beaumont in de Beaumont and Bytinski-Salz, 1959:131, ♀, ♂. Holotype: ♀, Syria: Douma near Damascus (Lausanne). – **As *Cerceris canaliculata palaestina***: R. Bohart and Menke, 1976:578 (new subspecific combination, listed); Guichard, 1991a:338 (Jordan). – **As *Cerceris euryanthe palaestina***: K. Schmidt, 2000:118 (new subspecific combination, in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:139 (in catalog of Crabronidae of Turkey).

**ssp. tingitana de Beaumont**

*Cerceris berlandi tingitana* de Beaumont, 1951f:400, ♀, ♂. Holotype: ♀, Morocco: Meknes (MNHN). – de Beaumont, 1953g:125 (Morocco: Mogador); R. Bohart and Menke, 1976:578 (listed).

**268. evansi Scullen**

*Cerceris evansi* Scullen, 1972:80, ♀, ♂. Holotype: ♀, Mexico: Morelos: 3 mi NW Cuernavaca (USNM). – R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:480 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**269. eversmanni Schulz**

*Cerceris cornuta* Eversmann, 1849:406, ♀, junior secondary homonym of *Cerceris cornuta* (Fabricius, 1787). Synonyms: ♀, Russia: foothills of Ural Mts. and Orenburg Province (Kraków). – Schletterer, 1887:436 (in revision of world *Cerceris*), 489 (listed); Ed. André, 1889:305 (in revision of Sphecidae of Europe and Algeria), 23\* (bibliographic references); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Kohl, 1916:110 (syntypes in O. Radoszkowski collection); Benoist, 1928:409 (first record from France: Basses-Alpes: near Barcelonnette); Gussakovskij, 1938:16 (Mongolia); Šnoflak in Zavadil and Šnoflak, 1948:89 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia).

*Cerceris eversmanni* W. Schulz, 1912:91. Substitute name for *Cerceris cornuta* Eversmann, 1849. – de Beaumont, 1952a:67 (France: Basses-Alpes, Hautes-Alpes; redescription); Bajári, 1956a:84 (in catalog of Hungarian *Cerceris*, with list of localities), 1956b:407, 408 (first records from Hungary), 1957a:36, 44 (in key to Hungarian Sphecidae); de Beaumont, 1965a:21 (Greece); Oehlke, 1970:681 (first record from Democratic Germany: Dresden area); Tsunek, 1968f:4 (China: Heilungkiang); Scobiola-Palade, 1971:205 (in review of *Cerceris* of Romania); Balthasar, 1972:406 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:580 (listed); Pulawski, 1978:194, 196 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:124 (redescription); Józán, 1985b:62 (recorded from Simontornya by Bajári, 1956), 72 (map of distribution in Hungary), 85 (ecological and zoogeographic characteristics); Jacobs and Oehlke, 1990:122 and 217 (occurrence in Democratic Germany questionable); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Bitsch, Barber, Gayubo, Schmidt, and Ohl, 1997:336 (in Sphecid Fauna of Western Europe); Schmidt and Schmid-Egger,



1997:7 (the only German records are from Saxony from mid XIXth century); Blösch, 2000:418 (in Sphecidae Fauna of Germany); K. Schmidt, 2000:57 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 119 (in key to *Cerceris* of Kazakhstan and Central Asia); Ohl et al., 2001:137 (distribution in Germany by provinces); Kazenas, 2002a:144 (geographic distribution, collecting localities in Kazakhstan), 2004b:112 (Kazakhstan: western Tien Shan); Jacobs, 2007:184, 188 (in key to Crabronidae of Germany); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:147 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: extinct, last collected in 1850).

**ssp. caucasica Shestakov**

*Cerceris caucasica* Shestakov, 1915:8, ♀. Holotype or syntypes: ♀, Azerbaijan: Yelisavetpol, now Kirovabad (ZIN). – Shestakov, 1916:232 (Caucasus; description of ♂); R. Bohart and Menke, 1976:578 (listed); Kazenas, 1978b:63, 67 (in key to Sphecidae of Kazakhstan and Central Asia). – As *Cerceris eversmanni caucasica*: K. Schmidt, 2000:57 (new status, in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2005:1803 (first record from Turkey: Erzurum: Oltu); Ljubomirov and Yildirim, 2008:139 (in catalog of Crabronidae of Turkey).

**ssp. clypeodentata Tsuneki**

*Cerceris eversmanni clypeodentata* Tsuneki, 1971:443, ♂. Holotype: ♂, Mongolia: Central Aymag: Ulaan Hodag (TMB). – R. Bohart and Menke, 1976:580 (listed).

**ssp. warnckei K. Schmidt**

*Cerceris eversmanni warnckei* K. Schmidt, 2000:57, ♀, ♂. Holotype: ♂, Turkey: Hakkari Province: Lake Gavaruk, Mt. Sat (K. Schmidt coll.). – Yildirim and Ljubomirov, 2005:1803 (Turkey: Erzurum: Şenyurt, Şenkayam Pasinler); Ljubomirov and Yildirim, 2008:140 (in catalog of Crabronidae of Turkey).

**270. exleyae Evans**

*Cerceris exleyae* Evans, 1982a:376, ♀, ♂. Holotype: ♀, Australia: Queensland: Longreach (Queensland Museum, Brisbane). – Cardale, 1985:298 (in catalog of Australian Sphecidae).

**271. expleta Brèthes**

*Cerceris expleta* Brèthes, 1910a:272, ♀, ♂. Lectotype: ♀, Argentina: La Pampa: no specific locality (MACN), designated by Fritz, 1968b:167. – Schrottky, 1913a:230 (Argentina: Pampa); Fritz and Toro, 1969:144 (in revision of Chilean and Patagonian *Cerceris*); R. Bohart and Menke, 1976:580 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**272. expulsa R. Turner**

*Cerceris expulsa* R. Turner, 1920a:268, ♀, ♂. Syntypes: India: West Bengal: Calcutta (BMNH). – R. Bohart and Menke, 1976:580 (listed).

**273. faceta Arnold**

*Cerceris faceta* Arnold, 1951:111, ♀, ♂. Lectotype: Senegal: Fatick (BMNH), designated by Empey, 1983:171. – Empey, 1969a:307 (listed); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:171 (listed).

**274. falcifera Tsuneki**

*Cerceris falcifera* Tsuneki, 1961c:50, ♀, ♂. Holotype: ♀, China: Peking: Tiendang (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c: 13, 17 (in key), 1971m:17 (China: Peking: Tiendang); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1979d:85, 87 (in key); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:474, 477 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**275. *farri* Scullen**

*Cerceris farri* Scullen, 1970:199, ♀, ♂. Holotype: ♀, Jamaica: Manchester: 3.5 mi SW Mandeville (USNM). – R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:481 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**276. *fastidiosa* R. Turner**

*Cerceris fastidiosa* R. Turner, 1912e:509, ♀. Holotype or syntypes: ♀, Pakistan: Karachi (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:580 (listed).

**277. *femurrubrum* Viereck and Cockerell**

*Cerceris femurrubrum* Viereck and Cockerell, 1904:135, ♂ (as *femur-rubrum*, incorrect original hyphenation). Lectotype: ♂, USA: New Mexico: Albuquerque (ANSP), designated by Cresson, 1928:49. – Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Banks, 1947:15 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Scullen, 1965b:435 (in revision on North American *Cerceris*, as *femurrubrum femurrubrum*), 1972:55 (in revision of Mexican and Central American species, as *femurrubra femurrubra*); R. Bohart and Grissell, 1975:46 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:580 (listed); Krombein, 1979b:1733 (in catalog of North American Hymenoptera, nesting site, prey); G. Ferguson, 1984c:481 (listed); Hook, 1987:105 (nesting habits); Frommer, 1988:93 (California: Riverside County: Deep Canyon); Melo, 2000:98 (nest usurpation and temporary association with nest owner); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

*Cerceris thione* Banks, 1947:18, ♂. Holotype: ♂, USA: California: Colton (MCZ); designation of lectotype by Ferguson, 1983b:233, was unnecessary. Synonymized with *Cerceris femurrubrum* by Scullen in Muesebeck et al., 1951:1007. – As *Cerceris femurrubrum thione*: Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (new status, in checklist of Mexican Sphecidae).

*Cerceris athene* Banks, 1947:20, ♀. Holotype: ♀, USA: California: Claremont (MCZ). Synonymized with *Cerceris femurrubrum* by Scullen, 1960:78, R. Bohart and Grissell, 1975:46, and R.R. Bohart in R. Bohart and Menke, 1976:580. – Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Wasbauer, 1957:131 (prey: *Eurymetopon rufipes* Eschscholz, a tenebrionid); Tsuneki, 1965d:3 (prey record summary: Tenebrionidae); Krombein, 1967:414 (synonymy with *femurrubrum* recorded); G. Ferguson, 1983b:226 (study of holotype). – As *Cerceris femurrubrum athene*: Scullen, 1965b:437 (new status, in revision on North American *Cerceris*); Scullen and Wold, 1970:211 (distribution and summary of prey records); Scullen, 1972:56 (in revision of Mexican and Central American species); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris femurrubra rossi* Scullen, 1972:56, ♀, ♂. Holotype: ♀, Mexico: Baja California Sur: Sierra Laguna (CAS). Synonymized with *Cerceris femurrubrum* by R. Bohart in R. Bohart and Menke, 1976:580; Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**278. *ferocior* R. Turner**

*Cerceris ferocior* R. Turner, 1912e:817, ♀. Holotype: ♀, East Malaysia (= Borneo): Kuching (OXUM). – R. Bohart and Menke, 1976:580 (listed).

**279. *ferox* F. Smith**

*Cerceris ferox* F. Smith, 1856:454, ♀. Holotype or syntypes: ♀, Indonesia: Sumatra: no specific locality (BMNH). – Schletterer, 1887:491 (listed); Cameron, 1890b:248 (listed); nec Bingham, 1897:309 and 1905:46 (= *Cerceris binghami*); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); R. Turner, 1912e:816 (comparison with *Cer-*

*ceris ferocior* and *shelfordi*); R. Bohart and Menke, 1976:580 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris annandali* Bingham, 1903b:v, ♂. Holotype or syntypes: ♂, Malaysia: "Biserat, Jalor" (BMNH). Synonymized with *Cerceris ferox* by R. Turner, 1912e:816. – Bingham, 1905:47 (Malaysia: Biserat), pl. A Fig. 5 (illustration of habitus and of pygidial plate).

### 280. *ferruginea* Brèthes

*Cerceris ferruginea* Brèthes, 1910a:261, ♀, ♂. Lectotype: ♀, Argentina: Mendoza: Chacras de Coria (MACN), designated by Fritz, 1968b:165 (Article 74.6). – Jörgensen, 1912:288 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Mendoza); R. Bohart and Menke, 1976:580 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

### 281. *ferusa* Kazenas

*Cerceris ferusa* Kazenas, 1979b:858, ♀. Holotype: ♀, Kazakhstan: Karatau Mts.: Chiili area (ZIN). – Kazenas, 1984a:135 (redescription), 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:115, 116 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:144 (geographic distribution, collecting localities in Kazakhstan), 2004b:112 (Kazakhstan: western Tien Shan), 2008a:106 (Southeastern Kazakhstan: foothills of Zailiyskiy Alatau: 10 km NW Chemolgan).

### 282. *festiva* Cresson

*Cerceris festiva* Cresson, 1865a:156, ♂. Holotype: ♂, Cuba: no specific locality (IZAC). – Packard, 1866:62 (listed); Schletterer, 1887:491 (listed); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Cresson, 1916:100 (holotype in ANSP); Giner Marí, 1943c:327 (in revision of Cuban *Cerceris*); Alayo Dalmau, 1968a:11 (in revision of Cuban Sphecidae), 1973:191 (in catalog of Cuban Hymenoptera), 1976:15, 16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:580 (listed); G. Ferguson, 1984c:481 (listed); Genaro and Sanchez, 1993:42 (nesting habits); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Fernández, Sariol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud).

*Cerceris gratiosa* Schletterer, 1887:460, ♂. Holotype or syntypes: ♂, Cuba: no specific locality (NHMW). Synonymized with *Cerceris festiva* by Scullen in Alayo Dalmau, 1968a:17. – Schletterer, 1887:493 (listed); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Giner Marí, 1943c:330 (in revision of Cuban *Cerceris*); Alayo Dalmau, 1968a:16 (probably not occurring in Cuba); Dollfuss, 1989:8 (type material in NHMW).

### 283. *fimbriata* (Rossi)

*Crabro fimbriatus* Rossi, 1790:93, sex not indicated. Holotype or syntypes: Italy: Toscana: no specific locality (destroyed). – de Beaumont, 1950c:319 (identity of species). – As *Cerceris variabilis* var. *fimbriata*: A. Costa, 1864c:124 (new status, Italy: Campania: Benevento area). – As *Cerceris fimbriata*: Illiger, 1807b:152 (new combination, synonymy, redescription); Vander Linden, 1829:120 (bibliographic references, Italy: Bologna, redescription); A. Costa, 1867c:92 and 1869b:108 (in revision of Italian Sphecidae); Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867); A. Costa, 1872a:26 (in revision of Sphecidae of Kingdom of Naples, Italy); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); de Beaumont, 1951f:322 (Egypt: Fayid, Sinai; discussion), 1952a:48 (first record from France: Carpentras, St.-Aygulf; redescription), 1954e:87 (Italy); Grandi, 1954:237 (Italy); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Bytinski-Salz, 1956:225 (Turkey: Akşehir); Balthasar, 1958:338 (first records from Slovakia: Čenkov, Gbelce); de Beaumont, 1958d:271 (Greece); Pulawski, 1958a:166 (Bulgaria: Aitos, Sandanski, Varna); de Beaumont, 1959a:13 (Italy); de Beaumont and Bytinski-Salz, 1959:118 (Israel); Balthasar and Hrubant, 1961:15 (Slovakia: Čenkov, Chotin); de Beaumont, 1961c:46

(Greece: Crete Island), 1962b:20 (Spain), 29 (Giner Mari's data of 1941a); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:19 (Greece); Diniz, 1966:7 (Portugal: Coimbra, Porto de Rei, Vale de Gaio); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:283 (Turkey), 1969:82 (Turkey); Scobiola-Palade, 1971:202 (in review of *Cerceris* of Romania, color variation); Balthasar, 1972:400 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:127 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, *Cynanchum sibiricum* Willd., Asclepiadaceae, and *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 112 (feeding on flowers of *Atraphaxis spinosa* L., Polygonaceae, in Kazakhstan); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:52, 55 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Pagliano, 1980:126 (Italy: Lazio); Gayubo, 1982e:110 (Spain: Cádiz Province); Gayubo and Tormos, 1984:25 (Spain: Valencia); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:17 (re-description); Gayubo, 1986a:67 (Spain: Ciudad Real Province); Gayubo and Sanza, 1986:87 (Spain: Burgos); Islamov, 1986:521 (Uzbekistan: Tashkent Oblast'); Pagliano, 1987:160 and 165 (Italy, in key), 1988:163 (Italy; revision); Pádr in Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Zamora Province); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Dollfuss, 1991:220 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:420 (Italy: Toscana, Puglia), 1992:291 (Greece); Roche and Zalat, 1994:117 (Egypt: Sinai Peninsula); Negrisolo, 1995a:18 (visiting flowers of *Eryngium maritimum* L.), 19 (visiting flowers of *Echinophora spinosa* L.), 22 (Italy: Veneto); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:337 (in Sphecid Fauna of Western Europe); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); González, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); K. Schmidt, 2000:154 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:54 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:144 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:134 (Spain: Tarragona); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Pagliano and Negrisolo, 2005:336 (in Sphecid Fauna of Italy); Yildirim and Ljubomirov, 2005:1803 (Turkey: Adiyaman, Kahramanmaraş, and Kars provinces); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Ljubomirov and Yildirim, 2008:140 (in catalog of Crabronidae of Turkey); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recorded from France: département de Bouche-du-Rhône, under the name of *Cerceris subimpressa*).

*Crabro lunulatus* Rossi, 1792:135, sex not indicated, junior primary homonym of ... Fourcroy, 1785.. Holotype or syntypes: Italy: Toscana: Pisa area (destroyed). – Synonymized with *Cerceris fimbriata* by A. Costa, 1872a:26. – de Beaumont, 1950c:320 (unrecognizable species); R. Bohart and Menke, 1976:583 (listed); Pagliano, 1988:172 (unrecognizable); Pagliano, 1990:98 (in catalog of Italian Sphecidae, as nomen dubium).

*Philanthus sexpunctatus* Fabricius, 1793:291, sex not indicated (as *6punctatus*, incorrect original spelling). Lectotype: ♀, Italy: no specific locality (ZMK), designated by van der Vecht, 1961a:63 (Article 74.6). Synonymized with *Cerceris fimbriata* by van der Vecht, 1961a:63. – Fabricius, 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:304 (redescription); Thunberg, 1815a:127 (diagnostic characters), 130 (redescription), 1815b:287 (diagnostic characters); Dahlbom, 1845:XXIV (type material not examined); Dalla Torre, 1987:490 (in catalog of world Hymenoptera); W. Schulz, 1912:68 (Thunberg's specimens not preserved in his collection).

*Mellinus scaber* Fabricius, 1798:266, sex not indicated. Lectotype: ♀, Italy: no specific locality (ZMK), designated by van der Vecht, 1961a:63 (Article 74.6). Synonymized with *Cerceris fimbriata* by van der Vecht, 1961a:63. – Fabricius, 1799:32 (in Index to his Supplementum, 1798). – **As *Prosopis scabra***: Fabricius, 1804:295 (new combination, redescription).

*Cerceris signata* Klug in Waltl, 1835:99, sex not indicated. Lectotype: ♂, Spain: Andalusia: no specific locality (ZMHU), designated by de Beaumont, 1950c:321 (Article 74.6). Synonymized with *Cerceris fimbriata* by de Beaumont, 1950c:321. – Klug in Waltl, 1835:87 (in list of Hymenoptera of Andalusia); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:378 (as synonym of *Cerceris sabulosa*).

*Cerceris ornata* var. *sicana* De Stefani Perez 1884b:200, ♀ (as *Sicana*, incorrect original capitalization). Holotype or syntypes: ♀, Italy: Sicilia: Girgenti (depository unknown). Synonymized with *Cerceris fimbriata* by K. Schmidt, 2000:154. – As *Cerceris rybyensis* var. *sicana*: De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:474 (in catalog of world Hymenoptera). – As *Cerceris rybyensis sicana*: R. Bohart and Menke, 1976:586 (new status, listed); S. Eck, 1979:21 (listed); Pagliano, 1990:100 (in catalog of Italian Sphecidae).

As *Cerceris funerea* (collectively corrected to *Cerceris fimbriata* by de Beaumont, 1950c:319, 1951b:177): Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia); Schletterer, 1887:382 (in revision of world *Cerceris*), 493 (listed); Ed. André, 1889:272, 297 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:901 (faunal records); Ed. André, 1891:27\* (bibliographic references); F. Morawitz, 1894:351 (Turkmenistan: Nerduali); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, one locality is in today's Romania); Chyzer, 1902:33 (Hungary); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); W. Schulz, 1904b:93 (Greece: Epirus); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); Mercet, 1914:445 (listed from Spain); Shestakov, 1914b:408 (Kazakhstan: Aulié-Ata, now Dzhambul); Zilahi Kiss, 1915:80 (Hungary: Haddad); Shestakov, 1916:232 (Armenia and Georgia: near Tiflis, now Tbilisi), 1918a:133 (= *Cerceris pallidopicta*), 1923:102, 104, 115 (in key, synonymy, distribution), 1927a:11 (Ukraine: Kherson Oblast'), 19 (Russia: Stalingrad Oblast', now Volgograd); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Vorontsovskiy, 1928:45 (Russia: vicinity of Orenburg); Grandi, 1930:340 (Italy: Toscana: Maremma); Schmiedeknecht, 1930:702 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:66 (Russia: Orenburg Oblast'); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Móczár, 1939:5 (Hungary: Jászberény); Giner Marí, 1941a:29 (in revision of Spanish *Cerceris*; partly = *Cerceris eryngii*; also corrected by de Beaumont, 1962b:29), 1943a:95 (in Sphecid Fauna of Spain); Giordani Soika, 1944:12 (Italy: Sicilia: Messina); Guiglia, 1944b:12 (Italy); Šnoflak in Zavdil and Šnoflak, 1948:85 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:11 (Portugal); also Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:81 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:40 (in key to Hungarian Sphecidae); .

As *Cerceris dorsalis*: Radoszkowski, 1877:61 (Uzbekistan), partly, corrected to *Cerceris funerea* by Shestakov, 1918a:130.

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Uzbekistan), corrected to *Cerceris funerea* by Shestakov, 1918a:161.

### ***ssp. pallidopicta* Radoszkowski**

*Cerceris pallidopicta* Radoszkowski, 1877:59, ♀, ♂ (as *pallido-picta*, incorrect original hyphenation). Syntypes: Uzbekistan: Samarkand; Kazakhstan: Kizil-Kum and Syr-Daria; Kyrgyzstan: Shahimardan and Okhsh (ZMMU). – Schletterer, 1887:382 (as new synonym of *Cerceris funerea*); Kohl, 1916:119 (as new synonym of *Cerceris funerea*); Shestakov, 1918a:133, 147 (as new synonym of *Cerceris funerea*). – As *Cerceris funerea* var. *pallidopicta*: R. Turner, 1912e:813 (new status, Pakistan: Baluchistan: Quetta; in revision of British India species); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897). – As *Cerceris fimbriata pallidopicta*: de Beaumont, 1961b:273 (new status, Afghanistan); Pulawski, 1965c:565 (as new status); Tsuneki, 1971:421 (Mongolia; new status); R. Bohart and Menke, 1976:580 (listed); K. Schmidt, 2000:155 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:106, 108 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris cogens* Kohl, 1916:119, ♀. Syntypes: Turkmenistan: Seraks (Kraków). Synonymized with *Cerceris fimbriata pallidopicta* by K. Schmidt, 2000:155. – As *Cerceris fimbriata cogens*: R. Bohart and Menke, 1976:580 (listed,

as questionable subspecies of *Cerceris fimbriata*); Kazenas, 1984a:20 (redescription); Kazenas, 2001d:106, 108 (in key to *Cerceris* of Kazakhstan and Central Asia).

### **ssp. *polita* Schletterer**

*Cerceris polita* Schletterer, 1889a:881, ♂. Lectotype: ♂, Russia: Sarepta = Krasnoarmeysk near Volgograd (Zurich), designated by de Beaumont, 1951b:178. – Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Kohl, 1916:120 (as new synonym of *Cerceris lunata*); Balthasar, 1972:400 (in Sphecid Fauna of Czechoslovakia: may be expected in the country). – **As *Cerceris fimbriata polita***: de Beaumont, 1951b:178 (new status).

### **284. *tingo* Brauns**

*Cerceris tingo* Brauns, 1926:plate XLIII, fig. 2, ♀ (no description). Holotype: ♀, South Africa: Cape Province: Wil-lowmore (TMP). – Arnold, 1931:149 (description); R. Bohart and Menke, 1976:580 (listed); Empey, 1983:171 (listed, type examined).

As *Cerceris latifrons latifrons*: Arnold, 1942:plate II fig. 26 (male genitalia), corrected to *Cerceris tingo* by Empey, 1969a:307.

### **285. *finitima* Cresson**

*Cerceris finitima* Cresson, 1865c:122, ♀. Holotype: ♀, USA: Illinois: no specific locality (ANSP). – Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:491 (listed); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Viereck and Cockerell, 1904b:138 (in revision of New Mexico *Cerceris*); H. Smith, 1908b:370 (in revision of Nebraskan Sphecidae); Banks, 1912:27 (in revision of eastern U.S. *Cerceris*); Cresson, 1916:100 (holotype in ANSP); Rohwer, 1917a:244 (California: Santa Barbara); Stevens, 1917:422 (North Dakota); Mickel, 1918b:453 (in catalog of Nebraskan Sphecidae); Brimley, 1938:447 (North Carolina: Bryson City, Flat Rock, Moore and Wake counties); Strandtmann, 1945a:312 (nest and prey); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Scullen, 1965b:378 (in revision of North American *Cerceris*); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae); Scullen and Wold, 1970:211 (distribution and summary of prey records, as *finitima finitima*); Scullen, 1972:24 (in revision of Mexican and Central American *Cerceris*, as *finitima finitima*); R. Bohart and Grissell, 1975:46 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:580 (listed); Krombein, 1979b:1733 (in catalog of North American Hymenoptera, parasite and prey); nec Finnamore, 1982:253 (= *Cerceris arelate*); G. Ferguson, 1984c:481 (listed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 72 (first record from Ontario: Windsor); Buck, Paiero, and Marshall, 2006:42, 47 (in key to eastern Canadian *Cerceris*); Horta Vega, Pinson Dominguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

*Cerceris finitima citrina* Scullen, 1965b:380, ♀, ♂. Holotype: ♀, USA: California: Riverside (CAS). Synonymized with *Cerceris finitima* by R. Bohart and Grissell, 1975:46 and by R. Bohart *in* R. Bohart and Menke, 1976:580.

### **286. *fischeri* Spinola**

*Cerceris fischeri* Spinola, 1839:493, ♀, ♂. Syntypes: Egypt: no specific locality (Torino). – Schletterer, 1887:469 (original description copied), 491 (listed); Ed. André, 1889:320 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Morice, 1911:79 (Algeria: Biskra: redescription); Shestakov, 1923:102, 104 (in key to subgenus *Apiraptrix*), 115 (synonymy, distribution); Bischoff, 1933:5 (Morocco); Shestakov *in* Nadig, 1933:97 (Morocco); Mochi, 1939:191 (in revision of Egyptian *Cerceris*); Giner Marí, 1941b:169 (in revision of North African *Cerceris*); Guiglia, 1940a:284 (Libya: Gadames), 1942b:231 (Libya); Giner Marí, 1945e:222 (Western Sahara); de Beaumont, 1950d:7 (Egypt: Siwa oa-

sis), 1950f:397 (Algeria), 1951b:176 (study of syntypes), 1951f:323 (Egypt to Morocco; discussion), 1953g:121 (Morocco; prey: *Nomioides*), 1956a:185 (Libya), 1958b:59 (Algeria: Tassili des Ajjer); de Beaumont and Bytinski-Salz, 1959:119 (Israel); Pulawski, 1964:72 (Egypt: Kom Osheim); de Beaumont, 1966:212 (Egypt: Amrye near Alexandria); Empey, 1973:22 (Socotra); R. Bohart and Menke, 1976:580 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Guichard, 1980:230 (Oman); Empey, 1983:171 (listed); Pulawski, 1983:242 (synonymy); Guichard, 1993a:157 (Arabian Peninsula); Roche and Zalut, 1994:117 (Egypt: Sinai Peninsula); K. Schmidt, 2000:156 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris histrio* Dahlbom, 1845:499, ♂. Holotype: ♂, Egypt: no specific locality (NRS). Synonymized with *Cerceris fischeri* by Morice, (**check**, not 1897), and de Beaumont, 1950c:324. – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:472 (original description copied), 493 (listed); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Giner Mari, 1941b:287 (original description copied, comments).

? *Cerceris contigua* Walker, 1871:28, ♀, ♂, junior secondary homonym of *Cerceris contigua* (Villers, 1789). Syn-types: Djibouti: Tajura (lost). Tentatively synonymized with *Cerceris fischeri* by de Beaumont, 1951f:323. – Schletterer, 1887:467 (original description copied), 489 (listed); Ed. André, 1889:325 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Innes Bey, 1912:113 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Tajura).

*Cerceris nobilitata walegae* Arnold, 1951:110, ♀. Holotype: ♀, Ethiopia: Gambeila (BMNH). Synonymized with *Cerceris fischeri* by Empey, 1983:171. – Empey, 1969a:317 (listed), 1974:112 (description of ♂); R. Bohart and Menke, 1976:584 (listed).

As *Cerceris mocsaryi* (corrected to *Cerceris fischeri* by Pulawski, 1983:242): Kohl, 1888:139; Schletterer, 1889a:890 (redescription).

### **spp. nobilitata Cameron**

*Cerceris nobilitata* Cameron, 1905m:216, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (AMG), designated by Jacot-Guillarmod, 1961:11 (Article 74.6). – Brauns, 1926:313 (revision, description of ♂); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:143 and 147 (in key), 1935a:499 (South Africa: Kalahari), 1942:plate I fig. 3 (male genitalia); Jacot-Guillarmod, 1961:11 (lectotype in Albany Museum, Grahamstown); Empey, 1969a:317 (listed), 1974:111 (nomenclatorial history); R. Bohart and Menke, 1976:584 (listed). – As *Cerceris fischeri nobilitata*: Empey, 1983:171 (new status).

### **287. fitzgeraldi Empey**

*Cerceris fitzgeraldi* Empey, 1973:20:♀. Holotype: ♀, Oman: Trucial Oman Coast: no specific locality (BMNH). – R. Bohart and Menke, 1976:581 (listed); Guichard, 1980:230 (Oman); Empey, 1983:171 (listed); Guichard, 1993a:154 (Arabian Peninsula, description of ♂).

### **288. flavicornis Brullé**

*Cerceris flavicornis* Brullé, 1833:373, ♂. Holotype: ♂, Greece: Morea, now Pelopónnisos: no specific locality (MNHN). – F. Smith, 1856:441 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); de Beaumont, 1950c:322 (study of holotype), 1952a:78 (France; redescription), 1958d:273 (Greece); Pulawski, 1958a:167 (Bulgaria: Aitos, Kurilo, Sandanski); de Beaumont, 1959a:16 (Italy); de Beaumont and Bytinski-Salz, 1959:131 (Israel: Jerusalem); de Beaumont, 1960a:8 (Greece: Rhodes Island), 1961c:46 (Greece: Crete Island), 1965a:22 (Greece); Diniz, 1966:8 (Portugal: Rezende); de Beaumont, 1967a:291 (Turkey); Scobiola-Palade, 1967b:41 (Bulgaria: Kavarna); de Beaumont, 1969:82 (Turkey); Scobiola-Palade, 1971:206 (first record from Romania: Agigea, Hagieni); Balthasar, 1972:402 (in Sphecidae Fauna of Czechoslovakia); Kazenas, 1972b:127 (Kazakhstan), 1974b:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, and *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 112 (feeding

on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan); R. Bohart and Menke, 1976:581 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:67, 68 (in key to Sphecidae of Kazakhstan and Central Asia); Pagliano, 1980:126 (Italy: Lazio); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:175 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1986a:67 (Spain: Ciudad Real Province); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast'); Pagliano, 1987:162 and 166 (Italy, in key), 1988:157 (Italy; revision), 1990:97 (in catalog of Italian Sphecidae); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:420 (Italy: Lombardia: Goito), 1992:291 (Greece); Gayubo and Borsato, 1994:220 (Italy: Toscana); Negrisolò *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Wu and Zhou, 1996a:178 (in revision in Economic Insect Fauna of China); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:338 (in Sphecid Fauna of Western Europe); Ljubomirov, 1999b:57 (Bulgaria: Mt. Vitosha near Sofia), 2000:13 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:123 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 251 (mating on flowers), 2001d:119 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:145 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:134 (Croatia: Šibenik); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Pagliano and Negrisolò, 2005:333 (in Sphecid Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1803 (Turkey: Artvin, Erzincan, Erzurum, and Konya provinces); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Ljubomirov and Yildirim, 2008:141 (in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Pagliano, 2009:183 (Italy: Molise: Guardialfiera).

*Cerceris conigera* Dahlbom, 1845:501, ♀, ♂. Syntypes: southern Europe: no specific locality (LUND). Synonymized with *Cerceris flavicornis* by Schletterer, 1887:437 (tentatively), W. Schulz, 1911a:68, and de Beaumont, 1950c:322. – A. Costa, 1860:10 (in revision of Sphecidae of Kingdom of Naples, Italy), 1867c:80 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); Palma, 1867:42 (Italy: Sicilia settentrionale); A. Costa, 1869b:96 (in revision of Italian Sphecidae); Radoszkowski, 1877:62 (Uzbekistan: Zaravschan valley); Marquet, 1881:189 (southern France); Gasperini, 1887:17 (Dalmatia: Brusije, Spalato, now Croatia: Brusje on Hvar Island, Split); Schletterer, 1887:437 (in revision of world *Cerceris*), 489 (listed); Ed. André, 1889:312 (in revision of Sphecidae of Europe and Algeria); Kohl and Handlirsch, 1889:278 (Turkmenistan); Schletterer, 1889a:901 (faunal records); Ed. André, 1891:25\* (bibliographic references); F. Morawitz, 1891a:217 (Russia: Astrakhan); Baldini, 1894:57 (Italy: Modena area); Medina, 1894b:262 (Spain: Sevilla); Dalla Torre, 1897:456 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (occurring in Hungary according to Schletterer, 1887); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); W. Schulz, 1904b:93 (Greece: Syra; Spain: Granada); Schmiedeknecht, 1907:239, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Mercet, 1914:445 (listed from Spain); Kohl, 1916:110 (Caucasus, Mongolia); Shestakov, 1916a:234 (Georgia: Tiflis, now Tbilisi), 1917c:48 (Ukraine: Crimea), 1918a:129 (Transcaspia); Maidl, 1922:69 (Croatia, Montenegro); Berland, 1924:90 (France: Var: Callian), 1925d:57 (in Sphecid Fauna of France); Coulon, 1925:117 (France: Cete, now Sète; Greece, Turkey); Shestakov, 1927a:11 (Ukraine: Kherson Oblast'), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); A. Müller, 1930:181 (Bulgaria: Kaliakra); Schmiedeknecht, 1930:700, 703, 704 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Grandi, 1934:129 (Italy: Toscana: Viareggio); Giner Marí, 1941a:45 (in revision of Spanish *Cerceris*), 1943a:99 (in Sphecid Fauna of Spain); Guiglia, 1943d:91 (Albania: Scutari); Šnoflak *in* Zavadil and Šnoflak, 1948:89, 95 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Beaumont, 1953h:197 (study of only syntype ♀ preserved); Harant and Leclercq, 1955:251 (France: Hérault: Courparan); Bajári, 1956b:405, 408 (not collected in Hungary for 70 years); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain); Grandi, 1957:388 (Italy); Čingovski, 1960:6 (Macedonia: St.Doyran); Balthasar, Hrubant, and Hrubant,



1967:175 (Bulgaria: Slanchev Bryag near Nessebar); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Tüzün, Gülmez, and Bağrıaçık, 1999:386 (Turkey: Aegean Region).

*Cerceris rostrata* Marquet, 1875:205, ♀, ♂, junior primary homonym of *Cerceris rostrata* F. Smith, 1873. Syntypes: France: Hérault: Béziers (Lausanne). Synonymized with *Cerceris conigera* by Marquet, 1879:189 – de Beaumont, 1950c:327 (interpretation of species), 1952b:89 (synonymy with *Cerceris flavicornis* confirmed).

*Cerceris antoniae* Fabre, 1879:320, ♀ (as *Antoniae*, incorrect original capitalization). Syntypes: ♀, France: Var: Avignon (MNH). Synonymized with *Cerceris conigera* by Fauvel, 1883:161, and Schletterer, 1889a:900 (as *antonii*). – von Dalla Torre, 1881:155 (original description translated into German); Berland, 1923a:173 (*Cerceris antoniae* is a junior synonym of *conigera*).

### 289. *flavida* Cameron

*Cerceris flavida* Cameron, 1890a:116, ♀, ♂. Lectotype: ♀, Mexico: Veracruz: Cordova (BMNH), designated by G. Ferguson, 1984b:435. – Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:27 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:581 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris atlacomulca* Scullen, 1972:68, ♀, ♂. Holotype: ♀, Mexico: Mexico: Atlatomulca (USNM). Synonymized with *Cerceris flavida* by G. Ferguson, 1984c:481. – R. Bohart and Menke, 1976:577 (listed); Amarante, 2002:57 (in catalog of Neotropical Crabronidae, as valid species); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae); Amarante, 2005a:12 (correction to his 2002 catalog).

### 290. *flavifrons* F. Smith

*Cerceris flavifrons* F. Smith, 1856:448, ♂. Holotype or syntypes: ♂, West Africa: no specific locality (BMNH). – Schletterer, 1887:491 (listed); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Arnold, 1931:193 (original description copied, additional notes); Empey, 1969a:307 (listed); R. Bohart and Menke, 1976:581 (listed).

### 291. *flavilabris* (Fabricius)

*Hylaeus flavilabris* Fabricius, 1793:304, sex not indicated. Lectotype: ♂, Italy (ZMK), designated by van der Vecht, 1961a:66. – As *Prosopis flavilabris*: Fabricius, 1804:294 (new combination, redescription). – As *Cerceris flavilabris*: de Beaumont, 1962b:21 (new combination, Spain), 1964c:41 (in Sphecidae Fauna of Switzerland), 1965a:21 (Greece); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Bonelli, 1966c:217 (Italy: Trentino–Alto Adige: Montagna); de Beaumont, 1967a:287 (Turkey); Gauss, 1967:551 (Germany: Baden-Württemberg); Scobiola-Palade, 1967b:40 (Romania); Benedek, 1968:71 (Hungary, floral records); Scobiola-Palade, 1968c:383 (Romania: Copăceni); Benedek, 1969a:83 (Hungary; marshy meadow), 1970:97 (Hungary: Tapolca); Oehlke, 1970:682 (Democratic Germany: Potsdam area); Scobiola-Palade, 1971:205 (in review of *Cerceris* of Romania); Kazenas, 1972b:127 (Kazakhstan); Myartseva, 1972a:92 (Turkmenistan); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:178 (France: Landes); Erlandsson, 1974:62 (Spain, Yugoslavia); Kazenas, 1974:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan); Benedek, 1975:251 (Hungary: onion pollinator); R. Bohart and Menke, 1976:581 (listed); Kolesnikov, 1977:317 (Russia: Bryansk Oblast); Kazenas, 1978b:63, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:86 (France: Nièvre Department); Pulawski, 1978:195, 196 (in key to Sphecidae of European part of former USSR); Benedek, 1979:229 (Hungary: Bakony Hills); Schmidt, 1979b:299 (Germany); Pagliano, 1980:126 (Italy: Lazio); Gayubo, 1982b:53 (Spain: Ávila and Salamanca provinces), 1982e:110 (Spain: Cádiz Province); Dollfuss, 1983b:24 (in catalog of Sphecidae of Austria); Gayubo, 1983e:237 (Spain: Salamanca Province), 1984c:383 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:25 (Spain: Valencia); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:155 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Józán, 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg);

Gayubo, 1986a:67 (Spain: Ciudad Real Province), 1986d:122 (Spain: Zamora Province); Gayubo and Sanza, 1986:87 (Spain: Burgos); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Islamov, 1986:520 (Uzbekistan: Surkhandarya Oblast'); Józán, 1986:375 (Hungary: Kiskunság National Park); Dollfuss, 1987:24 (Austria); Pagliano, 1987:164 and 167 (Italy, in key); Asís and Jiménez, 1988:276 (Spain: Castellón Province); Dollfuss, 1988:19 (Austria: Bisamberg near Vienna); Karsai, 1988:101 (Hungary: Kiskunság National Park); Pagliano, 1988:147 (Italy; revision); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:122 and 217 (not collected in Democratic Germany after 1960); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:420 (Italy); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Józán, 1991:605 (Hungary: Bátorliget Nature Reserve), 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); Negrisoló and Pagliano, 1993:94 (Italy: Sardegna); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Dollfuss, 1994:98 (endangered in Austria); Gayubo and Borsato, 1994:222 (Italy: Toscana, Sardegna); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills NW Samara); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Scharrer, 1995:30 (Croatia: Island of Krk including Malinska and Rudina); Schmid-Egger, Risch, and Niehuis, 1995:167 (summary of records from Germany: Rheinland-Pfalz Province); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:340 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Blösch, 2000:418 (in Sphecid Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Ljubomirov, 2000:13 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:60 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 118 (in key to *Cerceris* of Kazakhstan and Central Asia); Ohl et al., 2001:137 (distribution in Germany by provinces); Kazenas, 2002a:145 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:134 (Germany: Baden-Württemberg: Kaiserstuhl); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Schmid-Egger, 2003:751 (Italy: Sicilia: Castelammare, Randazzo); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Wiśniowski, 2004:52 and 63 (in checklist of Polish Sphecidae); Ebrahimi, 2005:131 (in key to selected Iranian Sphecidae); Pagliano and Negrisoló, 2005:323 (in Sphecid Fauna of Italy); Shoreenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1803 (Turkey: Bilecik, Erzincan, Erzurum, Iğdır, Kars, and Rize provinces, as *flavilabris*); Gadoum and Barbier, 2006:44 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes and Saint-Martin-la-Garenne); Ljubomirov, 2006:537 (Bulgaria: Rhodope Mountains: Peshtera, as *flavilabris flavilabris*); Jacobs, 2007:185, 188 (in key to Crabronidae of Germany); Kazenas, 2007a:93 (Kazakhstan: Akkala Oblast': Kurgandzhin Nature Reserve and vicinity); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Ljubomirov and Yildirim, 2008:141 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:147 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: France: first records from Loir-et-Cher: Saint-Laurent-des-Eaux and Loiret: Beaugency); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: very rare).

- Cerceris aurita* Latreille, [1805]:315, ♀, ♂, junior secondary homonym of *Cerceris aurita* (Fabricius, 1794) (= *Cerceris arenaria*). Syntypes: France: no specific locality (lost). Synonymized with *Cerceris ferreri* by Berland, 1926a:52. – Spinola, 1806:96 (Italy: Liguria); Latreille, 1809b:423 (nesting habits); Dufour, 1841c:354 (curculionid prey: *Otorhynchus raucus* and *Phytonomus punctatus*); Frauenfeld, 1861:103 (Croatia: Dalmatia); Berland, 1925d:58 (in Sphecidae Fauna of France); Grandi, 1931:58 (Italy: vicinity of Roma); Masi, 1933:196 (Italy: Toscana: Isola di Capraia); Giner Mari, 1934:131 (Spain); Bernard, 1935:62 (France: Var: Fréjus area); Zavadil, Šusterka, and Baťa, 1937:208 (in catalog of Sphecidae of Czechoslovakia); Giner Mari, 1941a:50 (in revision of Spanish *Cerceris*), 1941b:248 (in revision of North African *Cerceris*); Balthasar, 1943:42 (Czech Republic: Moravia: Zlin area); Giner Mari, 1943a:101 (in Sphecidae Fauna of Spain), 1945a:248 (Cyprus; Greece: Rhodes Island); Šnoflak in Zavadil and Šnoflak, 1948:87, 96 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Andrade, 1949:12 (Portugal: Massorra, Valença do Minho); de Beaumont, 1950c:318 (preoccupied name, cannot be used for *Cerceris ferreri*); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); de Beaumont, 1951f:364 (a synonym or subspecies of *Cerceris ferreri*, preoccupied); Cleu, 1953:50 (France: Ardèche River basin); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Vogrin, 1955:32 (Yugoslavia); Ceballos, 1956:366 (in catalog of Hymenoptera of Spain); Diniz, 1959:28 (Portugal: Massorra, Valença do Minho); Babiy, 1964:117 (Austria: Land Salzburg); Balthasar, 1972:410 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country).
- Cerceris ferreri* Vander Linden, 1829:114, ♀. Holotype: ♀, Italy: Turin (Inst. Roy. Sci. Nat. Belgique, Bruxelles). Synonymized with *Cerceris aurita* Latreille by Berland, 1925d:58, and with *Cerceris flavilabris* by van der Vecht, 1961a:66. – Dufour, 1841a:509 and 1841b:245 (digestive tract), 1841a:511 and 1841b:247 (male reproductive system), 1841a:512 and 1841b:248 (female reproductive system); Dahlbom, 1844:219 (in revision of Sphecidae and Pompilidae), 1845:501 (in key); Lepeletier de Saint Fargeau, 1845:4 (in revision of world Hymenoptera); Fabre, 1856a:137 (France: Vaucluse: Avignon area), 1856b:184 (list of prey); F. Smith, 1856:439 (in catalog of Hymenoptera in British Museum); Sichel, 1861:752 (Italy: Sicilia, determination tentative); A. Costa, 1867c:82 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); Palma, 1867:42 (Italy: Sicilia settentrionale); A. Costa, 1869b:98 (in revision of Italian Sphecidae), 1871:33 (in revision of Sphecidae of Kingdom of Naples, Italy); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Ghiliani, 1873 (Italy: Piemonte: Susa); Dours, 1874:144 (in catalog of Hymenoptera of France); Marquet, 1875:205 (France: Haute-Garonne: Toulouse); nec Radoszkowski, 1877:55 (= *Cerceris laxata*); Marquet, 1881:190 (southern France, preying on Coleoptera); Yaroshevskiy, 1881:123 (Ukraine: Khar'kiv Oblast': Kupyansk); Kohl, 1883e:664 (Switzerland); A. Costa, 1886a:9 (Italy: Sardegna); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Schletterer, 1887:441 (in revision of world *Cerceris*), 491 (listed); Cuní y Martorell, 1888:164 (Spain: Barcelona); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige); Ed. André, 1889:302, 308 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Gasperini, 1889:69 (Dalmatia); F. Morawitz, 1889a:159 (China); Schletterer, 1889a:901 (faunal records); Radoszkowski, 1890b:507 (Armenia: Mount Ararat); Steck, 1890:169, 170 (in key to *Cerceris* of Switzerland); F. Morawitz, 1891a:217 (Russia: Astrakhan Government); Kohl, 1893a:35 (Austria: Niederösterreich: Bisamberg and Piesting); F. Morawitz, 1893b:420 (Tajikistan: Iskander-kul in Zeravshan River valley); Baldini, 1894:55 (Italy: Modena area); De Stefani Perez, 1894:216 (Italy: Sicilia); Medina, 1894b:262 (Spain: Coria del Rio, Pozuelo de Calatrava); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); Borries, 1897:53 (reference to Fabre, 1886:184); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Ferton, 1901a:109 (list of prey); Chyzer, 1902:33 (Hungary); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); E. Saunders, 1904c:608 (Spain: Mayorca), 639 (Spain); W. Schulz, 1904b:94 (Spain: Madrid); Ferton, 1905:66 (prey); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); W. Schulz, 1905b:38 (Algeria: Biskra); Dusmet y Alonso, 1906:7 (Spain); Schmiedeknecht, 1907:239, 244 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of

French Hymenoptera); Šusterka, 1909:35 (Czech Republic: vicinity of Praha); Zavattari, 1910:3 (Italy: Isola d'Elba: Portoferraio); Szilády, 1913:89 (Hungary: Miriszló); Zavattari, 1913:3 (Greece: Island of Rhodes); Mercet, 1914:445 (listed from Spain); Shestakov, 1914b:409 (Russia: Siberia: Selety near Omsk, Don area); Dusmet y Alonso, 1915:87 (Spain: Aragón); Shestakov, 1916:234 (Transcaucasia), 1917c:48 (Ukraine: Crimea), 1918a:131 (Transcaspia); Maidl, 1922:69 (Croatia); Noskiewicz, 1922b:231 (Poland: Podole Region: Mielnica, now Ukraine); Shestakov, 1922:82 (Russia: Stavropol' area); Coulon, 1925:117 (France: Marseille; Spain, Algeria); Shestakov, 1927a:7 (Russia: Kursk Oblast'), 9 (Ukraine: Lubni area in Poltava Oblast'), 10 (Poltava Oblast'), 11 (Ukraine: Kherson Oblast'), 17 (Russia: Orenburg Oblast'), 19 (Stalingrad Oblast', now Volgograd), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:43 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:700, 705 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:64 (Russia: Orenburg Oblast'); Dusmet y Alonso, 1931:7 (Portugal: Mitra); Kolosov, 1937:219 (Ukraine: Kupyansk); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Giner Mari, 1941a:52 (in revision of Spanish *Cerceris*), 1941b:291 (North African records actually refer to *Cerceris aurita*), 1943a:101 (in Sphecid Fauna of Spain); Giordani Soika, 1944:12 (Italy: Sicilia: Siracusa, Taormina); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Giner Mari, 1945a:248 (Greece: Rhodes Island; as *ferreroi*); de Beaumont, 1947b:385 (Cyprus); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Šnoflak *in* Zavadil and Šnoflak, 1948:87, 97 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:12 (Portugal); de Beaumont, 1950f:397 (Algeria); Pittioni, 1950:22 (Cyprus); de Beaumont, 1951f:304 (Algeria, Morocco; discussion); Leininger, 1951:118 (Germany: Baden-Württemberg: Kaiserstuhl); de Beaumont, 1952a:69 (France; redescription), 1953g:123 (Morocco); Móczár, 1953:310 (Hungary); Nouvel and Ribaut, 1953:177 (France: Central Pyrénées: rare in Garonne River valley); de Beaumont, 1954e:87 (Italy); Grandi, 1954:237 (Italy); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Steiner, 1955:136 (France: Dordogne); Bajári, 1956a:84 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:368 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:35, 44 (in key to Hungarian Sphecidae); de Beaumont, 1957b:133 (n. Iran); Grandi, 1957:388 (Italy); de Beaumont, 1958d:273 (Greece), 286 (Cyprus); Nouvel and Ribaut, 1958:9 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:167 (Bulgaria: Aitos); Compte Sart, 1959:132 (Spain: Mayorca); de Beaumont, 1959a:16 (Italy); de Beaumont and Bytinski-Salz, 1959:123 (Israel); Diniz, 1959:28 (Portugal: Mata do Valado, Mitra); Grandi, 1959b:287 (Italy: Sardegna: Oristano); Scobiola-Palade, 1959:496 (Romania: Constanța Region: Agigea, Valui lui Traian); Wolf, 1959b:32 (known from Germany, but not from Nassau); de Beaumont, 1960a:8 (Greece: Rhodes Island); Noskiewicz and Pulawski, 1960:75, 79 (in key to Polish Sphecidae); van der Vecht, 1961a:66 (synonymy); Grandi, 1962:98 (Italy); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); Diniz, 1966:7 (Portugal: seven localities); Romanova, 1969:133 (Russia: North Caucasus); Balthasar, 1972:410 (in Sphecid Fauna of Czechoslovakia); Georghiou, 1977:189 (Cyprus); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Kowalczyk, 1988a:45 (Poland: Rogów, determination questionable); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast', as *ferreri*).

*Cerceris insularis* F. Smith, 1856:444, ♀. Holotype or syntypes: ♀, Italy: Sicilia: no specific locality (BMNH). Synonymized with *Cerceris arenaria* by Pulawski, 1960:164. – Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:441 (as tentative synonym of *Cerceris ferreri*); Dalla Tore, 1897:460 (listed as synonym of *Cerceris ferreri*). – **As *Cerceris flavilabris insularis***: R. Bohart and Menke, 1976:581 (new status, listed); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna).

*Cerceris propinqua* A. Costa, 1860:13, ♀. Lectotype: ♀, Italy: Napoli (Napoli), designated by de Beaumont, 1950c:325. Synonymized with *Cerceris ferreri* by Costa, 1869:98. – Kirchner, 1867:221 (in catalog of European Hymenoptera, as *propingua*).

*Cerceris scutellaris* A. Costa, 1867c:82, ♀. Syntypes: Italy: Sardinia and Napoli area: no specific localities (Napoli). Synonymized with *Cerceris ferreri* by de Beaumont, 1950c:325 (study of holotype). – A. Costa, 1871c:96 (description of ♀), pl. III fig. 6 (color illustration).

*Cerceris scutellaris* A. Costa, 1869b:98, ♀. Objective synonym of *Cerceris scutellaris* A. Costa, 1867c:82

*Cerceris ferreroi* W. Schulz, 1906:194 (as *Ferreroi*, incorrect original capitalization). Unjustified emendation of *Cerceris ferreri* Vander Linden, 1829.

### **ssp. laminata Eversmann**

*Cerceris laminata* Eversmann, 1849:406, ♀. Syntypes: ♀, Russia: Ural Mts. foothills (no specific locality) and Sarepta (Kraków). – Kohl, 1885c:165 (as new synonym of *Cerceris ferreri*), 1916:116 (types in O. Radoszkowski collection). – As *Cerceris flavilabris laminata*: Kazenas, 1984a:155 (new status); K. Schmidt, 2000:61 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:118 (in key to *Cerceris* of Kazakhstan and Central Asia); Ljubomirov and Yildirim, 2008:142 (in catalog of Crabronidae of Turkey).

### **292. flaviventris Vander Linden**

*Cerceris flaviventris* Vander Linden, 1829:109, sex not indicated. Holotype or syntypes: Spain: no specific locality (originally Déjean coll., now?). – Dahlbom, 1844:195 (in revision of Sphecidae and Pompilidae), 1845:498 (in key); F. Smith, 1856:442 (in catalog of Hymenoptera in British Museum); Radoszkowski, 1870:102 (*Cerceris rufiventris* listed as synonym); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:470 (original description copied), 492 (listed); Ed. André, 1889:313 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Medina, 1894b:263 (Spain: 263); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Mercet, 1914:445 (listed from Spain); Kohl, 1916:111 (specimen in O. Radoszkowski collection); Giner Mari, 1941a:85 (original description translated into Spanish), 1941b:286 (original description copied, comments); de Beaumont, 1953e:2 (redescription); Ceballos, 1956:368 (in catalog of Hymenoptera of Spain); de Beaumont, 1957d:332 (citation of previous paper); Ceballos, 1959:229 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1962b:21 (Spain), 30 (geographic variation); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); R. Bohart and Menke, 1976:581 (listed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Gayubo, 1981c:199 (Spain: Salamanca Province, recognition of subspecies not justified), 1982e:110 (Spain: Cádiz Province; as *flaviventris flaviventris*); Gayubo and Tormos, 1984:25 (Spain: Valencia; as *flaviventris flaviventris*); Tormos and Jiménez, 1987b:317 (Spain: Valencia Province: Dehesa de El Saler); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:342 (in Sphecid Fauna of Western Europe); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province), 1999:356 (Spain: Valladolid: Viana de Cega); K. Schmidt, 2000:62 (in revision of Western Palearctic *Cerceris*); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent record from Spain reported, as *flavilabris*).

*Cerceris quilisi* Giner Mari, 1941a:64, ♂, ♀. Holotype: sex not indicated, Spain: Valencia: Dehesa de la Albufera (MNCN). Synonymized with *Cerceris flaviventris* by de Beaumont, 1953e:2. – Giner Mari, 1943a:102 (in Sphecid Fauna of Spain); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain).

*Cerceris pardoi* Giner Mari, 1941b:268, ♀, ♂. Syntypes: Morocco: Larache (MNCN). Synonymized with *Cerceris flaviventris flaviventris* by Gayubo, 1981c:202. – de Beaumont, 1951f:360 (Morocco: Atlantic coast; discussion of status), 1953g:123 (Morocco). – As *Cerceris lusitana pardoi*: de Beaumont, 1953e:4 (new status); R. Bohart and Menke, 1976:581 (listed).

### **ssp. lusitana de Beaumont**

*Cerceris flaviventris lusitana* de Beaumont, 1953e:4, ♀, ♂. Holotype: ♀, Portugal: Caparica (Coimbra). – Diniz, 1959:28 (Portugal: Caparica, Trafaria, as *lusitanica*); Diniz, 1966:7 (Portugal: Caparica, Sines, Trafaria); R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:63 (in revision of Western Palearctic *Cerceris*).

**293. *flavocostalis* Cresson**

*Cerceris flavocostalis* Cresson, 1865a:153, ♀, ♂. Syntypes: Cuba: no specific locality (IZAC). – Cresson, 1865c:123 (in revision of North American Philanthinae); Packard, 1866:62 (listed); Schletterer, 1887:492 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Cresson, 1916:100 (type material in Gundlach collection); Giner Mari, 1943c:331 (in revision of Cuban *Cerceris*); Alayo Dalmau, 1968a:7 (in revision of Cuban Sphecidae), 1973:190 (in catalog of Cuban Hymenoptera), 1976:15, 16 (in key to Cuban *Cerceris*), 30 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:581 (listed); G. Ferguson, 1984c:481 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Portuendo and Fernández, 2004:134 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud).

**294. *flavofasciata* H. Smith**

*Cerceris flavofasciata* H. Smith, 1908:364, ♀. Holotype: ♀, USA: Nebraska: Lincoln (UNL). – Viereck, 1911:98 (*Cerceris flavofasciata* Sm. in H. Smith, 1910:678, should read *flavofasciata* H.S. Sm.); Mickel, 1916a:409 (description of ♂); Mickel, 1918b:448 (in catalog of Nebraskan Sphecidae); Rau, 1922:31 (USA: Missouri: Wesco); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL); Krombein, 1953b:123 (visiting foliage of *Quercus virginiana*), 124 (visiting flowers of *Pluchea* sp.), 134 (North Carolina: Kill Devil Hills), 1959e:197 (nesting habits); Scullen, 1965b:420 (in revision of North American *Cerceris*, as *flavofasciata flavofasciata*); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae); Scullen and Wold, 1970:211 (distribution and summary of prey records, as *flavofasciata flavofasciata*); R. Bohart and Menke, 1976:581 (listed); L. Davis, 1978:216 North Carolina: Kill Devil Hills, data from Krombein, 1953b); Krombein, 1979b:1733 (in catalog of North American Hymenoptera, nesting sites, list of parasites and prey); G. Ferguson, 1984c:481 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

*Cerceris floridensis* Banks, 1915:403, ♂. Lectotype: ♂, USA: Florida: Gulfport (MCZ), designated by G. Ferguson, 1983b:226. Synonymized with *Cerceris flavofasciata* by G. Ferguson, 1984c:482. – Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera). – **As *Cerceris flavofasciata floridensis***: Evans, 1964b:276 (new status, description of larva); Krombein, 1964c:20 (nest, prey, life cycle); Scullen, 1965b:423 (new status, in revision of North American *Cerceris*); Scullen and Wold, 1970:211 (distribution and summary of prey records); R. Bohart and Menke, 1976:581 (listed); Krombein, 1979b:1733 (in catalog of North American Hymenoptera, nesting sites, list of prey); Kurczewski and Miller, 1984:148 (nesting habits); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Deyrup and Eisner, 2003:522 (a Floridian, red-marked subspecies).

*Cerceris natalenus* Brimley, 1927:238, ♀, ♂. Holotype: ♀, North Carolina: La Grange (North Carolina Department of Agriculture). Synonymized with *Cerceris flavofasciata* by Scullen in Muesebeck et al., 1951:1007. – Brimley, 1938:448 (North Carolina: Bostic, La Grandge, Laurel Hill, Willard).

*Cerceris* sp.: Krombein, 1953a:298 (visiting flowers of *Cephalanthus occidentalis*), 337 (North Carolina), corrected to *Cerceris floridensis* by Krombein, 1928c:99.

**295. *flavomaculata* Cameron**

*Cerceris flavomaculata* Cameron, 1890a:115, ♀ (as *flavo-maculata*, incorrect original hyphenation). Holotype or syntypes: ♀, Costa Rica: Caché at Río Sucio (BMNH). – Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:27 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:581 (listed).

**296. *flavonasuta* Arnold**

*Cerceris flavonasuta* Arnold, 1951:105, ♀, ♂. Lectotype: Ethiopia: Aselle (BMNH), designated by Empey, 1983:171. – Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:171 (listed).

**297. *flavopicta* F. Smith**

*Cerceris flavopicta* F. Smith, 1856:451, ♀, ♂ (as *flavo-picta*, incorrect original hyphenation). Syntypes: northern India: no specific locality (BMNH). – Schletterer, 1887:492 (listed); Cameron, 1890b:249 (listed); Bingham, 1897:306 (redescription); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); R. Turner, 1912e:492 (revision); R. Bohart and Menke, 1976:581 (listed).

As *Cerceris sulphurea*: Bingham, 1897:305 (redescription), corrected to *Cerceris flavopicta* by R. Turner, 1912e:492

**298. *flavoplagiata* Cameron**

*Cerceris flavoplagiata* Cameron, 1905a:16, ♀. Holotype: ♀, India or Pakistan: Himalayas: no specific locality (BMNH). – R. Turner, 1912e:494 (revision); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:581 (listed); Empey, 1984:77 (listed, discussion of type specimen).

**299. *flavotrochanterica* Rohwer**

*Cerceris flavotrochanterica* Rohwer, 1912:471, ♂. Holotype: ♂, Mexico: Distrito Federal: no specific locality (USNM). – Scullen, 1972:81 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:581 (listed); G. Ferguson, 1984c:482 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris duisi* Scullen, 1972:47, ♀. Holotype: Mexico: Veracruz: Mendoza (10 mi SW Mendoza (USNM). Synonymized with *Cerceris flavotrochanterica* by G. Ferguson, 1984c:482. – R. Bohart and Menke, 1976:580 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

**300. *fletcheri* R. Turner**

*Cerceris fletcheri* R. Turner, 1912e:500, ♀. Holotype or syntypes: ♀, India: Bihar: Chapra (“in the Pusa collection”). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:581 (listed).

**301. *fluvialis* F. Smith**

*Cerceris fluvialis* F. Smith, 1873c:412, ♀. Holotype or syntypes: ♀, Australia: Western Australia: Swan River (BMNH). – Schletterer, 1887:492 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); R. Turner, 1910b:421 (in key), 1912d:665 (in key), 667 (in revision of Australian *Cerceris*); Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:581 (listed); Evans, 1982a:321 (revision); Cardale, 1985:298 (in catalog of Australian Sphecidae).

**302. *fodiens* Eversmann**

*Cerceris fodiens* Eversmann, 1849:401, ♀, ♂. Lectotype: ♂, Russia: Orenburg Province (Kraków), designated by Kohl, 1916:113 (Article 74.6) and Pulawski, 1965c:567. – Schletterer, 1889a:883 (original description copied); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Kohl, 1916:111 (specimens in O. Radoszkowski collection); Kolosov, 1931:94 (identity of species, incorrectly regarded as senior synonym of *Cerceris rossica*); R. Bohart and Menke, 1976:581 (listed); Pulawski, 1978:192, 195 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:99 (redescription); Gorobchishin, 1995:19 and 1996:53 (Ukraine: Kanev Nature Reserve); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Schmidt, 2000:63 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:145 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan).

*Cerceris charusini* F. Morawitz, 1891:215, ♀ (as *Charusini*, incorrect original capitalization). Syntypes: ♀, Russia: Khanskaya Stavka area = Urda area N Astrakhan (ZIN). Synonymized with *Cerceris fodiens* by Pulawski,

1965c:568. – Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Kohl, 1916:110 (as new synonym of *Cerceris sareptana*); Shestakov, 1917c:48 (Ukraine: Crimea: Evpatoriya, Kerch, Simferopol), 1922:81 (Russia: Stavropol' area; description of ♂), 1927a:19 (Stalingrad Oblast', now Volgograd).

*Cerceris sareptana* Schletterer, 1887:386, ♀, ♂. Lectotype: ♀, Russia: Sarepta, now Krasnoarmeysk (NHMW), designated by Empey, 1972:67. Synonymized with *Cerceris fodiens* by K. Schmidt, 2000:63. – Schletterer, 1887:501 (listed), 1889a:903 (Savigny, 1817, pl. X, Fig. 7 attributed to *sareptana*, clearly an error); Ed. André, 1889:326 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Kolosov, 1937:219 (Ukraine: Kupyansk); R. Bohart and Menke, 1976:587 (listed); Dollfuss, 1989:8 (lectotype in NHMW).

*Cerceris opalipennis* Kohl, 1888a:136, ♀. Holotype or syntypes: ♀, Caucasus: Helenendorf, now: Azerbaijan: Khanlar (NHMW). Synonymized with *Cerceris sareptana* by Kohl, 1916:110. – Ed. André, 1889:309 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:892 (redescription); Ed. André, 1891:25\* (bibliographic references); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Shestakov, 1916:230 (Azerbaijan: Helenendorf, now Khanlar); Dollfuss, 1989:8 (type material in NHMW).

### **spp. *shur* Shestakov**

*Cerceris shur* Shestakov, 1918b:21, ♀. Holotype: ♀, Russia: Zimnaya Stavka on lower Kuma River, W shore of Caspian Sea (ZIN). – Shestakov, 1922:80 (Russia: Stavropol' area). – **As *Cerceris fodiens shur***: Pulawski, 1965c:568 (new status); R. Bohart and Menke, 1976:581 (listed); Pulawski, 1978:195 (in key to Sphecidae of European part of former USSR); K. Schmidt, 2000:64 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia).

### **303. *forficata* Evans**

*Cerceris forficata* Evans, 1982a:328, ♀. Holotype: ♀, Australia: South Australia: New Kalamurina Station: Warburton River (South Australian Museum, Adelaide). – Cardale, 1985:298 (in catalog of Australian Sphecidae).

### **304. *formicaria* Eschscholtz**

*Cerceris formicaria* Eschscholtz, 1822:95, sex not indicated. Holotype or syntypes: Philippines: Luzon: Manila (Inst. Zool. Bot., Tartu Univ.?). – Dalla Torre, 1897:461 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:581 (listed).

*Cerceris formicaria* Eschscholtz, 1823:151, sex not indicated. Objective synonym of *Cerceris formicaria* Eschscholtz, 1822.

### **305. *formidolosa* de Saussure**

*Cerceris formidolosa* de Saussure, 1890:pl. 10, Fig. 9, ♀. Lectotype: ♀, Madagascar: no specific locality (MHNG), designated by Empey, 1983:171 (Article 74.6). – de Saussure, 1892:547 (Madagascar, redescription); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Arnold, 1945:41 (Madagascar; redescription); Leclercq, 1962b:211 (Madagascar: Rogez); Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:581 (listed); Madl, 1997:821 (Madagascar: Nosy Boraha Island), 822 (in checklist of Nosy Boraha Sphecidae); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris formidolosa* de Saussure, 1891:261, ♀. Objective synonym of *Cerceris formidolosa* de Saussure, 1890.

### **306. *formosa* Dahlbom**

*Cerceris formosa* Dahlbom, 1845:499, ♂. Lectotype: ♂, South Africa: Kwazulu Natal: Port Natal, now Durban (NRS), designated by Empey, 1971a:241 (Article 74.6). – F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:492 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Arnold, 1931:135 (insufficiently described species); Empey, 1969a:308 (listed), 1971a:241 (redescription); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:171 (listed).



*Cerceris sumptuosa* Arnold, 1931:160, ♀, ♂. Lectotype: ♀, South Africa: Pondoland: Port St John (BMNH), designated by Empey, 1983:172. Synonymized with *Cerceris formosa* by Empey, 1969a:308. – Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

*Cerceris marleyi* Arnold, 1949:272, ♀. Holotype: ♀, South Africa: Kwazulu Natal: Durban (SAM). Synonymized with *Cerceris formosa* by Empey, 1969a:306.

### **ssp. nigrifemur Arnold**

*Cerceris sumptuosa nigrifemur* Arnold, 1955:751, ♀, ♂. Holotype: sex not indicated, South Africa: Cape Province: no specific locality (TMP). – As *Cerceris formosa nigrifemur*: Empey, 1969a:308 (new subspecific combination, listed), 1971a:244 (redescription); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:172 (listed, unnecessary designation of lectotype).

### **ssp. hoeveldensis Empey**

*Cerceris formosa hoeveldensis* Empey, 1971a:246, ♀, ♂. Holotype: ♀, South Africa: Gauteng: Bronkhorstspuit Dam (originally H. Empey coll., now TMP). – R. Bohart and Menke, 1976:581 (listed); Empey, 1983:172 (listed, holotype in TMP).

### **307. formosana Strand**

*Cerceris formosana* Strand, 1913b:159, ♀. Holotype: ♀, Taiwan: Banshoryo District: Sokutsu (DEI). – Yasumatsu and Okabe, 1936:495 (description of ♂, sexual dimorphism), 499 (redescription); Tsuneki, 1970c:8 (Taiwan); Haneda, 1972a:6 (Taiwan); Oehlke and Wudowenz, 1974:422 (holotype and two paratypes in DEI); R. Bohart and Menke, 1976:581 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution). – As *Cerceris klapperichi formosana*: Giner Mari, 1943d:172 (new status, redescription); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan).

### **ssp. klapperichi Giner Mari**

*Cerceris klapperichi* Giner Mari, 1942b:121, ♂, ♀. Syntypes: China: Kuatun, Kwangtseh (Mus. A. Koenig, Bonn). – As *Cerceris formosana klapperichi*: R. Bohart and Menke, 1976:581 (new status, listed); Wu and Zhou, 1996:180 (in revision in Economic Insect Fauna of China); Li and He, 2004:1111 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris dubitabilis* Giner Mari, 1942b:119, ♂, ♀. Syntypes: China: Shaowu (Mus. A. Koenig, Bonn). Synonymized by ??? (citation from R. Bohart and Menke, 1976:581). – Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### **308. forticula Arnold**

*Cerceris forticula* Arnold, 1955:751, ♀. Holotype: ♀, Zambia: Abercorn, now Mbala (SAM). – Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:172.

### **309. fortin Scullen**

*Cerceris fortin* Scullen, 1972:47, ♀. Holotype: ♀, Mexico: Veracruz: Fortin de las Flores (CAS). – R. Bohart and Menke, 1976:581 (listed); G. Ferguson, 1984c:482 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### **310. fortinata Cameron**

*Cerceris fortinata* Cameron, 1902d:57, ♀. Lectotype: ♀, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:77. – R. Turner, 1912e:801 (in revision of British India species); Tsuneki, 1963c:27 (Thailand; discussion); R. Bohart and Menke, 1976:581 listed; Empey, 1984:77 (listed, type examined).

*Cerceris aureobarba* Cameron, 1905c:222, ♂. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:77 (Article 74.6). Synonymized with *Cerceris fortinata* by R. Turner, 1912e:801.

**311. *freymuthi* Radoszkowski**

*Cerceris freymuthi* Radoszkowski, 1877:57, ♀ (as *Freymuthi*, incorrect original capitalization). Holotype or syntypes: Uzbekistan: Zaravschan valley (ZMMU). – Schletterer, 1887:471 (original description copied), 492 (listed); Ed. André, 1889:328 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Shestakov, 1918a:132 (redescription, as *freimuthi*); R. Bohart and Menke, 1976:581 (listed); Kazenas, 1984a:168 (revision), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia).

**312. *frigida* Mocsáry**

*Cerceris frigida* Mocsáry in Mocsáry and Szépligeti, 1901:161, ♂. Holotype or syntypes: ♂, Russia: Siberia: Minusinsk (TMB). – R. Bohart and Menke, 1976:581 (listed).

**313. *froggatti* R. Turner**

*Cerceris froggatti* R. Turner, 1912d:668, ♀. Holotype or syntypes: ♀, Australia: Queensland: Rockhampton (BMNH). – Tsuneki, 1968e:2 (in key), 13 (Australia; redescription); R. Bohart and Menke, 1976:581 (listed); Evans, 1982a:326 (revision); Evans and Hook, 1982b:159 (nesting solitarily); Cardale, 1985:298 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:280 (nest structure), 1986b:1299 (prey: Chrysomelidae).

**314. *frontata* Say**

*Cerceri frontata* Say, 1823:80, ♀. Holotype: ♀, USA: Arkansas: no specific locality (destroyed). Neotype: ♀, USA: New Mexico: 19 mi E Lordsburg (USNM), designated by Scullen, 1965b:481 (USNM). – Le Conte, 1859a:167 (original description copied); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:129 (original description copied); Packard, 1866:64 (listed); Cresson, 1875:717 (Colorado), 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:492 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Cockerell, 1899a:142 (New Mexico); Viereck and Cockerell, 1904b:130 (New Mexico); Banks, 1912:16 (in revision of eastern U.S. *Cerceris*); Mickel, 1918b:447 (in catalog of Nebraskan Sphecidae); Banks, 1947:9 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Krombein, 1960b:76 (nest and prey, as *frontata frontata*), 1961:300 (prey: large weevils of genus *Eupagoderes* and *Cleonus pulvereus* Lec.); Evans, 1964b:277 (larva, as *frontata frontata*); Scullen, 1965b:480 (in revision on North American *Cerceris*, as *frontata frontata*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen and Wold, 1970:211 (distribution and summary of prey records, as *frontata frontata*); Scullen, 1972:81 (in revision of Mexican and Central American *Cerceris*, as *frontata frontata*); R. Bohart and Grissell, 1975:47 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:581 (listed); Krombein, 1979b:1732 (in catalog of North American Hymenoptera, nesting sites, list of prey); G. Ferguson, 1984c:482 (listed); Menke, 1986c:35 (Utah: Emery County: San Rafael Desert); Weislo, 1998:181 (proportions of antennae in relations to parasitic/non-parasitic behavior); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris occidentalis* de Saussure, 1867:100, ♀. Lectotype: ♀, USA: Texas: no specific locality (MHNG), designated by Scullen, 1961:47. Synonymized with *Cerceris frontata* by Scullen, 1961:47. – Schletterer, 1887:498 (listed); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera).

*Cerceris raii* Rohwer, 1920b:230, ♀, ♂. Holotype: ♀, Missouri: St. Louis (USNM). Synonymized with *Cerceris frontata* by R. Bohart and Grissell, 1975:47, and by R. Bohart in R. Bohart and Menke, 1976:581. – Rau, 1922:21 (USA: Missouri: Wesco); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera). – **As *Cerceris frontata raii***: Scullen, 1960:80 (new status), 1965b:482 (in revision on North American *Cerceris*); Scullen and Wold, 1970:211 (distribution and summary of prey records).

**315. *fuliginosa* F. Smith**

*Cerceris fuliginosa* F. Smith, 1856:454, ♀. Holotype or syntypes: ♀, Indonesia: Celebes, now Sulawesi: no specific locality (BMNH). – F. Smith, 1858b:19 (Indonesia: Sulawesi); Schletterer, 1887:492 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:581 (listed).

**316. *fulva* Mocsáry**

*Cerceris fulva* Mocsáry, 1883:47, ♀. Holotype or syntypes: ♀, southern Russia or Caucasus (TMB). – Dalla Torre, 1897:455 (as synonym of *Cerceris capito*, in catalog of world Hymenoptera); R. Bohart and Menke, 1976:581 (listed).

**317. *fulvipes* Eversmann**

*Cerceris fulvipes* Eversmann, 1849:407, ♀. Holotype: ♀, "in campis Kirgisorum", now Kazakhstan: no specific locality, but Irkutsk according to Kohl, 1916:113 (Kraków). – Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867), 1887a:44 (China: Tsinghai: Tsaidam region: no specific locality); Schletterer, 1887:471 (original description copied), 493 (listed); Ed. André, 1889:307 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); F. Morawitz, 1891a:217 (unknown to the author); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Kohl, 1916:113 (redescription); R. Bohart and Menke, 1976:581 (listed); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:148 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Cerceris shaman* Shestakov, 1918b:9, ♀, ♂. Syntypes: Russia: Siberia: Chita, and Malta near Irkutsk (ZIN). Synonymized with *Cerceris fulvipes* by Kolossov, 1932:117. – Tsuneki, 1962c:12 (in key); Kazenas, 1979d:85 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:474 (in key to Sphecidae of Russian Far East).

**318. *fulviventris* Guérin-Méneville**

*Cerceris fulviventris* Guérin-Méneville, 1844:444, sex not indicated. Holotype or syntypes: Senegal: shores of Casamance River (Genova). – Guérin-Méneville in Lefebvre, 1849:358 (Ethiopia); F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:493 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); Bingham, 1902:214 (South Africa); Guiglia, 1948b:179 (type material in Genova), 187 (redescription); Arnold, 1951:105 (Senegal: Kaolack, Kaffrine); Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:172 (listed).

*Cerceris bicolor* F. Smith, 1856:447, ♀. Lectotype: ♀, Gambia: no specific locality (BMNH), designated by Empey, 1983:172 (Article 74.6). Synonymized with *Cerceris fulviventris* by Arnold, 1951:107. – Schletterer, 1887:486 (listed); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Magretti, 1906:20 (Eritrea); R. Turner, 1918c:467 (synonymy); Arnold, 1931:183 (revision); Guiglia, 1943c:75 (Ethiopia: Gamo Gofa: Sagan–Omo region), 1950:235 (Ethiopia: Gamo Gofa: Gondaraba at 4°58'N, 36°49'E).

*Cerceris fossor* F. Smith, 1856:447, ♂. Lectotype: ♂, Gambia: no specific locality (BMNH), designated by Empey, 1983:172 (Article 74.6). Synonymized with *Cerceris bicolor* by R. Turner, 1918c:467. – Schletterer, 1887:492 (listed); Dalla Torre, 1897:461 (in catalog of world Hymenoptera).

*Cerceris flavifrons* F. Smith, 1856:448, ♂. Lectotype: ♂, West Africa: no specific locality (BMNH), designated by Empey, 1983:172 (Article 74.6). Synonymized with *Cerceris fulviventris* by Empey, 1983:172. – R. Bohart and Menke, 1976:581 (listed).

*Cerceris purpurea* Schletterer, 1887:453, ♂. Lectotype: ♂, Senegal: Dagana (NHMW), designated by Empey, 1969a:319 (Article 74.6). Synonymized with *Cerceris fulviventris* by Empey, 1983:172. – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Schoutedden, 1930:93 (Zaire); Arnold, 1931:195 (original description translated into English); Leclercq, 1962a:398 (comparison with *Cerceris iniqua*); Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed); Dollfuss, 1989:8 (holotype in NHMW).

**319. *fumipennis* Say**

*Cerceris fumipennis* Say, 1837:381, ♂. Holotype or syntypes: ♂, USA: Indiana: no specific locality (lost). Neotype: ♂, USA: Illinois: Boulder 3 mi W Kaskaskia River (USNM), designated by Scullen, 1965b:412. – F. Smith, 1856:465 (in catalog of Hymenoptera in British Museum); Le Conte, 1859b:762 (original description copied); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:113 (in revision of North American Philanthinae, description of ♀); Packard, 1866:60 (listed); Cresson, 1873:227 (Texas), 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:493 (listed); Marlatt, 1891:147 (individual died in its sleep while hanging by its jaws to stem of *Solidago*); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: Baldwin); Peckham and Peckham, 1900:90 (nest and prey: *Chrysobotris quadriimpressa*); Viereck, 1903d:120 (Maryland: College Park); Hartman, 1905:66 (homing experiment); Hart, 1907:255 (Illinois); H. Smith, 1908b:366 (in revision of Nebraskan Sphecidae); Banks, 1912:17 (in revision of eastern U.S. *Cerceris*); Grossbeck, 1912a:135 (prey); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:447 (in catalog of Nebraskan Sphecidae); Rau, 1922:30 (USA: Missouri: Wickes, two females found in one nest, nest structure); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Cartwright, 1931:269 (South Carolina: Jocassee, list of prey species); Brimley, 1938:447 (North Carolina: statewide); Scullen *in* Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Krombein, 1952a:95 (USA: Virginia: Westmoreland State Park); Evans, 1957b:84 (description of larva), 1959b:156 (additional description of larva); Krombein, 1958c:110 (nest, prey), 1963f:277 (Maryland: Plummers Island near Washington, D.C.); Scullen, 1965b:410 (in revision of North American *Cerceris*); Tsuneki, 1965d:3 (prey record summary: Buprestidae, Curculionidae); Scullen and Wold, 1970:211 (distribution and summary of prey records); Evans, 1971:501 (nesting habits); Scullen, 1972:41 (likely to occur in Mexico); R. Bohart and Menke, 1976:581 (listed); Young, 1976:206 (prey: *Buprestis maculativentris* Say); Evans and Rubink, 1978:62 (nesting habits); Krombein, 1979b:1732 (in catalog of North American Hymenoptera, nesting sites, list of parasites and prey); Kurczewski and Miller, 1984:150 (nesting habits); G. Ferguson, 1984c:482 (listed); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Hook and Evans, 1991:257 (prey and parasites in Texas); Mueller et al., 1992:42 (large females displaced smaller ones at Archbold Station, Florida); Spofford and Kurczewski, 1992:1000 (species of miltogrammine parasites listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 72 (first record from Ontario: list of localities); Marshall, Paiero, and Buck, 2005:416 (list of buprestid prey in Ontario, Canada), 419 (list of species of *Agrilus* recorded as prey); Buck, Paiero, and Marshall, 2006:45, 47 (in key to eastern Canadian *Cerceris*); Giles and Ascher, 2006:231 (New York: Black Rock Forest Preserve); Careless and Marshall, 2010:25 (use of *Cerceris fumipennis* as control agent against *Agrilus planipennis*, a serious pest of *Fraxinus* trees in North America).

Web page on *Cerceris fumipennis*: [www.cerceris.info](http://www.cerceris.info).

*Cerceris cincta* Dahlbom, 1844:204, ♂. Holotype: ♂, North America: no specific locality (LUND). Synonymized with *Cerceris fumipennis* by Cresson, 1865c:113. – Dahlbom, 1845:499 (in key); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris uncinata* Taschenberg, 1875:397, ♀. Holotype: ♀, USA: Tennessee: no specific locality (Halle). Synonymized with *Cerceris fumipennis* by Dalla Torre, 1897:462. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:505 (listed); Ashmead, 1899d:295 (in checklist of North American Crabronidae).

**320. *fumosipennis* Strand**

*Cerceris fumosipennis* Strand, 1910a:139, ♂. Holotype: ♂, Paraguay: Asunción: Villa Morra (ZMHU). – R. Bohart and Menke, 1976:581 (listed); Dollfuss, 1989:8 (type material in NHMW, record incorrect because the species was described from single male); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**321. *furcata* F. Morawitz**

*Cerceris furcata* F. Morawitz, 1890:600, ♂. Holotype or syntypes: ♂, Transcaspians: no specific locality (ZIN). – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Shestakov, 1918a:134 (Turkmenistan: Ashkhabad); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:93 (Turkmenistan: Akibay, Ashkhabad); R. Bohart and Menke, 1976:581 (listed); Kazenas, 1978b:70 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:195 (redescription), 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:120, 121 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan), 2008a:106 (Southeastern Kazakhstan: 65 km W Bakanas).

*Cerceris seraxensis* Radoszkowski, 1893a:67, ♀, ♂. Syntypes: Turkmenistan: Serax (Kraków). Synonymized with *Cerceris furcata* by Kazenas, 1984a:195. – Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Kohl, 1916:123 (specimens in O. Radoszkowski collection); Shestakov, 1918a:151 (citation); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:69 (in key to Sphecidae of Kazakhstan and Central Asia).

**322. *furcifera* Schletterer**

*Cerceris furcifera* Schletterer, 1887:459, ♀. Holotype or syntypes: Paraguay: no specific locality (NHMW). – Schletterer, 1887:493 (listed); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay), 1913a:230 (Paraguay); R. Bohart and Menke, 1976:581 (listed); Dollfuss, 1989:8 (type material in NHMW); Fritz, 1989:261 (in key), 262 (bibliographic reference); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**323. *gaetula* de Beaumont**

*Cerceris gaetula* de Beaumont, 1951f:318, ♀, ♂. Holotype: ♀, Algeria: Biskra (Lausanne). – de Beaumont, 1953g:121 (Morocco: Tinerhir); R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:156 (in revision of Western Palearctic *Cerceris*).

**ssp. *aegyptiaca* K. Schmidt**

*Cerceris gaetula aegyptiaca* K. Schmidt, 2000:158, ♀, ♂. Holotype: ♀, Egypt: Amrye near Alexandria (Torino).

**324. *galathea* de Beaumont**

*Cerceris galathea* de Beaumont in de Beaumont and Bytinski-Salz, 1959:109, ♀, ♂. Holotype: ♀, Israel: Jerusalem (RMNH). – R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:159 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:142 (in catalog of Crabronidae of Turkey).

**325. *gallienii* Arnold**

*Cerceris gallienii* Arnold, 1945:32, ♀, ♂ (as *Gallienii*, incorrect original capitalization). Lectotype: ♀, Madagascar: Fort Dauphin (MNHN), designated by Empey, 1983:172 (Article 74.6). – Leclercq, 1962b:211 (Madagascar: Rogez); Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:581 (listed, as *gallieni*); Empey, 1983:172 (listed); Hancock, Chahwanda, and Mhlanga, 1995:37 (syntypes in Bulawayo Museum); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris augagneuri* Arnold, 1945:34, ♀, ♂ (as *Augagneuri*, incorrect original capitalization). Syntypes: Madagascar: Antsirabé (MNHN). Synonymized with *Cerceris gallienii* by Leclercq, 1962b:211. – Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:165 (listed, type examined).

**ssp. *bekiliensis* Arnold**

*Cerceris Gallienii* var. *bekiliensis* Arnold, 1945:34, ♀, ♂. Syntypes: Madagascar: Bekily (MNHN), designated by Empey, 1983:173 (Article 74.6). – As *Cerceris gallieni bekilensis*: Empey, 1969a:308 (new status, listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:172 (listed).

**326. *gandarai* Rohwer**

*Cerceris gardarai* Rohwer, 1912:470, ♂. Holotype: ♂, Mexico: Distrito Federal: no specific locality (USNM). – nec Scullen (= *Cerceris rohweri*), 1968a:156 (as *ganderi*), 1972:82 (as *gandari*); R. Bohart and Menke, 1976:581 (listed); Krombein, 1979b:1734 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:482 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Amarante, 2005:12 (erroneous correction to his 2002 catalog).

*Cerceris micheneri* Scullen, 1972:86, ♀, ♂. Holotype: ♀, Mexico: Chihuahua: Matachic (AMNH). Synonymized with *Cerceris gardarai* by G. Ferguson, 1983c:238. – R. Bohart and Menke, 1976:584 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**327. *garleppi* Schrottky**

*Cerceris garleppi* Schrottky, 1911:29, ♂. Holotype or syntypes: ♂, Peru: Cuzco (depository?). – R. Bohart and Menke, 1976:581 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**328. *gaudebunda* Holmberg**

*Cerceris gaudebunda* Holmberg, 1903:481, ♀, ♂. Syntypes: Argentina: Buenos Aires: Buenos Aires, Las Conchas, Flores, Chivilcoy, Mercedes (originally MACN, now lost: Fritz, 1968b:164). – Jörgensen, 1912:287 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Buenos Aires); Brèthes, 1920a:408 (Argentina); R. Bohart and Menke, 1976:581 (listed); Fritz and Mariluis, 1979:25 (in revision of the *gaudebunda* group, as *gaudebunda gaudebunda*); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

***spp. roraima* Fritz and Mariluis**

*Cerceris gaudebunda roraima* Fritz and Mariluis, 1979:27, ♀. Holotype: ♀, Brazil: Roraima Territory: Brazil (UCD). – Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**329. *gaullei* Brèthes**

*Cerceris gaullei* Brèthes, 1920a:408, ♂ (as *Gaullei*, incorrect original capitalization). Syntypes: ♂, Argentina: Gran Chaco: no specific locality (MNHN). – R. Bohart and Menke, 1976:581 (listed); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**330. *gayi* Spinola**

*Cerceris gayi* Spinola, 1851a:346, ♀, ♂. (as *Gayi*, incorrect original capitalization). Syntypes: Chile: Coquimbo, Santa Rosa (TORINO). – F. Smith, 1856:465 (in catalog of Hymenoptera in British Museum); de Saussure, 1867:96 (Chile, redescription); Schletterer, 1887:493 (listed); Gribodo, 1895:210 (Chile, redescription); E. Reed, 1894:643 (revision); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Herbst, 1921:107 (varies markedly in color); Janvier, 1928:155 (nesting habits); C. Reed, 1928:316 (similarities in color with *Pison chilensis* and the Diptera *Rhopalia paulseni* Phil. and *Microdetus dentitarsus*); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes"); Ruíz Pereira and Stuardo, 1936:321 (Chile: Las Termas de Chillan); Gutiérrez, 1940:34 (Chile: Río Blanco); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae, Coccinellidae); Fritz and Toro, 1969:161 (in revision of Chilean and Patagonian *Cerceris*); Sielfeld, 1971:255 (in key to Chilean *Cerceris*); Zapata, 1974:37 (Chile: Lampa near Santiago); R. Bohart and Menke, 1976:578 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

**331. *genadentula* Reyes**

*Cerceris genadentula* Reyes, 1986:114, ♀. Holotype: ♀, Philippines: Mindanao: Mt. Pomalihi 21 km W Gingoog City (BISH). – Tsuneki et al., 1992c:47 (in key), 73 (bibliographic reference).

**332. geneana A. Costa**

*Cerceris geneana* A. Costa, 1867c:95, ♀ (as *Geneana*, incorrect original capitalization). Holotype or syntypes: ♀, Italy: Sardegna: no specific locality (lost). – A. Costa, 1871c:97 (redescription of ♀), pl. III fig. 7 (color illustration); Schletterer, 1887:471 (original description copied), 493 (listed); Ed. André, 1889:322 (in revision of Sphecidae of Europe and Algeria) Ed. André, 1891:30\* (bibliographic references); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); de Beaumont, 1950c:327 (unrecognizable species); Grandi, 1954:237 (Italy: Sicilia); Balthasar, 1972:404 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:581 (listed); Pagliano, 1988:171 (unrecognizable species), 1990:97 (in catalog of Italian Sphecidae, as nomen dubium); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:343 (as nomen dubium); Pagliano and Negrisolo, 2005:489 (in Sphecid Fauna of Italy, as nomen dubium).

*Cerceris geneana* A. Costa, 1869b:111 (as *Geneana*, incorrect original capitalization). Objective synonym of *Cerceris geneana* A. Costa, 1867c:95

**333. gibbosa Sickmann**

*Cerceris gibbosa* Sickmann, 1894:202, ♀, ♂. Syntypes: China: Hopei Province: Tientsin (Münster). – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Shestakov, 1923:102, 105 (in key to subgenus *Apiraptrix*), 114 (citation, distribution); Tsuneki, 1961c:8, 15 (in key), 53 (citation); R. Bohart and Menke, 1976:581 (listed); Kazenas, 1978b:50, 54 (in key to Sphecidae of Kazakhstan and Central Asia), 1979d:83, 86 (in key); Dollfuss, 1989:8 (type material in NHMW); Kazenas *in* Nemkov, Kazenas, Budryš, et Antropov, 1995:470, 476 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**334. gilberti R. Turner**

*Cerceris gilberti* R. Turner, 1916e:277, ♀. Holotype: ♀, Australia: Queensland: Mackay (BMNH). – Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:581 (listed); Evans, 1982a:347 (revision); Cardale, 1985:299 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:282 (nest structure); Naumann, 1993:187 (Australia: Queensland: Heathlands area in Cape York).

**335. gilesi R. Turner**

*Cerceris gilesi* R. Turner, 1910a:346, ♀, ♂. Syntypes: Western Australia: Claremont (BMNH). – R. Turner, 1910b:422 (in key), 1912d:671 (in revision of Australian *Cerceris*); Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:581 (listed); Cardale, 1985:299 (in catalog of Australian Sphecidae).

**336. gineri de Beaumont**

*Cerceris gineri* de Beaumont, 1951f:393, ♀, ♂. Holotype: ♀, Morocco: Plaine de Ben Guérir (Lausanne). – de Beaumont, 1953g:124 (Morocco: Ben Guérir); R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:123 (in revision of Western Palearctic *Cerceris*).

**337. ? globulosa (Fourcroy)**

*Vespa globulosa* Fourcroy, 1785:... – **As** *Cerceris globulosa*: R. Bohart and Menke, 1976:581 (new combination, listed).

**338. gloria Reyes**

*Cerceris gloria* Reyes, 1986:100, ♀, ♂. Holotype: ♀, Philippines: Mindanao: Dinawihan 26 km E Gingoog City (BISH). – Tsuneki et al., 1992c:46, 51 (in key), 67 (Philippines).

**339. gnarina Banks**

*Cerceris gnarina* Banks, 1913a:237, ♀. Holotype: ♀, USA: Oklahoma: Vinita (AMNH); designation of lectotype by G. Ferguson, 1983b:225, was unnecessary. – Scullen *in* Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Evans, 1983a:45 (nesting habits); G. Ferguson, 1984c:483 (listed as full species). – **As** *Cerceris*

*clypeata gnarina*: Scullen, 1965b:473 (new status, in revision on North American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera).

*Cerceris posticata* Banks, 1916:64, ♂. Holotype: ♂, USA: New Mexico: Jemez Mountains (MCZ). Synonymized with *Cerceris gnarina* by G. Ferguson, 1984c:483. – Banks, 1947:20 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:500 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:585 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:231 (study of holotype).

#### 340. *goddardi* Cockerell

*Cerceris goddardi* Cockerell, 1930:33, ♀, ♂. Holotype: ♀, Australia: Queensland: Dunk Island (Queensland Museum, Brisbane). – Tsuneki, 1968e:6 (in key); R. Bohart and Menke, 1976:581 (listed); Evans, 1982a:351 (revision); Evans and Hook, 1982b:160 (communal nesting); Cardale, 1985:299 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:285 (nesting habits), 1986b:1299 (prey: Chrysomelidae and Curculionidae); Evans, 1988:8 (nesting habits); Naumann, 1993:187 (Australia: Queensland: Heathlands area in Cape York).

As *Cerceris venusta* F. Smith: Krombein, 1969: (Queensland: Stradbroke Island; prey: scarab *Deuterocaulobius maechidioides* Macleay), corrected to *Cerceris goddardi* by Evans and Hook, 1986b:1300.

*Cerceris insulicola* Tsuneki, 1968e:27, ♂. Holotype: ♂, Australia: Queensland: Prince of Wales Island (originally H. Scullen coll., now USNM). Synonymized with *Cerceris venusta oceanica* by Krombein, 1969a:25, and with *Cerceris goddardi* by Evans, 1982a:351. – R. Bohart and Menke, 1976:589 (as synonym of *Cerceris venusta oceanica*); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

#### 341. *gomphocarpi* Brauns

*Cerceris gomphocarpi* Brauns, 1911a:239 (visiting flowers of *Gomphocarpus ramosus*). Nomen nudum.

*Cerceris gomphocarpi* Brauns, 1926:306, ♀, ♂. Lectotype: ♀, South Africa: Cape Province: Willowmore (TMP), designated by Empey, 1983:173. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:142 and 147 (in key), 1942:plate I fig. 14 (male genitalia); Empey, 1969a:308 (listed); R. Bohart and Menke, 1976:306 (listed); Empey, 1983:173 (listed).

#### 342. *gracilis* Kazenas

*Cerceris gracilis* Kazenas, 1984a:60, ♀, ♂. Holotype: E Kazakhstan: 10 km N Bayan-Aul (ZIN). – Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 107 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan).

#### 343. *grana* Shestakov

*Cerceris grana* Shestakov, 1918b:20, ♀. Holotype or syntypes: ♀, China: eastern Nan-Shan: village Van-tsi-tsan (ZIN). – Gussakovskij, 1934a:14 (China: Szechuan); Yasumatsu, 1940:31 (China: Nei Mongol: Kunshan-tagh Desert); nec Yasumatsu, 1942c:108 (= *Cerceris jakowleffi*); Tsuneki, 1961c:11 (in key); R. Bohart and Menke, 1976:581 (listed); Kazenas, 1979d:84 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:472 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### 344. *grandis* Banks

*Cerceris grandis* Banks, 1913b:423, ♀. Holotype: ♀, Arizona: Fort Yuma (AMNH). – Banks, 1947:10 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Scullen, 1965b:414 (in revision of North American *Cerceris*, as *grandis grandis*), 1972:41 (in revision of Mexican and Central American species, as *grandis grandis*); R. Bohart and Grissell, 1975:48 (in revision of North American Philanthinae); Alcock, 1976:343 (potential predator of the buprestid *Hippomelas planicosta*); R. Bohart and Menke, 1976:581 (listed); Krombein, 1979b:1734 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:226 (study of holotype), 1984c:483 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae);



Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); J. Davidson, 2003:12 (preying on buprestid *Gyascutus planicosta* (LeConte)).

### 345. *greeni* R. Turner

*Cerceris greeni* R. Turner, 1912g:370, ♀. Holotype: ♀, India: Tamil Nadu: Nilgiri Hills: Kharkur (BMNH). – Rama-krishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:581 (listed).

### 346. *grisselli* G. Ferguson

*Cerceris grisselli* G. Ferguson, 1983c:236. Holotype: ♀, USA: California: Los Angeles County: Tanbark Flat (UCD). – G. Ferguson, 1984c:483 (listed).

As *Cerceris minax*: R. Bohart and Grissell, 1975:49, corrected to *Cerceris grisselli* by G. Ferguson, 1983c:236.

### 347. *guigliae* Giordani Soika

*Cercerius guigliae* Giordani Soika, 1942:204, ♂ (as *Guigliae*, incorrect original capitalization). Holotype: ♂, Eritrea: Ghinda (Univ. Torino). – Empey, 1969a:309 (listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:173 (listed, type examined).

*Cerceris taygete* Arnold, 1951:119, ♂. Holotype: ♂, Ethiopia: Gambeila (BMNH). Synonymized with *Cerceris guigliae* by Empey, 1983:173. – Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:588 (listed).

### 348. *gusenleitneri* K. Schmidt

*Cerceris gusenleitneri* K. Schmidt, 2000:65, ♀, ♂. Holotype: ♂, Iran: Elburz Province: 75 km S Chaluz (J. Gusenleitner coll., Linz). – Yildirim and Ljubomirov, 2005:1803 (Turkey: Bayburt: Kopdağı; Bitlis: Adilcevaz; Erzurum: Konaklı, Şenkaya); Ljubomirov and Yildirim, 2008:143 (in catalog of Crabronidae of Turkey).

### 349. *hackeriana* Cockerell

*Cerceris hackeriana* Cockerell, 1930:32, ♀. Holotype: ♀, Australia: New South Wales: Toooloom (Queensland Museum, Brisbane). – Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:581 (listed); Evans, 1982a:337 (revision); Cardale, 1985:299 (in catalog of Australian Sphecidae).

### 350. *halone* Banks

*Cerceris halone* Banks, 1912:24, ♀. Lectotype: ♀, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:29 (Article 74.6). – Stevens, 1917:422 (North Dakota); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Byers, 1962:317 (nesting habits); Krombein, 1963f:277 (Maryland: Plummers Island near Washington, D.C.); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Scullen, 1965b:483 (in revision on North American *Cerceris*); Scullen and Wold, 1970:212 (distribution and summary of prey records); Evans, 1971:511 (nesting habits), 1975a:264 (unsuccessful colonizer of a new habitat); R. Bohart and Menke, 1976:581 (listed); Byers, 1978:818 (nests, prey, behavior, and development); Krombein, 1979b:1734 (in catalog of North American Hymenoptera, parasite and prey); G. Ferguson, 1984c:483 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 72 (first record from Ontario: list of localities); Amarante, 2005a:12 (correction to his 2002 catalog); Buck, Paiero, and Marshall, 2006:45, 47 (in key to eastern Canadian *Cerceris*); Giles and Ascher, 2006:231 (New York: Black Rock Forest Preserve).

*Cerceris stigmosalis* Banks, 1916:64, ♂. Holotype: ♂, USA: North Dakota: Fargo (MCZ). Synonymized with *Cerceris halone* by G. Ferguson, 1984c:483. – Stevens, 1917:422 (North Dakota); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:506 (in revision on North American *Cerceris*), 1972:95 (in revision of Mexican and North American *Cerceris*); R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:233 (study of holotype);

Melo, 2000:98 (nest reutilization); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Amarante, 2005a:13 (correction to his 2002 catalog).

*Cerceris architis* Mickel, 1916:409, ♀. Holotype: ♀, USA: Nebraska: South Bend (UNL). Synonymized with *Cerceris halone* by Scullen, 1960:78. – Abbott, 1928:205 (nesting habits, prey: *Curculio nasicus* Say); Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Krombein, 1967:414 (synonymy recorded); Amarante, 2005a:13 (correction to his 2002 catalog).

*Cerceris salome* Banks, 1923:21, ♀. Lectotype: ♀, USA: Virginia: Lee County: Jones Creek (MCZ), designated by Scullen, 1960:78 (Article 74.6), and by G. Ferguson, 1983b:232. Synonymized with *Cerceris architis* by Scullen in Muesebeck et al., 1951:1005, and with *Cerceris halone* by Scullen, 1960:78. – J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae).

*Cerceris shermani* Brimley, 1928:200, ♀. Holotype: ♀, North Carolina: Raleigh (North Carolina Department of Agriculture). Synonymized with *Cerceris architis* by Scullen in Muesebeck et al., 1951:1005. – Brimley, 1938:448 (North Carolina: Lakeview, Laurinburg, Marion, Raleigh).

### 351. *hameri* Guichard

*Cerceris hameri* Guichard, 1993a:156, ♀. Holotype: ♀, United Arab Emirates: Suweihan, 24°50'N, 55°25'E (BMNH).

### 352. *hamiltoni* Arnold

*Cerceris hamiltoni* Arnold, 1931:167, ♀ (as *Hamiltoni*, incorrect original capitalization). Holotype: ♀, Kenya: Magadi Junction (BMNH). Paratype: Mara River in Masai Reserve (BMNH). – Empey, 1969a:309 (listed); R. Bohart and Menke, 1976:581 (listed); Empey, 1983:173 (listed, unnecessary designation of lectotype).

### 353. *haramaiae* Arnold

*Cerceris rhodesiae haramaiae* Arnold, 1951:108, ♂. Holotype: ♂, Ethiopia: Haramaia (BMNH). – As *Cerceris haramaiae*: Empey, 1969a:309 (new status, listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:173.

### 354. *harbinensis* Tsuneki

*Cerceris harbinensis* Tsuneki, 1961c:55, ♂. Holotype: ♂, China: Heilungkiang: Harbin (RMNL). – Tsuneki, 1961c:16 (in key), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1979d:87 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:477 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### 355. *hathor* Pulawski

As *Cerceris eugenia* (corrected to *Cerceris hathor* by Pulawski, 1983:242): Schletterer, 1887:390 (Egyptian specimen only); Kohl, 1888a:139, 1916:111; Ed. André, 1889:268, 325, 330 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:902 (Savigny, 1817, pl. X, Fig. 24 represents *eugenia*); Ed. André, 1891:29\* (bibliographic references); Giner Mari, 1941b:224 (in revision of North African *Cerceris*); de Beaumont, 1951b:180 (synonymy), 1951f:339 (Egypt to Morocco; redescription; synonymy), 1953g:122 (Morocco: Midelt), 1956a:186 (Chad: Tibesti), 1958b:59 (Algeria: Tassili des Ajjer); de Beaumont and Bytinski-Salz, 1959:122 (Israel); Pulawski, 1964:73 (Egypt: Ghiza, Kom Osheim); de Beaumont, 1970b:38 (his previous interpretation of this species is incorrect); Guichard, 1993a:161 (Arabian Peninsula), present correction.

As *Cerceris tricolorata*: Mochi, 1939:190 (in revision of Egyptian *Cerceris*), corrected to *Cerceris eugenia* by de Beaumont, 1951b:180, and to *Cerceris hathor* by Pulawski, 1983:242; Giner Mari, 1941b:174 (in revision of North African *Cerceris*), corrected to *Cerceris eugenia* by de Beaumont, 1951f:339 and to *Cerceris hathor* by Pulawski, 1983:242; de Beaumont, 1950f:397 (Algeria, as *Cerceris tricolorata* (Spinola) Mochi).

As *Cerceris vidua* (corrected to *Cerceris eugenia* by de Beaumont, 1951b:180, and to *Cerceris hathor* by Pulawski, 1983:242): Honoré, 1941:150 (species different from *alboatra*), 1942:69 (Egypt).

*Cerceris hathor* Pulawski, 1983:242, ♀, ♂. Holotype: ♀, Egypt: Giza near Cairo (originally W. J. Pulawski coll., now CAS). – K. Schmidt, 2000:92 (in revision of Western Palearctic *Cerceris*).

### 356. *hatuey* Alayo Dalmau

*Cerceris hatuey* Alayo Dalmau, 1968a:14, ♀, ♂. Syntypes: Cuba: Ciudadamar (IZAC). – Alayo Dalmau, 1973:191 (in catalog of Cuban Hymenoptera), 1976:16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:582 (listed); G. Ferguson, 1984c:483 (listed); Reyes and Hernández, 1995:3 (holotype in Inst. Ecol. Sist., La Havana, Cuba); Amarante, 2002:59 (in catalog of Neotropical Crabronidae, as *hautey*); Portuendo and Fernández, 2004:134 (Cuba: Sierra Maestra); Amarante, 2005a:13 (correction to his 2002 catalog); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae).

### 357. *hausa* Arnold

*Cerceris hausa* Arnold, 1931:174, ♀. Holotype: ♀, Nigeria: Azare (BMNH). – Empey, 1969a:309 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:173 (listed, unnecessary designation of lectotype, type is from Azare); Guichard, 1993a:156 (Arabian Peninsula); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia).

### 358. *herbsti* Empey

*Cerceris herbsti* Empey, 1971b:254, ♀. Holotype: ♀, Namibia: Windhoek (originally H. Empey coll., now TMP). – R. Bohart and Menke, 1976:582 (listed); Empey, 1983:173 (listed).

### 359. *hermani* Fritz

*Cerceris hermani* Fritz, 1990:158, ♀. Holotype: ♀, Brazil: Goias: Jatai (Oregon State Univ.). – Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

### 360. *hexadonta* Strand

*Cerceris hexadonta* Strand, 1913b:158, ♀. Holotype: ♀, Taiwan: Anping (DEI). – Giner Mari, 1943d:219 (redescription); Tsuneki, 1970c:12 (Taiwan); Oehlke and Wudowenz, 1974:423 (holotype in DEI); R. Bohart and Menke, 1976:582 (listed); Wu and Zhou, 1996a:175 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### 361. *hidalgo* Scullen

*Cerceris calochorti hidalgo* Scullen, 1972:75, ♀, ♂. Holotype: ♀, Mexico: Durango: 14 mi NE Durango (USNM). – R. Bohart and Menke, 1976:578 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae). – **As *Cerceris hidalgo***: G. Ferguson, 1984c:484 (full species status); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

### 362. *hilaris* F. Smith

*Cerceris hilaris* F. Smith, 1856:452, ♀. Lectotype: ♀, northern India: no specific locality (BMNH), designated by Empey, 1984:77 (Article 74.6). – Schletterer, 1887:493 (listed); Cameron, 1890b:249 (listed), 267 (redescription); Bingham, 1897:311 (redescription); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Bingham, 1908:358 (India: Mussoorie); R. Turner, 1912e:490 (revision); Ramakrishna Aiyar, 1916:557 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:582 (listed); Empey, 1984:77 (listed).

*Cerceris himalayensis* Bingham, 1898b:120, ♂. Lectotype: ♂, India: Himachal Pradesh: Simla (BMNH), designated by Empey, 1984:77 (Article 74.6). Synonymized with *Cerceris hilaris* by R. Turner, 1912e:490.

*Cerceris simlaensis* Cameron, 1905d:83, ♂. Lectotype: ♂, India: Himachal Pradesh: Simla (BMNH), designated by Empey, 1984:77. Synonymized with *Cerceris hilaris* by R. Turner, 1912e:490.

**363. hilbrandi van der Vecht**

*Cerceris hilbrandi* van der Vecht, 1964:364, ♀, ♂. Holotype: ♀, Indonesia: Java: Mount Gedeh: Tjibodas (RMNH). – R. Bohart and Menke, 1976:582 (listed).

**364. hildebrandti de Saussure**

*Cerceris hildebrandti* de Saussure, 1891:261, ♀ (as *Hildebrandti*, incorrect original capitalization). Holotype or syntypes: Madagascar: ♀, no specific locality (missing: Empey, 1983:173). – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Empey, 1969a:301 (listed); R. Bohart and Menke, 1976:582 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

**365. histerisnica (Spinola)**

*Nectanebus fischeri* Spinola, 1839:491, ♀ (as *Fischeri*, incorrect original capitalization), secondary homonym of *Cerceris fischeri* Spinola, 1839:493. Syntypes: ♀, Egypt: no specific locality (Torino). – Dahlbom, 1844:194 (in revision of Sphecidae and Pompilidae), 1845:497 (in key); Dalla Torre, 1897:482 (in catalog of world Hymenoptera); Morice, 1900b:166 (Egypt: Cairo area); W.A. Schulz, 1904a:10 (as *fischeri fischeri*, comparison with *fischeri algeriensis*); von Schulthess, 1926b:212 (Tunisia); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Tobruk); Guiglia, 1934b:298 (Libya: bibliography and summary of locality records); Mochi, 1939a:114 (redescription); Guiglia, 1940a:281 (Libya: Wadi el-Had), 1942b:231 (Libya); de Beaumont and Bytinski-Salz, 1959:133 (Israel); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino). – **As *Cerceris fischeri***: R. Bohart and Menke, 1976:582 (new combination, listed).

*Nectanebus histerisnicus* Spinola, 1839:491, ♂. Syntypes: ♂, Egypt: no specific locality (Turin). Synonymized with *Nectanebus fischeri* by Spinola, 1840:1, and Mochi, 1939a:114. – Dahlbom, 1844:194 (in revision of Sphecidae and Pompilidae), 1845:497 (in key). – **As *Cerceris histerisnica***: R. Bohart and Menke, 1976:582 (new combination, listed); Roche and Zalut, 1994:117 (Egypt: Sinai Peninsula); K. Schmidt, 2000:126 (in revision of Western Palearctic *Cerceris*).

*Nectanebus histrionicus* Spinola, 1840:1, unjustified emendation of *Nectanebus histerisnicus* Spinola, 1839. – de Beaumont, 1952e:50 (study of syntypes); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, as *istrionicus*).

*Nectanebus fischeri algeriensis* W. Schulz, 1904a:10, ♀. Syntypes: ♀, Algeria: Biskra (coll. W. A. Schulz ?). Synonymized with *Nectanebus fischeri* by von Schulthess, 1926b:211. – W. Schulz, 1905b:38 (Algeria: Biskra). – **As *Cerceris histerisnica algeriensis***: R. Bohart and Menke, 1976:582 (new combination, listed).

**366. histrionica Klug**

*Cerceris histrionica* Klug, 1845:[28], pl. 47 fig. 9, ♂ (nec ♀). Syntypes: ♂, Egypt: Saqqara and Fayum Province, and Ambukohl on Nile W Korti (ZMHU). – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Walker, 1871:27 (Sinai Peninsula: Wadi Feiran, Wadi Gennah, Mount Sinai); Schletterer, 1887:472 (original description copied), 494 (listed); Ed. André, 1889:314 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Innes Bey, 1912:113 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected in Sinai: Wadi Feiran); Shestakov in Nadig, 1933:98 (Morocco: Marrakech); Giner Mari, 1941b:164 (in revision of North African *Cerceris*); de Beaumont, 1951b:177 (interpretation of species), 1951f:329 (North Africa; discussion), 1953g:121 (Morocco), 1956a:186 (Libya), 1958b:59 (Algeria: Tassili des Ajjer); de Beaumont and Bytinski-Salz, 1959:122 (Israel); R. Bohart and Menke, 1976:582 (listed); Roche and Zalut, 1994:117 (Egypt: Sinai Peninsula); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945); K. Schmidt, 2000:161 (in revision of Western Palearctic *Cerceris*).

*Cerceris syrkuti* Dahlbom, 1845:502, ♀ (as *Syrkuti*, incorrect original capitalization). Holotype: ♀, Egypt or Sudan: Nubia: Syrkut (NRS). Synonymized with *Cerceris histrionica* by de Beaumont, 1951f:329. – de Beaumont, 1950c:325 (study of type).

*Cerceris eatoni* Morice, 1911:85, ♀, ♂. Syntypes: Algeria: Biskra (BMNH). Synonymized with *Cerceris histrionica* by de Beaumont, 1951b:177 and 1951f:329. – Shestakov, 1923:101, 105 (in key to subgenus *Apiraptrix*), 115 (citation, distribution); de Beaumont, 1950f:397 (Algeria); Grandi, 1959b:287 (Algeria: Biskra, Goriana in Hodna district).

*Cerceris fluxa* Kohl, 1916:112, ♀. Holotype: ♀, Algeria: no specific locality (Kraków). Synonymized with *Cerceris histrionica* by de Beaumont, 1951b:177. – Giner Marí, 1941b:173 (in revision of North African *Cerceris*), 1945b:359 (Morocco: Muley Ali), 367 (redescription).

*Cerceris honorei* Mochi, 1939:186, ♀ (as *Honorei*, incorrect original capitalization). Holotype: ♀, Egypt: Gebel Asfar near Cairo (? USNM). Synonymized with *Cerceris histrionica* by de Beaumont, 1951b:177, 179. – Honoré, 1941a:152 (description of ♂); Giner Marí, 1941b:167 (in revision of North African *Cerceris*), 1945e:224 (Western Sahara, description of ♂).

*Cerceris fluxa* ssp. *saharica* Giner Marí, 1945e:222, ♀, ♂. Holotype (sex not indicated): Morocco: Tuisguirrentz (MNCN). Synonymized with *Cerceris histrionica* by de Beaumont, 1951f:329.

### 367. *hohlbecki* Shestakov

*Cerceris hohlbecki* Shestakov, 1914a:94, ♀. Holotype or syntypes: ♀, Turkmenistan: Farab (ZIN). – Shestakov, 1915:14 (Turkmenistan: Farab; description of ♂), 1916b:234 (Armenia; determination tentative), 1918a:135 (Kazakhstan and Turkmenistan); Myartseva, 1972a:92 (Turkmenistan); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1978b:62, 65 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:143 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Schmidt, 2000:66 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan).

*Cerceris fragosa* Kohl, 1916:116, ♂. Holotype: ♂, former Russian Turkestan: no specific locality (Kraków). Synonymized with *Cerceris hohlbecki* by Shestakov, 1926:240.

### 368. *holconota* Cameron

*Cerceris holconota* Cameron, 1905m:215, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:173 (Article 74.6). – Brauns, 1926:312 (revision, description of ♂); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:143 and 148 (in key); Empey, 1969a:310 (listed), 1971b:271 (redescription), 1974:108 (revue of subspecies and type material); R. Bohart and Menke, 1976:582 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 87 (prey: Hymenoptera), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils; prey: Hymenoptera; (as *holconota holconota*); Empey, 1983:173 (listed, type examined); S. Gess, 1996:280, 282 (floral records, as *holconota holconota*).

#### *ssp. labiosa* Empey

*Cerceris holconota labiosa* Empey, 1971b:273, ♀. Holotype: ♀: South Africa: Northern Province: Ellisras (originally H. Empey coll., now TMP). – Empey, 1974:108 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:173 (listed, type examined).

As *Cerceris nenitroidea* Bischoff, 1913:118 (♀ only), corrected to *Cerceris holconota labiosa* by Empey, 1983:173.

#### *ssp. oculata* Empey

*Cerceris holconota oculata* Empey, 1971b:274, ♀. Holotype: ♀, South Africa: Free State: Ficksburg (originally H. Empey coll., now TMP). – Empey, 1974:108 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed, type examined).

### 369. *hortivaga* Kohl

*Cerceris hortivaga* Kohl, 1880:223, ♀, ♂. Syntypes: Austria: Südtirol: Levico, now Italy: Alto Adige: Levico (NHMW). – Kohl, 1880:153 (Austria: Tirol, and Italy: Trentino–Alto Adige), 1883e:664 (Switzerland); Schlet-

terer, 1887:380 (in revision of world *Cerceris*), 494 (listed); Ed. André, 1889:264 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:901 (faunal records); Radoszkowski, 1890a:231 (Korea: Seoul); Steck, 1890:168, 170 (in key to *Cerceris* of Switzerland); Ed. André, 1891:27\* (bibliographic references); Kohl, 1893a:34 (Austria: Niederösterreich); Sickmann, 1894:204 (China: Hopei Province: Tientsin); Borries, 1897:53 (reference to Kohl, 1880:226); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia and Romania); Chyzer, 1902:33 (Hungary); de Cobelli, 1903:110 (Italy: Province of Trentino: Levico); Adlerz, 1904:138 (known prey: *Hylaesus*); Schmiedeknecht, 1907:237, 238, 242 (in key to Hymenoptera of Central Europe); Graeffe, 1911:48 (Italy: Trieste area); Shestakov, 1923:104, 105 (in key to subgenus *Apiraptrix*), 113 (citation, distribution); Lauterborn, 1925:355 (Germany: Baden-Württemberg: Kaiserstuhl); Strohm, 1925:212 (Germany: Baden-Württemberg: Ihringen); Noskiewicz, 1930:94 (Poland: Podole Region: Nizniów, now Ukraine); Schmiedeknecht, 1930:698, 699, 702 (in keys to Hymenoptera of North and Central Europe); Zavadil, 1934:187 (Slovakia); Zavadil, Šustera, and Bat'a, 1937:207 (in catalog of Sphecidae of Czechoslovakia); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Ribaut, 1946:271 (first record from France: Haute Garonne: Saint-Béat and Lacourtenourt); Balthasar, 1948:143 (Slovakia: Kovačov); Šnoflak in Zavadil and Šnoflak, 1948:86, 94 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1952a:44 (first record from France: Haute-Garonne, Haute-Savoie, Lot; redescription); Móczár, 1953:310 (Hungary); Nouvel and Ribaut, 1953:177 (France: Haute-Garonne: Saint-Béat); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:80 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:32, 40 (in key to Hungarian Sphecidae); Noskiewicz and Puławski, 1960:74, 78 (in key to Polish Sphecidae, not yet found in Poland); Tsuneki, 1961c:9, 15, 24, 25 (in key), 36 (Korea), 46 (China: Peking); Lehrer and Scutaru, 1963:284 (Romania: Moldova: Bahna in Bacău District, Baia in Suceava District, Mircești in Iași District); Tsuneki and Shimoyama, 1963:49 (Japan: Towada Prefecture); Babiý, 1964:117 (Austria: Land Salzburg); de Beaumont, 1964c:39 (in Sphecid Fauna of Switzerland); Tano, 1964:38 (Japan: Kyushu: Yakushima Island); Handea, 1965:19 (Japan: Fukui Prefecture); Tsuneki, 1965d:5 (prey record summary: Hymenoptera), 7 (nesting habits); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Tulcea); Gauss, 1967:551 (Germany: Baden-Württemberg: Kaiserstuhl); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Tsuneki, 1967g:44 (W Japan: Mount Hyonosen); Haneda, 1968a:46 (Japan); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Nishino, 1968:25 (Japan); Tano, 1968:34 (Japan); Tsuneki, 1968f:3 (Japan), 5 (China); Benedek, 1969a:83 (Hungary; marshy meadow); Haneda, 1969:70 (Japan: Yamanashi Prefecture); T. Iida, 1969b:284 (description of mature larva); Itami, 1969:47 (Japan: Niigata Prefecture); Tsuneki, 1969e:27 (Japan), 1970b:9 (central Japan); Scobiola-Palade, 1971:202 (in review of *Cerceris* of Romania); Tano, 1971:82 (Japan: Shikoku: Mt. Tsurugi); Tsuneki, 1971m:16 (China: Peking); Yamada, 1971:35 (Japan: Aichi Prefecture); Balthasar, 1972:397 (in Sphecid Fauna of Czechoslovakia); Niedl and Deneš, 1972:153 (Czech Republic: Třeboň area); Scobiola-Palade, 1972b:251 (Romania); Tsuneki, 1972f:53 (*Hedychrum gerstaeckeri japonicum* Cameron is possibly nest parasite); Nambu, 1973d:152 (Japan: Saitama Prefecture); Suda, 1973:123 (Japan: Yamanashi Prefecture); Tsuneki, 1974a:371 (Korea); Nambu, 1975b:72 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:582 (listed); Tsuneki, 1976d:294 (China: Heilungkiang; taxonomy); Kazenas, 1978b:50, 54 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Benedek, 1979:227 (Hungary: Bakony Hills); Kazenas, 1979d:70 (Russia: Primorskiy Krai; discussion), 83, 87 (in key); Schmidt, 1979b:299 (Germany); Dollfuss and Ressler, 1981:317, 324 (Austria: Niederösterreich: Scheibbs District); Tsuneki, 1982b:18 (known from Korea), 1982g:64 (known from the Ryukyu archipelago: Yakushima Island); Dollfuss, 1983b:24 (in catalog of Sphecidae of Austria); Gayubo, 1983e:238 (Spain: Salamanca Province); Józán, 1983:98 (Hungary), 1985a:181 (Hungary), 1985b:62 (Hungary S Lake Balaton), 72 (map of distribution in Hungary), 82 (floral records), 85 (ecological and zoogeographic characteristics); Brechtel, 1986:58 (Germany: Südpfalz: Lauterwiesen, Stixwörth); Dollfuss, 1988:19 (Austria: Bisamberg near Vienna), 1989:8 (type material in NHMW); Pádr in Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Schwammberger and Priesner, 1990:554 (Austria: Kärnten); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss,

- 1991:221 (in key to Sphecidae of North and Central Europe); Gusenleitner, 1991:648 (Austria: Schaufelberg N Grieselstein); Tsuneki, 1991:201 (Korea); Gusenleitner, 1992:689 (Austria: Burgenland); Józán, 1992c:290 (Hungary: Zselic Hills); Nemkov, 1992b:250 (Russia: Far East: Khingan Nature Reserve); Józán, 1993:415 (Hungary: Bükk National Park); Hamon, Tussac, and Richet, 1994:29 (distribution in France); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:471, 476 (in key to Sphecidae of Russian Far East); Schmid-Egger, Risch, and Niehuis, 1995:167 (summary of records from Germany: Rheinland-Pfalz Province); Sk. Yamane and Tano, 1995:11 (Japan: Ryukyu Islands); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Miyatake, 1996:103 (specimens in Hiroshi Aoki collection); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: probably endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:343 (in Sphecid Fauna of Western Europe); Schmid and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Elligsen, 1998:70 (Ukraine: Sambir area); Takahashi and Shiraishi, 1998:4 (Japan: Ehime Prefecture); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Takahashi and Shiraishi, 1999:12 (Japan: Ehime Prefecture); Yamane, Ikudome, and Terayama, 1999:545 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Blösch, 2000:419 (in Sphecid Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Melo, 2000:98 (nest usurpation and temporary association with nest owner); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:162 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:56 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:137 (distribution in Germany by provinces); Salzmänn-Wandeler and Rezbanyai-Reser, 2001:158 (Switzerland: Tessin Canton: Meride area); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Drewes, 2003:134 (Spain: Tarragona); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima); Tano, Kurokawa, Murota, and Nozaka, 2003:33 (Japan: Nagasaki Prefecture: Tsushima); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:38 (Japan: Gifu Prefecture); Suda, 2004:47 (Japan: Yamanashi Prefecture, as *hortivaga hortivaga*); Haneda, Inoue, Nozaka, Tano, Kurokawa, and H. and T. Murota, 2005:67 (Japan: Fukui Prefecture: Mount Monju); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:55 (Japan: Gifu Prefecture); Kinota, Haneda, and Tano, 2005:31 (Japan: Hokkaido); Kofler, 2005:185 (Austria: Tirol: Lienz District: Tristacher Au in Tristach Common; Kärnten: Irschen); Negoro, Haneda, and Tano, 2005:49 (Japan: Toyama Prefecture); Pagliano and Negrisolò, 2005:336 (in Sphecid Fauna of Italy); Terayama and Tano, 2005:3, 5 (in key to Japanese *Cerceris*); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006:30 (Japan: Toyama Prefecture); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nambu, 2006:247 (Japan: Tokyo: Imperial Palace garden); Nemkov, 2006b:169 (Russia: Primorskiy Krai: Kedrovaya Pad' Nature Reserve); Jacobs, 2007:182, 185 (in key to Crabronidae of Germany); Nemkov, 2007b:75 (Russia: Kuril Islands: Kunashir Island); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:148 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:238 (Russia: Primorskiy Krai: Lazovskiy Nature Reserve); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: France: first records from Ariège: La Bastide de Serou, Hérault: Lodève, Jura: Besançon, Rans, and Haut-Rhin: Winzenheim); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: rare).
- As *Cerceris harmandi* (all corrections to *Cerceris hortivaga* by Tsuneki, 1961c:36): Sato, 1927:96, 98 (Japan); Yano, 1926:97 (Japan), 1932:278 (Japan); Yasumatsu and Okabe, 1936:499 (redescription); Yasumatsu, 1937c:68 (Japan: Tsushima Island); Yano, 1950:1468 (Japan).
- As *Cerceris unifasciata*: Matsumura, 1911:115 (Japan), corrected to *Cerceris hortivaga* by Tsuneki, 1961c:36.

**370. horus Arnold**

*Cerceris horus* Arnold, 1931:177, ♀, ♂ (as *Horus*, incorrect original capitalization, ♂ = *Cerceris albifrons*). Lectotype: Namibia: Okahandja (BMNH), designated by Empey, 1983:174. – Empey, 1969a:310 (listed); R. Bohart and Menke, 1976:5582 (listed, as *hora*); Empey, 1983:174 (listed).

**371. howardevansi Genaro**

*Cerceris howardevansi* Genaro, 2004b:761, ♀, ♂. Holotype: ♀, Dominican Republic: Monte Cristi: Paroli (FSCA).

**372. huachuca Banks**

*Cerceris huachuca* Banks, 1947:29, ♂. Holotype: ♂, USA: Arizona: Patagonia (MCZ). – Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:226 (study of holotype), 1984c:484 (listed as valid species); Hook, 1987:108 (nesting habits). – **As synonym of *Cerceris acanthophila***: Scullen, 1960:75 and subsequent authors prior to G. Ferguson, 1984, including R. Bohart and Menke, 1976:576.

**373. hurdi Scullen**

*Cerceris hurdi* Scullen, 1972:48, ♀, ♂. Holotype: ♀, Mexico: Nayarit: Ahuacatlán (CAS). – R. Bohart and Menke, 1976:582 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:484 (listed); Maes, 1989:95 (in catalog of Nicaraguan Sphecidae); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**374. ibericella Leclercq**

*Cerceris iberica* Schletterer, 1889a:879, ♀, junior primary homonym of *Cerceris arenaria* var. *iberica* Schletterer, 1887. Holotype: ♀, Spain: Madrid (Madrid). – Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); Mercet, 1914:445 (listed from Spain); Shestakov, 1923:104 (in key to subgenus *Apiraptrix*), 114 (citation, distribution); Berland, 1925d:56 (in Sphecid Fauna of France), 1926a:52 (France: Montpellier, Avignon); Giner Mari, 1934:131 (Spain); Bernard, 1935:62 (France: Var: Fréjus area); Giner Mari, 1941a:27 (in revision of Spanish *Cerceris*), 1943a:95 (in Sphecid Fauna of Spain); de Andrade, 1949:10 (Portugal: Lisboa, Vale de Gaio); de Beaumont, 1951b:178 (study of type), 1951f:316 (Morocco; geographic variation), 1952a:46 (France; redescription), 1953g:121 (Morocco: Fez); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Ceballos, 1956:368 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Diniz, 1959:28 (Portugal: Lisboa, Vale de Gaio); Suárez, 1959:54 (Spain: Almería Province); de Beaumont, 1962b:20 (Spain); Ceballos, 1964:88, 89 (in supplement to catalog of Spanish Sphecidae); Diniz, 1966:7 (Portugal: Aljustrel, Caparica, Coimbra, Évora, Lisboa, Portimão); Balthasar, 1972:399 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:582 (listed); Gayubo, 1982e:110 (Spain: Cádiz Province), 1983e:238 (Spain: Salamanca Province); Gayubo, 1986a:67 (Spain: Ciudad Real Province); Gayubo and Sanza, 1986:87 (Spain: Burgos); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Asís and Jiménez, 1988:276 (Spain: Castellón Province); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Granada Province); K. Schmidt, 2000:163 (in revision of Western Palearctic *Cerceris*).

As *Cerceris subimpressa*: Shestakov in Nadig, 1933:98 (Morocco: El Hajeb), corrected to *Cerceris iberica* by de Beaumont, 1951f:316; Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges), present correction.

*Cerceris ibericella* Leclercq, 1979:34. Substitute name for *Cerceris iberica* Schletterer, 1889. – Gayubo, 1984c:383 (Portugal: El Algarve Province); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:344 (in Sphecid Fauna of Western Europe).



**375. *icta* Shestakov**

*Cerceris icta* Shestakov, 1918a:135, ♀. Holotype or syntypes: ♀, Uzbekistan: Kyzil Kum Desert: Burulbai (ZIN). – Shestakov, 1923:102, 104 (in key to subgenus *Apiraptrix*, citation, distribution); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1984a:44 (redescription); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**376. *iliensis* Kazenas**

*Cerceris iliensis* Kazenas, 1972b:132, ♀, ♂. Holotype: ♀, Kazakhstan: Alma-Ata Oblast': Ili (V.L. Kazenas coll.). – R. Bohart and Menke, 1976:582 (listed); Kazenas, 1978b:62, 64 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:113 (redescription); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ili River valley: near Bakanas, near Kapchagay, 35-70 km NW Kapchagay, Lepsy, near Masak).

**377. *illustris* Arnold**

*Cerceris illustris* Arnold, 1931:158, ♀, ♂. Lectotype: Zimbabwe: Penkrige (SAM), designated by Empey, 1983:174. – Empey, 1969a:310 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed); Hancock, Chahwanda, and Mhlanga, 1995:37 (paralectotypes in Bulawayo Museum).

**378. *imitator* F. Smith**

*Cerceris imitator* F. Smith, 1856:458, ♂. Holotype or syntypes: ♂, Brazil: Pará: Santarém (BMNH). – Schletterer, 1887:494 (listed); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Poulton, 1918:xxxvii (Brazil, prey); R. Bohart and Menke, 1976:582 (listed); Fritz, 1979:4 (synonymy, redescription); Amarante, 2002:59 (in catalog of Neotropical Crabronidae).

*Cerceris imitatrix* W. Schulz, 1906:195. Unjustified emendation of *Cerceris imitator* F. Smith.

*Cerceris guarani* Strand, 1910a:134, ♀. Holotype: ♀, Paraguay: Asunción (ZMHU). Synonymized with *Cerceris binodis* by Fritz, 1970:159, and with *Cerceris imitator* by Fritz, 1979:4. – Not listed by R. Bohart and Menke, 1976; Amarante, 2005a:12 (correction to his 2002 catalog).

*Cerceris transversalis* Brèthes, 1910a:274, ♂. Holotype: ♂, Argentina: no specific locality (MACN). Synonymized with *Cerceris imitator* by Fritz, 1979:4. – Fritz, 1968b:168 (study of holotype); R. Bohart and Menke, 1976:588 (listed); Genise, 1990:26 (type material in MACN).

**379. *impercepta* de Beaumont**

*Cerceris impercepta* de Beaumont, 1950c:325, ♀. Holotype: ♀, Hungary: no specific locality (NHMW). – de Beaumont, 1957d:332 (diagnostic characters); R. Bohart and Menke, 1976:582 (listed); Pulawski, 1978:194 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:127 (redescription); Dollfuss, 1987:24 (first record from Austria: Niederösterreich: Hundsheim); Dollfuss, 1989:8 (holotype in NHMW); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:345 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:67 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114 (in key to *Cerceris* of Kazakhstan and Central Asia); Mazzucco, 2001:193, 203 (Austria: Niederösterreich: Steinfeld); Gusenleitner, 2002:1125 (Austria: Niederösterreich: Hadersdorf am Kamp); Kazenas, 2002a:146 (geographic distribution, collecting localities in Kazakhstan).

As *Cerceris bucculata*: Schletterer, 1887:438 (in revision of world *Cerceris*), corrected to *Cerceris impercepta* by de Beaumont, 1950c:325, 1951b:177.

**380. *imperialis* de Saussure**

*Cerceris imperialis* de Saussure, 1867:98, ♀, ♂. Lectotype: ♀, Mexico: Sierra Madre Oriental: no specific locality (MHNG), designated by Scullen, 1961:47. – Schletterer, 1887:494 (listed); Cameron, 1890a:122 (Mexico: Guer-

rero: Acapulco); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:84 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:582 (listed); G. Ferguson, 1984c:484 (listed); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris exsecta* F. Smith, 1873c:410, ♀, ♂. Lectotype: ♀, Mexico: no specific locality (BMNH), designated by G. Ferguson, 1984b:434. Synonymized with *Cerceris imperialis* by Scullen, 1961:47. – Schletterer, 1887:491 (listed); Cameron, 1890a:123 (listed); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Kohl, 1916:111 (specimens in O. Radoszkowski collection).

*Cerceris pilosa* Cameron, 1890a:128, ♂. Holotype or syntypes: ♂, Guatemala: San Gerónimo (BMNH). Synonymized with *Cerceris imperialis* by Scullen, 1961:47. – Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae).

### 381. *inara* de Beaumont

*Cerceris inara* de Beaumont, 1967a:289, ♀, ♂. Holotype: ♀, Turkey: Mersin: Mut (M. Schwarz coll.). – R. Bohart and Menke, 1976:582 (listed); K. Schmidt, 2000:127 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:143 (in catalog of Crabronidae of Turkey).

### 382. *inconspicua* Arnold

*Cerceris inconspicua* Arnold, 1931:166, ♀. Holotype: ♀, Malawi: Chiromo (BMNH). – Arnold, 1942:9 (Zimbabwe, description of ♂); Empey, 1969a:310 (listed, Transvaal); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed, type examined).

### 383. *indica* (Thunberg)

*Philanthus indicus* Thunberg, 1815a:135, sex not indicated. Holotype or syntypes: India: no specific locality (Uppsala). – Thunberg, 1815a:128 (diagnostic characters), 1815b:288 (diagnostic characters), 293 ("habitat in India Orientali"); Dalla Torre, 1897:487 (in catalog of world Hymenoptera). – As *Cerceris indica*: W. Schulz, 1912:70 (new combination); R. Bohart and Menke, 1976:582 (listed).

### 384. *inexorabilis* R. Turner

*Cerceris inexorabilis* R. Turner, 1912e:500, ♀. Holotype or syntypes: ♀, Pakistan: Karachi (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:582 (listed).

### 385. *inexpectata* R. Turner

*Cerceris inexpectata* R. Turner, 1908:469, ♀. Holotype or syntypes: ♀, Australia: Queensland: Mackay (BMNH). – R. Turner, 1910b:421 (in key), 1912d:674 (in revision of Australian *Cerceris*); Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:582 (listed); Evans, 1982a:324 (revision); Cardale, 1985:299 (in catalog of Australian Sphecidae).

### 386. *infumata* Maidl

*Cerceris infumata* Maidl, 1926:233, ♀. Holotype: ♀, Indonesia: Sulawesi: Manado (NHMW). – R. Bohart and Menke, 1976:582 (listed).

### 387. *iniqua* Kohl

*Cerceris iniqua* Kohl, 1894:288, ♀. Lectotype: ♀, Sierra Leone: no specific locality (Inst. Roy. Sci. Nat. Belgique), designated by Empey, 1983:174 (Article 74.6). – Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:138 (in key), 1951:110 (Ethiopia: Lekempti); Lelclercq, 1962a:397 (Tanzania: Uluguru Mts., also Rwanda, Zaire, Zambia; prey: *Amphismenus convexus* Hustache,

a curculionid; comparison with *Cerceris purpurea*); Empey, 1969a:310 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed, type examined).

**ssp. arida Arnold**

*Cerceris arida* Arnold, 1931:163, ♀. Holotype: ♀, Nigeria: Zungeru (BMNH). – Arnold, 1935b:6 and 9 (Mauritania: Nema). – **As *Cerceris iniqua arida***: Empey, 1969a:310 (new status, listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed, type examined).

**ssp. cratocephala Cameron**

*Cerceris cratocephala* Cameron, 1908a:275, ♀. Holotype: ♀, Kenya: Mt. Kilimanjaro: Kibonoto (NRS). – Brauns, 1926:333 (revision); Arnold, 1931:149 (*Cerceris cratocephala* is a color variety of *iniqua*); Scott in Arnold, 1933a:369 (Ethiopia: Harar District and Higo Samula). – **As *Cerceris iniqua race cratocephala***: Arnold, 1930:12 (new status, in checklist of Afrotropical Sphecidae). – **As *Cerceris iniqua cratocephala***: Empey, 1969a:311 (new status, listed), 1974:105 (description of ♂); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:174 (listed). As *Cerceris yalensis* (male only): R. Turner, 1912:744, corrected to *Cerceris cratocephala* by R. Turner, 1918a:91.

**ssp. deceptrix Brauns**

*Cerceris cratocephala* var. *deceptrix* Brauns, 1926:334, ♀. Holotype: ♀, Zimbabwe: Salisbury, now Harare (TMP). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:149 (*Cerceris deceptrix* is a color variety of *iniqua*). – **As *Cerceris iniqua deceptrix***: Empey, 1969a:311 (new status, listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:175 (listed, unnecessary designation of lectotype).

**ssp. libitina Brauns**

*Cerceris cratocephala* forma *libitina* Brauns, 1926:335, ♀. Holotype: ♀, South Africa: Natal: Durban (TMP). – Arnold, 1931:149 (*Cerceris libitina* is a color variety of *iniqua*). – **As *Cerceris iniqua* var. *libitina***: Arnold, 1930:12 (new status, in checklist of Afrotropical Sphecidae). – **As *Cerceris iniqua libitina***: Empey, 1969a:311 (new status, listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:175 (listed, unnecessary designation of lectotype).

**388. insignita Arnold**

*Cerceris insignita* Arnold, 1951:104, ♂. Holotype: ♂, Ethiopia: Moggio (BMNH). – Empey, 1969a:311 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:175 (listed, type examined).

*Cerceris insignita* var. *opulenta* Arnold, 1951:105, ♂, junior primary homonym of *Cerceris opulenta* Morice, 1911, and of *Cerceris opulenta* R. Turner, 1912. Holotype: ♂, Ethiopia: Moggio (BMNH). Synonymized with *Cerceris insignita* by Empey, 1969a:311.

**389. insolita Cresson**

*Cerceris insolita* Cresson, 1865c:129, ♂. Holotype: ♂, USA: Illinois: no specific locality (ANSP). – Packard, 1866:63 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:494 (listed); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); H. Smith, 1908b:370 (in revision of Nebraskan Sphecidae); Banks, 1912:23 (in revision of eastern U.S. *Cerceris*); Cresson, 1916:100 (holotype in ANSP); Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Brimley, 1938:448 (North Carolina: Cruso, Kingsboro, Marion, Overhills, Raleigh); Banks, 1947:15 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Krombein, 1963f:277 (Maryland: Plummers Island near Washington, D.C.), 1964b:119 (chrysomelid prey); Scullen, 1965b:445 (in revision on North American *Cerceris*, as *insolita insolita*); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae); Scullen, 1972:62 (in revision of Mexican and Central American *Cerceris*, as *insolita insolita*); R. Bohart and Menke, 1976:582 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera, nesting sites, prey); G. Ferguson, 1984c:484 (listed); Ahlstrom, 1995:114 (in checklist of insects of North

Carolina); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 73 (first record from Canada: Ontario: Windsor); Buck, Paiero, and Marshall, 2006:45, 47 (in key to eastern Canadian *Cerceris*).

*Cerceris intractibilis* Mickel, 1916:411, ♀. Holotype: ♀, USA: Nebraska: Child's Point (UNL). Synonymized with *Cerceris insolita* by Scullen, 1962:58. – Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL).

*Cerceris insolita albida* Scullen, 1965b:447, ♀, ♂. Holotype: ♀, USA, New Mexico: Las Cruces (USNM). Synonymized with *Cerceris insolita* by G. Ferguson, 1984c:484. – Scullen, 1972:62 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:582 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris insolita atrafemori* Scullen, 1965b:448, ♀. Holotype: ♀, USA: Arizona: Phoenix (USNM). Synonymized with *Cerceris insolita* by G. Ferguson, 1984c:484. – R. Bohart and Menke, 1976:582 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 390. *integra* F. Morawitz

*Cerceris integra* F. Morawitz, 1894:350, ♀. Syntypes: ♀, Turkmenistan: Serax (ZIN). – Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Shestakov, 1914b:408 (Kazakhstan: Barsa Kelmes Island in Aral Lake, Kazalinsk), 411 (description of ♂), 1918a:137 (Transcaspia); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:94 (Turkmenistan: Akibay, Murgab district, Bayram-Ali district, Seraks, Kopet-Dagh, Chuli); Kazenas, 1972b:132 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, and *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 110 (feeding on flowers of *Daucus carota* L., Apiaceae, in Kazakhstan); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1978b:58, 59 (in key to Sphecidae of Kazakhstan and Central Asia), nest and buprestid prey, 1984a:67 (redescription); K. Schmidt, 2000:87 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:146 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan).

As *Cerceris vagans*: Radoszkowski, 1877:61 (Transcaspia), partly, corrected to *Cerceris integra* by Shestakov, 1918a:161.

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Uzbekistan), corrected to *Cerceris integra* by Shestakov, 1918a:161.

### 391. *interrupta* (Panzer)

*Crabro labiatus* Fabricius, 1793:296, sex not indicated, junior primary homonym of *Crabro labiatus* Olivier, 1792. Lectotype: ♀, Germany: no specific locality (ZMK), designated by van der Vecht, 1961a:64. – As *Philanthus labiatus*: Fabricius, 1804:303 (new combination, redescription); Jurine, 1807:202 (listed); Thunberg, 1815b:289 (diagnostic characters), 297 (redescription); Dahlbom, 1845:XXIV (study of specimens in collection Fabricius). – As *Cerceris labiata*: Spinola, 1806:99 (new combination, as synonym of *Cerceris interrupta*); Kirchner, 1867:221 (in catalog of European Hymenoptera).

*Philanthus interruptus* Panzer, 1799:... Synonymized with *Crabro labiatus* Fabricius, 1793 by van der Vecht, 1961a:64. – As *Cerceris interrupta*: Spinola, 1806:99 (new combination; Italy: Liguria); Vander Linden, 1829:115 (bibliographic references, Germany, taxonomic history); Shuckard, 1837a:238 (in revision of British Aculeata); von Siebold, 1839:52 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); Dahlbom, 1842a:16 (in review of Scandinavian aculeates), 1844:210 (in revision of Sphecidae and Pompilidae), 1845:501 (in key); Lepeletier de Saint Fargeau, 1845:7 (in revision of world Hymenoptera);

Eversmann, 1849:405 (Russia: between Ural Mts. and Volga); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden); Kirschbaum, 1853:46 (Germany: Herzogtum Nassau: Mainz-Mombach); F. Smith, 1856:437 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:150 (in revision of fossorial wasps of Nassau Region, Germany); Taschenberg, 1858 (Germany); Schenck, 1860:147 (Germany: Nassau Region); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Funk, 1864:156 (Germany: Bayern: Bamberg, as *interrupta* Linden); Taschenberg, 1866:191 (in revision of Hymenoptera of Germany); A. Costa, 1867c:84 (in revision of Italian Sphecidae); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schenck, 1867a:354 (Germany: Nassau Region); Jaenicke, 1868:9 (Germany: Hessen: Rüsselsheim); Wierzejski, 1868:117 (Ukraine: L'viv); A. Costa, 1869b:100 (in revision of Italian Sphecidae); Radoszkowski, 1870:102 (synonyms listed); Aichinger, 1870:317 (Austria: Tirol); A. Costa, 1872a:16 (in revision of Sphecidae of Kingdom of Naples, Italy); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Dours, 1874:143 (in catalog of Hymenoptera of France); Wierzejski, 1874:260 (Ukraine: L'viv and Podole Region: Kalinowce; determination tentative); Marquet, 1875:204 (France: Haute-Garonne: Toulouse); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Kohl, 1880:166 (Austria: Tirol, and Italy: Trentino–Alto Adige); Marquet, 1881:190 (southern France, as *interrupta* Shuckard); Yaroshevskiy, 1881:123 (Ukraine: Khar'kiv Oblast': Kupyansk); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen; Thüringen Gumperda); Kohl, 1883e:664 (Switzerland); Schletterer, 1887:433 (in revision of world *Cerceris*; *dufouri* incorrectly regarded as synonym of *interrupta*), 494 (listed); Brischke, 1888b:98 (Germany: Preussen Province, now Poland: Pomorze Region); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige); Ed. André, 1889:304 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Schletterer, 1889a:901 (diagnostic character, faunal records); Steck, 1890:169, 170 (in key to *Cerceris* of Switzerland); F. Morawitz, 1891a:217 (Russia: Astrakhan Government); Kohl, 1893a:34 (Austria: Niederösterreich); Krieger, 1894:12 (Germany: Kingdom of Saxony); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria, as *interrupta* Vander Linden); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Hocking, 1901:68 (Great Britain: Surrey county); deCobelli, 1903:110 (Italy: Province of Trentino: Caldonazzo, Vallunga); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); W. Schulz, 1904b:93 (Greece: Corfu Island); Schmiedeknecht, 1907:239, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Šusterka, 1909:35 (Czech Republic: vicinity of Praha); Dittrich, 1911b:25 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:48 (Italy: Trieste area); Birula, 1912:545 (Ukraine: Zhytomyr Oblast': Radomyshl'); nec Matsumura, 1912:168 (= *Cerceris japonica*); Schirmer, 1912:168 (Germany: Berlin area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Torka, 1913:35 (Germany: Provinz Posen, now Poland: Poznań Region); Mercet, 1914:445 (listed from Spain), 450 (in revision of Spanish Philanthinae); Shestakov, 1916:234 (Russia: Stavropol' area), 1917c:49 (Ukraine: Crimea: Kerch); A. Waagner, 1920:39 (Germany: Lower Elbe region, not found but can be expected); Dubois, 1921c:210, 211 (in key to Belgian Sphecidae); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:68 (Croatia); Shestakov, 1922:82 (Russia: Stavropol' area); R. Perkins, 1924a:229 (Great Britain: Devon); Berland, 1925d:60 (in Sphecid Fauna of France); Coulon, 1925:116 (France: Elbeuf, Forêt de la Londe); Lauterborn, 1925:355 (Germany: Baden-Württemberg: Kaiserstuhl); Strohm, 1925:212 (Germany: Baden-Württemberg: Wasenweiler in Kaiserstuhl); Chevalier, 1926c:70 and 1927:103 (France: Chatou); Shestakov, 1927a:7 (Russia: Kursk Oblast'), 9 (Ukraine: Lubni area in Poltava Oblast'), 10 (Poltava Oblast'), 11 (Ukraine: Odessa Oblast'), 17 (Russia: Orenburg Oblast'), 19 (Stalingrad Oblast', now Volgograd), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Bouwman, 1928a:361 (in revision of Sphecidae of Netherlands); Vorontsovskiy, 1928:43 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:700, 704 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:64 (Russia: Orenburg Oblast'); Bischoff, 1931:9 (Spain); Spooner, 1931:15 (Great Britain: Cambridgeshire); Bondroit, 1932:38 (Belgium: recorded from Bruxelles area by Wesmael); Grandi, 1934:130 (Italy: Lazio: Acilia); Bernard, 1935:63 (France: Var:

Fréjus area); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Drogoszewski, 1936:130 (Poland: Łowicz); Dulac, 1937:9 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Goebel, 1937:47 (Poland: Poznań District: Poznań-Dębina, Strzeszyn, Strzeszynek); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Baťa, 1937:209 (in catalog of Sphecidae of Czechoslovakia); Molitor, 1938:439 (color recognition); A. Waagner, 1938a:123 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Giner Marí, 1941a:79 (in revision of Spanish *Cerceris*); Giner Marí, 1943a:106 (in Sphecid Fauna of Spain); Guiglia, 1944b:14 (Italy); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Šnoflak *in Zavadil and Šnoflak*, 1948:89, 97 (in key to Sphecidae of Czechoslovakia); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km S Poznań); de Beaumont, 1952a:64 (France; redescription); Cleu, 1953:50 (France: Ardèche River basin); Głowacki, 1953:520 (Poland: Podkova Leśna near Warszawa); Heldmann, 1953:112 (Germany: Hessen: Eberstädter Düne near Darmstadt); Nouvel and Ribaut, 1953:177 (France: Haute-Garonne: Saint-Béat); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); de Beaumont, 1954e:87 (Italy); Steiner, 1955:137 (France: Dordogne); Vergne, 1955:4 (France: Auvergne); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:83 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain); Leclercq, 1956g:325 (Greece, as *interrupta interrupta*); Bajári, 1957a:35, 43 (in key to Hungarian Sphecidae); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:11 (in review of Dutch Sphecidae); van der Zanden, 1958b:90 (France: Pyrénées-Orientales: Saillagouse); de Beaumont, 1959a:15 (Italy); Wolf, 1959b:32 (Germany: Nassau); Noskiewicz and Puławski, 1960:76, 79 (in key to Polish Sphecidae); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland), 1965a:21 (Greece); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:287 (Turkey); Gauss, 1967:551 (Germany: Baden-Württemberg); J. Heinrich, 1967:71 (Germany: Bayern: Unterfranken District); Miczulski, 1967:189 (Poland: Ślawin near Lublin); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:41 (Romania); Benedek, 1968:71 (Hungary, floral records); Romanova, 1969:133 (Russia: North Caucasus); Oehlke, 1970:682 (Democratic Germany); Schmidt, 1971b:27 (Germany: Mainz area); Scobiola-Palade, 1971:205 (in review of *Cerceris* of Romania); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 48, 49 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:407 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:128 (Kazakhstan), 1974b:110 (feeding on flowers *Silaum besseri* L., Apiaceae, and *Achillea millefolium* L., Asteraceae, in Kazakhstan); R. Bohart and Menke, 1976:582 (listed); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:63, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:86 (France: Nièvre Department); Puławski, 1978:194, 196 (in key to Sphecidae of European part of former USSR); Benedek, 1979:229 (Hungary: Bakony Hills); Lefebber, 1979:11 (in checklist of Sphecidae of Netherlands), 25 (Netherlands: distribution map); Schmidt, 1979b:301 (Germany); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Pagliano, 1980:126 (Italy: Trentino Alto Adige); Donath, 1982:212 (Germany: Cottbus Bezirk); Skibińska, 1982:123 (Poland: Warszawa area); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Schmidt and Westrich, 1983:125 (Greece); Kazenas, 1984a:145 (redescription); Józán, 1985b:62 (Hungary: Kaposvár: Cser), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg); Józán, 1986:375 (Hungary: Kiskunság National Park); Pagliano, 1987:164 and 166 (Italy, in key); Schmidt and Westrich, 1987:358 (Germany: Mainz area); Dollfuss, 1988:19, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Kowalczyk, 1988a:45 (Poland: Rogów), 1988b:64 (Poland: environs of Łódź); Pagliano, 1988:148 (Italy; revision); Jacobs, 1989:28 (Germany: Mecklenburg-Vorpommern); Pádr *in Šedivy*, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960), 217 (new records from Democratic Germany); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pagliano, 1990:97 (in catalog of Italian Sphecidae); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and

Osella, 1991:421 (Italy); Kowalczyk, 1991a:99, 101 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Józan, 1992c:290 (Hungary: Zselic Hills); K. Weber, 1992:86 (Germany: Bayern: Bamberg District, as *interruptus*); Wiśniowski, 1993a:98 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast'); Dollfuss, 1994:101 (endangered in Austria); Gayubo and Borsato, 1994:222 (Italy: Piemonte); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:30 (Germany: Bayern: Aschaffenburg, Lohr, Obernau; Slovenia: Portorož); Schmid-Egger, Risch, and Niehuis, 1995:167 (summary of records from Germany: Rheinland-Pfalz Province); Flügel, 1996:524 (Germany: Freizeitpark Marienfelde S Berlin); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg), 107 (locality records); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:346 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); Pagliano and Scaramozzino, 1999:160 (Italy: Piemonte: Borgomale); Tüzün, Gülmez, and Bağriaçık, 1999:386 (Turkey: Aegean Region); Blösch, 2000:419 (in Sphecid Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); González, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Jacobs, 2000:6, 16 (Germany: Land Mecklenburg-Vorpommern: extinct); Ljubomirov, 2000:13 (Bulgaria, specimens in N. Nedelkov collection); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:68 (in revision of Western Palearctic *Cerceris*); Cungs and Jakubzik, 2001:122, 123, 124 (first record from Luxemburg); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:137 (distribution in Germany by provinces); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Kazenas, 2002a:147 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Drewes, 2003:134 (Italy: Trentino: Termalzo, Torbole); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Tischendorf and Treiber, 2003:120, 124 (Germany: Hessen: 15 km SW Frankfurt am Main: nesting under high power lines); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: no longer endangered); Hellrigl, 2004a:172 (Italy: Trentino-Alto Adige, as Südtirol: Vinschgau = Val Venosta: St. Martin im Kofel, Tannas); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:52 and 63 (in checklist of Polish Sphecidae); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisoló, 2005:324 (in Sphecid Fauna of Italy); Reder, 2005:948 (Germany: Rheinland-Pfalz: Eisenberg, Guntersblum, Monsheim, Ingelheim, Sporkenheim); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Bleidorn and Venne, 2006:65 (Germany: recent extension of geographic distribution to the north); Dathe, 2006:38 (*Crabro labiatus*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, is now *Cerceris interrupta*); Ljubomirov, 2006:538 (Bulgaria and Greece: previous records from Rhodope Mountains summarized, as *interrupta interrupta*); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Jacobs, 2007:184, 185, 187 (in key to Crabronidae of Germany); Kazenas, 2007a:93 (Kazakhstan: Akkala Oblast: Kurgandzhin Nature Reserve and vicinity); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Venne, Bleidorn, and Lauterbach, 2007:300 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka,

2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Ljubomirov and Yildirim, 2008:144 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2008c:11 (Russia: first record from Altay Kray: Malakhovo), 2009b:148 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent record from Luxemburg reported; France: first record from Hautes-Alpes: Chorges); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: rare).

*Cerceris brevis* Lapeletier de Saint Fargeau, 1845:13, ♀. Holotype or syntypes: ♀, France: Paris area (MNHN). Synonymized, France: Paris area (MNHN). Synonymized with *Cerceris interrupta* by Schletterer, 1887:433, synonymy confirmed by de Beaumont, 1950c:322. – F. Smith, 1856:439 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); Dours, 1874:144 (in catalog of Hymenoptera of France); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); de Beaumont, 1950c:322 (study of holotype).

### ***ssp. peninsularis* Mercet**

*Cerceris peninsularis* Mercet, 1903:103, ♂. Syntypes: ♂, Spain: Madrid Province: Los Molinos (MNCN). – Dusmet y Alonso, 1906:7 (Spain); Mercet, 1914:449 and 450 (in revision of Spanish Philanthinae); Dusmet y Alonso, 1915:87 (Spain: Aragón); Giner Mari, 1941a:57 (in revision of Spanish *Cerceris*), 1943a:102 (in Sphecidae Fauna of Spain); de Andrade, 1949:11 (Portugal); Ceballos, 1956:370 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Nouvel and Ribaut, 1958:10 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Diniz, 1959:28 (Portugal: Massorra, Quinta do Mato, Valença do Minho); Martin Albaladeo and Izquierdo Moya, 2006:126 (syntype in Museo Nacional de Ciencias Naturales). – **As *Cerceris interrupta peninsularis***: de Beaumont, 1952a:65 (new status, France: Carpentras, Perpignan, Sérignan; new status, redescription), 1962b:21 (Spain: Segovia); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae, as *peninsularis*); Diniz, 1966:7 (Portugal: six localities); Suárez, 1969:29 (Spain: Almería Province); R. Bohart and Menke, 1976:582 (listed); Gayubo, 1983e:238 (Spain: Salamanca Province), 1986d:122 (Spain: Zamora Province; status of *Cerceris peninsularis* reexamined); Gayubo and Sanza, 1986:88 (Spain: Burgos, Segovia); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Salamanca Province); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Tormos, Asís, and Gayubo, 1994:190, 226 (Spain: Albacete Province); Asís, Tormos, and Gayubo, 1996b:292 (nesting habits); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); K. Schmidt, 2000:69 (in revision of Western Palearctic *Cerceris*); González, Gayubo, Asís, Tormos, and García, 2003:62 (Spain: Soria: Chavaler); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recent biological observations reported).

### **392. *interstincta* (Fabricius)**

*Philanthus interstinctus* Fabricius, 1798:269, sex not indicated. Lectotype: ♂, India: no specific locality (ZMK), designated by van der Vecht, 1961a:67. – Fabricius, 1799:40 (in Index to his Supplementum, 1798), 1804:306 (redescription); Thunberg, 1815b:287 (diagnostic characters), 291 (redescription); F. Smith, 1856:452 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:494 (listed); Cameron, 1890b:264 (original description copied); W. Schulz, 1812:90 (study of type); R. Turner, 1912e:813 (may be identical with *Cerceris pallidipicta*). – **As *Cerceris interstincta***: Dahlbom, 1845:XXIV (new combination, study of type material), 499 (in key); Cameron, 1890b:249 (new combination, listed), 264 (unrecognizable species); Dalla Torre, 1897:464 (in catalog of world



Hymenoptera); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:582 (listed); Krombein, 1981:51 (in revision of Sri Lanka Philanthinae, as *Cerceris interstincta interstincta*).

*Cerceris humberiana* de Saussure, 1867:97, ♀. Holotype or syntypes: Sri Lanka: no specific locality (NHMW or MHNG). Synonymized with *Cerceris interstinctus* by W. Schulz, 1912:90. – Schletterer, 1887:494 (listed); Cameron, 1890b:249 (India: Barrackpore), 266 (description of ♂); Bingham, 1896a:446 (references), 1897:303 (redescription); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); R. Turner, 1912e:491 (revision); Tsuneki, 1968f:33 (southern India).

*Cerceris emortalis* de Saussure, 1867:98, ♀. Holotype or syntypes: ♀, Sri Lanka: no specific locality (NHMW). Synonymized with *Cerceris humberiana* by Cameron, 1890b:266. – Schletterer, 1887:490 (listed, as *emortalis*); Cameron, 1890b:248 (listed, as *emortalis*); Bingham, 1896a:446 (references); Dalla Torre, 1897:458 (in catalog of world Hymenoptera).

### **ssp. *viscosa* F. Smith**

*Cerceris viscosa* F. Smith, 1875:40, ♀ (as *viscosus*, incorrect original termination). Holotype or syntypes: ♀, India: no specific locality (OXUM). – Schletterer, 1887:506 (listed); Cameron, 1890b:249 (as synonym of *Cerceris humberiana*); Bingham, 1897:303 (as synonym of *Cerceris humberiana*); Dalla Torre, 1897:481 (in catalog of world Hymenoptera). – As *Cerceris interstincta viscosa*: R. Turner, 1912e:492 (new status, revision); R. Bohart and Menke, 1976:582 (listed).

*Cerceris rufinodis* F. Smith, 1875:41, ♂. Holotype or syntypes: ♂, India: no specific locality (OXUM). Synonymized with *Cerceris humberiana* by Cameron, 1890b:249 and 266. – Schletterer, 1887:501 (listed), 501 (listed).

*Cerceris rufinodula* Dalla Torre, 1897:474 (as *rufinodulus*, incorrect original termination). Unnecessary new name for *Cerceris rufinodis* F. Smith.

### **393. *intricata* F. Smith**

*Cerceris intricata* F. Smith, 1856:459, ♂. Lectotype: ♂, Brazil: Pará: Santarém (BMNH), designated by G. Ferguson, 1984b:436. – Schletterer, 1887:495 (listed); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); Fritz, 1970:159 (synonymy); R. Bohart and Menke, 1976:582 (listed); G. Ferguson, 1984c:485 (listed); Melo, 2000:98 (nest usurpation and temporary association with nest owner); Amarante, 2002:59 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Amarante, 2005a:13 (correction to his 2002 catalog).

*Cerceris simplex* F. Smith, 1856:462, ♀, ♂. Lectotype: ♀, Brazil: Pará: Santarém (BMNH), designated by Scullen, 1961:48 (Article 74.6), and by G. Ferguson, 1984b:438. Synonymized with *Cerceris intricata* by Fritz, 1970:160. – Schletterer, 1887:502 (listed); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Poulton, 1918:xxxvii (Brazil, prey).

*Cerceris vulpina* F. Smith, 1856:463, ♂. Lectotype: ♂, Brazil: Pará: Santarém (BMNH), designated by G. Ferguson, 1984b:440. Synonymized with *Cerceris intricata* by Fritz, 1970:160. – Schletterer, 1887:506 (listed); Dalla Torre, 1897:481 (in catalog of world Hymenoptera).

*Cerceris larvata* Taschenberg, 1875:391, ♂. Holotype or syntypes: ♂, Argentina: Mendoza: no specific locality (Halle). Synonymized with *Cerceris intricata* by Fritz, 1970:160. – Schletterer, 1887:495 (listed); Dalla Torre, 1897:465 (in catalog of world Hymenoptera); Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Brèthes, 1913:121 (diagnostic characters); Jörgensen, 1912:287 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Mendoza). – As *Cerceris simplex larvata*: Scullen, 1962:58 (new status).

*Cerceris affumata* Schletterer, 1887:455, ♀. Lectotype: ♀, Brazil: Rio de Janeiro (NHMW), designated by Scullen, 1961:48 (Article 74.6). Synonymized with *Cerceris simplex* by Scullen, 1961:48. – Schletterer, 1887:485 (listed); Dalla Torre, 1897:449 (in catalog of world Hymenoptera); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris melanogaster* Holmberg, 1903:481, ♀. Lectotype: ♀, Argentina: Pampa Centralis (MACN), designated by Fritz, 1968b:163 (Article 74c). Synonymized with *Cerceris larvata* by Fritz, 1962:65. – Brèthes, 1910a:276 (redescription); Schrottky, 1913a:230 (Argentina: Mendoza, Pampa).

*Cerceris elephantinops* Holmberg, 1903:485, ♂. Holotype or syntypes: ♂, Argentina: Pampa Centralis (originally MACN, now missing: Fritz, 1968b:164). Synonymized with *Cerceris larvata* by Brèthes, 1913:121. – Schrottky, 1913a:229 (Argentina: Pampa).

*Cerceris elephantinops* var. *dissita* Holmberg, 1903:485, ♂. Holotype or syntypes: ♂, Argentina: Formosa (originally MACN, now missing: Fritz, 1968b:164). Synonymized with *Cerceris larvata* by Fritz, 1962:65. – Schrottky, 1913a:229 (Argentina: Formosa).

*Cerceris catamarcensis* Schrottky, 1909b:246, ♀. Holotype or syntypes: ♀, Argentina: Catamarca: no specific locality (depository unknown). Synonymized with *Cerceris intricata* by Fritz, 1970:160. – Schrottky, 1913a:229 (Argentina: Catamarca).

*Cerceris cisandina* Brèthes: Jörgensen, 1912:287, nomen nudum (Argentina: Mendoza Province).

*Cerceris cisandina* Brèthes, 1913:122, ♀. Holotype: ♀, Argentina: Mendoza: no specific locality (MACN). Synonymized with *Cerceris intricata* by Fritz, 1970:160. – Fritz, 1968b:168 (type material not found); Genise, 1990:26 (type material in MACN).

### **ssp. *graphica* F. Smith**

*Cerceris grafica* F. Smith, 1873c:410, ♀. Holotype or syntypes: ♀, Mexico: no specific locality (BMNH). – Schletterer, 1887:493 (listed); Cameron, 1891a:129 (listed); W. Fox, 1895c:266 (Mexico: Baja California Sur, description of ♂); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); R. Bohart and Grissell, 1975:48 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:581 (listed); Krombein, 1979b:1734 (in catalog of North American Hymenoptera, nesting sites, list of parasites and prey); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles). – **As *Cerceris simplex grafica***: Scullen, 1965c:273 (new status); C. Lin, 1967b:312 (nesting habits); Scullen and Wold, 1970:213 (distribution and summary of prey records); Scullen, 1972:57 (in revision of Mexican and Central American species); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae). – **As *Cerceris intricata grafica***: G. Ferguson, 1984c:485 (new subspecific combination), 1984c:485 (listed); Hook, 1987:109 (nesting habits); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

*Cerceris hebes* Cameron, 1890a:124, ♂. Lectotype: ♂, Mexico: Guerrero: Chilpancingo (BMNH), designated by R. Bohart and Grissell, 1975:48 (Article 74.6). Synonymized with *Cerceris grafica* by R. Bohart and Grissell, 1975:48. – Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:57 (in revision of Mexican and Central American species); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris macrosticta* Viereck and Cockerell, 1904b:133, ♂. Holotype: ♂, USA: New Mexico: no specific locality (ANSP). Synonymized with *Cerceris grafica* by R. Bohart and Grissell, 1975:48, and R. Bohart in R. Bohart and Menke, 1976:581. – Cresson, 1928:49 (holotype in ANSP); Banks, 1947:9 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:438 (in revision on North American *Cerceris*); Fritz, 1970:161 (full species, not a subspecies of *simplex*); Hurd and Linsley, 1975:117 (New Mexico: Dodna Ana County: Las Cruces; on flowers of *Larrea tridentata* (De Candolle) Coville, Zygophyllaceae). – **As *Cerceris simplex macrosticta***: Scullen, 1965c:274 (new status); Scullen and Wold, 1970:213 (distribution and summary of prey records); Scullen, 1972:59 (in revision of Mexican and Central American species); Alcock, 1974c:645 (nesting habits), 1975g:142 (social interactions: changes of nest ownership, mutual provisioning of nests); Alcock and Gamboa, 1975a:528 (home ranges of males); Evans and Rubink,

1978:59 (nesting habits); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris ampla* Banks, 1912:16, ♀. Lectotype: ♀, USA: Texas: Lee County: Fedor (MCZ), designated by G. Ferguson, 1983b:225. Synonymized with *Cerceris macrosticta* by Scullen, 1942:187, and with *Cerceris simplex macrosticta* by Scullen, 1965c:274.

#### 394. *intrusa* Krombein

*Cerceris intrusa* Krombein, 1981:25, ♀, ♂. Holotype: Sri Lanka: Amparai District: Ekgal Aru Reservoir Jungle (USNM).

#### 395. *invalida* Kohl

*Cerceris invalida* Kohl, 1906a:205, ♂. Holotype: ♂, Yemen: Aden: Ras Fartak (NHMW). – Empey, 1969a:311 (listed), 1973:1 (redescription); R. Bohart and Menke, 1976:582 (listed); Dollfuss, 1989:8 (holotype in NHMW); Empey, 1983:174 (listed, type examined).

#### 396. *invita* R. Turner

*Cerceris invita* R. Turner, 1912e:818, ♀. Holotype or syntypes: ♀, Indonesia: Sumatra: no specific locality (OXUM). – R. Bohart and Menke, 1976:582 (listed).

#### 397. *irene* Banks

*Cerceris irene* Banks, 1912:26, ♀. Lectotype: ♀, USA: Texas: Lee County: Fedor (MCZ), designated by G. Ferguson, 1983b:230 (Article 74.6). – Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Scullen, 1965b:383 (in revision of North American *Cerceris*), 1972:28 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:582 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:486 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

#### 398. *iridis* Evans

*Cerceris iridis* Evans, 1982a:339, ♀, ♂. Holotype: ♀, Australia: Queensland: Dividing Range 15 km W Captain Billy Creek in Cape York (ANIC). – Cardale, 1985:300 (in catalog of Australian Sphecidae).

#### 399. *isis* Arnold

*Cerceris isis* Arnold, 1931:178, ♀, ♂ (as *Isis*, incorrect original capitalization). Lectotype: ♀, Zimbabwe: Sawmills (SAM), designated by Empey, 1983:175. – Arnold, 1935a:499 (South Africa: Kalahari); Empey, 1969a:311 (listed); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:175 (listed).

#### 400. *isolde* Banks

*Cerceris isolde* Banks, 1947:24, ♂. Holotype: ♂, USA: Arizona: Palmerlee (MCZ). – Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Scullen, 1960:75 (as new synonym of *Cerceris californica*), 1965b:401 (as synonym of *Cerceris californica*); R. Bohart and Menke, 1976:578 (listed as synonym of *Cerceris californica*); G. Ferguson, 1983b:230 (study of holotype), 1984c:486 (reverted to valid species, listed).

*Cerceris sandiegensis* Scullen, 1965b:432, ♀, ♂. Holotype: ♀, USA: California: Riverside County: Anza (CAS). Synonymized with *Cerceris isolde* by G. Ferguson, 1984c:486. – R. Bohart and Grissell, 1975:51 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:587 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**401. *ivannikovi* Kazenas**

*Cerceris ivannikovi* Kazenas, 1984a:99, ♂. Holotype: ♂, Kazakhstan: Zaysan (ZIN). – Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:147 (geographic distribution, collecting localities in Kazakhstan).

**402. *jakowleffi* Kohl**

*Cerceris jakowleffi* Kohl, 1898a:349, ♀ (as *Jakowleffi*, incorrect original capitalization). Holotype or syntypes: ♀, Russia: Siberia: near Irkutsk (NHMW). – Gussakovskij, 1938:16 (Mongolia; as *jakovlevi*); Tsuneki, 1961c:11 (in key), 70 (China: Nei Mongol: Apaka, ca. 45°N, 116°E), 1971i:436 (Mongolia), 1971m:18 (China: Nei Mongol: Apaka); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1979d:84 (in key); Dollfuss, 1989:8 (type material in NHMW); Nemkov, 1990c:84 (Russia: Buryat Republic); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:472 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:148 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

As *Cerceris grana*: Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E), corrected to *Cerceris jakowleffi* by Tsuneki, 1971m:18.

*Cerceris pulawskii* Tsuneki, 1971i:434, ♂. Holotype: ♂, Mongolia: Central Aymag: Somon Lun (TMB). Synonymized with *Cerceris jakowleffi* by Nemkov, 1990c:84.

**403. *japonica* Ashmead**

*Cerceris interrupta* Matsumura, 1912:168, 169, ♀ (as *interruptus*, incorrect original termination), junior secondary homonym of *Cerceris interrupta* (Panzer, 1799). Holotype or syntypes: ♀, Japan: Honshu: Kyoto (depository?).

*Cerceris japonica* Ashmead, 1904b:66, ♀. Holotype: ♀, Japan: no specific locality (USNM). Synonymized with *Cerceris interrupta* Matsumura, 1912 by Tsuneki, 1968f:3. – Yasumatsu, 1934c:63 (Japan: Yakushima Island); Masaki, 1937:83 (Japan: Honsu: islands off Izu Peninsula); Tsuneki, 1937:186 (nesting habits); Miyamoto, 1959:32 (visiting flowers of *Erigeron annuus* L., Asteraceae), 34 (visiting flowers of *Daucus carota* L., Apiaceae), 35 (visiting flowers of *Cissus japonica* Willd., Vitaceae, and of *Euonymus japonica* Thunb., Celastraceae); Tsuneki, 1961c:9, 16, 24 (in key; as *Cerceris rybyensis japonica*), 30 (as *Cerceris rybyensis japonica*, new status); Tano, 1964:38 (Japan: Kyushu: Yakushima Island, as *rybyensis japoinea* [sic]); Handea, 1965:19 (Japan: Fukui Prefecture, as *Cerceris rybyensius japonica*); Tsuneki, 1965d:23 (nesting habits; as *Cerceris rybyensis japonica*), 1967h:45 (as full species), 1968f:3 (Japan: Fukuoka); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Haneda, 1969:70 (Japan: Yamanashi Prefecture); Itami, 1969:47 (Japan: Niigata Prefecture); Tsuneki, 1969e:27 (Japan); Haneda, 1970:13 (Japan: Akita Prefecture); Yamada, 1971:35 (Japan: Aichi Prefecture); Nambu, 1973d:152 (Japan: Saitama Prefecture), 1975b:72 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:582 (listed); Tsuneki, 1982g:64 (known from the Ryukyu archipelago); Takahashi 1993:3 (Japan: Hachijo-Jima Island); Zhou and Wu, 1993a:671 (China: Wuling Mountains); Sk. Yamane and Tano, 1995:11 (Japan: Ryukyu Islands); Miyatake, 1996:103 (specimens in Hiroshi Aoki collection); Wu and Zhou, 1996a:171 (in revision in Economic Insect Fauna of China, as *Cerceris rybyensis japonica*); Li and He, 1998b:398 (China: Longwangshan Nature Reserve, as *rybyensis japonica*); Yamane, Ikudome, and Terayama, 1999:546 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima); Kurokawa, 2003:61 (Japan: city of Fukui: Egamichou); Ohl and Linde, 2003:151 (number of ovarioles); Li and He, 2004:1113 (in hymenopterous fauna of Zhejiang Province, China, as *rybyensis japonica*); Suda, 2004:47 (Japan: Yamanashi Prefecture); Haneda, Inoue, Nozaka, Tano, Kurokawa, and H. and T. Murota, 2005:67 (Japan: Fukui Prefecture: Mount Monju); Negoro, Haneda, and Tano, 2005:49 (Japan: Toyama Prefecture); Terayama and Tano, 2005:3, 5 (in key to Japanese *Cerceris*); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006:30 (Japan: Toyama Prefecture); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Ohkusa, 2007:35 (Japan: central Honshu: Aichi Prefecture); Okusa and Tajima, 2008:75 (Japan: central Honshu: Aichi Prefecture).

*Cerceris harmandi* Pérez, 1905:152, ♀, ♂ (as *Harmandi*, incorrect original capitalization). Syntypes: Japan: Yokohama (MNHN). Synonymized with *Cerceris japonica* by Tsuneki, 1961c:28. – Yasumatsu, 1934c:63 (Japan: Yakushima Island); Tsuneki, 1937:183 (nesting habits); Maruyama, 1948:7 (Japan: Honsu: between Yasan and Ken-gamine). – Nec following authors (= *Cerceris hortivaga*): Yano, 1926:497; Sato, 1927:96, 98; Yano, 1932:278; Yasumatsu and Okabe, 1936:499; Yasumatsu, 1937c:68; Yano, 1950:1468.

#### 404. *jashenkoi* Kazenas

*Cerceris jashenkoi* Kazenas, 2006:33, ♀. Holotype: ♀, Kazakhstan: 20 km SE village Bakanas at 44°39'52"N 76°29'03"E (ZIN?).

#### 405. *jatahyna* Brèthes

*Cerceris jatahyna* Brèthes, 1920a:410, ♂. Syntypes: ♂, Brazil: State of Goyás: Jatahy, now Jataí (MNHN). – R. Bohart and Menke, 1976:582 (listed); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

#### 406. *jeiti* Genaro

*Cerceris jeiti* Genaro, 2009:101, ♀, ♂. Holotype: ♀, Dominican Republic: Provincia La Altigracia: Parque Nacional del Este (FSCA).

#### 407. *jucunda* Cresson

*Cerceris jucunda* Cresson, 1873:231, ♂. Holotype: ♂, USA: Texas: Bosque County: no specific locality (USNM). – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:495 (listed); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:26 (in revision of eastern U.S. *Cerceris*); Cresson, 1916:100 (holotype in ANSP); Scullen in Muesebeck et al., 1951:1006 (as new synonym of *Cerceris compar*); G. Ferguson, 1984c:486 (listed as valid species).

*Cerceris zelica* Banks, 1912:23, ♀, ♂. Lectotype: ♀, USA: Texas: Lee County: Fedor (MCZ), designated by G. Ferguson, 1983b:234. Synonymized with *Cerceris compacta* by Scullen, 1960:77, and with *Cerceris jucunda* by G. Ferguson, 1984c:486. – Brimley, 1938:448 (North Carolina: Raleigh); Scullen in Muesebeck et al., 1951:1011 (in catalog of North American Hymenoptera); Scullen, 1965b:450 (in revision on North American *Cerceris*, as valid species); R. Bohart and Menke, 1976:589 (listed); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

#### 408. *kansuensis* Shestakov

*Cerceris kansuensis* Shestakov in Gussakovskij, 1934a:14, ♀ (authorship confirmed on p. 2, spelled *gansuensis*). Holotype: ♀, China: S Kansu: no specific locality (NRS). – R. Bohart and Menke, 1976:582 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### 409. *karimuiensis* Krombein

*Cerceris karimuiensis* Krombein, 1969b:17, ♀, ♂. Holotype: Papua New Guinea: Eastern Highland Province: Karimui S Goroka (BISHOP). – R. Bohart and Menke, 1976:582 (listed).

#### 410. *kasachstanica* Kazenas

*Cerceris kasachstanica* Kazenas, 1972b:137, ♀ (as *kasachstanicus*, incorrect original termination). Holotype: ♀, Kazakhstan: Ili in Alma-Ata Oblast' (V.L. Kazenas coll.). – Kazenas, 1978b:53, 55 (in key to Sphecidae of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:582 (listed); Kazenas, 1984a:36 (redescription), 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 107 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:147 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ili River valley: near Bakanas, 17 km NW Bakanas, near Borandysu, Kapchagay, 35 km NW Kapchagay).

**411. *kaszabi* Tsuneki**

*Cerceris kaszabi* Tsuneki, 1971:437, ♀, ♂. Holotype: ♀, Mongolia: Bulgan Aymag: Bayan-nuur (TMB). – R. Bohart and Menke, 1976:582 (listed); Kazenas, 1979d:73 (Russia: Amur Oblast'; discussion), 83, 89 (in key); Nemkov, 1986:108 (Russia: Siberia: Irkutsk Oblast'), 1992b:50 (Russia: Far East: Semenovka near Khingan Nature Reserve); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:471, 479 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:184 (in revision in Economic Insect Fauna of China); Nemkov, 2005a:160 (Russia: Sakhalin Island); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2007c:997 (in Appendix to Key to identification of Sphecidae of Far East of Russia), 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:149 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**412. *katangae* Brauns**

*Cerceris katangae* Brauns, 1914:237, ♀. Holotype: ♀, Zaire: Katanga, now Shaba: Kibimbi (MRAC). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire); Empey, 1969a:312 (listed), 1972:60 (redescription, description of ♂); R. Bohart and Menke, 1976:582 (listed); Empey, 1983:175 (listed, type examined).

*Cerceris katangae* Brauns, 1926:288. Objective synonym of *Cerceris katangae* Brauns, 1914.

**413. *kedahae* Pagden**

*Cerceris kedahae* Pagden, 1934b:467, ♀, ♂. Holotype: ♀, Malaysia: Kedah: Kedah Peak (BMNH). – van der Vecht, 1964:354 (in revisions of Javan species); Tsuneki, 1974b:592 (Thailand); R. Bohart and Menke, 1976:583 (listed).

**414. *kennicottii* Cresson**

*Cerceris kennicottii* Cresson, 1865c:128, ♂ (as *Kennicotti*, incorrect original capitalization). Holotype: ♂, USA: Louisiana: no specific locality (ANSP). – Packard, 1866:63 (listed); Cresson, 1873:231 (Texas), 1887:282 (in catalog of North American Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Cresson, 1916:100 (holotype in ANSP); Schletterer, 1887:495 (listed); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); Banks, 1912:25 (in revision of eastern U.S. *Cerceris*); Mickel, 1918b:45 (in catalog of Nebraskan Sphecidae); Hendrickson, 1930:159 (Iowa, as *kennicothii*); Brimley, 1938:448 (North Carolina: Beaufort, Bryson City, Raleigh); Scullen in Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Scullen, 1965b:384 (in revision of North American *Cerceris*, as *kennicotti kennicotti*), 1972:28 (in revision of Mexican and Central American *Cerceris*, as *kennicotti kennicotti*); R. Bohart and Grissell, 1975:49 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:486 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 73 (first record from Ontario: Chatham, NE Harrow, Leamington, Point Pelee, Windsor); Buck, Paiero, and Marshall, 2006:41, 46 (in key to eastern Canadian *Cerceris*); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas, as *kennicotti kennicotti*).

*Cerceris montivaga* Cameron, 1890a:119, ♀. Holotype or syntypes: ♀, Mexico: Guerrero: Chilpancingo (BMNH). Synonymized with *Cerceris kennicottii zapoteca* by Scullen, 1972:30, and with *Cerceris kennicottii kennicottii* by G. Ferguson, 1984c:486. – Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae);.

*Cerceris eriogoni* Viereck and Cockerell, 1904b:139, ♂. Holotype: ♂, USA: New Mexico: Organ Mountains: Dripping Spring (ANSP). Synonymized with *Cerceris kennicottii* by Scullen, 1965b:384. – Cresson, 1928:49 (holotype in ANSP); Banks, 1947:30 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).

*Cerceris kennicottii beali* Scullen, 1965b:386, ♀, ♂. Holotype: ♀, USA: Arizona: Scottsdale (USNM). Synonymized with *Cerceris kennicottii zapoteca* by Scullen, 1972:30, and with *Cerceris kennicottii kennicottii* by R. Bohart and Grissell, 1975:49. – Zack, 1984:39 (paratype in James Entomological Collection, Washington State University).

#### **ssp. chinandegaensis Cameron**

*Cerceris chinandegaensis* Cameron, 1904h:66, ♂ (as *Chinandegaensis*, incorrect original capitalization). Lectotype: ♂, Nicaragua: Chinandega (BMNH), designated by G. Ferguson, 1984b:433. – Scullen, 1972:28 (as synonym of *Cerceris kennicottii bakeri*); Maes, 1989:95 (in catalog of Nicaraguan Sphecidae). – **As *Cerceris kennicottii chinandegaensis***: G. Ferguson, 1984c:487 (new status); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

*Cerceris iresinides* Rohwer, 1914:522, ♂. Holotype: ♂, Guatemala: Gualan (USNM). Synonymized with *Cerceris kennicottii bakeri* by Scullen, 1972:28, with *Cerceris kennicottii chinandegaensis* by G. Ferguson, 1984c:487.

#### **415. kilimandjaroensis Cameron**

*Cerceris kilimandjaroensis* Cameron, 1908a:277, ♀, ♂. Lectotype: ♀, Tanzania: Mt. Kilimanjaro: Kibonoto (NRS), designated by Empey, 1974:107. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:185 (revision), 1933a:355 (Ethiopia: Doukam, Higo Samula and Hawash River, and Harar District); Giordani Soika, 1939c:102 (Eritrea: Adi Ugri, Assaorta); Empey, 1969a:312 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:175 (listed).

*Cerceris sterope* Arnold, 1951:117, ♂. Holotype: ♂, Ethiopia: Haramaia (BMNH). Synonymized with *Cerceris kilimandjaroensis* by Empey, 1974:107. – Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:587 (listed), 628 (synonymy with *Cerceris kilimandjaroensis* recorded).

*Cerceris zyx* Leclercq, 1955i:413, ♂. Holotype: ♂, Burundi: Makoronkwe (MRAC). Synonymized with *Cerceris kilimandjaroensis* by Empey, 1974:107. – Empey, 1969a:326 (listed), 1970:186 (Zaire: Garamba and Upemba National Parks); R. Bohart and Menke, 1976:589 (listed), 628 (synonymy with *Cerceris kilimandjaroensis* recorded).

*Cerceris molesta* Arnold, 1958:129, ♀, ♂. Lectotype: ♀, Zambia: Abercorn, now Mbala (SAM), designated by Empey, 1983:175. Synonymized with *Cerceris zyx* by Empey, 1969a:326. – Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

#### **ssp. capensis Arnold**

*Cerceris macololo* race *capensis* Arnold, 1931:152, ♀, ♂. Lectotype: ♀, South Africa: Cape Province: Alival North (BMNH), designated by Empey, 1983:176. – **As *Cerceris heterospila capensis***: Empey, 1969a:310 (new status, listed); R. Bohart and Menke, 1976:582 (listed). – **As *Cerceris kilimandjaroensis capensis***: Empey, 1974:107 (new subspecific combination); R. Bohart and Menke, 1976:628 (listed); Empey, 1983:176 (listed).

*Cerceris griqua* Arnold, 1942:10, ♀, ♂. Lectotype: ♀, South Africa: East Griqualand: Ormiston (SAM), designated by Empey, 1983:176. Synonymized with *Cerceris heterospila capensis* by Empey, 1969a:310. – Hancock, Chahwanda, and Mhlanga, 1995:37 (paralectotypes in Bulawayo Museum).

#### **ssp. heterospila Cameron**

*Cerceris heterospila* Cameron, 1910:150, ♀, but actually ♂ (Brauns, 1917:239). Lectotype: ♂, South Africa: Transvaal: Johannesburg (TMP), designated by Empey, 1969a:309. – Brauns, 1917:239 (discussion of type material); Arnold, 1931:198 (original description copied), 1942:11 (Zimbabwe, Botswana, description of ♀ which actually is *Cerceris rhodesiensis*); Empey, 1969a:309 (listed); R. Bohart and Menke, 1976:582 (listed). – **As *Cerceris kilimandjaroensis heterospila***: Empey, 1974:107 (new status); R. Bohart and Menke, 1976:628 (listed); Empey, 1983:176 (listed).

*Cerceris macololo* Brauns, 1926:295, ♀, ♂. Lectotype: ♀, South Africa: Transvaal: Johannesburg (TMP), designated by Empey, 1983:176. Synonymized with *Cerceris heterospila* by Empey, 1969a:309. – Arnold, 1931:149 (the male described (as *Cerceris macololo* by Brauns must belong to another species), 1942:12 (the male described as *Cerceris macololo* by Brauns is *heterospila*), 24 (female head illustrated).

*Cerceris illustrissimus* Giner Mari: Empey, 1969a:327 (nomen nudum).

**416. kirbyi Bingham**

*Cerceris kirbyi* Bingham, 1897:313, ♀. Holotype or syntypes: ♀, Burma: Tenasserim: Haundraw Valley (BMNH). – R. Turner, 1912e:508 (revision); R. Bohart and Menke, 1976:583 (listed).

**417. klugii F. Smith**

*Cerceris annulata* Klug, 1845:[29], pl. 47, fig. 13, ♂, junior secondary homonym of *Cerceris annulata* (Rossi, 1790). Holotype or syntypes: ♂, Egypt: Fayum (ZMHU). – de Beaumont, 1951b:177 (interpretation of the species); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945).

*Cerceris klugii* F. Smith, 1856:445 (as *Klugii*, incorrect original capitalization). Substitute name for *Cerceris annulata* Klug, 1845. – Dalla Torre, 1897:464 (in catalog of world Hymenoptera); de Beaumont, 1951f:315 (Egypt; diagnostic characters); R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:163 (in revision of Western Palearctic *Cerceris*).

*Cerceris klugii* Schletterer, 1887:395, junior primary homonym of *Cerceris klugii* F. Smith, 1856 and of *Cerceris klugi* Kirchner, 1867. Substitute name for *Cerceris annulata* Klug. Synonymized with *Cerceris klugi* Kirchner by Schletterer, 1889a:900. – Schletterer, 1887:495 (listed), 1889a:903 (Savigny, 1817, pl. X, Fig. 24 represents *klugii*); Ed. André, 1889:271 (in revision of Sphecidae of Europe and Algeria), 1891:27\* (bibliographic references); Mochi, 1939:146 (Egypt; redescription); Honoré, 1941a:156 (redescription); Giner Mari, 1941b:157 (Klug's and Schletterer's descriptions copied); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain).

**418. kobrowi Brauns**

*Cerceris kobrowi* Brauns, 1926:271, ♀, ♂ (as *Kobrowi*, incorrect original capitalization). Lectotype: ♀, South Africa: Gauteng: Johannesburg (TMP), designated by Empey, 1983:176. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:137 and 146 (in key); Empey, 1969a:312 (listed); R. Bohart and Menke, 1976:583 (listed).

**419. kohlii Schletterer**

*Cerceris kohlii* Schletterer, 1887:447, ♀. Holotype or syntypes: ♀, Caucasus: no specific locality (Kraków). – Schletterer, 1887:495 (listed); Ed. André, 1889:307 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:900 (correction to earlier description); Ed. André, 1891:25\* (bibliographic references); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); Kohl, 1916:114 (syntypes in O. Radoszkowski collection); Shestakov, 1916a:230 (Caucasus); R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:69 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:56 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia).

*Cerceris perdita* Kohl, 1898a:343, ♀, ♂. Syntypes: Armenia: Arax Valley (NHMW). Synonymized with *Cerceris kohlii* by Kohl, 1916:114. – Shestakov, 1916a:235 (Armenia: Arax valley).

**420. kokuevi Shestakov**

*Cerceris kokuevi* Shestakov, 1912:507, ♀. Holotype or syntypes: ♀, Turkmenistan: Krasnovodsk (ZIN). – Shestakov, 1918a:137 (description; as *kokujevi*); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1978b:58 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:81 (redescription), 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:147 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: 15 km N Ak-suyek, Ayak-Kalkan, 20 km N village Aydarly, near Bakanas, 17 km NW Bakanas, Basshiy, 35-60 km E Chilik).

*Cerceris egregia* Kazenas, 1977b:433, ♂. Holotype: ♂, Kazakhstan: 17 km NW Bakanas (ZIN). Synonymized with *Cerceris kokuevi* by Kazenas, 1984a:81.

**421. koma Tsuneki**

*Cerceris koma* Tsuneki, 1961c:40, ♀. Holotype: ♀, Korea: Hokkanzan: Keijo (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:8 (in key); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1979d:81 (in key); Tsu-



neki, 1982b:18 (known from Korea); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470 (in key to Sphecidae of Russian Far East); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

#### 422. *koryo* Tsuneki

*Cerceris koryo* Tsuneki, 1961c:43, ♂. Holotype: ♂, Korea, Koryo (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:18 (in key); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1979d:88 (in key); Tsuneki, 1982b:18 (known from Korea); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:479 (in key to Sphecidae of Russian Far East).

#### 423. *koshantshikovi* Shestakov

*Cerceris koshantshikovi* Shestakov, 1914a:96, ♀. Holotype or syntypes: ♀, Turkmenistan: Imam Baba (ZIN). – Shestakov, 1918a:138 (Turkmenistan; description of ♂; nesting habits), 1923:104, 105 (in key), 114 (citation, distribution); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:94 (Turkmenistan: Akibay and Murgab district); Kazenas, 1972b:131 (Kazakhstan; determination?), 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, and *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of *Alhagi pseudalhagi* M.B. Desv., in Kazakhstan), 112 (feeding on flowers of *Atraphaxis spinosa* L., Polygonaceae, in Kazakhstan), 1978b:53, 56 (in key to Sphecidae of Kazakhstan and Central Asia); Myartseva, 1972a:93 (Turkmenistan); R. Bohart and Menke, 1976:583 (listed); Kazenas 1984a:37 (re-description); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### 424. *kozlovi* Shestakov

*Cerceris kozlovi* Shestakov, 1918b:16, ♀. Holotype (or syntypes?): ♀, China: northern Kansu: between Danger-Tin and Danger-Khe (ZIN). – R. Bohart and Menke, 1976:583 (listed).

#### 425. *krombeini* Scullen

*Cerceris krombeini* Scullen, 1965a:388, ♀, ♂. Holotype: ♀, USA, Arizona: Continental (USNM). – R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:487 (listed).

#### 426. *krugi* Dewitz

*Cerceris krugi* Dewitz, 1881:200, ♀, ♂ (as *Krugi*, incorrect original capitalization). Lectotype: ♀, Puerto Rico: no specific locality (ZMHU), designated by G. Ferguson, 1984b:436. – Schletterer, 1887:495 (listed); Dalla Torre, 1897:465 (in catalog of world Hymenoptera, as *krugii*); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Wolcott, 1951:839 (Puerto Rico); R. Bohart and Menke, 1976:583 (listed); G. Ferguson, 1984c:487 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

*Cerceris margareta* Rohwer, 1915:248, ♂. Holotype: ♂, Puerto Rico: Mayaguez (USNM). Synonymized with *Cerceris krugi* by G. Ferguson, 1984c:487. – Wolcott, 1951:839 (Puerto Rico); R. Bohart and Menke, 1976:583 (listed).

#### 427. *kumamotonis* Tsuneki

*Cerceris kumamotonis* Tsuneki, 1978c:81, ♀. Holotype: ♀, Japan: Kyushu: Kumamoto Prefecture: Gokasho (originally K. Tsuneki coll., now Hyogo Mus.); Tano, 1994a:8 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Mitai, 2005:54 (Japan: recorded from Kyushu); Terayama and Tano, 2005:3, 5 (in key to Japanese *Cerceris*).

#### 428. *kurzenkoi* Kazenas

*Cerceris kurzenkoi* Kazenas, 1980a:793, ♀. Holotype: ♀, Turkmenistan: Repetek (ZIN). – Kazenas, 1984a:215 (re-description); Krivokhatskiy, 1985:37 (listed from Repetek, Turkmenistan); Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119 (in key to *Cerceris* of Kazakhstan and Central Asia).

**429. *kuznetzovi* Kazenas**

*Cerceris kuznetzovi* Kazenas, 1984a:139, ♀, ♂. Holotype: ♀, Kazakhstan: 5 km SW Balkhash (ZIN). – Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:147 (geographic distribution, collecting localities in Kazakhstan).

**ssp. *turgaica* Kazenas**

*Cerceris kuznetzovi turgaica* Kazenas, 1984a:141, ♂. Holotype: ♂, Kazakhstan: Karaturgai River in Turgai (ZIN). – Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:116 (in key to *Cerceris* of Kazakhstan and Central Asia).

**430. *kwangtsehiana* Giner Mari**

*Cerceris kwangtsehiana* Giner Mari, 1942b:143, ♀. Holotype: ♀, China: Kwangtseh (Mus. A. Koenig, Bonn). – Tsuneki, 1968f:6 (China: Wangshan), 1970c:10 (Taiwan); R. Bohart and Menke, 1976:583 (listed); Tsuneki, 1977j:264 (Taiwan); Zhou and Wu, 1993a:671 (China: Wuling Mountains); Wu and Zhou, 1996a:167 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Li and He, 2004:1111 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**431. *labeculata* R. Turner**

*Cerceris labeculata* R. Turner, 1908:470, ♀, ♂. Syntypes: Australia: Queensland: Cairns (BMNH). – R. Turner, 1910b:421 (in key), 1912d:676 (in revision of Australian *Cerceris*); Tsuneki, 1968e:6 (in key; as *lubeculata*); R. Bohart and Menke, 1976:583 (listed); Evans, 1982a:342 (revision); Cardale, 1985:300 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:281 (nest), 1986b:1299 (prey: *Colaspoides pallidula* Lea, Chrysomelidae Eumolpinae).

**432. ? *labiata* (Olivier)**

*Crabro labiat...* Olivier, 1792:... – **As *Cerceris labiata***: R. Bohart and Menke, 1976:583 (new combination, listed).

**433. *lacinia* Tsuneki**

*Cerceris lacinia* Tsuneki, 1961c:58, ♂. Holotype: ♂, China: Heilungkiang: Harbin (RMNH). – Tsuneki, 1967e:2 (China: Heilungkiang), 9 (China: Heilungkiang: Harbin); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1979d:71 (NE China; discussion), 88 (in key); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:479 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**434. *laeta* (Fabricius)**

*Philanthus laetus* Fabricius, 1793:291, sex not indicated. Lectotype: ♂, Spain: no specific locality (ZMK), designated by van der Vecht, 1961a:63. – Fabricius, 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:305 (re-description); Jurine, 1807:202 (listed); Thunberg, 1815b:289 (diagnostic characters); Dahlbom, 1845:XXIV (type material not examined); Gistel, 1848:142 (southern and central Europe, description). – **As *Vespa laeta***: Turton, 1801:529 (new combination, Spain). – **As *Cerceris laeta***: Curtis, 1828:pl.269 (new combination, illustration); Guérin-Méneville, 1835:pl. 71, Fig. 10 (illustrations of antenna and mouthparts); Ghiliani, 1842:25 (listed from Italy: Sicilia: Palermo); Guérin-Méneville, 1844:443 (explanation of his 1835 figure); A. Costa, 1864b:98 (specimen from Parma, Italy, in Napoli Museum); van der Vecht, 1961a:63 (re-description; may be a synonym of *Cerceris arenaria*, *dusmeti*, or *moroderi*); R. Bohart and Menke, 1976:583 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

**435. *laevigata* F. Smith**

*Cerceris laevigata* F. Smith, 1856:465, ♀, ♂. Lectotype: ♀, Dominican Republic: Santo Domingo (BMNH), designated by G. Ferguson, 1984b:436. – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:132 (original description copied); Packard, 1866:64 (listed); Schletterer, 1887:495 (listed); Dalla Torre, 1897:466 (in

catalog of world Hymenoptera, as *levigata*); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera, as *levigata*); R. Bohart and Menke, 1976:583 (listed); G. Ferguson, 1984c:487 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**436. lama R. Turner**

*Cerceris lama* R. Turner, 1912e:814, ♀. Syntypes: ♀, Tibet: Gyantse (BMNH). – R. Bohart and Menke, 1976:583 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**437. lamarquensis Fritz and Toro**

*Cerceris lamarquensis* Fritz and Toro, 1969:142, ♀. Holotype: ♀, Argentina: Rio Negro: Lamarque (M. Fritz coll.). – R. Bohart and Menke, 1976:583 (listed); Fritz, 1993:17 (holotype in M. Fritz coll., dated 1969); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**438. lanaonis Tsuneki**

*Cerceris lanaonis* Tsuneki in Tsuneki et al., 1992c:79, ♂. Holotype: Philippines: Lanao del Norte: Iligan area (depository not indicated originally, now USNM). – Tsuneki et al., 1992c:51 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

**439. languida Cameron**

*Cerceris languida* Cameron, 1905m:218, ♂. Lectotype: ♂, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:176 (Article 74.6). – Brauns, 1926:292 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:140 and 147 (in key); Empey, 1969a:312 (listed), 1974:108 (recognition of subspecies); R. Bohart and Menke, 1976:583; Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 87 (prey: phalacrid beetles), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils; prey: *Olibrus* sp., a phalacrid; (as *languida languida*); Empey, 1983:176 (listed, type examined); Gess and Gess, 1994:100 (visiting flowers of *Aspalathus linearis*); S. Gess, 1996:277, 280, 281, 287, 294 (floral records).

As *Cerceris arrogans* Arnold, 1931:164 (♂ only), corrected to *Cerceris languida* by Empey, 1983:176.

**ssp. agulhas Empey**

*Cerceris languida agulhas* Empey, 1974:110, ♀, ♂. Holotype: ♀, South Africa: Western Cape Province: Bredasdorp (SAM) – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:177 (listed).

**ssp. shangaani Empey**

*Cerceris languida shangaani* Empey, 1974:109, ♀, ♂. Holotype: ♀, Zimbabwe: Gwaai (originally Bulawayo Mus., now SAM?). – R. Bohart and Menke, 1976:629 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paratype in Bulawayo Museum); Empey, 1983:177 (listed, faunal records).

**ssp. tanzana Empey**

*Cerceris languida tanzana* Empey, 1974:110, ♀. Holotype: ♀, Tanzania: Dar es Salaam (TMP). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:177 (listed).

**440. larissae K. Schmidt**

*Cerceris larissae* K. Schmidt, 2000:108, ♀. Holotype: ♀, Tunisia: Dahar Mts.: Mount Ksour 31 km SW Matmata (Mus. Stuttgart).

**441. lateridentata Arnold**

*Cerceris lateridentata* Arnold, 1945:26, ♀, ♂. Lectotype: ♀, Madagascar: Ivondro (MNHN), designated by Empey, 1983:177 (Article 74.6). – Empey, 1969a:312 (listed); R. Bohart and Menke, 1976:583 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

**442. *laterifurcata* Empey**

*Cerceris laterifurcata* Empey, 1973:13, ♀, ♂. Holotype: ♀, Yemen: Lodar, also spelled Lawdar (BMNH). – R. Bohart and Menke, 1976:583 (listed); Empey, 1983:177 (listed, faunal records); Guichard, 1993a:161 (Arabian Peninsula); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia).

**443. *laterimaculata* Empey**

*Cerceris laterimaculata* Empey, 1973:18, ♀. Holotype: ♀, W Aden: Jebel Jibah (BMNH). – R. Bohart and Menke, 1976:583 (listed); Empey, 1983:177 (listed); Guichard, 1993a:161 (Arabian Peninsula).

**444. *lateriproducta* Mochi**

*Cerceris lateriproducta* Mochi, 1939:183, ♀, ♂. Syntypes: Egypt: Fayum, Mansurieh (USNM). – Giner Mari, 1941b:206 (in revision of North African *Cerceris*); Honoré, 1941a:156 (Egypt: Hawamdieh); de Beaumont, 1951b:179 (interpretation of species), 1951f:368 (Erythrea, Sudan; diagnostic characters); R. Bohart and Menke, 1976:583 (listed); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Menke *in* Mochi, 1988:43 (type material in USNM); Guichard, 1993a:153 (Arabian Peninsula); K. Schmidt, 2000:111 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 234 (in catalog of Sphecidae of Saudi Arabia).

**445. *latibalteata* Cameron**

*Cerceris latibalteata* Cameron, 1904f:293, ♀. Lectotype: ♀, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:77 (Article 74.6). – R. Turner, 1912e:496 (revision); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:583 (listed); Empey, 1984:77 (listed).

*Cerceris lepcha* Cameron, 1905c:222, ♂. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:77. Synonymized with *Cerceris latibalteata* by Empey, 1984:77. – R. Turner, 1912e:497 (revision, may be the male of *Cerceris latibalteata*).

**446. *latiberbis* Tsuneki**

*Cerceris latiberbis* Tsuneki, 1968e:19, ♂. Holotype: ♂, Australia: Queensland: Prince of Wales Island (USNM). – R. Bohart and Menke, 1976:583 (listed); Evans, 1982a:378 (revision); Cardale, 1985:300 (in catalog of Australian Sphecidae); Evans, 1988:1 (description of ♀, redescription), 10 (nesting habits), 1989a:1 (description of ♀); Nuhn and Menke, 1994:26 (holotype in USNM).

*Cerceris xanthura* Evans, 1982a:345, ♀, ♂. Holotype: ♀, Australia: Queensland: Brisbane: Blunder Creek (Queensland Museum Brisbane). Paratypes: New South Wales, South Australia, Victoria. Synonymized with *Cerceris latiberbis* by Evans, 1988:3. – Evans and Hook, 1986a:283 (nesting habits), 1986b:1299 (prey: Curculionidae).

**447. *laticincta* Lepeletier de Saint Fargeau**

*Cerceris laticincta* Lepeletier de Saint Fargeau, 1845:18, ♀, ♂ (♂ = *Cerceris solitaria*). Syntypes: Algeria: Oran (MNHN). – Lucas, 1849:252 (Algeria: Oran; original description copied with modifications; ♀, nec ♂); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:473 (original description copied), 495 (listed); Ed. André, 1889:276, 317 (in revision of Sphecidae of Europe and Algeria), 1891:28\* (bibliographic references); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Graeffe, 1906:455 (Tunisia: Tunis area); Olivier, 1910:163 (Algeria: Saida); Morice, 1911:92 (Algeria: Biskra); von Schulthess, 1926b:211 (Tunisia); Giner Mari, 1941b:288 (original description copied, comments); de Beaumont, 1950c:323 (study of syntypes), 1951f:379 (Algeria to Morocco; redescription); R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:30 (in revision of Western Palearctic *Cerceris*).

*Cerceris atlantica* Schletterer, 1887:404, ♂. Holotype or syntypes: ♂, Algeria: Alger (NHMW). Synonymized with *Cerceris laticincta* by de Beaumont, 1951b:178. – Schletterer, 1887:486 (listed); Ed. André, 1889:286 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:453 (in catalog of

world Hymenoptera); de Beaumont, 1950f:397 (Algeria). – Giner Marí, 1941b:212 (in revision of North African *Cerceris*); Dollfuss, 1989:8 (type material in NHMW).

#### 448. *latidens* Cameron

*Cerceris latidens* Cameron, 1902a:99, ♀. Lectotype: ♀, East Malaysia: Sarawak: Kuching (BMNH), designated by Empey, 1984:78 (Article 74.6). – van der Vecht, 1964:364 (in revision of Javan *Cerceris*); Tsuneki, 1974b:593 (Borneo); R. Bohart and Menke, 1976:583 (listed); Empey, 1984:78 (listed).

#### 449. *latifrons* Bingham

*Cerceris latifrons* Bingham, 1902:214, ♀. Holotype or syntypes: ♀, South Africa: Transvaal-Natal border: no specific locality (BMNH). – Brauns, 1926:303 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:140 and 146 (in key); nec Arnold, 1942:plate II fig. 26 (= *Cerceris fingo*); de Beaumont, 1967b:506 (South Africa: Cape Province); Empey, 1969a:312 (listed); R. Bohart and Menke, 1976:583 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 87 (prey: melolonthine beetles), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils in very deep nests; prey: Scarabaeidae: Hopliini; (as *latifrons latifrons*), 40 (method of digging nest); Empey, 1983:177 (listed); Callan, 1987:102 (prey: Scarabaeidae Melolonthini: probably *Dicranocnemus*); S. Gess, 1996:280, 282, 287 (floral records, as *latifrons latifrons*).

*Cerceris sedula* Arnold, 1940:104, ♀, ♂. Lectotype: ♀, Zimbabwe: Vumbu Mts. (SAM), designated by Empey, 1983:177. Synonymized with *Cerceris latifrons* by Empey, 1983:177. – As *Cerceris latifrons sedula*: Empey, 1969a:312 (new status, listed); R. Bohart and Menke, 1976:583 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotypes in Bulawayo Museum).

#### 450. *lativentris* Gussakovskij

*Cerceris lativentris* Gussakovskij, 1938:7, ♀, Holotype: ♀, China: Kiangsu Province: no specific locality (NRS). – R. Bohart and Menke, 1976:583 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### 451. *latro* F. Smith

*Cerceris latro* F. Smith, 1856:459, ♀. Holotype or syntypes: ♀, Brazil: Pará: Belém (BMNH). – Schletterer, 1887:495 (listed); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:583 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

#### 452. *lauta* Sk. Yamane and Tano

*Cerceris lauta* Sk. Yamane and Tano, 1995:19, ♀. Holotype: ♀, Japan: southern Ryukyu Islands: Iriomote-jima: Komi (depository not indicated). – Yamane, Ikudome, and Terayama, 1999:548 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:3 (in key to Japanese *Cerceris*).

#### 453. *laxata* Shestakov

*Cerceris laxata* Shestakov, 1918a:140, ♀. Holotype or syntypes: ♀, Kazakhstan: Baigakum near Dzhulek = Chiili (ZMMU). – R. Bohart and Menke, 1976:583 (listed); Kazenas, 1978b:64 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:163 (redescription), 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:147 (geographic distribution, collecting localities in Kazakhstan).

As *Cerceris ferreri*: Radoszkowski, 1877:55 (Kazakhstan: Bairakum), corrected to *Cerceris laxata* by Shestakov, 1918a:131.

#### 454. *leucochroa* Schletterer

*Cerceris leucochroa* Schletterer, 1887:407, ♀. Holotype or syntypes: ♀, Sudan: Kordofan: no specific locality (NHMW). – Schletterer, 1887:496 (listed); Ed. André, 1889:335 (in revision of Sphecidae of Europe and Algeria); Ed. André, 1891:27\* (bibliographic references); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Giner

Mari, 1941b:203 (in revision of North African *Cerceris*); Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:177 (listed); Dollfuss, 1989:8 (type material in NHMW).

**455. *leytensis* Tsuneki**

*Cerceris leytensis* Tsuneki in Tsuneki et al., 1992c:81, ♂. Holotype: ♂, Philippines: Leyte: Lake Imelda (depository not indicated originally, now USNM). – Tsuneki et al., 1992c:52 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

**456. *listrognatha* Evans**

*Cerceris listrognatha* Evans, 1982a:333, ♀, ♂. Holotype: ♀, Australia: Queensland: Claudie River in Cape York (National Museum of Victoria, Melbourne). Paratypes: New South Wales. – Cardale, 1985:300 (in catalog of Australian Sphecidae).

**457. *ljubae* Fritz**

*Cerceris ljubae* Fritz, 1990:154, ♀, ♂. Holotype: ♀, Paraguay: Caaguazú: Caaguazú (M.A. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**458. *lobaba* W.F. Kirby**

*Cerceris lobaba* W.F. Kirby, 1900:18, ♀. Holotype: ♀, Yemen: island of Socotra: Homhil (BMNH). – W.F. Kirby, 1903:245 (Socotra, redescription); Kohl, 1906a:211 (original description copied); Empey, 1969a:313 (listed, as *lobata*), 1973:11 (redescription of ♀; description of ♂); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, type examined).

**459. *longilabris* Arnold**

*Cerceris longilabris* Arnold, 1946:83, ♀. Syntypes: ♀, Zambia: Kaputa in Mweru District (SAM). – Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, type examined).

**460. *longitudinalis* Giordani Soika**

*Cerceris longitudinalis* Giordani Soika, 1942:206, ♂. Holotype: Somalia: Iscia Baidoa (Univ. Torino). – Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, holotype examined).

**461. *longiuscula* Arnold**

*Cerceris longiuscula* Arnold, 1951:101, ♂. Holotype: ♂, Ghana: Kpeve (BMNH). – Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, type examined).  
*Cerceris bambesae* Empey, 1972:48, ♀. Holotype: ♀, Zaire: Bembesa (MRAC). Synonymized with *Cerceris longiuscula* by Empey, 1983:178. – R. Bohart and Menke, 1976:577 (listed).

**462. *luchtii* van der Vecht**

*Cerceris luchtii* van der Vecht, 1964:360, ♀, ♂. Holotype: ♀, Indonesia: Java: Mount Gedeh: Tjibodas (RMNH). – R. Bohart and Menke, 1976:583 (listed).

**463. *luculenta* Evans**

*Cerceris luculenta* Evans, 1982a:363, ♀. Holotype: ♀, Australia: New South Wales: 27 mi N Bourke (ANIC). – Cardale, 1985:300 (in catalog of Australian Sphecidae).

**464. *lunata* A. Costa**

? *Crabro affinis* Rossi, 1792:137, sex not indicated. Holotype or syntypes: Italy: Toscana: Pisa area (lost). – de Beaumont, 1950c:320 (probable synonym of *Cerceris lunata*). – As *Cerceris affinis*: Vander Linden, 1829:121 (new combination, bibliographic references, discussion of status);

*Cerceris dorsalis* Dufour, 1849:93, ♀, junior primary homonym of *Cerceris dorsalis* Eversmann, 1849. Holotype or syntypes: ♀, Spain: Madrid (MNHN). Synonymized with *Cerceris lunata* by Shestakov, 1928:268. – Ed. André,

1889:337 and 1891:30\* (unrecognizable species); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:457 (in catalog of world Hymenoptera, authorship attributed to André); Mercet, 1914:445 (listed from Spain); Giner Marí, 1941a:86 (original description translated into Spanish); de Beaumont, 1950c:342 (study of syntypes, synonymy with *Cerceris lunata* confirmed).

*Cerceris lunata* A. Costa, 1867c:60, ♀. Lectotype: ♂ [sic], Italy: Calabria: Brancaleone (Napoli), designated by de Beaumont, 1950c:326. – A. Costa, 1872a:60 (in revision of Italian Sphecidae); Schletterer, 1887:385 (revision), 496 (listed); Ed. André, 1889:273 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:901 (faunal records); Ed. André, 1891:27\* (bibliographic references); Baldini, 1894:58 (Italy: Modena area); Medina, 1894b:262 (Spain: Calañas); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Medina, 1899:115 (Spain: Sevilla); Morice, 1911:83 (Algeria: Biskra, Hippône, Médéa); Mercet, 1914:445 (listed from Spain); Shestakov, 1916:232 (Caucasus), 1917c:47 (Ukraine: Crimea); Fahringer, 1922:178 (Turkey); Shestakov, 1923:104, 105 (in key to subgenus *Apiraptrix*), 113 (citation, distribution); Berland, 1925d:56 (in Sphecid Fauna of France); von Schulthess, 1926b:211 (Tunisia); Shestakov *in* Nadig, 1933:97 (Morocco); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Giner Marí, 1941a:25 (in revision of Spanish *Cerceris*), 1943a:95 (in Sphecid Fauna of Spain); Guiglia, 1943b:70 (Albania: Kopluku), 1944a:146 (Cyprus: Limassol); Giner Marí, 1945a:247 (Cyprus); de Beaumont, 1947b:384 (Cyprus); Šnoflak *in* Zavadil and Šnoflak, 1948:87, 93 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Andrade, 1949:10 (Portugal: Lisboa); Pittioni, 1950:21 (Cyprus); de Beaumont 1951f:314 (Algeria, Tunisia; geographic variation), 1952a:47 (France: Aix, Bézier, Montpellier; redescription), 1954e:86 (Italy); Bytinski-Salz, 1956:225 (Turkey: Konya); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain); Grandi, 1957:388 (Italy); de Beaumont, 1958d:271 (Greece), 279 (Cyprus; discussion); Pulawski, 1958a:166 (Bulgaria: Akhtopol, Nesebar, Varna); de Beaumont, 1959a:14 (Italy); de Beaumont and Bytinski-Salz, 1959:109 (Israel); Diniz, 1959:28 (Portugal: Lisboa); de Beaumont, 1960a:6 (Greece: Rhodes Island), 1962b:20 (Spain); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:19 (Greece); Diniz, 1966:7 (Portugal: Estoril, Lisboa); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:283 (Turkey), 1969:82 (Turkey); Scobiola-Palade, 1971:202 (first record from Romania: Dolj Department: Braniște, Gorj Department: Tintăreni, Ilfov Department: Frătești and Pususnicu Forest; color variation); Balthasar, 1972:399 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:128 (Kazakhstan); Erlandsson, 1974:62 (Spain, Yugoslavia); R. Bohart and Menke, 1976:583 (listed); Georghiou, 1977:189 (Cyprus); Kazenas, 1978b:50, 55 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Pagliano, 1980:126 (Italy: Calabria); Gayubo, 1982e:110 (Spain: Cádiz Province); Dollfuss, 1983b:25 (records from Austria questionable); Gayubo, 1983e:238 (Spain: Salamanca Province), 1984c:383 (Portugal: El Algarve Province, as *lunata lunata*); Gayubo and Tormos, 1984:25 (Spain: Valencia, as *lunata lunata*); Kazenas, 1984a:23 (redescription); Pagliano, 1987:160 and 167 (Italy, in key); Tormos and Jiménez, 1987a:128 (Spain: Valencia, as *lunata lunata*); Pagliano, 1988:163 (Italy; revision), 1990:98 (in catalog of Italian Sphecidae); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1992:291 (Greece); Gayubo and Borsato, 1994:222 (Italy: Toscana); Negrisola *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:347 (in Sphecid Fauna of Western Europe); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Ljubomirov, 2000:13 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:164 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:105, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:148 (geographic distribution, collecting localities in Kazakhstan); Pagliano and Negrisola, 2005:336 (in Sphecid Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1803 (Turkey: Ankara, Balikesir, Bilecik, Erzurum, and Konya provinces); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N

23°E); Coumar and Dey, 2008:340 (India: Bihar: Benhar and Chapra, redescription); Ljubomirov and Yildirim, 2008:144 (in catalog of Crabronidae of Turkey); Pagliano, 2009:183 (Italy: recorded from Lombardia by Bezzi, 1891); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: ♀ rance: first record from Gard: Quissac).

*Cerceris funerea* A. Costa, 1867c:92, ♀. Holotype or syntypes: ♀, Italy: Sicilia: Madonie (Napoli). Synonymized with *Cerceris lunata* by de Beaumont, 1950c:326. – Schletterer, 1887:382 (in revision of world *Cerceris*); Radoszkowski, 1890b:507 (Armenia: Mount Ararat); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Schmiedeknecht, 1907:238, 241 (in key to Hymenoptera of Central Europe), 1930:699 (in keys to Hymenoptera of North and Central Europe); Šnoflak in Zavadil and Šnoflak, 1948:85, 93 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Ceballos, 1956:368 (in catalog of Hymenoptera of Spain); Diniz, 1959:28 (Portugal: Paço de Rei, Serra do Montemuro, Vale de Gaio). – **As *Cerceris lunata funerea***: R. Bohart and Menke, 1976:583 (new status, listed); Józán, 1985b:62 (recorded from Zamardi and Simontornya by Bajári, 1956), 72 (map of distribution in Hungary), 85 (ecological and zoogeographic characteristics), 1986:375 (Hungary: Kiskunság National Park); Pagliano, 1990:98 (in catalog of Italian Sphecidae); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Schmid-Egger, 2003:751 (Malta: Busket); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: recently recorded from Hungary and Italy). – **Nec following authors** (= *Cerceris fimbriata*): Schletterer, 1887:382; Ed. André, 1889:272, 297, 1891:27\*; F. Morawitz, 1894:351; Mercet, 1914:445; Shestakov, 1914b:408, 1916b:232, 1918a:133, 1923:102, 104, 115; Schmiedeknecht, 1930:702; Gussakovskij, 1935:445; Giner Marí, 1941a:29 (= *Cerceris eryngii* and *fimbriata*); Giordani Soika, 1944:12; Guiglia, 1944b:12; de Andrade, 1949:11; Bajári, 1956a:81, 1957a:33.

*Cerceris lunata* A. Costa, 1869b:106, ♀. Objective synonym of *Cerceris lunata* A. Costa, 1867c:90.

*Cerceris funerea* A. Costa, 1869b:108, ♀. Objective synonym of *Cerceris funerea* A. Costa, 1867c:92.

*Cerceris moesta* De Stefani Perez, 1884b:198, ♀. Syntypes: Italy: Sicilia: Santa Ninfa (depository unknown); and Greece: no specific locality (O. Radoszkowski coll.). Synonymized with *Cerceris lunata* by K. Schmidt, 2000:164. – Schletterer, 1887:474 (original description copied), 497 (listed); Ed. André, 1889:254, 283 (in revision of Sphecidae of Europe and Algeria), 1891:26\* (bibliographic references); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:467 (in catalog of world Hymenoptera, as *maesta*); de Beaumont, 1957d:337 (unrecognizable species; as *maesta*); R. Bohart and Menke, 1976:584 (listed); Pagliano, 1990:98 (in catalog of Italian Sphecidae, as nomen dubium); Pagliano and Negrisoló, 2005:489 (in Sphecid Fauna of Italy, as nomen dubium).

*Cerceris pyrenaica* Schletterer, 1887:476. Substitute name for *Cerceris dorsalis* Dufour (Dufour's original description copied). – Schletterer, 1887:500 (listed); Ed. André, 1891:30\* (unrecognizable species).

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Uzbekistan), corrected to *Cerceris funerea* by Shestakov, 1918a:161.

### **spp. *tenebricosa* Giner Marí**

*Cerceris tenebricosa* Giner Marí, 1941b:185, ♀, ♂. Holotype: sex not indicated: Morocco: El Hajeb (MNCN). – **As *Cerceris lunata tenebricosa***: de Beaumont, 1951f:314 (new status), 1953g:120 (Morocco); R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:165 (in revision of Western Palearctic *Cerceris*).

### **465. *lunigera* Dahlbom**

*Cerceris lunigera* Dahlbom, 1845:499, ♀. Lectotype: ♀, South Africa: Western Cape Province: Cape of Good Hope (NRS), designated by Empey, 1971a:236 (Article 74.6). – F. Smith, 1856:449 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:496 (listed); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Arnold, 1931:135 (unrecognizable species); Empey, 1969a:313 (listed), 1971a:235 (redescription); R. Bohart and Menke, 1976:583 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: *Halictus* sp.



and *Lasioglossum* sp.), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in clayey soils; prey: halictids); Empey, 1983:178 (listed).

*Cerceris albigena* Cameron, 1905m:217, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Pearston (BMNH), designated by Empey, 1983:178 (Article 74.6). Synonymized with *Cerceris lunigera* by Empey, 1983:178. – Arnold, 1931:191 (original description copied); Empey, 1969a:300 (listed), 1972:63 (redescribed, description of ♂), 1974:100 (holotype in BMNH); R. Bohart and Menke, 1976:576 (listed).

*Cerceris whiteana* Cameron, 1905m:225, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Grahamstown: Brak Kloof (AMG), designated by Jacot-Guillarmod, 1961:12 (Article 74.6). Synonymized with *Cerceris lunigera* by Empey, 1969a:313. – Brauns, 1917:240 (as new synonym of *Cerceris spinicaudata*), 1926:336 (as synonym of *Cerceris spinicaudata*); Jacot-Guillarmod, 1961:12 (type material in Albany Museum, Grahamstown); Empey, 1974:117 (taxonomic history).

*Cerceris holconotula* Brauns, 1926:plate XLIV, fig. 13, ♀. Holotype: ♀, South Africa: Cape Province: Port Elizabeth (TMP). Synonymized with *Cerceris lunigera* by Empey, 1969a:313. – Arnold, 1931:150 (description of ♀, ♂, type locality).

*Cerceris nobilitata* race *sordidula* Arnold, 1931:153, ♀. Holotype: ♀, South Africa: Western Cape Province: Ceres (BMNH). Synonymized with *Cerceris lunigera* by Empey, 1983:178. – **As *Cerceris nobilitata sordidula***: Empey, 1969a:317 (listed), 1974:111 (description of ♂); R. Bohart and Menke, 1976:584 (listed); not listed by Empey, 1983.

#### 466. *lutphia* Kazenas

*Cerceris lutphia* Kazenas, 1980f:81, ♀, ♂. Holotype: ♀, Tajikistan: Garavuty area (ZIN). – Kazenas, 1984a:164 (re-description); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 119 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### 467. *lutzi* Scullen

*Cerceris lutzi* Scullen, 1972:85, ♀, ♂. Holotype: ♀, Panama: El Volcan Chiriquí (AMNH). – R. Bohart and Menke, 1976:583 (listed); G. Ferguson, 1984c:488 (listed); Evans, 1992:91 (nest and prey); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

#### 468. *luxuriosa* Dahlbom

*Cerceris luxuriosa* Dahlbom, 1845:498, ♂. Holotype: ♂, Egypt or Sudan: Nubia: Syrkut (NRS). – F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:496 (listed); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); de Beaumont, 1950c:324 (study of holotype), 1951b:177 (synonymy reviewed), 1951f:317 (Lower Egypt to Khartoum, Sudan; diagnostic characters); Pulawski, 1964:72 (Egypt: Aswan); R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:166 (in revision of Western Palearctic *Cerceris*).

*Cerceris subimpressa* Schletterer, 1887:389, ♀, ♂. Syntypes: Egypt (NHMW). Synonymized with *Cerceris luxuriosa* by de Beaumont, 1950c:324 and 1951b:177. – Schletterer, 1887:503 (listed); Ed. André, 1889:264, 267 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:902 (Savigny, 1817, pl. X, Fig. 3 represents *subimpressa*); Ed. André, 1891:27\* (bibliographic references); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Longstaff, 1911:125 (Sudan: Mogran); Morice, 1921:822 (Iraq: Amara); Shestakov, 1923:104 (in key to subgenus *Api-raptrix*), 114 (citation, distribution); Guiglia, 1932b:99 (Libya: Fezzan: Auenat); nec Shestakov *in* Nadig, 1933:98 (= *Cerceris ibericella*); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records); Giner Marí, 1941b:155 (original description translated into Spanish); Honoré, 1941a:153 (Egypt, redescription); Dollfuss, 1989:8 (type material in NHMW); nec Deleurance, 1946b:67 (= *Cerceris ibericella*).

**469. luzonensis Crawford**

*Cerceris luzonensis* Crawford, 1910:120, ♂. Holotype: ♂, Philippines: no specific locality (USNM). – Baltazar, 1966:351 (in catalog of Hymenoptera of Philippines); Tsuneki, 1968f:21 (Luzon; discussion); R. Bohart and Menke, 1976:583 (listed); Tsuneki, 1976b:36 (Philippines), 1984b:50 (Philippines); Tsuneki et al., 1992c:45, 49 (in key), 56 (Philippines, variation); Valentine, 1995:52 (anthribid prey: *Phloeobius pallipes* Jordan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris pleuralis* Tsuneki, 1968f:23, ♀, junior primary homonym of *Cerceris pleuralis* H. Smith, 1908. Holotype: ♀, Philippines: Luzon: Banqui (USNM). Synonymized with *Cerceris luzonensis* by Tsuneki, 1984b:50. – R. Bohart and Menke, 1976:585 (listed); Nuhn and Menke, 1994:26 (holotype in USNM).

**ssp. fukaii Rohwer**

*Cerceris fukaii* Rohwer, 1911a:482, ♂. Holotype: ♂, Taiwan: Horisha (USNM). – Strand, 1913b:163 (Taiwan, redescription); Iwata, 1939b:172 (nesting habits); Giner Mari, 1943d:209 (redescription); Scullen, 1960:80 (as new synonym of *Cerceris luzonensis*); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae). – **As *Cerceris luzonensis fukaii***: Tsuneki, 1970c:13 (new status, Taiwan); Haneda, 1971b:32 (Taiwan); Tsuneki, 1972c:5 (Taiwan); Murota, 1973b:117 (Taiwan); R. Bohart and Menke, 1976:583 (listed); Tsuneki, 1977j:263 (Taiwan); Tsuneki et al., 1992c:57 (may be full species); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris fukaii* form *superflua* Strand, 1913b:164, ♂. Lectotype: ♂, Taiwan: no specific locality (DEI), designated by Oehlke and Wudowenz, 1974:425. Synonymized with *Cerceris* ... by .... – **As *Cerceris superflua***: Giner Mari, 1943d:211 (new status, redescription); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**470. lynchii Brèthes**

*Cerceris lynchii* Brèthes, 1910a:273, ♀ (as *Lynchii*, incorrect original capitalization). Holotype: ♀, Argentina: Chaco: Las Mercedes (MACN). – Schrottky, 1913a:230 (Argentina: Chaco); Fritz, 1968b:168 (study of holotype); R. Bohart and Menke, 1976:583 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**471. macalanga Brauns**

*Cerceris macalanga* Brauns, 1926:294, ♀. Holotype: ♀, Zimbabwe: Sawmills (TMP). – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:151 (description of ♂), 1942:12 (♂ redescribed), 1951:116 (illustration); Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, type examined).

**472. macswaini Scullen**

*Cerceris macswaini* Scullen, 1965b:485, ♀, ♂. Holotype: ♀, USA: California: Imperial County: no specific locality (USNM). – R. Bohart and Grissell, 1975:49 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:488 (listed).

**473. macula (Fabricius)**

*Philanthus macula* Fabricius, 1804:305, sex not indicated. Lectotype: ♂, South Africa: Cape of Good Hope area (ZMK), designated by van der Vecht, 1961a:67. – Thunberg, 1815b:288 (diagnostic characters), 293 (redescription); Dalla Torre, 1897:488 (in catalog of world Hymenoptera); W. Schulz, 1912:70 (*macula* is correct, not *maculatus*, Thunberg's specimens not preserved in his collection), 89 (redescription of Fabricius's type material). – **As *Cerceris macula***: van der Vecht, 1961a:67 (new combination, redescription); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:178 (listed, type examined).

**474. *maculata* Radoszkowski**

*Cerceris maculata* Radoszkowski, 1877:57, ♀. Holotype: ♀, Kazakhstan: Kyzil Kum: no specific locality (ZMMU). – Schletterer, 1887:474 (original description copied), 496 (listed); Ed. André, 1889:338, and 1891:30\* (unrecognizable species); Radoszkowski, 1893a:66 (Turkmenistan); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); nec R. Turner, 1912e:819 (= *Cerceris turneri*); Kohl, 1916:117 (as synonym of *Cerceris funerea* and *pallidopicta*); Shestakov, 1918a:141 (Uzbekistan and Turkmenistan), 1926 (Kohl's 1916 interpretation corrected); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:94 (Turkmenistan: Akibay, Murgab district, Kara-Yab in Sakar-Chagin district, Bayram-Ali district); R. Bohart and Menke, 1976:583 (listed); Pulawski, 1983:240 (revision); Kazenas, 1984a:75 (redescription); Pagliano, 1988:171 (Italy; revision), 1990:98 (in catalog of Italian Sphecidae); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna, referring to *C. distans* in Grandi, 1931:58); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:349 (specimen recorded by Grandi, 1931, as *C. distans*, is probably *Cerceris odontophora*); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:148 (geographic distribution, collecting localities in Kazakhstan); Pagliano and Negrisolo, 2005:332 (in Sphecid Fauna of Italy, Grandi's record from Italy, as *C. distans*, needs confirmation).

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Uzbekistan), corrected to *Cerceris puncticeps* by Shestakov, 1918a:161.

*Cerceris orientalis* Mocsáry, 1883:47, ♀, junior primary homonym of *Cerceris orientalis* F. Smith, 1856. Holotype: ♀, "Russia mer.-or.", now Kazakhstan, not Caucasus (lost). Neotype: holotype of *Cerceris maculata* Radoszkowski, designated by Pulawski, 1983:240. Synonymized with *Cerceris maculata* by Pulawski, 1983:240. – Kohl, 1888a:139 (comparison with *Cerceris eugenia*).

*Cerceris eugenia* Schletterer, 1887:390. Substitute name for *Cerceris orientalis* Mocsáry, 1883. – nec Schletterer, 1887:390 (= *Cerceris hathor*), nec Kohl, 1888a:139 (= *Cerceris hathor*); Schletterer, 1887:490 (listed); Gasperini, 1889:69 (Dalmatia); nec Ed. André, 1889:268 (= *Cerceris hathor*); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Shestakov, 1915:14 (Turkmenistan: Imam Baba; description of ♂, as *eugeniae*); Kohl, 1916:111 (may be a variety of *Cerceris odontophora*); Shestakov, 1918a:131 (Turkmenistan: Imam Baba); nec Giner Mari, 1941b:224, de Beaumont, 1951b:180, 1951f:339, 1953g:122, 1956a:186, 1958b:59, and Pulawski, 1964:73 (= *Cerceris hathor*); R. Bohart and Menke, 1976:580 (listed); Kazenas, 1978b:58 (in key to Sphecidae of Kazakhstan and Central Asia).

*Cerceris mocsaryi* Kohl, 1888:139 (as *Mocsaryi*, incorrect original capitalization). Substitute name for *Cerceris orientalis* Mocsáry, 1883. – Nec Kohl, 1888:139 (= *Cerceris fischeri*); nec Schletterer, 1889a:890 (= *Cerceris fischeri*); Ed. André, 1889:330 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Shestakov, 1918a:146 (Turkmenistan), 1923:104 (in key; in subgenus *Apiratrix*); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:94 (Turkmenistan: Akibay and Murgab district, Kelte-Chigar, Krasnovodsk, Tedjen).

*Cerceris denticulata* Schletterer, 1889a:894, ♀, ♂ (♀ = *Cerceris dispar*). Holotype: Transcaspiia: Asmabad (probably Ashabad) or Karak (NHMW). Synonymized with *Cerceris maculata* by K. Schmidt, 2000:93. – Dalla Torre, 1897:457 (in catalog of world Hymenoptera); nec Shestakov, 1918a:130 and 1923:103, 104, 115 (= *Cerceris dispar*); Gussakovskij, 1935:445 (Tajikistan: Kulab area); R. Bohart and Menke, 1976:579 (listed); Kazenas, 1978b:52 (in key to Sphecidae of Kazakhstan and Central Asia), 1884:27 (possibly a synonym of *Cerceris dispar*); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris puncticeps* F. Morawitz, 1894:352, ♂. Syntypes: ♂, Turkmenistan: Serax (ZIN). Synonymized with *Cerceris maculata* by Kazenas, 1984a:75. – Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Shestakov, 1918a:147 (Uzbekistan and Turkmenistan); R. Bohart and Menke, 1976:585 (listed).

*Cerceris haematina* Kohl, 1916:111, ♀. Holotype: ♀, origin unknown (originally NHMW, now lost). Neotype: holotype of *Cerceris maculata* Radoszkowski, designated by Pulawski, 1983:240. Synonymized with *Cerceris macu-*

*lata* by Pulawski, 1983:240. – R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:94 (holotype of *Cerceris haematina* preserved in NHMW, designation of neotype by Pulawski was unnecessary).

**475. *maculicrus* de Beaumont**

*Cerceris maculicrus* de Beaumont, 1967a:281, ♀, ♂. Holotype: ♀, Turkey: Denizli: Pamukkale (J. Gusenleitner coll.). – R. Bohart and Menke, 1976:583 (listed); Dollfuss, 1989:8 (paratype in NHMW); K. Schmidt, 2000:166 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:145 (in catalog of Crabronidae of Turkey); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: in Europe occurring on the island of Rhodes).

**476. *manca* Fritz and Mariluis**

*Cerceris manca* Fritz and Mariluis, 1979:32, ♀. Holotype: ♀, Argentina: Salta: Salta (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

***ssp. cordil* Fritz and Mariluis**

*Cerceris manca cordil* Fritz and Mariluis, 1979:33, 33, ♀. Holotype: ♀, Argentina: Corrientes (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.; Amarante, 2002:60 (in catalog of Neotropical Crabronidae)).

**477. *manchuriana* Tsuneki**

*Cerceris manchuriana* Tsuneki, 1961c:62, ♀, ♂. Holotype: ♀, China: Heilungkiang: Harbin (RMNH). – Tsuneki, 1961c:13, 17 (in key), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1979d:76 (Russia: Primorskiy Kray; discussion), 85, 88 (in key); Kazenas *in* Nemkov, Kazenas, Budryś, et Antropov, 1995:474, 478 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:184 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**478. *mandibularis* Patton**

*Cerceris mandibularis* Patton, 1880:403, ♀, ♂. Syntypes: USA: Connecticut: Waterbury (lost). Neotype: ♀, USA: Pennsylvania: Glenside (USNM), designated by Scullen, 1965b:425. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:496 (listed); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:17 (in revision of eastern U.S. *Cerceris*); Mickel, 1918b:447 (in catalog of Nebraskan Sphecidae); Cartwright, 1931:269 (South Carolina: Jocassee); Brimley, 1938:448 (North Carolina: Mars Hill); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:425 (in revision of North American *Cerceris*); R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:488 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

**479. *manflava* Tsuneki**

*Cerceris flava* Tsuneki, 1961c:67, ♀, junior primary homonym of *Cerceris flava* Mochi, 1939. Holotype: ♀, China: Nei Mongol: Apaka, ca. 45°N, 116°E (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:11, 19 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

*Cerceris manflava* Tsuneki, 1971i:434. Substitute name for *Cerceris flava* Tsuneki, 1961. – Tsuneki, 1971m:17 (China: Nei Mongol: Apaka, ca. 45°N, 116°E); Kazenas, 1979d:73 (Russia: Primorskiy Kray; discussion), 84, 89 (in key); Nemkov, 1992b:250 (Russia: Far East: Dim near Khingan Nature Reserve); Kazenas *in* Nemkov, Kazenas, Budryś, et Antropov, 1995:473, 479 (in key to Sphecidae of Russian Far East); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:149 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia). – **As *Cerceris ansa manflava***: R. Bohart and Menke, 1976:577 (new status, listed).

**480. *manifesta* Arnold**

*Cerceris manifesta* Arnold, 1952:470, ♀. Holotype: ♀, Kenya: Olgasalic (BMNH). – R. Bohart and Menke, 1976:583 (listed); Empey, 1983:179 (listed, type examined).

**481. *manjoni* Fritz and Mariluis**

*Cerceris manjoni* Fritz and Mariluis, 1976:99, ♀, ♂. Holotype: ♀, Argentina: Salta: Tartagal (M. Fritz collection). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**482. *maracandica* Radoszkowski**

*Cerceris maracandica* Radoszkowski, 1877:57, ♀ (as *Maracandica*, incorrect original capitalization). Syntypes: ♀, Uzbekistan: Samarkand (ZMMU). – Radoszkowski, 1886a:35 (Turkmenistan); nec Schletterer, 1887:420 and Kohl, 1916:117 (= *Cerceris errata*); Schletterer, 1887:496 (listed); Ed. André, 1889:116 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Shestakov, 1918a:142 (Turkmenistan and Uzbekistan; redescription), 1923:102 (in key), 114 (citation, distribution); Gussakovskij, 1935:445 (Tajikistan: Kulab area); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1984a:63 (redescription), 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:148 (geographic distribution, collecting localities in Kazakhstan).

*Cerceris ignaruris* Kohl, 1916:118, ♀. Syntypes: Turkmenistan: Seraks, and Uzbekistan: Samarkand (Kraków). Synonymized with *Cerceris maracandica* by Shestakov, 1926:239.

**483. *margarita* de Beaumont**

*Cerceris margarita* de Beaumont, 1966:203, ♀, ♂. Holotype: ♀, se. Egypt: Gebel Elba (Lausanne). – R. Bohart and Menke, 1976:583 (listed); K. Schmidt, 2000:100 (in revision of Western Palearctic *Cerceris*).

**484. *marginata* F. Smith**

*Cerceris marginata* F. Smith, 1856:460, ♀. Holotype or syntypes: ♀, Brazil: Pará: Santarém (BMNH). – Schletterer, 1887:496 (listed); Cameron, 1890a:117 (Costa Rica, redescription); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); R. Bohart and Menke, 1976:583 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**485. *marginula* Dalla Torre**

*Cerceris marginata* Cameron, 1890:117, ♀, junior primary homonym of *Cerceris marginata* F. Smith, 1856. Holotype: ♀, Costa Rica: Volcan de Irazú (BMNH).

*Cerceris marginula* Dalla Torre, 1897:467. Substitute name for *Cerceris marginata* Cameron. – Scullen, 1972:32 (in revision of Mexican and Central American species); R. Bohart and Menke, 1976:583 (listed); G. Ferguson, 1984c:488 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**486. *maritima* de Saussure**

*Cerceris maritima* de Saussure, 1867:91, ♀. Holotype or syntypes: ♀, Mauritius: no specific locality (lost: Empey, 1983:179). – Schletterer, 1887:496 (listed); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Empey, 1969a:313 (listed); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:179 (listed).

**487. *mariusi* Fritz**

*Cerceris mariusi* Fritz, 1989:262, ♀, ♂. Holotype: ♀, Paraguay: San Pedro: Corroró (M. Fritz coll.). – Fritz, 1989:261 (in key); Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**488. *martialis* Giner Marí**

*Cerceris martialis* Giner Marí, 1942b:132, ♀. Holotype: ♀, China: N Yunnan: "A. tun. tse." (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:583 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**489. mastogaster F. Smith**

*Cerceris mastogaster* F. Smith, 1856:453, ♀. Holotype or syntypes: ♀, India: Madras (BMNH). – Schletterer, 1887:496 (listed); Cameron, 1890b:249 (listed); Bingham, 1897:310 (redescription); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); R. Turner, 1912e:505 (revision); R. Bohart and Menke, 1976:583 (listed); Krombein, 1981:32 (in revision of Sri Lanka Philanthinae); S. Gupta, 1995:87 (India: Uttar Pradesh).

**490. mazimba Brauns**

*Cerceris mazimba* Brauns, 1926:295, ♀. Holotype: ♀, Mozambique: Dondo (SAM). – Arnold, 1931:140 (in key), 1942:9 (Lesotho, description of ♂), 1951:112 (Mali: Tillembeya); Empey, 1969a:314 (listed), 1970:186 (Zaire: Upemba National Park); R. Bohart and Menke, 1976:583 (listed); Empey, 1983:179 (listed, unnecessary designation of lectotype); Hancock, Chahwanda, and Mhlanga, 1995:38 (specimen in Bulawayo Museum).

**491. media Klug**

*Cerceris media* Klug in Waltl, 1835:98, ♀. Holotype: ♀, Spain: Andalusia: no specific locality (ZMHU). – Klug in Waltl, 1835:87 (in list of Hymenoptera of Andalusia); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:414 (as synonym of *Cerceris arenaria*); Ulrich, 1922:256 (study of holotype, valid species); de Beaumont, 1950c:321 (study of holotype), 1952a:75 (France: found only in St.Martin de Crau; redescription); Bajári, 1956a:85 (in catalog of Hungarian *Cerceris*, with list of localities), 1956b:405, 408 (previous records from Hungary are misdeterminations), 1957a:34, 42 (in key to Hungarian Sphecidae, not yet found in Hungary); de Beaumont, 1958d:273 (Greece); Pulawski, 1958a:167 (Bulgaria: Sandanski); Scobiola, 1960a:171 (Romania: Brănești Region: Cernica, Medgidia Region: Valul-lui-Traian); de Beaumont, 1962b:21 (Spain: Sevilla); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:22 (Greece), 1967a:290 (Turkey); Diniz, 1966:8 (Portugal: Évora); Romanova, 1969:133 (Russia: North Caucasus); Scobiola-Palade, 1968c:383 (Romania: Cernica), 1971:206 (in review of *Cerceris* of Romania); Balthasar, 1972:405 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:128 (Kazakhstan); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1978b:68 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:196 (in key to Sphecidae of European part of former USSR); Pagliano, 1980:125 (Italy: Piemonte); Gayubo, 1982b:55 (Spain: Ávila and Salamanca provinces), 1983e:238 (Spain: Salamanca Province); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:180 (redescription); Gayubo, 1986a:67 (Spain: Ciudad Real Province); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast'); Pagliano, 1987:162 and 166 (Italy, in key), 1988:143 (Italy, revision), 1990:98 (in catalog of Italian Sphecidae); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Schembri, 1991:178 (recorded from Malta by Cilia, 1975); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast'); Gayubo and Borsato, 1994:222 (Italy: Toscana), 223 (map of distribution in Italy); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Scharrer, 1995:30 (Croatia: Island of Krk); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:350 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:30 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:148 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Pagliano and Negrisolo, 2005:320 (in Sphecid Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1804 (Turkey: Erzurum: Himis); Ebrahimi, 2006:1 (Iran); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Kazenas, 2007a:93 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Ljubomirov and Yildirim, 2008:145 (in catalog of Crabronidae of Turkey).

*Cerceris capitata* F. Smith, 1856:441, ♀. Holotype or syntypes: ♀, Albania: no specific locality (BMNH or OUM?). Synonymized with *Cerceris media* by de Beaumont, 1950c:321. – A. Costa, 1867c:88 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); A. Costa, 1869b:104 (in revision of Italian Sphecidae); Schletterer, 1887:417 (in revision of world *Cerceris*), 488 (listed); Ed. André, 1889:288, 312 (in revision of Sphecidae of Europe and Algeria), 1891:25\* (bibliographic references); F. Morawitz, 1893b:420 (Uzbekistan: Pyandjikent); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Hungary); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Mercet, 1914:445 (listed from Spain); Shestakov, 1916:235 (Transcaucasia), 1917c:49 (Ukraine: Crimea), 1918a:125 (Tajikistan and Turkmenistan), 1922:81 (Russia: Stavropol' area); Berland, 1923b:288 (France: locality records); Shestakov, 1927a:10 (Ukraine: Odessa and Poltava Oblast's), 11 (Ukraine: Kherson Oblast'), 19 (Russia: Stalingrad Oblast', now Volgograd, as *capitata*), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral), 1928:267 (as synonym of *Cerceris tenuivittata*); Vorontsovskiy, 1928:43 (Russia: vicinity of Orenburg), 1930:64 (Russia: Orenburg Oblast'); Dusmet y Alonso, 1935:53 (Spain: Madrid: El Pardo); Kolosov, 1937:219 (Ukraine: Kupyansk); Giner Marí, 1941a:48 (in revision of Spanish *Cerceris*), 1943a:100 (in Sphecid Fauna of Spain); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain).

As *Cerceris arenaria*: Radoszkowski, 1877:58 (Transcaspi: Sutkent), corrected to *Cerceris capitata* by Shestakov, 1918a:124

#### 492. *meditata* Shestakov

*Cerceris meditata* Shestakov, 1918a:144, ♀, ♂. Syntypes: Uzbekistan: Tashkent, Bukhara (ZIN). – Shestakov, 1923:102, 105 (in key to subgenus *Apiraptrix*); Myartseva, 1972a:92 (Turkmenistan); R. Bohart and Menke, 1976:583 (listed); Kazenas, 1978b:52, 55 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:45 (redescription; possibly a synonym of *Cerceris spectabilis*); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:148 (geographic distribution, collecting localities in Kazakhstan).

#### 493. *megacantha* Evans

*Cerceris megacantha* Evans, 1982a:317, ♀, ♂. Holotype: ♀, Australia: Queensland: Brisbane: Blunder Creek (Queensland Museum, Brisbane). – Evans and Hook, 1982b:159 (nesting solitarily); Cardale, 1985:300 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:280 (Australia: Queensland; nest structure), 1986b:1298 (prey: Chrysomelidae Eumolpinae).

#### 494. *megacephala* Brèthes

*Cerceris megacephala* Brèthes, 1913:126, ♀. Holotype: ♀, Argentina: Misiones: Bompland (MACN). – Fritz, 1968b:170 (study of holotype); R. Bohart and Menke, 1976:583 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

#### 495. *melaina* R. Turner

*Cerceris melaina* R. Turner, 1912e:811, ♀. Holotype or syntypes: ♀, India: Maharashtra: Nasik (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:583 (listed).

#### 496. *melanthe* Banks

*Cerceris melanthe* Banks, 1947:21, ♀. Holotype: ♀, Arizona: Santa Catalina Mountains: Apache Canyon (MCZ). – Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:486 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Finnamore, 1982:254 (in Sphecid Fauna of Southern Quebec); G. Ferguson, 1983b:230 (study of holotype), 1984c:488 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

**497. mellicula R. Turner**

*Cerceris mellicula* R. Turner, 1912e:514, ♀, ♂. Syntypes: ♀, Pakistan: Karachi (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:584 (listed).

**498. mendesensis Brèthes**

*Cerceris mendesensis* Brèthes, 1920a:409, ♀. Holotype: ♀, Brazil: Mendés 90 km from Rio de Janeiro (MNHN). – R. Bohart and Menke, 1976:584 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**499. mendozana Brèthes**

*Cerceris mendozana* Brèthes: Jörgensen, 1912:288, nomen nudum (Argentina: Mendoza Province).

*Cerceris mendozana* Brèthes, 1913:123, ♀, ♂. Lectotype: ♀, Argentina: Mendoza: Chacras de Coria (MACN), designated by Fritz, 1968b:169. – Fritz and Toro, 1969:159 (in revision of Chilean and Patagonian *Cerceris*); R. Bohart and Menke, 1976:584 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**ssp. melanopus Brèthes**

*Cerceris mendozana* var. *melanopus* Brèthes: Jörgensen, 1912:288, nomen nudum (Argentina: Mendoza Province).

*Cerceris mendozana* var. *melanopus* Brèthes, 1913:124, ♀. Lectotype: ♀, Argentina: Mendoza (MACN), designated by Fritz, 1968b:169 (Article 74.6). – As *Cerceris mendozana melanopus*: Fritz and Toro, 1969:160 (new status, original description copied); R. Bohart and Menke, 1976:584 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**500. menkei Fritz and Toro**

*Cerceris menkei* Fritz and Toro, 1969:151, ♀. Holotype: ♀, Argentina: Río Negro: Lamarque (M. Fritz coll.). – R. Bohart and Menke, 1976:584 (listed); Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**501. menoni Coumar and Dey**

*Cerceris menoni* Coumar and Dey, 2003:103, ♀. Holotype: ♀, India: New Delhi: Indian Agricultural Research Institute (Indian Agricultural Research Institute.).

**502. merope Arnold**

*Cerceris merope* Arnold, 1951:115, ♀, ♂. Lectotype: ♀, Ghana: Accra (BMNH), designated by Empey, 1983:179. – Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed).

**503. merredinensis R. Turner**

*Cerceris merredinensis* R. Turner, 1936:536, ♀, ♂. Syntypes: Western Australia: Merredin (BMNH). – Tsuneki, 1968e:3 (in key); R. Bohart and Menke, 1976:584 (listed); Cardale, 1985:300 (in catalog of Australian Sphecidae).

**504. mesopotamica Brèthes**

*Cerceris mesopotamica* Brèthes, 1913:125, ♂. Holotype: ♀, Argentina: Misiones: Bompland (MACN). – Fritz, 1968b:170 (holotype labeled Mendoza); R. Bohart and Menke, 1976:584 (listed); Fritz, 1990:152 (revision); Genise, 1990:26 (type material in MACN); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

**505. metatarsalis R. Turner**

*Cerceris metatarsalis* R. Turner, 1926b:199, ♀. Holotype or syntypes: ♀, peninsular Thailand: Nakhon Sri Thammarat, Khao Ram (BMNH). – R. Bohart and Menke, 1976:584 (listed).



**506. mexicana de Saussure**

*Cerceris mexicana* de Saussure, 1867:101, ♀, ♂. Syntypes: "In Agro Mexicano calido" (depository?). – Schletterer, 1887:497 (listed); Cameron, 1890a:117 (Mexico); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:50 (in revision of Mexican and Central American species); R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:488 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Amarante, 2005a:13 (correction to his 2002 catalog); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

*Cerceris veracruz veracruz* Scullen, 1972:53, ♀, ♂. Holotype: ♀, Mexico: Veracruz: 1 mi E Cordoba (CAS). Synonymized with *Cerceris mexicana* by G. Ferguson, 1984c:488. – R. Bohart and Menke, 1976:589 (listed, as *Cerceris veracruz*); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris veracruz josei* Scullen, 1972:53, ♀, ♂. Holotype: ♀, El Salvador: Quezaltepeque (UCD). Synonymized with *Cerceris mexicana* by G. Ferguson, 1984c:488.

**ssp. irwini Scullen**

*Cerceris irwini* Scullen, 1972:49, ♀, ♂. Holotype: ♀, Costa Rica: 7 mi SE Liberia (USNM). – R. Bohart and Menke, 1976:582 (listed). – **As *Cerceris mexicana irwini***: G. Ferguson, 1984c:488 (new status); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**507. micropunctata Shestakov**

*Cerceris micropunctata* Shestakov, 1918b:14, ♀, ♂. Syntypes: Russia: Siberia: Chita Oblast': Gornyi Zerentyu near Nerchinsk (ZIN). – Tsuneki, 1961c:12 (in key); R. Bohart and Menke, 1976:584 (listed); Kazenas, 1979d:85 (in key); Nemkov, 1986:109 (Russia: Siberia: Irkutsk Oblast'); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:473 (in key to Sphecidae of Russian Far East); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009a:66 (is an endemic of Transbaicalia), 2009b:149 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**508. militaris Dahlbom**

*Cerceris militaris* Dahlbom, 1844:224, ♀. Holotype: ♀, "Promontorium Bonae Spei = Cape of the Good Hope", but actually Costa Rica to Brazil (LUND). – Dahlbom, 1845:502 (in key); F. Smith, 1856:450 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:497 (listed); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Empey, 1969a:314 (listed), 1971a:233 (redescription); R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:488 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

*Cerceris rufonigra* Taschenberg, 1875:399, ♀ (as *rufo-nigra*, incorrect original hyphenation). Lectotype: ♀, Brazil: Rio de Janeiro (Halle), designated by G. Ferguson, 1984c:488. Synonymized with *Cerceris militaris* by Empey, 1980:52. – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed).

*Cerceris rufonigra turrialba* Scullen, 1972:51, ♀, ♂. Holotype: ♀, Costa Rica: Turrialba (USNM). Synonymized with *Cerceris militaris* by G. Ferguson, 1984c:488. – R. Bohart and Menke, 1976:586 (listed). – **As *Cerceris militaris turrialba***: Empey, 1980:52 (new subspecific combination).

**509. milkoii Kazenas**

*Cerceris milkoii* Kazenas, 2000c:190, ♀, ♂. Holotype: ♂, Kyrgyzstan: Alay Mts: Arkhalsu Valley 16 km NWW village Irkeshtm (ZIN). – Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**510. millironi Krombein**

*Cerceris millironi* Krombein, 1969b:18, ♀, ♂. Holotype: ♀, Solomon Island: Guadalcanal: Kiwi Creek (USNM). – R. Bohart and Menke, 1976:584 (listed).

**ssp. *tulagiensis* Krombein**

*Cerceris millironi tulagiensis* Krombein, 1969b:20, ♀. Holotype: ♀, Solomon Islands: Florida Island: Tulagi (BISHOP). – R. Bohart and Menke, 1976:584 (listed).

**ssp. *malaitensis* Krombein**

*Cerceris millironi malaitensis* Krombein, 1969b:20, ♂. Holotype: ♂, Solomon Islands: Malaita Island (BISHOP). – R. Bohart and Menke, 1976:584 (listed).

**511. *mimica* Cresson**

*Cerceris mimica* Cresson, 1873:228, ♀, ♂. Lectotype: ♀, USA: Texas: no specific locality (ANSP), designated by Cresson, 1916:101. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:497 (listed, as *minima*); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:488 (in revision on North American *Cerceris*), 1972:87 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:584 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:489 (listed); Evans, 2001:220 (nesting habits); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Amarante, 2005a:13 (correction to his 2002 catalog).

*Cerceris esau* Schletterer, 1887:458, ♀, ♂. Lectotype: ♀, Mexico: Mexico City (NHMW), designated by Scullen, 1961:47. Synonymized with *Cerceris mimica* by Scullen, 1961:47. – Schletterer, 1887:490 (listed); Cameron, 1890a:123 (Mexico, comparison with *Cerceris curvicornis*); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Dollfuss, 1989:8 (lectotype in NHMW).

*Cerceris englehardti* Banks, 1947:12, ♂. Holotype: ♂, USA: Arizona: St. John (MCZ). Synonymized with *Cerceris mimica* by Scullen in Muesebeck et al., 1951:1009. – G. Ferguson, 1983b:228 (study of holotype).

**512. *minax* Mickel**

*Cerceris minax* Mickel, 1918a:339, ♀, ♂. Holotype: ♀, USA: California: Sacramento (Univ. Nebraska). – Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1960:75 (as new synonym of *Cerceris acanthophila*); R. Bohart and Grissell, 1975:49 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:584 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:47 (California: Channel Islands).

**513. *mindanaonis* Tsuneki**

*Cerceris mindanaonis* Tsuneki in Tsuneki et al., 1992c:83, ♂. Holotype: ♂, Philippines: Mindanao: Zamboanga: Pasonanca Park (depository not indicated originally, now USNM). – Tsuneki et al., 1992c:51 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

**514. *minuscula* R. Turner**

*Cerceris minuscula* R. Turner, 1910a:347, ♀, ♂. Syntypes: Australia: Queensland: Mackay; Northern Territory: Hermannsburg (BMNH). – R. Turner, 1910b:422 (in key), 1912d:677 (in revision of Australian *Cerceris*); Cockerell, 1930:36 (Queensland: Stanthorpe); R. Turner, 1936:538 (Western Australia); Tsuneki, 1968e:6 (in key), 29 (Australia; redescription); Krombein, 1969b:22 (discussion of subspecies); nec Evans and Matthews, 1970:156 (= *Cerceris windorum*); R. Bohart and Menke, 1976:584 (listed); Evans, 1982a:368 (revision); Evans and Hook, 1982b:160 (communal nesting); Cardale, 1985:300 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:295 (nesting habits), 1986b:1303 (prey: Attelabidae, Chrysomelidae, Curculionidae, Phalacridae); Naumann, 1993:187 (Australia: Queensland: Heathlands area in Cape York, as *miniscula*).

**ssp. sculleniana Krombein**

*Cerceris minuscula sculleniana* Krombein, 1969b:22, ♀, ♂. Holotype: ♀, Papua New Guinea: Oro (= Northern) Province: Kokoda (BMNH). – Krombein, 1974a:466 (additional locality records); R. Bohart and Menke, 1976:584 (listed).

**ssp. stanleyensis Krombein**

*Cerceris minuscula stanleyensis* Krombein, 1969b:23, ♀. Holotype: ♀, Papua New Guinea: Central Province: Bisianumu 40 km NE Port Moresby (BISHOP). – R. Bohart and Menke, 1976:584 (listed).

**ssp. korovensisa Krombein**

*Cerceris minuscula korovensisa* Krombein, 1969b:24, ♂. Holotype: ♂, Solomon Islands: Shshortland Island: Korovo (BISHOP). – R. Bohart and Menke, 1976:584 (listed).

**515. *Cerceris minutior* Maidl**

*Cerceris minutior* Maidl, 1924:243, ♂. Holotype: ♂, Sudan: Sennar (NHMW). – R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type examaianed).

**516. *minutissima* Maidl**

*Cerceris minutissima* Maidl, 1924:244, ♂. Holotype: ♂, Sudan: Sennar (NHMW). – R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type examaianed).

**517. *misoolensis* Krombein**

*Cerceris misoolensis* Krombein, 1969b:16, ♀. Holotype: ♀, Indonesia: Irian Jaya (= Indonesian New Guinea): Misool Island: Fakal (RMNH). – R. Bohart and Menke, 1976:584 (listed).

**518. *mitjaevi* Kazenas**

*Cerceris mitjaevi* Kazenas, 2001e:124, ♀. Holotype: ♀, Kazakhstan: Almaty Oblast': 30 km E Shilik = 3 km ENE Borandysu (ZIN).

**519. *moczari* Tsuneki**

*Cerceris moczari* Tsuneki, 1971:440, ♀. Holotype: ♀, Mongolia: Hovd Aymag: Somon Bulgan (TMB). – R. Bohart and Menke, 1976:584 (listed)

**520. *modica* Amarante**

*Cerceris modesta* F. Smith, 1873b:106, ♀ (as *modestus*, incorrect original termination), junior primary homonym of *Cerceris modesta* F. Smith, 1856. Holotype or syntypes: ♀, Brazil: Amazonas: Ega, now Tefê (BMNH). – Schletterer, 1887:497 (listed); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:584 (listed).

*Cerceris modica* Amarante, 2002:60. Substitute name for *Cerceris modesta* F. Smith, 1873.

**521. *moestissima* Guiglia**

*Cerceris moestissima* Guiglia, 1941b:116, ♂. Holotype: ♂, Ethiopia: Gota (MSNG). – Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed).

**522. *moggionis* Arnold**

*Cerceris moggionis* Arnold, 1951:102, ♂. Holotype: ♂, Ethiopia: Moggio (BMNH). – Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type examined).

**523. *monocera* Kohl**

*Cerceris monocera* Kohl, 1898a:341, ♀. Holotype: ♀, Senegal: no specific locality (NHMW). – Arnold, 1930:13 (in checklist of Afrotropical Sphecidae), 1931:204 (original description translated into English), 1942:19 (Liberia, de-

scription of ♂); Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type examined); Dollfuss, 1989:8 (holotype in NHMW).

#### 524. *montealban* Scullen

*Cerceris montealban* Scullen, 1972:51, ♀, ♂. Holotype: ♀, Mexico: Oaxaca: Oaxaca (CAS). – R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:489 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

#### 525. *montezuma* Cameron

*Cerceris montezuma* Cameron, 1890a:108, ♀. Lectotype: ♀, Mexico: no specific locality (BMNH), designated by G. Ferguson, 1984b:437. – Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:88 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:489 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

#### 526. *monticola* Arnold

*Cerceris monticola* Arnold, 1931:160, ♀. Holotype: ♀, Malawi: Mlanje (BMNH). – Arnold, 1942:13 (description of ♂); Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type examined).

#### 527. *morawitzi* Mocsáry

*Cerceris morawitzi* Mocsáry, 1883:46, ♀, ♂ (as *Morawitzi*, incorrect original capitalization). Syntypes: southern Russia or Caucasus: no specific locality (TMB). – Shestakov, 1914b:409 (Kazakhstan: Aulie-Ata, now Dzhambul, as *Cerceris tuberculata* var. *morawitzi*); de Beaumont and Bytinski-Salz, 1959:130 (Israel: Negev; as *Cerceris rufipes morawitzi*); R. Bohart and Menke, 1976:584 (listed); Kazenas, 1984a:208 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 252 (nest and prey: *Cleonus* sp., a curculionid), 2001d:120 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:149 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ili River valley: 45 km Chingildy, 15 km E Chundza).

#### *ssp. chagatai* Tsuneki

*Cerceris morawitzi chagatai* Tsuneki, 1971:449, ♀, ♂. Holotype: ♀, Mongolia: Bayanhongor Aymag: Cagan Bogdul: Tooroin-bulag (TMB).

#### *ssp. desertorum* Kazenas

*Cerceris morawitzi desertorum* Kazenas, 1984a:210, ♀, ♂. Holotype: ♀, Kazakhstan: Balkhash (ZIN). – Kazenas, 2001b:55 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### *ssp. hissarica* Kazenas

*Cerceri morawitzi hissarica* Kazenas, 1984a:211, ♀, ♂. Holotype: ♀, Tajikistan: Kondara Canyon 35 km N Dushanbe (ZIN). – Kazenas, 2001b:56 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### *ssp. mongolensis* Tsuneki

*Cerceris morawitzi mongolensis* Tsuneki, 1971:448, ♀, ♂. Holotype: ♀, Mongolia: Sukhebaator Aymag: Ongon-elis (TMB). – Tsuneki, 1971m:19 (China: Nei Mongol: Apaka, ca. 45°N, 116°E); R. Bohart and Menke, 1976:584 (listed).

As *Cerceris rufipes evecta* (corrected to *Cerceris morawitzi mongolensis* by Tsuneki, 1971i:448 and 1971m:19): Tsuneki, 1961c:71 but not 53 and 63 (China: Nei Mongol), 1965d:39 (nesting habits), 1968f:10 (China: Yenping; discussion).

### 528. *mordax* Krombein

*Cerceris mordax* Krombein, 1969b:28, ♀. Holotype: ♀, Papua New Guinea: Central Province: Laloki (BISHOP). – R. Bohart and Menke, 1976:584 (listed).

### 529. *morelos* Scullen

*Cerceris finitima morelos* Scullen, 1972:25, ♀, ♂. Holotype: ♀, Mexico: Morelos: 14 mi S Cuernavaca (USNM). – R. Bohart and Menke, 1976:580 (as new synonym of *Cerceris finitima* by R. Bohart); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae). – As *Cerceris morelos*: G. Ferguson, 1984c:489 (new status; listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

### 530. *morrae* Strand

*Cerceris morrae* Strand, 1910a:135, ♀. Holotype: ♀, Paraguay: Asunción: Villa Morra (ZMHU). – Scullen, 1962:58 (synonymy); Fritz, 1971:158 (synonymy); R. Bohart and Menke, 1976:584 (listed); Fritz, 1990:150 (revision); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

*Cerceris nigra* Brèthes, 1910a:263, ♀, junior primary homonym of *Cerceris nigra* Ashmead, 1900. Holotype: ♀, Argentina: Mendoza: Chacras de Coria (MACN). Synonymized with *Cerceris morrae* by Fritz, 1970:158. – Jørgensen, 1912:287 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Mendoza); Fritz, 1968b:165 (study of holotype); Genise, 1990:26 (type material in MACN).

*Cerceris ruficapoides* ab. *derufata* Strand, 1910a:138, ♂. Holotype: ♂, Paraguay: Asunción: Villa Morra (ZMHU). Synonymized with *Cerceris morrae* by Fritz, 1990:150. – As *Cerceris ruficapoides derufata*: R. Bohart and Menke, 1976:586 (new status, listed).

*Cerceris paraguayana* Strand, 1910a:138, ♀. Holotype: ♀, Paraguay: Asunción: Villa Morra (ZMHU). Synonymized with *Cerceris morrae* by Scullen, 1962:58.

*Cerceris atra* Scullen, 1965c:274. Substitute name for *Cerceris nigra* Brèthes, 1910.

### 531. *mossambica* Gribodo

*Cerceris mossambica* Gribodo, 1895:354, ♀. Holotype: ♀, Mozambique: no specific locality (MSNG). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:200 (original description translated); Empey, 1969a:314 (listed, coasts of Mozambique and Natal); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed, type depository).

### 532. *moyanoi* Holmberg

*Cerceris moyanoi* Holmberg, 1903:477, ♂ (as *Moyanoi*, incorrect original capitalization). Lectotype: ♂, Argentina: Misiones: no specific localities (MACN), designated by Fritz, 1968b:162 (Article 74c). – Schrottky, 1913a:230 (Argentina: Chaco, Misiones); R. Bohart and Menke, 1976:584 (listed); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

### 533. *multiguttata* R. Turner

*Cerceris multiguttata* R. Turner, 1908:471, ♀, ♂. Syntypes: ♀, Australia: Queensland: Mackay (BMNH). – R. Turner, 1910b:421 (in key), 1912d:672 (in revision of Australian *Cerceris*); Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:584 (listed); Evans, 1982a:329 (revision); Cardale, 1985:301 (in catalog of Australian Sphecidae); Naumann, 1993:187 (Australia: Queensland: Heathlands area in Cape York).

### 534. *multipicta* F. Smith

*Cerceris multipicta* F. Smith, 1873c:411, ♀, ♂. Lectotype: ♀, Angola: no specific locality (BMNH), designated by Empey, 1983:179. – Schletterer, 1887:430 (in revision of world *Cerceris*), 497 (listed); Ed. André, 1889:310 (in

revision of Sphecidae of Europe and Algeria), 1891:25\* (bibliographic references); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Brauns, 1911a:238 (South Africa, sleeping on plants), 1926:323 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:144 and 147 (in key); Giner Mari, 1941b:280 (in revision of North African *Cerceris*); Arnold, 1943:74 (Zaire); Empey, 1969a:315 (listed); I. Robertson, 1969:480 (Tanzania: Ukiriguru); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:179 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (specimens in Bulawayo Museum).

*Cerceris simoni* du Buysson, 1897:358, ♀ (as *Simoni*, incorrect original capitalization). Lectotype: ♀, South Africa: Cape Province: Vryburg (MNHN), designated by Empey, 1983:179. Synonymized with *Cerceris multipicta* by Empey, 1969a:315.

*Cerceris speculata* Shestakov, 1917a:317, ♂. Holotype or syntypes: ♂, Senegal: no specific locality (ZIN). Synonymized with *Cerceris multipicta* by Empey, 1969a:315. – Arnold, 1930:13 (in checklist of Afrotropical Sphecidae).

### 535. *nana* Shestakov

As *Cerceris acuta*: R. Turner, 1912e:489 (Kashmir), corrected to *Cerceris nana* by Shestakov, 1918a:124.

*Cerceris nana* Shestakov, 1918a:124. Syntypes: ♀, India: Kashmir: Kangra Valley (BMNH). – R. Bohart and Menke, 1976:584 (listed).

### 536. *narcisoi* Fritz

*Cerceris narcisoi* Fritz, 1983b:164, ♀, ♂. Holotype: ♀, Argentina: Entre Ríos: Parque Nacional El Palmar (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:60 (in catalog of Neotropical Crabronidae).

### 537. *nargisa* Kazenas

*Cerceris nargisa* Kazenas, 1984a:137, ♀, ♂. Holotype: ♀, Uzbekistan: Samarkand: Mount Chupan-Ata (ZIN). – Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), as *nargiza*, 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:149 (geographic distribution, collecting localities in Kazakhstan, as *nargiza*), 2004b:112 (Kazakhstan: western Tien Shan, as *nargiza*).

### 538. *nasidens* Schletterer

*Cerceris nasidens* Schletterer, 1887:452, ♂, ♀. Lectotype: ♀, South Africa: Cape Province: no specific locality (NHMW), designated by Empey, 1983:180 (Article 74.6). – Schletterer, 1887:497 (listed); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:195 (original description translated into English); Empey, 1969a:312 (recognition characters), 315 (listed); R. Bohart and Menke, 1976:584 (listed); Dollfuss, 1989:8 (holotype in NHMW).

*Cerceris kalaharica* Bischoff, 1913b:118, ♀, ♂. Lectotype: ♀, Botswana: Sekuma in Kakia District (ZMHU), designated by Empey, 1983:180. Treated as synonym of *Cerceris nasidens* by Empey, 1983:180 (but not formally synonymized, possibly a mistake). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:582 (listed). – **As *Cerceris africana* race *kalaharica***: Arnold, 1931:138 (new status, ♀, in key), 145 (♂, in key = *Cerceris nasidens* Schletterer according to Empey, 1969a:311), 149 (bibliographic reference). – **As *Cerceris africana kalaharica***: Empey, 1969a:311 (new status, listed), 312 (recognition characters). – **As *Cerceris kalaharica kalaharica***: Empey, 1972:54 (new subspecific combination, redescription). – **As *Cerceris trichionota kalaharica***: Empey, 1974:119 (new subspecific combination, taxonomic history); R. Bohart and Menke, 1976:628 (listed).

*Cerceris africana* race *karooensis* Brauns, 1914:230, ♀, ♂. Lectotype: ♀, South Africa: Cape Province: Willowmore (TMP), designated by Empey, 1983:180. Synonymized with *Cerceris nasidens* by Empey, 1969a:315. – Brauns, 1926:283 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:149 (as synonym of *Cerceris kalaharica*).

**539. natalensis de Saussure**

*Cerceris natalensis* de Saussure, 1867:96, ♀. Lectotype: ♀, South Africa: Natal coast (MHNG), designated by Empey, 1983:180 (Article 74.6). – Schletterer, 1887:497 (listed); Arnold, 1931:137 and 145 (in key); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Empey, 1969a:315 (listed); R. Bohart and Menke, 1976:584 (listed); Callan, 1987:102 (prey: Scarabaeidae Melolonthinae: *Hybocamenta* sp.).

*Cerceris morosula* Brauns, 1914:226, ♀, ♂. Lectotype: ♀, South Africa: Kwazulu Natal: Durban (TMP), designated by Empey, 1983:180. Synonymized with *Cerceris natalensis* by Arnold, 1931:149. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire).

*Cerceris morosula* Brauns, 1926:280. Objective synonym of *Cerceris morosula* Brauns, 1914.

**540. neahminax Scullen**

*Cerceris neahminax* Scullen, 1965b:390, ♀. Holotype: ♀, USA: New Mexico: Santa Fe (CAS). – R. Bohart and Menke, 1976:584 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:490. (listed).

**541. nebrascensis H. Smith**

*Cerceris nebrascensis* H. Smith, 1908:368, ♀. Holotype: ♀, USA: Nebraska: Sioux County: Glen (UNL). – Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 24 (paratype in UNL); Scullen, 1965b:491 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:584 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:490 (listed).

**542. nebulosa Cameron**

*Cerceris nebulosa* Cameron, 1890b:265, ♀. Lectotype: ♀, India: Assam: North Khasi (OXUM), designated by Empey, 1984:78. – Cameron, 1890b:250 (India: North Khasi); Bingham, 1897:311 (original description copied); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); R. Turner, 1912e:504 (revision); Ramakrishna Aiyar, 1916:557 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:584 (listed); Empey, 1984:78 (listed, type examined); Wu and Zhou, 1996a:179 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris erythropoda* Cameron, 1902d:57, ♀, junior primary homonym of *Cerceris erythropoda* Cameron, 1890. Lectotype: ♀, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:78. Synonymized with *Cerceris nebulosa* by R. Turner, 1912e:504.

*Cerceris himalayensis* Cameron, 1905c:220, ♂, junior primary homonym of *Cerceris himalayensis* Bingham, 1898. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:78. Synonymized with *Cerceris nebulosa* by R. Turner, 1912e:504.

*Cerceris intimella* Cameron, 1905c:221, ♀. Holotype or syntypes: ♀, India: Assam: Khasia Hills (OXUM). Synonymized with *Cerceris nebulosa* by R. Turner, 1912e:504.

*Cerceris assamensis* Cameron, 1905:269, ♂. Holotype or syntypes: ♂, India: Assam (lost? Empey, 1984:78). Synonymized with *Cerceris nebulosa* by R. Turner, 1912:504.

**543. neghelliensis Guiglia**

*Cerceris neghelliensis* Guiglia, 1939d:62, ♂. Holotype: ♂, Ethiopia: Sidamo: Neghelli, now Negele (Genova). – R. Bohart and Menke, 1976:584 (listed); Empey, 1983:180 (listed).

**544. nenicra de Saussure**

*Cerceris nenicra* de Saussure, 1887:25, ♀, ♂. Lectotype: ♀, Madagascar: Nosibe (MHNG), designated by Empey, 1983:180. – Dalla Torre, 1897:468 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:584 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae). – **As *Cerceris nenitra*** (a misspelling): de Saussure, 1892:551 (Madagascar, redescription); R. Turner, 1911b:370 (Seychelles Islands); Arnold, 1945:42 (Madagascar);

redescription); Vesey-Fitzgerald, 1956b:362 (Seychelles, as *renitra*); Leclercq, 1961d:102 (Madagascar), 1962b:212 (Madagascar); Empey, 1969a:316 (listed).

*Cerceris perfoveata* Arnold, 1947:167, ♀. Holotype: ♀, Madagascar: Ivondro (MNHN). Synonymized with *Cerceris nenicra* by Empey, 1983:180. – Empey, 1969a:318 (listed, possibly dark form of *Cerceris nenit ra*); R. Bohart and Menke, 1976:585 (listed).

#### 545. *nenitroidea* Bischoff

*Cerceris nenitroidea* Bischoff, 1913b:118, ♀, ♂ (♀ = *Cerceris holconota labiosa*). Lectotype: ♀, Botswana: Sevrelela in Kakia District (ZMHU), designated by Empey, 1983:180. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae, as *ninitroidea*), 1931:194 (original description translated into English); Empey, 1969a:316 (listed); R. Bohart and Menke, 1976:584 (listed).

*Cerceris pseudoillustris* Giner Mari: Empey, 1969a:327. Nomen nudum. Synonymized with *Cerceris nenitroidea* by Empey, 1983:180.

#### 546. *neogenita* Schulz

*Cerceris laevigata* Holmberg, 1903:476, ♂, junior primary homonym of *Cerceris laevigata* F. Smith, 1856. Lectotype: ♂, Argentina: Buenos Aires: Chacabuco (MACN), designated by Fritz, 1968b:162 (Article 74c).

*Cerceris neogenita* W. Schulz, 1906:195. Substitute name for *Cerceris laevigata* Holmberg, 1903. – Schrottky, 1913a:230 (Argentina: Buenos Aires); R. Bohart and Menke, 1976:584 (listed); Fritz, 1983b:162 (in revision of *neogenita* species group); Amarante, 2002:60 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

*Cerceris holmbergi* Brèthes, 1910a:264 (as *Holmbergi*, incorrect original capitalization). Substitute name for *Cerceris laevigata* Holmberg, 1903.

*Cerceris antemissa* Brèthes, 1910a:269, ♂, ♀. Lectotype: ♂, Argentina: Jujuy (MACN), designated by Fritz, 1962:64. Synonymized with *Cerceris neogenita* by Fritz, 1962:64. – Jörgensen, 1912:287 (Argentina: Mendoza Province; floral records); Schrottky, 1913a:229 (Argentina: Jujuy, Tucumán).

*Cerceris joerjenseni* Brèthes: Jörgensen, 1912:287, nomen nudum (as *Jörjenseni*, incorrect original capitalization and diacritic mark (Argentina: Mendoza Province). – Amarante, 2005a:13 (correction to his 2002 catalog).

*Cerceris joergenseni* Brèthes, 1913:121, ♀, ♂ (as *Jörgenseni*, incorrect original capitalization and diacritic mark. Lectotype: ♀, Argentina: Mendoza: Chacras de Coria (MACN), designated by Fritz, 1968b:168. Synonymized with *Cerceris neogenita* by Fritz, 1962:64. – Genise, 1990:26 (type material in MACN); Brèthes, 1920a:408 (Argentina); Amarante, 2005a:12 (correction to his 2002 catalog).

#### 547. *nephthys* Arnold

*Cerceris nephthys* Arnold, 1931:165, ♀ (as *Nephthys*, incorrect original capitalization). Holotype: ♀, Namibia: Okahandja (BMNH). – Empey, 1969a:316 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:181 (listed, type examined).

#### *ssp. plathyryncha* Arnold

*Cerceris nephthys plathyryncha* Arnold, 1942:20, ♀, ♂. Lectotype: ♀, Zimbabwe: Matetsi (SAM), designated by Empey, 1983:181. – Empey, 1969a:316 (listed); R. Bohart and Menke, 1976:584 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotypes in Bulawayo Museum).

#### 548. *nigra* Ashmead

*Cerceris nigra* Ashmead, 1900:227, ♀. Lectotype: ♀, Lesser Antilles: St. Vincent Island (USNM), designated by G. Ferguson, 1984b:437. – Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:490 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae), *Cerceris joerjenseni* Brèthes: Jörgensen, 1912:287, nomen nudum.



*Cerceris eustylicida* Williams, 1928a:169, ♀. Holotype: ♀, British Guiana: Berbice County: Blairmont (BISH). Synonymized with *Cerceris nigra* by G. Ferguson, 1984c:490. – F. Williams, 1928a:152 (nesting habits); Tsuneki, 1965d:3 (prey record summary: Curculionidae); R. Bohart and Menke, 1976:580 (listed).

#### 549. *nigrescens* F. Smith

*Cerceris nigrescens* F. Smith, 1856:466, ♀. Lectotype: ♀, Canada: Nova Scotia: no specific locality (BMNH), designated by R. Bohart and Grissell, 1975:49 (Article 74.6). – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:123 (in revision of North American Philanthinae); Packard, 1866:62 (listed); Cresson, 1873:230 (Texas); Provancher, 1883:643 (in revision of Canadian Hymenoptera); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:497 (listed); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Harrington, 1902:222 (Canada: Ontario: Ottawa); Viereck and Cockerell, 1904b:138 (in revision of New Mexico *Cerceris*); Banks, 1912:20 (in revision of eastern U.S. *Cerceris*); Faull, 1913:384 (Canada: Toronto region); Stevens, 1917:422 (North Dakota); Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Krombein, 1936:94 (nesting, prey: weevils), 99 (floral records); Brimley, 1938:448 (North Carolina: Manee, Southern Pines); Krombein, 1938a:1 (nesting habits); Banks, 1947:18 (in revision of western U.S. *Cerceris*); Strickland, 1947:130 (Canada: Alberta); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Evans, 1957b:85 (description of larva); Spencer, 1957:23 (Canada: British Columbia: dry belt from Kelowna to Chilcotin, Royal Oak near Victoria); Scullen, 1965b:493 (in revision on North American *Cerceris*, as *nigrescens nigrescens*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Evans, 1970:501 (Wyoming: Jackson Hole, as *nigrescens nigrescens*); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); Scullen and Wold, 1970:212 (distribution and summary of prey records, as *nigrescens nigrescens*); Evans, 1971:512 (nesting habits, as *nigrescens nigrescens*); R. Bohart and Grissell, 1975:49 (in revision of North American Philanthinae); Evans, 1975a:264 (unsuccessful colonizer of a new habitat); R. Bohart and Menke, 1976:584 (listed); Kumar, Lavigne, Lloyd, and Pfadt, 1976:51 (USA: Colorado: Pawnee National Grassland); Krombein, 1979b:1736 (in catalog of North American Hymenoptera, nesting sites, list of parasites and prey); Finnamore, 1982:255 (in Sphecid Fauna of Southern Quebec); Evans and O'Neill, 1985:1037 (male territorial behavior); G. Ferguson, 1984c:490 (listed); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Finnamore, 1997:893 (Canada: Yukon); Kurczewski, 1998d:250 (pine barrens in upstate New York); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:46, 48 (in key to eastern Canadian *Cerceris*).

*Cerceris munda* Mickel, 1918a:337, ♀, ♂. Holotype: ♀, USA: California: Sacramento (UNL). Synonymized with *Cerceris nigrescens* by Scullen, 1960:79 and R. Bohart and Grissell, 1975:49. – Banks, 1947:18 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL) – **As *Cerceris nigrescens munda***: Scullen, 1965b:497 (new status, in revision on North American *Cerceris*).

*Cerceris abbreviata* Banks, 1919:84, ♂. Lectotype: ♂, Washington: Yakima River: Nelson's (MCZ), designated by R. Bohart and Grissell, 1975:50, and G. Ferguson, 1983b:224. Synonymized with *Cerceris nigrescens* by Scullen *in* Muesebeck et al., 1951:1009. – Banks, 1947:17 (in revision of western U.S. *Cerceris*).

#### 550. *nigriceps* F. Smith

*Cerceris nigriceps* F. Smith, 1873b:106, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Pará: Pará, now Belém (BMNH). – Schletterer, 1887:498 (listed); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:584 (listed); Amarante, 2002:6; Amarante, 2002:61 (in catalog of Neotropical Crabronidae) (in catalog of Neotropical Crabronidae).

**551. nigrosa Fritz**

*Cerceris nigrosa* Fritz, 1989:263, ♀. Holotype: ♀, Argentina: Salta: Rosario de Lerma (M. Fritz coll.). – Fritz, 1989:261 (in key), 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**552. nigrostoma Brauns**

*Cerceris nigrostoma* Brauns, 1926:301, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP), designated by Empey, 1983:181. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:141 and 147 (in key); Empey, 1969a:317 (listed); R. Bohart and Menke, 1976:584 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

**553. nikolaji Kazenas**

*Cerceris nikolaji* Kazenas, 1980a:794, ♀. Holotype: ♀, Tajikistan: Dushanbe (ZIN). – Kazenas, 1984a:153 (redescription), 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia).

**554. nipponensis Tsuneki**

*Cerceris nipponensis* Tsuneki, 1961c:31, ♀, ♂. Holotype: ♀, Japan: Ishikawa Prefecture: Mont Haku (originally K. Tsuneki coll., now Hyogo Mus.). – Tsuneki, 1961c:7, 14, 22, 23 (in key); Tsuneki and Shimoyama, 1963:49 (Japan: Towada Prefecture); Handea, 1965:19 (Japan: Fukui Prefecture); Tsuneki, 1965d:3, 4 (prey record summary: Curculionidae, Chrysomelidae), 31 (nesting habits); Haneda, 1967:1 (recognition characters in male); Tsuneki, 1967g:44 (W Japan: Mont Hyonosen); Haneda, 1968a:46 (Japan); Matsuura, 1968:29 (Japan); Tano, 1968:34 (Japan); Tsuneki, 1968l:51 (Korea: Quelquepart Island), 1968n:59 (taxon.); Haneda, 1969:70 (Japan: Yamanashi Prefecture); Yamada, 1971:35 (Japan: Aichi Prefecture); Nambu, 1973d:152 (Japan: Saitama Prefecture); Suda, 1973:123 (Japan: Yamanashi Prefecture); Nambu, 1975b:72 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:584 (listed); Kazenas, 1979d:81, 86 (in key); Tano, 1994a:8 (holotype in K. Tsuneki collection); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:468, 476 (in key to Sphecidae of Russian Far East); Sk. Yamane and Tano, 1995:17 (Japan: Ryukyu Islands); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Yamane, Ikudome, and Terayama, 1999:547 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima); Tano, Kurokawa, Murota, and Nozaka, 2003:33 (Japan: Nagasaki Prefecture: Tsushima); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:38 (Japan: Gifu Prefecture); Suda, 2004:47 (Japan: Yamanashi Prefecture); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:55 (Japan: Gifu Prefecture); Terayama and Tano, 2005:4, 6 (in key to Japanese *Cerceris*); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006:30 (Japan: Toyama Prefecture).

**555. nitidoides G. Ferguson**

*Cerceris nitida* Banks, 1913b:424, ♀, ♂, junior primary homonym of *Cerceris nitida* Wesmael, 1852. Lectotype: ♀, USA: North Carolina: Valley of Black Mountain (AMNH), designated by G. Ferguson, 1983b:231.– Mickel, 1918b:454 (in catalog of Nebraskan Sphecidae); Brimley, 1938:448 (North Carolina: Valley of Black Mountain); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:498 (in revision on North American *Cerceris*); Scullen in R. Bohart and Menke, 1976:583 (as new synonym of *Cerceris melanthe*).

*Cerceris nitidoides* G. Ferguson, 1984c:490. Substitute name for *Cerceris nitida* Banks, 1913. – Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 73 (first record from Ontario: Merivale); Buck, Paiero, and Marshall, 2006:45, 46 (in key to eastern Canadian *Cerceris*).

**556. nitrariae Morice**

*Cerceris nitrariae* Morice, 1911:89, ♀, ♂. Syntypes: Algeria: Biskra (BMNH). – Shestakov in Nadig, 1933:97 (Morocco: Marrakech); Giner Marí, 1941b:214 (in revision of North African *Cerceris*); de Beaumont, 1951f:380

(Tunisia to Morocco; diagnostic characters), 1953g:124 (Morocco: Goulmina); R. Bohart and Menke, 1976:584 (listed); K. Schmidt, 2000:31 (in revision of Western Palearctic *Cerceris*).

### 557. *nortina* Fritz and Toro

*Cerceric nortina* Fritz and Toro, 1969:164, ♀ (as *nortinus*, incorrect original termination). Holotype: ♀, Chile: Atacama: Río Manflas (Mus. Nac. Hist. Nat. Santiago). – Sielfeld, 1971:255 (in key to Chilean *Cerceris*); R. Bohart and Menke, 1976:584 (listed, as *nortinus*); Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae, as *nortinus*); Amarante, 2002:61 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

### 558. *nugax* Arnold

*Cerceris nugax* Arnold, 1931:176, ♂. Holotype: ♂, Nigeria: Zungeru (BMNH). – Arnold, 1951:112 (Mali: Tillembeya); Empey, 1969a:317 (listed); R. Bohart and Menke, 1976:584 (listed); Empey, 1983:181 (listed, type examined); Guichard, 1993a:160 (Arabian Peninsula); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 234 (in catalog of Sphecidae of Saudi Arabia).

### *ssp. dahlak* Menke

*Cerceris nugax insularis* Arnold, 1951:112, ♂, junior primary homonym of *Cerceris insularis* F. Smith, 1856. Holotype: ♂, Red Sea: Dahlak Island (BMNH). – Empey, 1969a:317 (listed).

*Cerceris nugax dahlak* Menke in R. Bohart and Menke, 1976:584. Substitute name for *Cerceris insularis* Arnold, 1951. – Empey, 1983:181 (listed, type examined).

### 559. *oaxaca* Scullen

*Cerceris oaxaca* Scullen, 1972:90, ♀, ♂ (♂ = *Cerceris truncata*). Holotype: Mexico: Oaxaca: 12 mi SE Oaxaca (USNM). – R. Bohart and Menke, 1976:585 (listed); G. Ferguson, 1984c:490 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 560. *obo* Tsuneki

*Cerceris obo* Tsuneki, 1971:430, ♀, ♂. Holotype: ♀, Mongolia: Hovd Aymag: Somon Bulag (TMB). – R. Bohart and Menke, 1976:585 (listed).

### 561. *obregon* Scullen

*Cerceris obregon* Scullen, 1972:34, ♀, ♂. Holotype: ♀, Mexico: Sonora: 38 mi NW Obregon (USNM). – R. Bohart and Menke, 1976:584 (listed); G. Ferguson, 1984c:490 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 562. *obscura* Schletterer

*Cerceris nasidens* var. *obscura* Schletterer, 1887:453, ♀. Lectotype: ♀, South Africa: Cape Province: no specific locality (NHMW), designated by Empey, 1983:181 (Article 74.6). – Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Arnold, 1931:195 (original description translated). – **As *Cerceris nasidens obscura***: Empey, 1969a:315 (new status, listed, recognition characters), 1974:100 (synonymy); R. Bohart and Menke, 1976:584 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: melolonthine beetles), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils); Callan, 1987:102 (prey: Scarabaeidae Melolonthinae: *Ablabera splendida* (Fabricius), *Ablaberoides aeneus* Blanchard, *Trochalus aeruginosus* Burmeister); Dollfuss, 1989:8 (holotype in NHMW). – **As *Cerceris obscura***: Empey, 1983:181 (full species status).

*Cerceris africana* Cameron, 1905m:222, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1974:100. Synonymized with *Cerceris nasidens obscura* by Empey, 1969a:315. – Brauns, 1914:228 (revision, description of ♂), 1926:282 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:138 and 145 (in key); Giordani Soika, 1942:plate II (photograph of pygidial plate)

**563. *obsoleta* Cameron**

*Cerceris obsoleta* Cameron, 1890a:118, ♀. Lectotype: ♀, Mexico: Tabasco: Teapa (BMNH), designated by G. Ferguson, 1984b:437. – Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:91 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:585 (listed); G. Ferguson, 1984c:491 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**564. *occipitamaculata* Packard**

*Cerceris occipitamaculata* Packard, 1866:62, ♂. Holotype or syntypes: ♂, USA: Kansas: no specific locality (lost). Neotype: ♂, USA: Texas: Hunt County: no specific locality (USNM), designated by Scullen, 1965b:501. – Cresson, 1873:229 (Texas), 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:498 (listed); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); H. Smith, 1908b:368 (in revision of Nebraskan Sphecidae); Stevens, 1917:422 (North Dakota); Mickel, 1918b:449 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta; as *occipitamaculata*); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:500 (in revision on North American *Cerceris*), 1972:91 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:585 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:491 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 73 (first record from Ontario: Algonquin Provincial Park); Buck, Paiero, and Marshall, 2006:46, 48 (in key to eastern Canadian *Cerceris*).

*Cerceris fasciola* Cresson, 1873:230, ♂. Holotype: ♂, USA: Texas: Comal County: no specific locality (ANSP). Synonymized with *Cerceris occipitamaculata* by Scullen, 1965b:500. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:491 (listed); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:23 (in revision of eastern U.S. *Cerceris*); Cresson, 1916:100 (holotype in ANSP); Rohwer, 1916b:696 (in catalog of Hymenoptera of Connecticut); Brimley, 1938:447 (North Carolina: Harnett County); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).

*Cerceris novomexicana* Viereck and Cockerell, 1904b:137, ♀. Holotype: ♀, USA: New Mexico: Johnson Park (ANSP). Synonymized with *Cerceris occipitamaculata* by Scullen, 1965b:500. – Cresson, 1928:49 (holotype in ANSP); Scullen *in* Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera).

**565. *oecania* de Beaumont**

*Cerceris oecania* de Beaumont, 1951f:355, ♀, ♂. Holotype: ♀, Morocco: Sidi Moussa (Lausanne). – de Beaumont, 1953g:123 (Morocco); R. Bohart and Menke, 1976:585 (listed); K. Schmidt, 2000:70 (in revision of Western Palearctic *Cerceris*).

**566. *odontophora* Schletterer**

*Cerceris odontophora* Schletterer, 1887:398, ♀, ♂. Syntypes: Greece: Corfu and Crete Islands (NHMW). – Schletterer, 1887:498 (listed); Ed. André, 1889:225 (in revision of Sphecidae of Europe and Algeria), 1891:26\* (bibliographic references); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); W. Schulz, 1906:45 (Greece: Crete); Shestakov, 1918a:142 (as synonym of *Cerceris maculata*), 1926:240 (synonym of *Cerceris maculata* or closely related species); Giner Mari, 1945a:248 (Greece: Rhodes Island); Grandi, 1954:237 (Italy); de Beaumont, 1957b:132 (n. Iran; discussion), 1957d:328 (previous paper cited), 1958d:272 (Greece; additional characteristics), 1965a:19 (Greece); Pulawski, 1958a:166 (Bulgaria: Varna); de Beaumont, 1960a:7 (Greece: Rhodes Island);

Balthasar, Hrubant, and Hrubant, 1967:175 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:284 (Turkey), 1969:82 (Turkey); Balthasar, 1972:401 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:128 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan, as *odontofora*), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan, as *odontofora*); R. Bohart and Menke, 1976:585 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:58 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:190, 192 (in key to Sphecidae of European part of former USSR); Schmidt and Westrich, 1983:125 (Greece); Kazenas, 1984a:77 (redescription); Pagliano, 1988:155 (Italy; revision); Dollfuss, 1989:8 (type material in NHMW); Pagliano, 1990:98 (in catalog of Italian Sphecidae); Negrisolò *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:350 (in Sphecidae Fauna of Western Europe); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); K. Schmidt, 2000:94 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:149 (geographic distribution, collecting localities in Kazakhstan); Jacobs, 2005a:441 (Bulgaria: Arkutino near Burgas); Pagliano and Negrisolò, 2005:332 (in Sphecidae Fauna of Italy); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Ljubomirov and Yildirim, 2008:146 (in catalog of Crabronidae of Turkey); Pagliano, 2009:183 (Italy: Piemonte: Bonvicino).

#### 567. *okumurai* Tsuneki

*Cerceris okumurai* Tsuneki, 1968a:1, ♀. Holotype: ♀, Japan: Ryukyus Islands: Amami-Oshima Islands: Simmura (originally K. Tsuneki coll., now Hyogo Mus.). – Murota, 1973a:101 (Amami-Oshima Islands); Tsuneki, 1968o:65 (recognition characters); R. Bohart and Menke, 1976:585 (listed); Tsuneki, 1982g:65 (known from the Ryukyu archipelago); Sk. Yamane and Tano, 1995:16 (Japan: Ryukyu Islands; description of ♂); Tano, 1994a:8 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Yamane, Ikudome, and Terayama, 1999:547 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:2, 5 (in key to Japanese *Cerceris*).

#### 568. *opposita* F. Smith

*Cerceris opposita* F. Smith, 1873c:413, ♀. Holotype or syntypes: ♀, Australia: Victoria: Lower Plenty, now Melbourne (BMNH). – Schletterer, 1887:498 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); R. Turner, 1910b:420 (in key), 1912d:671 (in revision of Australian *Cerceris*); Tsuneki, 1968e:4 (in key); Evans and Matthews, 1970:153 (prey: *Edusella* sp., Chrysomelidae Eumolpinae); R. Bohart and Menke, 1976:585 (listed); Evans, 1982a:341 (revision); Cardale, 1985:301 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:28 (summary of behavioral data), 1986b:1299 (citation of Evans and Matthews, 1970).

#### 569. *orangiae* Brauns

*Cerceris orangiae* Brauns, 1926:331, ♀, ♂. Lectotype: ♀, South Africa: Free State: Bloemfontain (TMP), designated by Empey, 1983:181. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:141 and 146 (in key), 1942:5 (recognition characters); Empey, 1969a:317; R. Bohart and Menke, 1976:585 (listed).

*Cerceris orangiae* var. *korana* Brauna, 1926:333, ♀ (as *Korana*, incorrect original capitalization). Lectotype: ♀, South Africa: Free State: Bloemfontein (TMP), designated by Empey, 1983:181. Synonymized with *Cerceris orangiae* by Empey, 1969a:317.

#### 570. *oraniensis* Brauns

*Cerceris oraniensis* Brauns:329, ♀, ♂. Lectotype: South Africa: Free State: Bloemfontein (TMP), designated by Empey, 1983:182. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:139 and 146 (in key); Empey, 1969a:3317 (listed); R. Bohart and Menke, 1976:585 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km

WNW Grahamstown), 88 (prey: curculionids), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils; nests deep); Empey, 1983:182 (listed).

*Cerceris lingnau* Arnold, 1933b:54, ♀ (as *Lingnau*, incorrect original capitalization). Holotype: ♀, South Africa: Free State: Wepener (DEI). Synonymized with *Cerceris oraniensis* by Empey, 1969a:317. – Oehlke and Wudowenz, 1974:424 (holotype in DEI).

#### 571. *orientalis* F. Smith

*Cerceris orientalis* F. Smith, 1856:454, ♀, ♂. Syntypes: India: Madras (BMNH). – A. Costa, 1864a:61 (one specimen from Madras, India, in Napoli Museum); Schletterer, 1887:498 (listed); Cameron, 1890b:250 (India: Barrackpore), 265 (redescription); Bingham, 1897:302 (redescription); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Bingham, 1902:214 (South Africa, "identical with specimens from Karachi"); R. Turner, 1912e:487 (revision); R. Bohart and Menke, 1976:585 (listed).

#### 572. *osculata* Evans

*Cerceris osculata* Evans, 1982a:361, ♀, ♂. Holotype: ♀, Australia: Queensland: 56 km S Nappamerry (ANIC). – Cardale, 1985:301 (in catalog of Australian Sphecidae).

#### 573. *osiris* Arnold

*Cerceris osiris* Arnold, 1931:172, ♀, ♂ (as *Osiris*, incorrect original capitalization). Lectotype: ♀, Namibia: Okahandja (BMNH), designated by Empey, 1983:182. – Empey, 1969a:317 (listed); R. Bohart and Menke, 1976:585 (listed).

#### 574. *otomia* de Saussure

*Cerceris otomia* de Saussure, 1867:99, ♀, ♂. Lectotype: ♀, Mexico: no specific locality (NHMW), designated by G. Ferguson, 1984b:438. – Schletterer, 1887:498 (listed); Cameron, 1890a:116 (Mexico, diagnostic characters); Dalla Torre, 1897:496 (in catalog of world Hymenoptera, as *otomita*); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Rau, 1933:183 (Panama: Barro Colorado Island, as *otomaria*, prey: beetles of genus *Nodonota*); Tsuneki, 1965d:3 (prey record summary: Curculionidae; as *otomaria*); G. Ferguson, 1984c:491 (listed as valid species); Amarante, 2002:61 (in catalog of Neotropical Crabronidae). – As *Cerceris insolita otomia*: Scullen, 1972:65 (new status, in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:582 (listed); Dollfuss, 1989:8 (lectotype in NHMW); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceri flavo-maculata* Cameron, 1890:115, ♀, ♂ (♂ = *Cerceris cooperi*). Lectotype: ♀, Costa Rica: Rio Susio (BMNH), designated by G. Ferguson, 1984b:435. Synonymized with *Cerceris otomia* by G. Ferguson, 1984c:491.

#### 575. *palawanensis* Tsuneki

*Cerceris palawanensis* Tsuneki, 1976b:39, ♀. Holotype: ♀, Philippines: Palawan: Pinigisan (ZMK). – Tsuneki et al., 1992c:46, 49 (in key), 65 (bibliographic reference).

#### 576. *paleata* de Saussure

*Cerceris paleata* de Saussure, 1891:262, ♀. Lectotype: ♀, Madagascar: Andreagoloka (MHNG), designated by Empey, 1983:182 (Article 74.6). – de Saussure, 1892:543 (Madagascar, redescription); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Arnold, 1945:24 (Madagascar; redescription); Leclercq, 1962b:212 (Madagascar: Mandraka); Empey, 1969a:318 (listed); R. Bohart and Menke, 1976:585 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris carmaria* de Saussure, 1892:545, ♂. Lectotype: ♂, Madagascar: Antananarivo and Bezanozano Province: Anosibé (MHNG). Synonymized with *Cerceris paleata* by Arnold, 1945:24. – Dalla Torre, 1897:455 (in catalog of world Hymenoptera).

**577. *pallidula* Morice**

*Cerceris pallidula* Morice, 1897:302, ♀, ♂. Syntypes: Egypt: Abbasiyah near Cairo (OXUM). – Morice, 1911:83 (Algeria: Biskra); Mochi, 1939:177 (in revision of Egyptian *Cerceris*); Giner Mari, 1941b:192 (in revision of North African *Cerceris*); de Beaumont, 1951f:335 (Egypt; diagnostic characters; (as *pallidula pallidula*); de Beaumont and Bytinski-Salz, 1959:122 (Israel); Pulawski, 1964:73 (Egypt: Maadi; (as *pallidula pallidula*); R. Bohart and Menke, 1976:585 (listed); Guichard, 1991a:338 (Jordan); K. Schmidt, 2000:166 (in revision of Western Palearctic *Cerceris*).

**ssp. *annexa* Kohl**

*Cerceris annexa* Kohl, 1898:95, ♀, ♂. Syntypes: ♀, Algeria: Biskra, Oran (NHMW). – Longstaff, 1911:125 (Sudan: Mogran); Morice, 1911:84 (Algeria: Biskra), 1921:823 (Iraq: Amara, Fao, Khaniquin); nec von Schulthess, 1926a:210 (= *Cerceris pulchella*); Giner Mari, 1941b:187 (in revision of North African *Cerceris*), 1947:20 (Western Sahara); de Beaumont, 1950f:397 (Algeria). – **As *Cerceris pallidula annexa***: de Beaumont, 1951f:336 (new status), 1953g:122 (Morocco); R. Bohart and Menke, 1976:585 (listed); Dollfuss, 1989:8 (type material in NHMW); K. Schmidt, 2000:168 (in revision of Western Palearctic *Cerceris*).

**578. *palmetorum* de Beaumont**

*Cerceris palmetorum* de Beaumont, 1950d:8. Nomen nudum (Egypt: Siwa oasis).

*Cerceris palmetorum* de Beaumont, 1951f:342, ♀, ♂. Holotype: ♀, Egypt: Siwa Oasis: El Arig (BMNH) – R. Bohart and Menke, 1976:585 (listed); K. Schmidt, 2000:95 (in revision of Western Palearctic *Cerceris*).

**579. *panama* Scullen**

*Cerceris insolita panama* Scullen, 1972:67, ♀, ♂. Holotype: ♀, Costa Rica: 7 mi SE Liberia (USNM). – R. Bohart and Menke, 1976:582 (listed); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae). – **As *Cerceris panama***: G. Ferguson, 1984c:491 (new status); Cambra and Santos, 2000:50 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**580. *papuensis* Krombein**

*Cerceris papuensis* Krombein, 1969b:16, ♀. Holotype: ♀, Indonesia: Irian Jaya (= Indonesian New Guinea): Manokwari (KU). – R. Bohart and Menke, 1976:585 (listed).

**581. *paratristis* Coumar and Dey**

*Cerceris paratristis* Coumar and Dey, 2003:101, ♂. Holotype: ♂, India: New Delhi: Indian Agricultural Research Institute (Indian Agricultural Research Institute).

**582. *paupercula* Holmberg**

*Cerceris paupercula* Holmberg, 1903:476, ♂ (authorship attributed to Lynch Arribálzaga). Holotype or syntypes: ♂, Argentina: Buenos Aires: Baradero (MACN). – Schrottky, 1913a:230 (Argentina: Buenos Aires); Fritz, 1968b:162 ("no tiene tipo"); R. Bohart and Menke, 1976:585 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**583. *paulista* Fritz**

*Cerceris paulista* Fritz, 1883b:168, ♀. Holotype: ♀, Brazil: São Paulo (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**584. *pava* Kazenas**

*Cerceris pava* Kazenas, 1984a:142, ♀. Holotype: ♀, Kazakhstan: E Kazakhstan: mountains near Lake Zaysan (ZIN). – Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:149 (geographic distribution, collecting localities in Kazakhstan).

**585. *pearstonensis* Cameron**

*Cerceris pearstonensis* Cameron, 1905m:223, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Pearston (BMNH), designated by Empey, 1983:182. – Brauns, 1926:297 (revision); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:140 (in key), 1942:plate II fig. 22 (male genitalia); de Beaumont, 1967b:506 (South Africa: Cape Province); Empey, 1974:115 (taxonomic history); R. Bohart and Menke, 1976:585 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: curculionids), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in clayey soils (as *pearstonensis pearstonensis*); Empey, 1983:182 (listed).

*Cerceris pearstonensis* race *bantu* Brauns, 1926:299, ♀. Holotype: ♀, Zimbabwe: Sawmills (SAM). Synonymized with *Cerceris pearstonensis* by Empey, 1983:182. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae). – **As *Cerceris pearstonensis bantu***: Empey, 1969a:318 (new status, listed), 1974:115 (listed); R. Bohart and Menke, 1976:585 (listed).

*Cerceris discrepans* race *perplexa* Arnold, 1931:153, ♂. Holotype: ♂, Namibia: Okahandja (BMNH). Synonymized with *Cerceris pearstonensis* by Empey, 1983:183. – **As *Cerceris albigena perplexa***: Empey, 1969a:300 (new subspecific combination, new status, listed). – **As *Cerceris discrepans perplexa***: Empey, 1972:47 (redescription); R. Bohart and Menke, 1976:580 (listed).

**586. *pectinata* Shestakov**

*Cerceris pectinata* Shestakov, 1918b:5, ♀, ♂. Syntypes: China: Kansu: Tatung Mts.; “central Mongolia”: Dundu Saykhan (may be in Mongolia or in Nei Mongol Province of China); Mongolia: Tsaorgol Khairkhan (ZIN). – R. Bohart and Menke, 1976:585 (listed).

**587. *pedetes* Kohl**

*Cerceris bicornuta* F. Smith, 1856:455, ♀, junior primary homonym of *Cerceris bicornuta* Guérin-Ménéville, 1844. Holotype or syntypes: ♀, North China: no specific locality (BMNH). Synonymized with *Cerceris pedetes* by R. Turner, 1912e:814. – Schletterer, 1887:465 (original description copied), 487 (listed); nec Sickmann, 1894:204 (as *Cerceris tuberculata* var. *bicornuta* = *Cerceris tuberculata evecta*). – **As *Cerceris tuberculata* var *bicornuta***: Dalla Torre, 1897:480 (new status, in catalog of world Hymenoptera).

*Cerceris pedetes* Kohl in Schletterer, 1887:449, ♀. Holotype or syntypes: ♀, Korea: no specific locality (Kraków). – Schletterer, 1887:498 (listed); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Kohl, 1916:119 (specimens in O. Radoszkowski collection); Tsuneki, 1961c:13, 25 (in key), 35 (Japan), 42 (Korea), 58 (China: Heilungkiang: Harbin); Togashi, 1962b:63 (Japan: Ishikawa Prefecture); Tsuneki, 1963h:54 (Japan: locality records); Tsuneki and Haneda, 1964:45 (Japan; description of ♂); Tsuneki, Iida, Hirai, and Sabi, 1964:60 (Japan: Aomori Prefecture: Towada); Handea, 1965:19 (Japan: Fukui Prefecture); Tsuneki, 1967e:2 (China: Heilungkiang); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Nambu, 1975b:73 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:585 (listed); Kazenas, 1979d:78 (Russia: Primorskiy Krai; discussion), 86 (in key); Tsuneki, 1982b:18 (known from Korea); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:474 (in key to Sphecidae of Russian Far East); Terayama and Tano, 2005:2, 4 (in key to Japanese *Cerceris*); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:25 (in catalog of Crabronidae of Asiatic Russia), 2009b:149 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Cerceris smithii* Dalla Torre, 1897:199. Substitute name for *Cerceris bicornuta* F. Smith, 1856. – R. Bohart and Menke, 1976:587 (listed).

**588. *pekingensis* Tsuneki**

*Cerceris pekingensis* Tsuneki, 1961c:46, ♀, ♂. Holotype: ♀, China: Peking (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:8, 9, 14, 15 (in key), 1965d:5 (prey record summary: Hymenoptera), 33 (nesting habits), 1971m:16 (China: Peking); R. Bohart and Menke, 1976:585 (listed); Kazenas, 1979d:83, 86 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:470, 476 (in key to Sphecidae of Russian Far East); Nuhn and



Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**ssp. *alini* Tsuneki**

*Cerceris pekingensis alini* Tsuneki, 1961c:54, ♂. Holotype: ♂, China: Heilungkiang: Harbin (K. Tsuneki coll.). – Tsuneki, 1961c:15 (in key), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:585 (listed); Kazenas, 1979d:86 (in key); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:476 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**ssp. *mongolica* Tsuneki**

*Cerceris pekingensis mongolica* Tsuneki, 1961c:64, ♀, ♂. Holotype: ♀, China: Nei Mongol: Apaka, ca. 45°N, 116°E (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:9, 15 (in key), 1971m:16 (China: Nei Mongol: Apaka); R. Bohart and Menke, 1976:585 (listed); Kazenas, 1979d:83 (in key); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470 (in key to Sphecidae of Russian Far East, as *mongolicus*); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**589. *penai* Fritz and Toro**

*Cerceris penai* Fritz and Toro, 1969:143, ♀. Holotype: ♀, Chile: Aisén: Chile Chico (M. Fritz coll.). – Sielfeld, 1971:256 (in key to Chilean *Cerceris*); R. Bohart and Menke, 1976:585 (listed); Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Fritz, 1993:17 (holotype in M. Fritz coll., dated 1969); Amarante, 2002:61 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**590. *pentadonta* Cameron**

*Cerceris pentadonta* Cameron, 1890:262, ♀. Holotype or syntypes: ♀, India: West Bengal: Barrackpore (OXUM, lost? Empey, 1984:78). – Cameron, 1890:250 (listed); Bingham, 1897:312 (redescription); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); R. Turner, 1912e:494 (revision); R. Bohart and Menke, 1976:585 (listed); Empey, 1984:78 (listed).

**591. *perboscii* Guérin-Méneville**

*Cerceris perboscii* Guérin-Méneville, 1844:444, sex not indicated (as *Perboscii*, incorrect original capitalization). Holotype or syntypes: Mexico: Campeche: Bahía de Campeche (Genova). –F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:132 (original description copied); Packard, 1866:64 (listed); Schletterer, 1887:499 (listed); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Guiglia, 1948b:179 (type material in Genova); R. Bohart and Menke, 1976:585 (listed, Brazil incorrectly given as origin); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**592. *perfida* de Saussure**

*Cerceris perfida* de Saussure, 1890:pl. 19 fig. 10, ♀. Holotype: ♀, illustrated specimen, Madagascar: no specific locality (MHNG). – de Saussure, 1892:549 (Madagascar, redescription); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); Arnold, 1945:23 (Madagascar; redescription); Leclercq, 1962b:212 (Madagascar: Rogez); Empey, 1969a:318 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:183 (listed, type examined); Hancock, Chahwanda, and Mhlanga, 1995:38 (specimen in Bulawayo Museum); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris perfida* de Saussure, 1891:262, ♀. Objective synonym of *Cerceris perfida* de Saussure, 1890.

*Cerceris spinifrons* de Saussure, 1891:262, ♂. Holotype or syntypes: ♂, Madagascar: no specific locality (MHNG, type missing; Empey, 1983:183). Synonymized with *Cerceris perfida* by ... (Arnold, 1945:23 or an earlier author?).

**593. *perkinsi* R. Turner**

*Cerceris perkinsi* R. Turner, 1910b:423, ♀. Holotype or syntypes: ♀, Australia: Queensland: Cairns (BMNH). – R. Turner, 1910b:420 (in key), 1912d:669 (in revision of Australian *Cerceris*); Tsuneki, 1968e:2 (in key); R. Bohart and Menke, 1976:585 (listed); Evans, 1982a:322 (revision); Cardale, 1985:301 (in catalog of Australian Sphecidae).

**594. *perspicua* Holmberg**

*Cerceris perspicua* Holmberg, 1903:475, ♀. Lectotype: ♀, Argentina: Buenos Aires: Las Conchas (MACN), designated by Fritz, 1968b:162 (Article 74.6). – Schrottky, 1913a:230 (Argentina: Buenos Aires); R. Bohart and Menke, 1976:585 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**595. *petiolata* de Saussure**

*Cerceris petiolata* de Saussure, 1891:261, ♂. Lectotype: ♂, Madagascar: Andreagoloka (MHNG), designated by Empey, 1983:183. – Dalla Torre, 1897:470 (in catalog of world Hymenoptera, as *petiola*); Arnold, 1945:38 (Madagascar; redescription); Empey, 1969a:318 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:183 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris petiolata* de Saussure, 1892:555, ♂. Objective synonym of *Cerceris petiolata* de Saussure, 1891.

**596. *pharaonum* Kohl**

*Cerceris pharaonum* Kohl, 1898a:345, ♀. Holotype: ♀, Egypt: Turah near Cairo (NHMW). – Mochi, 1939:173 (in revision of Egyptian *Cerceris*); Giner Mari, 1941b:204 (in revision of North African *Cerceris*); de Beaumont, 1951f:378 (Egypt; discussion), 1956a:187 (Chad: Tibesti); de Beaumont and Bytinski-Salz, 1959:124 (Israel); Pulawski, 1964:73 (Egypt: Abu Rawash, Dahshur, Ghiza, Kom Osheim, Saqqara); de Beaumont, 1970c:7 (Iran: Baluchistan); Empey, 1972:67 (holotype in NHMW); R. Bohart and Menke, 1976:(listed); Dollfuss, 1989:8 (holotype in NHMW); K. Schmidt, 2000:18 (in revision of Western Palearctic *Cerceris*).

**597. *pharetrigera* Shestakov**

*Cerceris pharetrigera* Shestakov, 1923:108, ♀. Holotype: ♀, China: Hopei Province: Tien-Tsin (ZIN). – Shestakov, 1923:103 (in key to subgenus *Apiraptrix*); Gussakovskij, 1934a:14 (China: S Kansu Province); R. Bohart and Menke, 1976:585 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**598. *picta* Dahlbom**

*Cerceris picta* Dahlbom, 1844:222, ♀. Holotype: ♀, Senegal: no specific locality (LUND). – Dahlbom, 1845:500 (in key); F. Smith, 1856:448 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Arnold, 1931:203 (original description translated); Empey, 1969a:318 (listed), 1971a:239 (redescription); R. Bohart and Menke, 1976:585 (listed, type locality may be erroneous); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Empey, 1983:183 (listed, type examined).

**599. *pictifacies* Brauns**

*Cerceris pictifacies* Brauns, 1926:316, ♀. Holotype: ♀, South Africa: Cape Province: Uitenhage (TMP). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:143 and 147 (in key), 152 (description of ♂); Empey, 1969a:318 (listed); R. Bohart and Menke, 1976:585 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown);, 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils); Empey, 1983:183 (listed, type examined).

**600. *pictiventris* Dahlbom**

*Cerceris pictiventris* Dahlbom, 1845:498, ♀. Holotype or syntypes: ♀, Indonesia: Java: no specific locality (NRS). – F. Smith, 1856:454 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:499 (listed); Cameron, 1890b:250 (listed), 259 ("no doubt identical with *Cerceris novaruae*"); Bingham, 1897:305 (redescription); Dalla

Torre, 1897:470 (in catalog of world Hymenoptera); Alfken, 1904b:134 (Indonesia: Java: Bogor); Bingham, 1905:46 (Malaysia: Biserat); R. Bohart and Menke, 1976:585 (listed); S. Gupta, 1995:86 (India: Uttar Pradesh). – **As *Cerceris pictiventris pictiventris***: van der Vecht, 1964:354 (in revisions of Javan species); Tsuneki, 1968f:31 (Thailand), 1974b:592 (Thailand, Malaysia); Sk. Yamane, 1983:87 (Indonesia: Krakatau Islands); Empey, 1984:78 (listed).

*Cerceris malayana* Cameron, 1903d:162, ♂. Lectotype: ♂, Malaysia: Sarawak (Borneo): Kuching (BMNH), designated by Empey, 1984:78. Synonymized with *Cerceris pictiventris* by van der Vecht, 1964:354. – Maidl, 1926:236 (description of ♀, Java).

*Cerceris rybyensis thaiana* Tsuneki, 1963c:26, ♀. Holotype: ♀, Thailand: Chiangmai (Sasayama Univ.). Synonymized with *Cerceris pictiventris* by Tsuneki, 1968f:31.

### **ssp. *bariana* Tsuneki**

*Cerceris pictiventris bariana* Tsuneki, 1974b:592, ♂. Holotype: ♂, Indonesia: Bali Island, misspelled as Bari (T. Tano coll., Fukui). – R. Bohart and Menke, 1976:629 (listed).

### **ssp. *formosicola* Strand**

*Cerceris novarae* var. *formosicola* Strand, 1913b:161, ♀, ♂. Lectotype: ♂, Taiwan: Kankau (DEI), designated by Oehlke and Wudowenz, 1974:422. – Iwata, 1939b:173 (nesting habits). – **As *Cerceris formosicola***: Giner Mari, 1943d:170 (new status, redescription). – **As *Cerceris pictiventris formosicola***: Tsuneki, 1968f:6 (new status, China: Szechuan: Chengtu), 21 (Taiwan), 1970c:6 (Taiwan); Haneda, 1971b:32 (Taiwan), 1972a:6 (Taiwan); Murota, 1973b:117 (Taiwan); R. Bohart and Menke, 1976:585 (listed); Tsuneki, 1977c:22 (Taiwan), 1977j:263 (Taiwan), 1982d:14 (Taiwan); Wu and Zhou, 1996a:171 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Li and He, 2004:1113 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### **ssp. *immolator* F. Smith**

*Cerceris immolator* F. Smith, 1863a:37, ♂. Holotype: ♂: Indonesia: Moluccas: Waigiou Island, now Waigeo (OXUM). – Schletterer, 1887:494 (listed); Dalla Torre, 1897:463 (in catalog of world Hymenoptera). – **As *Cerceris pictiventris immolator***: van der Vecht, 1964:354 (new status); Krombein, 1969b:12 (in revision of Melanesian *Cerceris*), 1974a:464 (New Britain, Solomon Islands); R. Bohart and Menke, 1976:585 (listed); Empey, 1984:87 (listed, type examined); Tsuneki, 1982a:55 (Bismarck Archipelago).

*Cerceris immolatrix* Schulz, 1906:195. Unjustified emendation of *Cerceris immolator* F. Smith, 1864.

*Cerceris papuana* Cameron, 1906a:57, ♀. Lectotype: ♀, New Guinea: Irian Jaya: Manokwari (BMNH), designated by Empey, 1984:79 (Article 74.6). Synonymized with *Cerceris pictiventris immolator* by van der Vecht, 1964:354.

### **ssp. *kawasei* Tsuneki**

*Cerceris formosicola kawasei* Tsuneki, 1963i:102, ♂. Holotype: ♂, Malaya: Parit Buntar (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:585 (listed); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### **ssp. *novarae* de Saussure**

*Cerceris novarae* de Saussure, 1867:92, ♀. Holotype or syntypes: ♀, Sri Lanka: no specific locality (NHMW). – Schletterer, 1887:498 (listed); Cameron, 1890b:249 (India: Barrackpore, Bombay, Poona), 257 (redescription); Bingham, 1896a:445 (Sri Lanka: Pundaluoya), 1897:305 (as new synonym of *Cerceris pictiventris*); Dalla Torre, 1897:469 (in catalog of world Hymenoptera); R. Turner, 1912e:804 (in revision of British India species). – **As *Cerceris pictiventris novarae***: van der Vecht, 1964:354 (new status); R. Bohart and Menke, 1976:585 (listed); Krombein, 1981:10 (prey: *Nomia krombeini* Hirashima), 26 (in revision of Sri Lanka Philanthinae); nec Tsuneki, 1984b:52 (= *Cerceris pictiventris philippinica*).

*Cerceris fervens* F. Smith, 1873c:411, ♀, ♂. Syntypes: northern India, possibly Pakistan: no specific locality (BMNH). Tentatively synonymized with *Cerceris novarae* by Cameron, 1890:256, synonymized with *Cerceris pictiventris* by Bingham, 1897:305, and with *Cerceris novarae* by R. Turner, 1912e:804. – Magretti, 1884c:598 (Sudan: Sawakin); Schletterer, 1887:491 (listed); Cameron, 1890b:249 (listed); Bingham, 1908:357 (India: Mhow); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Giner Mari, 1945c:850 (India: Maharashtra: Khandala).

**ssp. philippinica Tsuneki**

As *Cerceris pictiventris novarae*: Tsuneki, 1984b:52 (Philippines), corrected to *Cerceris pictiventris philippinensis* by Tsuneki et al., 1992c:65.

*Cerceris pictiventris philippinica* Tsuneki in Tsuneki et al., 1992c:65, ♀, ♂. Holotype: ♂, Philippines: Luzon: Camarinesur Province: Naga (depository not indicated originally, now USNM). – Tsuneki et al., 1992c:45, 49 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

**ssp. praedata F. Smith**

*Cerceris praedata* F. Smith, 1860b:126, ♀. Holotype or syntypes: ♀, Indonesia: Moluccas: Batjan: no specific locality (OXUM). – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera). – As *Cerceris pictiventris praedata*: R. Bohart and Menke, 1976:585 (new combination, listed).

**601. picturata Taschenberg**

*Cerceris picturata* Taschenberg, 1875:392, ♀. Syntypes: ♀, Brazil: no specific locality (Halle). – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:585 (listed); Fritz and Mariluis, 1976:110 (revision); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**602. placida Arnold**

*Cerceris placida* Arnold, 1931:171, ♀, ♂. Lectotype: ♀, Nigeria: Azare, Kano (BMNH), designated by Empey, 1983:183. – Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:183 (listed).

**603. placita Arnold**

*Cerceris placita* Arnold, 1931:163, ♀. Holotype: ♀, Kenya: Karungu (BMNH). – Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:183 (listed, type examined).

**ssp. arnoldiana Guiglia**

*Cerceris placita* var. *arnoldiana* Guiglia, 1939d:62, ♀. Holotype: ♀, Ethiopia: Sidamo: Arero (Genova). – As *Cerceris placita arnoldiana*: R. Bohart and Menke, 1976:62 (new status, listed); Empey, 1983:183 (listed).

**604. pleurispina de Beaumont**

*Cerceris pleurispina* de Beaumont in de Beaumont and Bytinski-Salz, 1959:114, ♀, ♂. Holotype: ♀, Israel: Tiberias (Lausanne). – R. Bohart and Menke, 1976:585 (listed); Ljubomirov and Yildirim, 2008:146 (in catalog of Crabronidae of Turkey).

**605. podagrosa Kohl**

*Cerceris podagrosa* Kohl, 1906a:296, ♀, ♂. Lectotype: ♀, Yemen: Socotra: Ras Shoab (NHMW), designated by Empey, 1969a:319. – Empey, 1973:4 (redescription); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:183 (listed); Dollfuss, 1989:8 (lectotype in NHMW).

**606. pollens Schletterer**

*Cerceris pollens* Schletterer, 1887:461, ♀. Holotype or syntypes ♀: Brazil: Yponema (NHMW). – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Fritz, 1959:68 (...), 1970c:157 (synonymy); R. Bohart and Menke, 1976:585 (listed); Dollfuss, 1989:8 (type material in NHMW); Fritz, 1989:262 (in key), 264 (revision); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

*Paracerceris tridentifera* Brèthes, 1913:127, ♂. Holotype: ♂, Argentina: Misiones: Bompland (MACN). Synonymized with *Cerceris pollens* by Fritz, 1970:157. – As *Cerceris tridentifera*: Holmberg, 1922:355 (new combination, type is teratological male; spelled *tridentifer*); Fritz, 1960:68 (description of ♀), 1968b:171 (study of holotype); Genise, 1990:27 (type material in MACN).

**607. *polybioides* Pendlebury**

*Cerceris polybioides* Pendlebury, 1927:39, ♂. Holotype: ♂, Malaysia: Selangor: Bukit Kutu (BMNH). – R. Bohart and Menke, 1976:585 (listed).

**608. *ponderosa* Brèthes**

*Cerceris ponderosa* Brèthes, 1920a:409, ♂. Holotype: ♂, Brazil: Goyás Province: Jatahy (MNHN). – R. Bohart and Menke, 1976:585 (listed); Genise, 1990:26 (depository of type material unknown); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**609. *potanini* Shestakov**

*Cerceris potanini* Shestakov, 1918b:25, ♀. Holotype or syntypes: ♀, China?: Nan-Shan-kou (ZIN). – Shestakov, 1923:102 (in key to subgenus *Apiraptrix*), 114 (citation, distribution); R. Bohart and Menke, 1976:585 (listed).

**610. *povolnyi* de Beaumont**

*Cerceris povolnyi* de Beaumont, 1970a:396, ♀. Holotype: ♀, Afghanistan: Kataghan: Baghlan (Brno). – R. Bohart and Menke, 1976:585 (listed).

**611. *praedura* R. Turner**

*Cerceris praedura* R. Turner, 1908:472, ♀, ♂. Syntypes: Australia: Queensland: Mackay (BMNH). – R. Turner, 1910b:422 (in key), 1912d:677 (in revision of Australian *Cerceris*); Tsuneki, 1968e:7 (in key); R. Bohart and Menke, 1976:585 (listed); Evans, 1982a:372 (revision); Cardale, 1985:301 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:297 (nesting habits), 1986b:1304 (prey: Apionidae, Bruchidae, Chrysomelidae, Dermestidae).

*Cerceris koala* Tsuneki, 1968e:17, ♀, ♂. Holotype: ♀, Australia: Queensland: Prince of Wales Island (USNM). Synonymized with *Cerceris praedura* by Evans 1982a:372. – Tsuneki, 1968e:7 (in key); R. Bohart and Menke, 1976:583 (listed). – R. Bohart and Menke, 1976:583 (listed); Nuhn and Menke, 1994:26 (holotype in USNM).

**612. *priesneri* Mochi**

As *Cerceris pulchella*: Schletterer, 1887:391 (Egypt; description), corrected to *Cerceris priesneri* by de Beaumont, 1951b:177, 179.

*Cerceris priesneri* Mochi, 1939:179, ♀, ♂ (as *Priesneri*, incorrect original capitalization). Syntypes: Egypt: Abu Rawash (USNM). – Giner Mari, 1941b:162 (in revision of North African *Cerceris*), 1947:20 (Spanish Sahara); de Beaumont, 1950f:397 (Algeria Tadjerouna), 1951f:334 (Algeria, Egypt; diagnostic characters); R. Bohart and Menke, 1976:585 (listed); Guichard, 1980:230 (Oman); Menke *in* Mochi, 1987:43 (type material in USNM); Guichard, 1993a:154 (Arabian Peninsula); K. Schmidt, 2000:169 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia).

**613. *proboscidea* Holmberg**

*Cerceris proboscidea* Holmberg, 1903:479, ♀. Syntypes: ♀, Argentina: Buenos Aires: Belgrano (MACN). – Jørgensen, 1912:288 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Buenos Aires); Fritz, 1968b:163 (syntypes in MACN); Fritz and Toro, 1969:148 (in revision of Chilean and Patagonian *Cerceris*); R. Bohart and Menke, 1976:585; Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**614. *prominens* Banks**

*Cerceris prominens* Banks, 1912:19, ♀. Lectotype: ♀, USA: Virginia: Falls Church (MCZ), designated by G. Ferguson, 1983b:231. – Brimley, 1938:448 (North Carolina: Marion, Raleigh, Wadesboro); Scullen *in* Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Evans, 1975a:264 (slow colonizer of new habitats); G. Ferguson, 1984c:491 (reverted to full species status); Buck, 2004:28 (in checklist of Crabronidae of Ontario, Canada), 31 (distribution within Ontario), 74 (first record from Ontario: Ottawa); Buck, Paiero, and Marshall, 2006:46, 47 (in key to eastern Canadian *Cerceris*). – **As *Cerceris clypeata prominens***: Scullen, 1965b:474 (new status, in revision on North American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

As *Cerceris clypeata*: Harrington, 1902:222 (Canada: Ontario: Ottawa), corrected to *Cerceris prominens* by Buck, 2004:76.

**615. *protea* R. Turner**

*Cerceris protea* R. Turner, 1912e:803, ♀, ♂. Lectotype: ♀, India: Gujarat: Deesa (BMNH), designated by Krombein, 1981:24. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:585 (listed); Krombein, 1981:23 (in revision of Sri Lanka Philanthinae).

**616. *proteles* Brauns**

*Cerceris proteles* Brauns, 1926:290, ♀. Holotype: ♀, Zaire: Kiborno (TMP). – Arnold, 1930:12 (in checklist of Afro-tropical Sphecidae), 1931:149 (the ♂ described by Brauns, 1926:290, as *Cerceris severini* is likely to be *proteles*); Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:184 (listed, type examined).

**617. *pruinosa* Morice**

*Cerceris pruinosa* Morice, 1897:303, ♀. Holotype: ♀, Egypt, Abbasiah near Cairo (OXUM). – Morice, 1911:83 (Algeria: Biskra; description of ♂); R. Turner, 1912e:794 (Pakistan: Baluchistan: Quetta; in revision of British India species); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records); Mochi, 1939:171 (in revision of Egyptian *Cerceris*); Guiglia, 1940a:283 (Libya: Gadames); Giner Mari, 1941b:194 (in revision of North African *Cerceris*; specimen from Tripoli = *Cerceris pulchella*); Honoré, 1941a:149 (*chlorotica* Spinola, *walatlui* Spinola, and *flaviventris* Spinola are closely related); Guiglia, 1942b:230 (Libya); de Beaumont, 1950f:397 (Algeria), 1951f:327 (Algeria, Egypt; diagnostic characters); de Beaumont and Bytinski-Salz, 1959:121 (Israel); R. Bohart and Menke, 1976:585 (listed); K. Schmidt, 2000:170 (in revision of Western Palearctic *Cerceris*).

As *Cerceris ?straminea*: Morice, 1911:81 (Algeria), corrected to *Cerceris pruinosa* by de Beaumont, 1951f:327.

**618. *przewalskii* Shestakov**

*Cerceris przewalskii* Shestakov, 1918b:1, ♀. Holotype or syntypes: ♀, China: Alashan Mountains (also spelled Helan Shan); no specific locality (ZIN); R. Bohart and Menke, 1976:585 (listed).

**619. *psamathe* Banks**

*Cerceris psamathe* Banks, 1912:21, ♀. Lectotype: ♀, USA: Texas: Lee County: Fedor (MCZ), designated by G. Ferguson, 1983b:231 (Article 74.6). – Scullen *in* Muesebeck et al., 1951:1004 (as new synonym of *Cerceris aequalis*); R. Bohart and Grissell, 1975:39 (as new synonym of *Cerceris aequalis*); R. Bohart and Menke, 1976:576 (as synonym of *Cerceris aequalis*); G. Ferguson, 1984c:492 (valid species).

**620. *pseudoerythrocephala* von Schulthess**

As *Cerceris erythrocephala*: Schletterer, 1887:393, corrected to *Cerceris pseudoerythrocephala* by Kohl, 1906:204, and von Schulthess, 1926a:150.

*Cerceris pseudoerythrocephala* von Schulthess, 1926a:150 (28 July), ♀. Holotype: ♀, Schletterer's 1887 specimen, origin unknown (NHMW, now lost?; see Empey, 1983:184). Paratype: 1 ♀, South Africa (MNHN). – R. Bohart and Menke, 1976:585 (listed); Empey, 1983:184 (listed, type could not be located).

*Cerceris bequaerti* Brauns, 1926:328 (14 Sept.), ♀ (as *Bequaerti*, incorrect original capitalization). Holotype: ♀, Zaire: Kilombo (TMP). Synonymized with *Cerceris pseudoerythrocephala* by Empey, 1983:184. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:144 (in key); Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed); Empey, 1983:184 (unnecessary designation of lectotype).

*Cerceris adulatrix* Arnold, 1933b:53, ♀. Holotype: ♀, Zaire: Stanleyville (MRAC). Synonymized with *Cerceris bequaerti* by Empey, 1969a:302.

### 621. *pseudoflavescens* Shestakov

As *Cerceris sirdariensis*: Kohl, 1916:123 (redescription), corrected to *Cerceris pseudoflavescens* by Shestakov, 1926:240.

*Cerceris pseudoflavescens* Shestakov, 1926:240. Substitute name for *Cerceris syrdariensis* of Kohl, 1916. – R. Bohart and Menke, 1976:585 (listed); Kazenas, 1984a:96 (redescription); Kazenas, 2001b:57 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:149 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ayak-Kalkan, 30 km E village Chinghildy, Kapchagay, 35 km NW Kapchagay, near Dubun').

*Cerceris arenaria schnitnikovi* Kazenas, 1972b:138, ♀, ♂. Holotype: ♀, Kazakhstan: Alma-Ata Oblast': Ili (V. Kazenas coll.). Synonymized with *Cerceris pseudoflavescens* by Kazenas, 1984a:96. – R. Bohart and Menke, 1976:577 (listed).

### 622. *pseudotridentata* Maidl

*Cerceris pseudotridentata* Maidl, 1926:227, ♀. Holotype: ♀, Indonesia: Java: Nongkodjadar (RMNH). – van der Vecht, 1964:359 (in revisions of Javan species); R. Bohart and Menke, 1976:585 (listed).

### 623. *pucilii* Radoszkowski

*Cerceris pucilii* Radoszkowski, 1869:106, ♀ (as *Pucilii*, incorrect original capitalization). Holotype or syntypes: ♀, Russia: Chita Oblast': Shilka (KRAKÓW). – Schletterer, 1887:476 (original description copied), 499 (listed); Ed. André, 1889:327 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Kohl, 1916:120 (redescription); R. Bohart and Menke, 1976:585 (listed); Nemkov, 2006a:12 (locality records from Russian Far East and Siberia), 2007c:997 (in Appendix to Key to identification of Sphecidae of Far East of Russia), 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2009b:149 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Cerceris poutziloii* W. Schulz, 1906:195 (as *Poutziloii*, incorrect original capitalization). Unjustified emendation of *Cerceris pucilii* Radoszkowski, 1869.

*Cerceris nupta* Shestakov, 1918b:23, ♀, ♂. Syntypes: China: Alashan: Din-yuan-in oasis and Kansu: Sinin-he river valley (ZIN). Synonymized with *Cerceris pucilii* by Nemkov, 2006a:12. – Shestakov, 1923:103, 105 (in key to subgenus *Apiraptrix*), 108 (citation, distribution); Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E); Tsuneki, 1971:426 (Mongolia; as *Cerceris nupta nupta*), 1971m:16 (China: Nei Mongol: Apaka); R. Bohart and Menke, 1976:584 (listed); Kazenas, 1979d:83, 87 (in key); Nemkov, 1990c:85 (Russia: Chita Oblast'), 1992b:250 (Russia: Far East: Dim near Khingan Nature Reserve); Kazenas in Nemkov, Kazenas, Budryś, et Antropov, 1995:471, 476 (in key to Sphecidae of Russian Far East). – As *Cerceris sabulosa nupta*: Tsuneki, 1961c:10, 15 (in key), 54 (new status, China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka), 1965d:41 (nesting habits), 1967e:2 (China: Heilungkiang).

**ssp. *echingol* Tsuneki**

*Cerceris nupta echingol* Tsuneki, 1971:426, ♀. Holotype: ♀, Mongolia: Bayanhongor Aymag: Ehingol oasis (TMB).  
– R. Bohart and Menke, 1976:584 (listed).

**624. *pulchella* Klug**

*Cerceris pulchella* Klug, 1845:[30], pl. 47, fig. 14, ♂. Holotype or syntypes: ♂, Egypt: Fayum (ZMHU). – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Walker, 1871:27 (Djibuti: Tajura, and Red Sea coast of Africa: Harkeko); Radoszkowski, 1876b:137 (Egypt); nec Schletterer, 1887:391 (= *Cerceris priesneri*); Schletterer, 1887:499 (listed); Ed. André, 1889:315 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:903 (Savigny, 1817, pl. X, Fig. 12 may represent *pulchella*); Ed. André, 1891:29\* (bibliographic references); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); Bingham, 1898a:109 (Yemen: Aden); Innes Bey, 1912:113 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Harkeko and Tajaura); R. Turner, 1912e:795 (Pakistan: Baluchistan: Quetta; in revision of British India species); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); nec Mochi, 1939:175 (= *Cerceris cheops*); nec Giner Mari, 1941b:190, 1945b:362, 1945e:224, and 1947:19 (= *Cerceris cheops*); nec de Beaumont, 1950f:397 (= *Cerceris cheops*); de Beaumont, 1951b:176, 179 (interpretation of species), 1951f:325 (Egypt to Morocco; diagnostic characters), 1953g:121 (Morocco: Imiter), 1956a:186 (Libya); de Beaumont and Bytinski-Salz, 1959:119 (Israel); de Beaumont, 1960b:230 (Libya); Pulawski, 1964:73 (Egypt: Abu Rawash, Dahshur); de Beaumont, 1966:212 (Egypt: Agami near Alexandria); R. Bohart and Menke, 1976:585 (listed); Guichard, 1980:230 (Oman); Al-Houty, 1989:158 (Kuwait: Erifjan); Guichard, 1993a:154 (Arabian Peninsula); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945); K. Schmidt, 2000:171 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:234 (in catalog of Sphecidae of Saudi Arabia).

As *Cerceris annexa*: von Schulthess, 1926b:210 (Algeria, Tunisia), corrected to *Cerceris pulchella* by de Beaumont, 1951f:326.

*Cerceris alfieri* Mochi, 1939:181, ♀, ♂ (as *Alfieri*, incorrect original capitalization). Syntypes: Egypt: Mansurieh and Gebel Asfar (? USNM). Synonymized with *Cerceris pulchella* by de Beaumont, 1951b:176. – Giner Mari, 1941b:159 (in revision of North African *Cerceris*), 1945b:362 (Western Sahara: El Aiun; as *alfieri*), 1947:19 (Western Sahara, as *alfieri*); de Beaumont, 1950f:397 (Algeria).

*Cerceris alfieri* var. *picta* Mochi, 1939:182, ♀, ♂, junior primary homonym of *Cerceris picta* Dahlbom, 1844. Syntypes: Egypt: Saqqara and Kerdassa (?USNM). Synonymized with *Cerceris pulchella* by de Beaumont, 1951b:179.

*Cerceris pulchella scabra* de Beaumont in de Beaumont and Bytinski-Salz, 1959:121, ♀, ♂ junior secondary homonym of *Cerceris scabra* (Fabricius, 1798) = *Cerceris fimbriata* (Rossi, 1790). Holotype: ♀, Israel: Ramat Gan (Lausanne).

*Cerceris pulchella judaea* de Beaumont, 1970b:38. Substitute name for *Cerceris scabra* de Beaumont, 1959. – R. Bohart and Menke, 1976:585 (listed). Synonymized with *Cerceris pulchella* by K. Schmidt, 2000:171.

As *Cerceris pruinosa*: Giner Mari, 1941b:194 (specimen from Libya: Tripoli), corrected to *Cerceris pulchella* by de Beaumont, 1951f:325, 326.

**625. *pulchra* Cameron**

*Cerceris pulchra* Cameron, 1890:253, ♀, ♂. Lectotype: ♀, India: West Bengal: Barrackpore (OXUM), designated by Krombein, 1981:43. – Cameron, 1890b:250 (India: Barrackpore, Poona); Bingham, 1897:308 (redescription); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); R. Turner, 1912e:808 (in revision of British India species); R. Bohart and Menke, 1976:585 (listed); Krombein, 1981:42 (in revision of Sri Lanka Philanthinae; as *Cerceris pulchra pulchra*); Empey, 1984:79 (listed; as *Cerceris pulchra pulchra*).



**ssp. variaesimilis Maidl**

*Cerceris variaesimilis* Maidl, 1926:223, ♀. Holotype: ♀, Indonesia: Java: Samarang (Leiden). – van der Vecht, 1964:350, 357 (in revisions of Javan species); Tsuneki, 1968f:21 (China: Canton; Taiwan; Philippines), 1970c:21 (Taiwan), 1970g:14 (Japan: Kyushu: Kagoshima Prefecture: Mount Takakuma); Haneda, 1972a:6 (Taiwan); Tsuneki, 1974b:592 (Thailand); R. Bohart and Menke, 1976:589 (listed); Tsuneki, 1976b:36 (Philippines), 1977j:263 (Taiwan), 1982g:65 (known from the Ryukyu archipelago); Nagase, 1982, Hymen. Comm., 14:67 (Japan); Tsuneki, 1984b:54 (Philippines); Tsuneki et al., 1992c:45, 48 (in key), 63 (Philippines); Sk. Yamane and Tano, 1995:16 (Japan: Ryukyu Islands); Wu and Zhou, 1996a:173 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Yamane, Ikudome, and Terayama, 1999:547 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:3, 5 (in key to Japanese *Cerceris*). – **As *Cerceris pulchra variaesimilis***: Krombein, 1981:43 (new status); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris spinicollis* Giner Mari, 1942b:126, ♂, ♀. Syntypes: China: Shaowu and Kwangtseh (Mus. A. Koenig, Bonn). Synonymized with *Cerceris variaesimilis* by Tsuneki, 1968f:21. – Tsuneki, 1968b:107 (Ryukyus).

*Cerceris fukai basiferruginea* Tsuneki, 1963c:27, ♀, ♂. Holotype: ♀, Thailand: Lampoon (Sasayama Univ.). Synonymized with *Cerceris variaesimilis* by Tsuneki, 1968f:21.

**626. pygmaea de Saussure (preoccupied)**

*Cerceris pygmaea* de Saussure, 1867:91, ♂, junior secondary homonym of *Cerceris pygmaea* (Thunberg, 1815). Holotype or syntypes: ♂, China: Shanghai (NHMW or MHNG). – Schletterer, 1887:499 (listed); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:585 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**627. quadricincta (Panzer)**

*Philanthus quadricinctus* Panzer, 1799:... – Jurine, 1807:202 (listed). – **As *Cerceris quadricincta***: Latreille, [1805]:316 (new combination, redescription); Vander Linden, 1829:116 (bibliographic references, redescription, Belgium: Bruxelles, France: Paris, Italy); Shuckard, 1837a:243 (in revision of British Aculeata); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); Dahlbom, 1844:212 (in revision of Sphecidae and Pompilidae), 1845:500 (in key), determination corrected to *Cerceris truncatula* by Thomson, 1870:248; Lepeletier de Saint Fargeau, 1845:23 (in revision of world Hymenoptera); Eversmann, 1849:407 (Russia: Ural Mts. foothills); Lucas, 1849:254 (Algeria: Alger, Bône, Constantine, La Calle, Oran); Wesmael, 1852:265 (Belgium; additional description); Fabre, 1856a:137 (France: Vaucluse: Avignon area), 1856b:184 (list of prey); Schenck, 1857:153 (in revision of fossorial wasps of Germany); Taschenberg, 1858:81 (in key to Sphecidae of Germany), 1866:190 (in revision of Hymenoptera of Germany); A. Costa, 1867c:71 (in revision of Italian Sphecidae, as *quadricincta* Latreille); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schenck, 1867a:354 (known from Germany); Wierzejski, 1868:117 (Ukraine: Podole Region); A. Costa, 1869b:102 (in revision of Italian Sphecidae); Radoszkowski, 1870:103 (synonyms listed); A. Costa, 1872a:36 (in revision of Sphecidae of Kingdom of Naples, Italy); P. Ivanov, 1872:152 (Ukraine: Khar'kiv Oblast': Kupyansk area); Dours, 1874:144 (in catalog of Hymenoptera of France); Wierzejski, 1874:260 (Ukraine: Podole Region: Mielnica, Sinków, Skala); Marquet, 1875:204 (France: Haute-Garonne: Toulouse); Radoszkowski, 1877:62 (Uzbekistan); Kohl, 1880:160 (Italy: Trentino–Alto Adige); Marquet, 1881:190 (southern France, preying on Coleoptera); Yaroshevskiy, 1881:124 (Ukraine: Khar'kiv Oblast': Kupyansk); A. Costa, 1882b:23 (Italy: Sardegna), 1883:57 (Italy: Sardegna, as *quadricincta* Latreille); Kohl, 1883e:664 (Switzerland); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Schletterer, 1887:426 (in revision of world *Cerceris*), 500 (listed); Ed. André, 1889:294, 296 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Schletterer, 1889a:901 (Fiume, now Rijeka in Croatia); Steck, 1890:169, 171 (in key to *Cerceris* of Switzerland); A. Costa, 1893b:8 (Tunisia); Kohl, 1893a:34 (Austria: Niederösterreich, as *4-cincta*); F. Morawitz, 1893b:420 (Tajikistan: Anzob); Baldini, 1894:56 (Italy: Modena area); De

Stefani Perez, 1894:216 (Italy: Sicilia); Medina, 1894b:262 (Spain); de Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Meunier, 1896:272 (Belgium: Bruxelles area); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); Borries, 1897:53 (reference to Fabre, 1886:184); Dalla Torre, 1897:471 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Sladen, 1900:265 (Great Britain: Kent: St. Margaret's Bay, Tilmanstone); Ferton, 1901a:109 (list of prey); deCobelli, 1903:110 (Italy: Province of Trentino: Caldonazzo); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); E. Saunders, 1904c:607 (Spain: Mayorca), 638 (Spain); Ferton, 1905:65 (France: Corse: Bonifacio; prey, position of egg); Dusmet y Alonso, 1906:7 (Spain); Móczár and Henter, 1907:205 (Romania: Caraș-Severin: Mehadia); Schmiedeknecht, 1907:241, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera, as *4-cincta*); Ferton, 1910:154 (sand closure of nest cell); Mantero, 1911:72 (Italy: Sardegna: Isola dell'Asinara); Morice, 1911:91 (Algeria); Zavattari, 1912:3 (Italy: Sardegna: Pantaleo and Isola di Antiogus); Smits van Burgst, 1913a:319 (Tunisia); Mercet, 1914:445 (listed from Spain); Dusmet y Alonso, 1915:87 (Spain: Aragón); Kohl, 1916:120 (specimens in O. Radoszkowski collection); Shestakov, 1916:235 (Transcaucasia: several localities), 1917b:410 (Finland), 1918a:147 (Transcaspiya); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); O. Meyer, 1919:156 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1921c:210, 212 (in key to Belgian Sphecidae); Fahringer and Friese, 1921:160 (Turkey: Erzurum: Iyarbashi in Amanus Mts. = Gavur Dağları, prey: *Lixus ascanii* L., a curculionid, as *quadricincta* Villers); Fahringer, 1922:178 (Turkey: Floria near Istanbul); Maidl, 1922:68 (Albania); Berland, 1925d:60 (in Sphecidae Fauna of France); Coulon, 1925:116 (France, list of prey, as *quadricincta* Villers); Chevalier, 1926c:69 (nesting habits); von Schulthess, 1926b:211 (Tunisia); Chevalier, 1927:102 (curculionid prey); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Montserrat); Shestakov, 1927a:17 (Russia: Orenburg Oblast'); Bouwman, 1928a:361 (in revision of Sphecidae of Netherlands); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Grandi, 1930:340 (Italy: Toscana: Maremma); Hamm and Richards, 1930:114 (summary of nesting habits); Schmiedeknecht, 1930:702, 704 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:9 (Spain); Bondroit, 1932:38 (Belgium: recorded from Bruxelles area by Vander Linden and Wesmael); Bischoff, 1933:5 (Spain, Morocco); Shestakov *in* Nadig, 1933:98 (Morocco); Giner Marí, 1934:131 (Spain); Grandi, 1934:130 (Italy: Lazio: Acilia, Sardegna: Cagliari, and Toscana: San Vincenzo); Nadig, 1934:33 (Italy: Sardegna: Aritzo, Cagliari); Bernard, 1935:63 (France: Var: Fréjus area); Grandi, 1935a:110 (Italy); Richards, 1935a:169 (correct name for species is *Cerceris fasciata*); Vergne, 1935:117 (France: Auvergne: Billom, as *quadricincta* Villers); Crèvecoeur and Maréchal, 1936:254 (in catalog of Belgian Hymenoptera); Richards, 1936a:171 (*Cerceris quadricincta* Panzer is valid name for species); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavdil, Šusterka, and Bat'a, 1937:211 (in catalog of Sphecidae of Czechoslovakia); Guiglia, 1938b:8 (Italy: Sardegna); Molitor, 1938:442 (color recognition); Deleurance, 1941:278 (France: Camargue; prey: *Coniatus tamarisci*, a curculionid); Giner Marí, 1941a:66 (in revision of Spanish *Cerceris*), 1941b:232 (in revision of North African *Cerceris*); Schneid, 1941:1049 (Germany: Bayern: Bamberg area); Blüthgen, 1942:10 (Germany: Sachsen: known from Kyffhäuser but not from Saal Valley); Guiglia, 1942a:56 (Greece: Rhodes Island: Villanova); Giner Marí, 1943a:104 (in Sphecidae Fauna of Spain); Guiglia, 1943b:69 (Albania: Kopliku); Giordani Soika, 1944:12 (Italy: Sicilia: Messina, as *4-cincta*); Guiglia, 1944a:146 (Cyprus: Cherkas, Limassol, Zakaki), 1944b:14 (Italy); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Giner Marí, 1945a:248 (Greece: Rhodes Island), 1945b:359 (Morocco: Ain Zorah), 1945e:23 (Spanish Sahara); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges, as *quadricincta* Villers); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Guiglia, 1948c:201 (Italy: Sardegna: Cagliari); Šnoflak *in* Zavdil and Šnoflak, 1948:92, 97 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:11 (Portugal); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Balthasar, 1950:35 (known from 7 localities in Czechoslovakia); Cavro, 1950:36 (France: Département du Nord); de Beaumont, 1950f:397 (Algeria, Morocco); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Pittioni, 1950:22 (Cyprus); de Beaumont, 1951f:363 (Mediterranean North Africa); Caruel,

1951:100 (France: Marne Department); Scobiola, 1951:273 (first record from Romania: Argeşului, Budeşti, Bucureşti, Dărăşti); de Beaumont, 1952a:60 (France; redescription), 1953g:123 (Morocco), 1954e:87 (Italy); Grandi, 1954:237 (Italy); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Aerts, 1955:64 (Germany: Rheinland); Steiner, 1955:137 (France: Dordogne); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:83 (in catalog of Hungarian *Cerceris*, with list of localities); Bytinski-Salz, 1956:225 (Turkey: Kemer, Seki); Ceballos, 1956:370 (in catalog of Hymenoptera of Spain); Stadler and Glässel, 1956:111 (Germany: Bayern: Romberg Nature Reserve); Bajári, 1957a:38, 45 (in key to Hungarian Sphecidae); de Beaumont, 1957b:133 (northern Iran); Grandi, 1957:388 (Italy); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Birkenheide); Benno, 1958b:11 (in review of Dutch Sphecidae); de Beaumont, 1958d:285 (Cyprus), 1959a:15 (Italy); Compte Sart, 1959:132 (Spain: Mayorca); Diniz, 1959:28 (Portugal: six localities); Grandi, 1959b:287 (Italy: Livorno: Quercinella); Suárez, 1959:54 (Spain: Almería Province); Wolf, 1959b:31 (Germany: Nassau); de Beaumont, 1960a:8 (Greece: Rhodes Island); Noskiewicz and Puławski, 1960:77, 80 (in key to Polish Sphecidae); de Beaumont, 1960b:233 (Libya; color variation), 1960c:171 (Afghanistan), 1961c:46 (Greece: Crete Island), 1961e:3 (Iraq), 1962b:21 (Spain); Grandi, 1962:98 (Italy); Felton, 1963:179 (Great Britain: Kent County); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland); Roberti, Frilli, and Pizzaghi, 1965:109 (Italy: Emilia-Romagna: Bobbio in Piacenza Province); de Beaumont, 1965a:21 (Greece); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Diniz, 1966:7 (Portugal: fourteen localities); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Chilia Veche); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:286 (Turkey); Scobiola-Palade, 1967b:41 (Romania); Leclercq, 1968d:109 (Belgium: city of Liège); Parré, 1968:122 (Germany: Sachsen-Anhalt: Staßfurt); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Bucureşti, Budeşti, Dărăşti, Islaz, Periş); Lefeber, 1969c:233 (Netherlands: St. Pietersberg = Montagne Saint Pierre); Romanova, 1969:133 (Russia: North Caucasus); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Oehlke, 1970:683 (Democratic Germany); Schmidt, 1971b:26 (Germany: Mainz area); Scobiola-Palade, 1971:205 (in review of *Cerceris* of Romania); Valetta, 1971:46 (Malta); Balthasar, 1972:412 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:129 (Kazakhstan); Scobiola-Palade, 1972b:252 (Romania); Erlandsson, 1974:62 (Italy, Malta, Spain); Lomholdt, 1975c:178 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:585 (listed); Georghiou, 1977:189 (Cyprus); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Guichard, 1978:270 (Greece); Kazenas, 1978b:62, 65 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1195 (distribution in Belgium); Pulawski, 1978:194, 195 (in key to Sphecidae of European part of former USSR); Benedek, 1979:228 (Hungary: Bakony Hills); Kazenas, 1979d:84, 89 (in key); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 26 (Netherlands: distribution map); Schmidt, 1979b:302 (Germany); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, as *4-cincta*); Pagliano, 1980:125 (Italy: Molise, Piemonte); Richards, 1980:85 (in key to Sphecidae of British Isles); van der Zanden, 1981:130 (Netherlands: Markelo); Leclercq, 1982a:125 (Belgium: Liège); Gayubo, 1982b:56 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:110 (Spain: Cádiz Province); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Gayubo, 1983a:125 (prey: *Ceutorrhynchus* sp., a curculionid), 1983e:238 (Spain: Salamanca Province); Schmidt and Westrich, 1983:125 (Greece); Gayubo and Tormos, 1984:25 (Spain: Valencia); Jacob-Remacle, 1984:260 (Belgium: urban center of Liège); Islamov and Kazenas, 1983:45 (Uzbekistan; nest and prey: Halticinae); Chevin and Silvestre de Sacy, 1984:10 (France: Yvelines Department); Gayubo, 1984c:384 (Portugal: El Algarve Province); Kazenas, 1984a:106 (redescription); Lefeber, 1984:28 (Netherlands: Maastricht); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1985c:172 (Spain: Toledo: Corchuela); Józán, 1985b:62 (Hungary: Pécs area), 72 (map of distribution in Hungary), 82 (floral records), 85 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Gayubo, 1986a:67 (Spain: Ciudad Real Province), 1986b:41 (Spain: Andalucía); Gayubo and Heras, 1986:73 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:88 (Spain: Burgos); Islamov, 1986:519 (Uzbekistan: Surk-

handarya and Tashkent Oblast's); Józán, 1986:375 (Hungary: Kiskunság National Park); Dollfuss, 1987:25 (Austria); Pagliano, 1987:164 and 167 (Italy, in key); Schmidt and Westrich, 1987:358 (Germany: Mainz area); Scobiola-Palade, 1987:64 (Romania: Dobrogea; (as *quadricinctus*); Tormos and Jiménez, 1987a:128 (Spain: Valencia); Asís and Jiménez, 1988:276 (Spain: Castellón Province); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Pagliano, 1988:149 (Italy; revision); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:80 (Spain); Jacobs and Oehlke, 1990:122 (not collected in Democratic Germany after 1960), 217 (citation of last records from Democratic Germany); Pagliano, 1990:98 (in catalog of Italian Sphecidae); Rohe, 1990:1048 (Germany: Rheinland-Pfalz: Lenneberg forest); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:221 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:421 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Schembri, 1991:178 (Malta); Gayubo, Borsato, and Osella, 1992:292 (Turkey); Józán, 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Sorg and Wolf, 1993:59 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast'); Dollfuss, 1994:99 (endangered in Austria); Gayubo and Borsato, 1994:222 (Italy: Veneto, Toscana); Theunert, 1994a:47 (Germany: Niedersachsen: Braunschweig, Peine, and Wense), 1994c:33 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:190, 226 (Spain: Albacete Province); Wickl and Wickl, 1994:193 (Germany: Bayern: Oberpfalz: Haidweiher); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:729 (Italy: Island of Lampedusa); Schmid-Egger, Risch, and Niehuis, 1995:168 (summary of records from Germany: Rheinland-Pfalz Province); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:80 (Great Britain: summary of records from Essex); Jacobi, 1996:221 (method of hunting, prey); Jakubzik, 1996:251 (Germany: Köln); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Woydak, 1996:100 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:351 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Petit, 1998a:109 (Belgium: Bassenge, visiting flowers of *Polygonum cuspidatum* Siebold and Zucc.); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Kuhlmann, Wolf, and Woydak, 1999:569 (threatened with extinction in Nordrhein-Westfalen State of Germany); Pagliano and Scaramozzino, 1999:160 (Italy: Piemonte: Borgomale); Pauly, 1999:111 (in catalog of Belgian aculeates); Petit, 1999:112 (Netherlands: Kruisdorp, Nieuw-Namen); Blösch, 2000:419 (in Sphecid Fauna of Germany); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Gonzáles, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Ljubomirov, 2000:13 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:71 (in revision of Western Palearctic *Cerceris*); Zettel, 2000:32 (Austria: Wachau); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 252 (review of known biology), 2001d:113, 115 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:138 (distribution in Germany by provinces); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Kazenas, 2002a:149 (geographic distribution, collecting localities in Kazakhstan); Litt, 2002:166 (Belgium); Cölln, Esser, and Jakubzik, 2003:61 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:134 (Hungary: Harkany); Esser and Jakubzik,

2003:290 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Feitz, Schneider, and Pauly, 2003:80 (first record from Luxemburg: Remich); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:751 (Italy: Sicilia: six localities; Malta: Busket); von der Heide and Metscher, 2003:101 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: probably endangered); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:261 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Tischendorf and Frommer, 2004:67 (Germany: first record from Hessen: near Lorch); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:52 and 63 (in checklist of Polish Sphecidae); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs, 2005a:441 (Bulgaria); Jakubzik and Cölln, 2005:63 (Germany: Rheinland-Pfalz: Bausenberg near Niederrissen); Pagliano and Negrisoló, 2005:324 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1804 (Turkey: Artvin, Bilecik, Bingöl, Erzincan, Erzurum, Hatay, Iğdır, Kars, and Konya provinces); Gadoum and Barbier, 2006:44 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes, Longuesse, and Wy-Dit-Joli-Village); Ljubomirov, 2006:538 (Bulgaria: Rhodope Mountains: Peshtera, as *quadricincta quadricincta*); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund), 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Guldemond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:184, 187 (in key to Crabronidae of Germany); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:209 (in catalog of Sphecidae of Czech Republic and Slovakia); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:115 (Kazakhstan: foothills of Zailiskiy Alatau: sometimes found on loess cliffs); Ljubomirov and Yildirim, 2008:147 (in catalog of Crabronidae of Turkey); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero, as *quadricinctus*); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:802 (Iran: East Azarbaijan: several localities); Ghazi-Soltani, Khaghaninia, and Shahim, 2010:638 (Iran: East Azerbaijan: Horand Forests); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: France: first records from Aisne: Rocourt-Saint-Martin, Isère: Arandon, Loir-et-Cher: Suèvres, Lozère: Le Rozier, Saint-Etienne-Vallée-Française); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: relatively common).

*Cerceris fasciata* Spinola, 1806:97. Substitute name for *Cerceris quadricincta* Panzer, 1799. – Nouvel and Ribaut, 1953:177 (France: Central Pyrénées: Garonne River valley); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Nouvel and Ribaut, 1958:9 (France: Pyrénées-Orientales: Banyuls-sur-Mer area).

### ***spp. corsica de Beaumont***

*Cerceris quadricincta corsica* de Beaumont, 1952a:62, ♀, ♂. Holotype: ♀, France: Corse: Bonifacio (MNHN). – Grandi, 1954:237 (Italy: Sardegna); Erlandsson, 1974:63 (Italy: Capo Falcone); Pagliano, 1980:125 (Italy: Sardegna), 1988:149 (listed), 1990:98 (in catalog of Italian Sphecidae); Gayubo, Borsato, and Osella, 1992:292

(France: Corse); Luchetti, 1993:106 (Italy: Sardegna: Maddalena archipelago); Gayubo and Borsato, 1994:224 (Italy: Sardegna; France: Corsica); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); K. Schmidt, 2000:72 (in revision of Western Palearctic *Cerceris*); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano).

### **ssp. segregata de Beaumont**

*Cerceris quadricincta* var. *divisa* Giner Mari, 1947:21, ♀, ♂, junior primary homonym of *Cerceris divisa* Brèthes, 1910. Syntypes: Morocco: Saguia el Hamra (MNCN). – **As *Cerceris quadricincta divisa***: de Beaumont, 1951f:363 (new status, discussion).

*Cerceris quadricincta segregata* de Beaumont, 1970b:38. Substitute name for *Cerceris divisa* Giner Mari, 1947. – R. Bohart and Menke, 1976:585 (listed); K. Schmidt, 2000:73 (in revision of Western Palearctic *Cerceris*).

### **628. quadricolor F. Morawitz**

*Cerceris quadricolor* F. Morawitz, 1889a:158, ♀. Holotype or syntypes: ♀, Mongolia or China: "Monasterium U-tai" (ZIN). – Schletterer, 1889b:1129 (redescription); Dalla Torre, 1897:471 (in catalog of world Hymenoptera); Yasumatsu, 1942c:108 (China: Nei Mongol: Apaka at 44°N 114.96°E); Tsuneki, 1961c:11, 19 (in key), 57 (China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka, ca. 45°N, 116°E; discussion), 1967e:2 (China: Heilungkiang), 1971m:17 (China: Nei Mongol: Apaka); R. Bohart and Menke, 1976:585 (listed); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:473, 480 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:183 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### **629. quadricornis Gussakovskij**

*Cerceris quadricornis* Gussakovskij, 1938:9, ♀. Holotype: ♀, China: Kiangsu Province: no specific locality (NRS). – R. Bohart and Menke, 1976:585 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### **630. quadridentata Arnold**

*Cerceris quadridentata* Arnold, 1931:169, ♀. Holotype: ♀, Namibia: Okahandja (BMNH). – Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:184 (listed, unnecessary designation of lectotype).

### **631. quadridentata Reyes (preoccupied)**

*Cerceris quadridentata* Reyes, 1986:108, ♀, ♂, junior primary homonym of *Cerceris quadridentata* Arnold, 1931. Holotype: ♀, Philippines: Luzon: Abatan 60 km S Bontoc (BISH). – Tsuneki et al., 1992c:48, 52 (in key), 69 (bibliographic reference).

### **632. quadrifasciata (Panzer)**

*Philanthus quadrifasciatus* Panzer, 1799:pl. 14. – Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Fabricius, 1804:305 (redescription); Jurine, 1807:202 (listed). – Dahlbom, 1845:XXIV (specimens in collection Fabricius examined). – **As *Cerceris quadrifasciata***: Dahlbom, 1842a:16 (new combination, in review of Scandinavian aculeates), 1844:209 (in revision of Sphecidae and Pompilidae), 1845:500 (in key); Eversmann, 1849:404 (Russia: between Ural Mts. and Volga); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden); Wissmann, 1849:13 (Germany: Kingdom of Hannover: Göttingen, Harz Mts., and Münden); Fabre, 1856a:138 (France: Vaucluse: Avignon area), 1856b:184 (list of prey); Kawall, 1857:24 (Kurland, now Latvia); Taschenberg, 1858:82 (in key to Sphecidae of Germany); Schenck, 1861:160 (redescription, Germany: Dresden, Herrstein); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:190 (in revision of Hymenoptera of Germany); A. Costa, 1867c:83 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); Wierzejski, 1868:117 (Ukraine: Bukowina Region: Kalinowce); A. Costa, 1869a:16 (Italy: Piemonte), 1869b:99 (in revision of Italian Sphecidae), 1872a:16 (in revision of Sphecidae of Kingdom of Naples, Italy); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Wierzejski, 1874:260 (Ukraine: Podole Re-

gion: Kalinowce, Sinków); Beuthin, 1876:231 (Germany: Hamburg area, determination tentative); Kohl, 1880:159 (Austria: Tirol, and Italy: Trentino–Alto Adige); Friese, 1883:202 (Germany: Sachsen-Anhalt: Weissenfels); Kohl, 1883e:664 (Switzerland, as *4-fasciata*); von Heyden, 1884:118 (Germany: Birstein); Sickmann, 1885:179 (Germany: Niedersachsen: Wellingholthausen); Schletterer, 1887:425 (in revision of world *Cerceris*), 500 (listed); Brischke, 1888b:98 (Germany: Preussen Province, now Poland: Pomorze Region); Ed. André, 1889:279, 291 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Schletterer, 1889a:901 (faunal records); F. Morawitz, 1891a:217 (Russia: Astrakhan); Kohl, 1893a:34 (Austria: Niederösterreich, as *4-fasciata*); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus); Sickmann, 1893:93 (Germany: Niedersachsen: Iburg); Baldini, 1894:57 (Italy: Modena area); Krieger, 1894:12 (Germany: Kingdom of Saxony); Borries, 1897:58 (nesting habits); Dalla Torre, 1897:471 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Chyzer, 1902:33 (Hungary); de Cobelli, 1903:110 (Italy: Province of Trentino: Serrada, Trento); Adlerz, 1904:138 (preying on Hymenoptera according to André, 1889:279); Kubes, 1905:83 (Czech Republic: Sušice); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár; Romania: Caraș-Severin: Mehadia); Schmiedeknecht, 1907:241, 244 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera, as *4-fasciata*); Zavattari, 1910:4 (Italy: Isola d'Elba: Portoferraio); Dittrich, 1911b:25 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Birula, 1912:545 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:168 (Germany: Berlin area; also var. *truncatula*); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Crkvenica, now in Croatia, Gyilkos-to); Alfken, 1914:282 (NW Germany); Birula, 1914:388 (Belarus': Luskopol' near Vitebsk); Mercet, 1914:445 (listed from Spain); Shestakov, 1914b:409 (Russia: White Sea Biological Station), 1916:235 (Caucasus: many localities), 1917b:410 (Finland; also var. *truncatula*), 1917c:49 (Ukraine: Crimea); O. Meyer, 1919:156 (Germany: Posen Province, now Poland: Poznań Region); A. Waagner, 1920:40 (Germany: Lower Elbe region); Dubois, 1921c:211, 212 (in key to Belgian Sphecidae); Shestakov, 1922:82 (Russia: Stavropol' area); Hellén, 1923:60 (recorded from Finland); Alfken, 1924:231 (N Germany); Lauterborn, 1924:287 (Germany: Baden-Württemberg: Kaiserstuhl); Berland, 1925d:60 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul; Lithuania: Woinichi; Poland: Białowieża and Grajewo area); Coulon, 1925:117 (Morocco: Tanger); Shestakov, 1925:37 (Russia: Yaroslavl' area); K. Strohm, 1925:212 (Germany: Baden-Württemberg: Sasbach); Friese, 1926:155 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); K. Strohm, 1926:74 (reference to Lauterborn, 1924); Shestakov, 1927a:3 (Russia: Leningrad and Tver Oblast's), 4 (Russia: Moskva Vladimir, and Yaroslavl' Oblast's), 5 (Russia: Kostroma and Nizhgorod Oblast's), 8 (Belarus': Minsk area), 17 (Russia: Orenburg Oblast'); Bouwman, 1928a:361 (in revision of Sphecidae of Netherlands); Benoist, 1928:409 (France: Alpes-Maritimes, Basses-Alpes, Hautes-Alpes); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:702, 704 (in keys to Hymenoptera of North and Central Europe); Grandi, 1931:56 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Minkiewicz, 1934:183 (nesting habits); Forsius *in* Forsius and Hellén, 1935:12 (in checklist of Hymenoptera of Finland); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Crèvecoeur and Maréchal, 1936:254 (in catalog of Belgian Hymenoptera); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Bat'a, 1937:210 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Waagner, 1938a:123 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Dovernar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Giner Marí, 1941a:68 (in revision of Spanish *Cerceris*); Guiglia, 1941c:161 (Italy: Calabria: Grande Sila); Alfken, 1942:231 (Germany: Niedersachsen: Lüneburger Heide); J. Perkins, 1942:200 (Sweden: Skåne: Degaberga and Höör); Giner Marí, 1943a:104 (in Sphecidae Fauna of Spain); Guiglia, 1943d:92 (Albania: Scutari), 1944b:14 (Italy); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Šnoflak *in* Zavadil and Šnoflak, 1948:92, 97 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:12 (Portugal: Paço de Queirã); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Cavro, 1950:36 (France: Département du Nord);

Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km S Poznań); Caruel, 1952b:101 (France: Marne Department); de Beaumont, 1952a:59 (France; redescription); Móczár, 1953:310 (Hungary); Blüthgen, 1954:139 (Germany: color variation, prey: curculionids *Polydrosus atomarius* (Olivier) and *Strophosomus rufipes* Stephens)); de Beaumont, 1954e:87 (Italy); Grandi, 1954:237 (Italy); Aerts, 1955:64 (Germany: Rheinland); Steiner, 1955:137 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:82 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:370 (in catalog of Hymenoptera of Spain); Bajári, 1957a:37, 45 (in key to Hungarian Sphecidae); Grandi, 1957:388 (Italy: Abruzzi); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:11 (in review of Dutch Sphecidae); de Beaumont, 1958c:203 (Swiss National Park); Pulawski, 1958a:166 (Bulgaria: Vitosha Mtn. near Sofia); de Beaumont, 1959a:15 (Italy); Diniz, 1959:28 (Portugal: Paço de Queirã); Wolf, 1959b:31 (Germany: Nassau); Noskiewicz and Puławski, 1960:77, 80 (in key to Polish Sphecidae); Tsuneki, 1961c:12, 18 (in key), 44 (Korea), 58 (China: Heilungkiang: Harbin); Grandi, 1962:98 (nesting habits); Valkeila, 1962b:68 (southwestern Finland); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 199 (visiting flowers of *Daucus carota* L.); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Bonelli, 1966a:12 (nesting habits), 1966c:218 (Italy: Trentino–Alto Adige: Piazzòl); Diniz, 1966:7 (Portugal: Mata do Fundão, Rezende); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:286 (Turkey); Gauss, 1967:551 (Germany: Baden-Württemberg); J. Heinrich, 1967:71 (Germany: Bayern: Unterfranken District); Hoop, 1967a:40 (Germany: Schleswig-Holstein: Buchhorster Bergen, Sarnekow); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Bănasea, Comarova, Hagieni, Strunga), 1967b:41 (Romania), 1968c:382 (Romania: Alexandria, București, Budești, Comana, Pasărea, Rădulești); Tsuneki, 1967e:2 (China: Heilungkiang); de Beaumont, 1969:82 (Turkey); Benedek, 1969a:83 (Hungary; marshy meadow); Lefeber, 1969a:78 (Netherlands: Appelscha, Eremlo, Zeist); Romanova, 1969:133 (Russia: North Caucasus); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Lefeber and Petit, 1970:130 (Belgium: Plombières); Oehlke, 1970:684 (Democratic Germany); Lefeber, 1971a:17 (Netherlands: Nijmegen; Belgium: As, Plombières); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 48 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:413 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:129 (Kazakhstan); Kofler, 1972:105 (Austria: eastern Tirol); Scobiola-Palade, 1972b:252 (Romania); Erlandsson, 1974:63 (Yugoslavia); Lefeber, 1975b:156 (Belgium); Peters, 1975:118 (Sweden: Lappland); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Schmidt, 1977:96 (Germany: Schwarzwald); Kazenas, 1978b:62, 64 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1196 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Pulawski, 1978:194, 195 (in key to Sphecidae of European part of former USSR); Schwammberger, 1978:416 (Germany: Württemberg); Benedek, 1979:228 (Hungary: Bakony Hills: Balatonalmádi); Kazenas, 1979d:74 (Russia: Primorskiy Krai; discussion), 85, 89 (in key); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 27 (Netherlands: distribution map); Schmidt, 1979b:302 (Germany); Schwammberger, 1979:114 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, as *4-fasciata*); Pagliano, 1980:125 (Italy: Piemonte); Dollfuss and Ressler, 1981:318, 324 (Austria: Niederösterreich: Scheibbs District); Haeseler, 1981:50 (Germany: Friesian Island: Amrum Island); Skibińska, 1981:357 (Poland: Warszawa-Białoleka); Gayubo, 1982b:57 (Spain: Ávila, Cáceres, and Salamanca provinces); Skibińska, 1982:119, 13 (Poland: Mazovian Voivodship: Warszawa); Tsuneki, 1982b:18 (known from Korea); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Kvamme and Axelsson, 1983:58 (Norway); Nachtigall, 1983:283 (Germany; influence of weather on provisioning); Kazenas, 1984a:108 (redescription); Lefeber, 1985:87 (Netherlands: southern Limburg); Schmidt and Westrich, 1984:240 (Germany: Rheinland Pfalz: Bad Münster); Józán, 1985b:62 (Hungary S Lake Balaton), 85 (ecological and zoogeographic characteris-



tics); Nilsson, 1985:43 (Sweden); Brechtel, 1986:58 (Germany: Südpfalz); Gayubo and Sanza, 1986:88 (Spain: Burgos); Józán, 1986:375 (Hungary: Kiskunság National Park); Nemkov, 1986:109 (Russia: Siberia: Irkutsk Oblast'); Skibińska, 1986b:154 (Poland: suburbs of Warszawa); Vikberg, 1986:78 (Finland); Pagliano, 1987:162 (Italy, in key, male not included); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Kowalczyk, 1988b:64 (Poland: environs of Łódź); Pagliano, 1988:149 (Italy; revision); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Jacobs, 1989:28 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pádr, 1990:69 (Czech Republic: Praha area); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Avila and Salamanca Provinces); Jacobs and Oehlke, 1990:218 (new records from Democratic Germany); Pagliano, 1990:98 (in catalog of Italian Sphecidae); Schwammbberger and Priesner, 1990:554 (Austria: Kärnten); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:222 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:421 (Italy); Kowalczyk, 1991a:99 (Poland: Łódź); van der Smissen, 1991:96 (nw. Germany); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Nemkov, 1992b:250 (Russia: Far East: Belogorye near Khingan Nature Reserve, as *quadrifasciatus*); Nilsson, 1992:54 (Sweden); K. Weber, 1992:86 (Germany: Bayern: Bamberg District, as *quadrifasciatus*); Józán, 1993:415 (Hungary: Bükk National Park); Kuhlmann, 1993:75 (Germany: known from Westfalen); Wiśniowski, 1993a:98 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Kowalczyk, 1994:73 (Poland: Łągiwniki forest in Łódź); Pádr and Lukáš, 1994:892 (Slovakia: High Tatra Mountains); Theunert, 1994b:58 (Germany: first record from Niedersachsen for more than 50 years: quarry S Wense), 1994c:34 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:473, 479 (in key to Sphecidae of Russian Far East); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills NW Samara); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:30 (Germany: Bayern: Aschaffenburg, Lohr); Schmid-Egger, Risch, and Niehuis, 1995:169 (summary of records from Germany: Rheinland-Pfalz Province); Skibińska, 1995:424, 427 (Poland: pine forest in Białowieża Primeval Forest); Arens, 1996:442 (Germany: Bayern: Bayreuth area); Blösch, 1996:7 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Jakubzik, 1996:251 (Germany: Köln); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg), 107 (locality records); Woydak, 1996:101 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:352 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Celary, 1998:211 (Poland: Babia Góra National Park); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Haeseler and Ritzau, 1998:50 (Germany: Bremen: Steller Heide); Lefeber, 1998:181, 182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); van der Smissen, 1998:54 (Germany: Schleswig-Holstein, Niedersachsen); K. Weber, 1998:134 (Germany: Bayern: Bamberg area); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (strongly endangered in Nordrhein-Westfalen State of Germany); Ljubomirov, 1999b:58 (Bulgaria: Mt. Vitosha near Sofia); Pagliano and Scaramozzino, 1999:160 (Italy: Piemonte: Borgomale); Pauly, 1999:111 (in catalog of Belgian aculeates); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Tüzün, Gülmez, and Bağriaçık, 1999:386 (Turkey: Aegean Region); Wickl, 1999a:104 (Germany: Bayern: Oberpfalz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:420 (in Sphecidae Fauna of Germany); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Jacobs, 2000:6, 16 (Germany: Land Mecklenburg-Vorpommern: close to extinction); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); M. Mader and Chalwatzis, 2000:59 (Ger-

many: Hessen: Oderwald Mts.); Nachtigall, 2000:6 (wing bending and folding during flight without or with prey); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:73 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Dorow, 2001:136 (Germany: Hessen: Schönbuche Forest Reserve), 168 (comments on distribution and ecology); Feitz, Schneider, and Pauly, 2001:131 (first record from Luxemburg: Dudelange: Haardt); Ivanov and Ljubomirov, 2001:213 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 252 (review of known biology), 2001d:113, 115 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:138 (distribution in Germany by provinces); Shkuratov, 2001:17 (prey: *Polydrusus pterygomelus* Boh., a curculionid); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Wolf, 2001a:171 (Germany: Bayern: Lech valley from Augsburg to Donau); Kazenas, 2002a:149 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus': no specific locality); Wiśniowski, 2002:73 (Poland: Ojców National Park); Drewes, 2003:134 (Hungary, Sweden, Turkey: miscellaneous locality records); Esser and Jakubzik, 2003:290 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Wiśniowski *in* Dylewska and Wiśniowski, 2003:178 (Poland: Ojców National Park); Dorow, 2004a:127 (Germany: Hessen: Schönbuche Nature Reserve); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Kazenas, 2004b:112 (Kazakhstan: western Tien Shan); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:53 and 63 (in checklist of Polish Sphecidae); Blösch, 2005:8 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs, 2005a:441 (Bulgaria); Kofler, 2005:185 (Austria: Tirol: Lienz District: Lavant, city of Lienz); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nemkov, 2005a:160 (Russia: Sakhalin Island); Pagliano and Negrisolò, 2005:325 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Shoreiko, 2005a:169 (Ukraine: Crimea); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1804 (Turkey: Erzurum: five localities); Dorow, 2007:264 (Germany: Hessen: Niddahänge Forest Reserve); Guldmond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:183, 187 (in key to Crabronidae of Germany); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Kazenas, 2008b:115 (Kazakhstan: foothills of Zailiskiy Alatau: found among others on loess cliffs); Ljubomirov and Yildirim, 2008:148 (in catalog of Crabronidae of Turkey, as *quadrifasciatus*); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:150 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: France: first record from Haut-Rhin: Fessenheim); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: rare).

*Philanthus tricinctus* Thunberg, 1815a:133, sex not indicated, junior primary homonym of *Philanthus tricinctus* Spinola, 1805, possibly a citation of the latter. Holotype or syntypes: ♀, origin unknown (Uppsala). Synonymized with *Cerceris quadrifasciata* by de Beaumont, 1950c:321. – Thunberg, 1815a:128 (diagnostic characters), 1815b:288 (diagnostic characters); Dalla Torre, 1897:493 (in catalog of world Hymenoptera). – **As *Cerceris tricincta***: W. Schulz, 1912:69 (new combination, study of type material).

- Philanthus quadrifasciatus* Thunberg, 1815a:135, sex not indicated, junior primary homonym of *Philanthus quadrifasciatus* Panzer, 1799, perhaps a citation of the latter. Holotype or syntypes: Sweden: no specific locality (Uppsala). Synonymized with *Cerceris quadrifasciata* by ... – Thunberg, 1815a:128 (diagnostic characters), 1815b:288 (diagnostic characters), 293 (redescription).
- Cerceris truncatula* Dahlbom, 1844:210, ♀. Lectotype: ♀, Sweden: Godegard (LUND), designated by de Beaumont, 1953h:197. Synonymized with *Cerceris quadricincta* by Thomson, 1870:248, and with *Cerceris quadrifasciata* by ... – Dahlbom, 1845:500 (in key); Wissmann, 1849:13 (Germany: Kingdom of Hannover: Münden); F. Smith, 1856:413 (in catalog of Hymenoptera in British Museum); Taschenberg, 1858:82 (in key to Sphecidae of Germany); Schenck, 1861:160 (diagnostic characters, Germany: Münden); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:191 (in revision of Hymenoptera of Germany); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schenck, 1867a:354 (known from Germany); Wierzejski, 1868:117 (Ukraine: Podole Region, Bukowina Region: Kalinowce); Thomson, 1874:246 (in revision of Hymenoptera of Scandinavia); Wierzejski, 1874:260 (Poland: Kraków; Ukraine: Podole Region, Sinkow); Friese, 1883:202 (Germany: Sachsen-Anhalt: Kösen; Thüringen: Gumperda; determination tentative); Brischke, 1888b:98 (Germany: Preussen Province, now Poland: Pomorze Region); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus); Westerlund, 1893:26 (Russia: Karelian Republic: northern shore of Lake Ladoga); Engel, 1894:53 (Germany: Bahrenfeld near Hamburg); Dalla Torre, 1897:472 (in catalog of world Hymenoptera, as *quadrifasciata* var. *truncatula*); Kozhevnikov, 1897:15 (Russia: Moscow Government); Strand, 1898b:95 (Norway); J. Nielsen, 1901a:267 (nesting habits); Adlerz, 1904:68 (nesting habits); Aurivillius, 1904:274 (in revision of Swedish Sphecidae); de Gaulle, 1908:104 (in catalog of French Hymenoptera, as *quadrifasciata* var. *truncatula*); Bondroit, 1933:27 (Belgium: Hal).
- Cerceris bidentata* Lepeletier de Saint Fargeau, 1845:9, ♀, junior primary homonym of *Cerceris bidentata* Say, 1823, now in *Eucerceris*. Holotype or syntypes: ♀, France: Paris area (MNHN). Synonymized with *Cerceris quadrifasciata* by Berland, 1925d:60; synonymy confirmed by de Beaumont, 1950c:322. – F. Smith, 1856:438 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); Dours, 1874:144 (in catalog of Hymenoptera of France); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Berland, 1923b:288 (France: locality records); Coulon, 1925:117 (France: Montgeon); de Beaumont, 1950c:322 (study of holotype). – Incorrectly listed as synonym of *Cerceris flavilabris* by R. Bohart and Menke, 1856: 581.
- Cerceris dufourii* Lepeletier de Saint Fargeau, 1845:14, ♀ (as *Dufourii*, incorrect original capitalization), junior primary homonym of *Cerceris dufourii* Guérin-Méneville, 1844. Holotype or syntypes: ♀, France: Saint-Séver (MNHN). Synonymized with *Cerceris quadrifasciata* by de Beaumont, 1950c:322. – Six, 1859:18 (Netherlands: no specific locality); Dours, 1874:144 (in catalog of Hymenoptera of France); Schletterer, 1887:433 (as synonym of *Cerceris interrupta*); W. Schulz, 1911a:68 (study of holotype, unrecognizable species); de Beaumont, 1950c:322 (study of holotype). – As *Cerceris interrupta* var. *dufourii*: Ed. André, 1889:279 (new status, in revision of Sphecidae of Europe and Algeria).
- Cerceris nitida* Wesmael, 1852:263, ♀. Syntypes: ♀, Belgium: Bruxelles area (Bruxelles). Synonymized with *Cerceris quadrifasciata* by ... – F. Smith, 1856:43 9 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera); Dours, 1874:144 (in catalog of Hymenoptera of France).
- Cerceris fargei* F. Smith, 1856:439 (as *Fargei*, incorrect original capitalization). Substitute name for *Cerceris dufourii* Lepeletier de Saint Fargeau, 1845. – Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:46 (Lepeletier's original description copied), 491 (listed).
- Cerceris spreata* A. Costa, 1858:27, ♀, ♂. Lectotype: ♂, Italy: Campania: Monti Vergine (Napoli), designated by de Beaumont, 1950c:327. Synonymized with *Cerceris quadrifasciata* by A. Costa, 1869b:100. – Kirchner, 1867:221 (in catalog of European Hymenoptera); de Beaumont, 1950c:326 (synonymy confirmed).

*Cerceris euphorbiae* Marquet, 1875:205, ♂. Syntypes: ♂, southern France: no specific locality (Lausanne). Synonymized with *Cerceris quadrifasciata* by de Beaumont, 1950c:327 and 1952b:89. – Marquet, 1881:190 (France: Hautes-Pyrénées: Tarbes, description of ♀); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); de Gaulle, 1908:104 (in catalog of French Hymenoptera).

### 633. *queretaro* Scullen

*Cerceris queretaro* Scullen, 1972:91, ♀, ♂. Holotype: ♀, Mexico: Queretaro: 41 mi N Querétaro (USNM). – R. Bohart and Menke, 1976:586 (listed); G. Ferguson, 1984c:492 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 634. *querula* Kohl

*Cerceris querula* Kohl, 1906a:210, ♂. Syntypes: Yemen: Aden: Ras Fartak (NHMW). – Empey, 1973:2 (redescription); R. Bohart and Menke, 1976:586 (listed); Guichard, 1980:230 (Oman); Empey, 1983:184 (listed, holotype studied); Dollfuss, 1989:8 (holotype in NHMW); Guichard, 1993a:158 (Arabian Peninsula); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 234 (in catalog of Sphecidae of Saudi Arabia: N Jeddah).

#### *ssp. flavofemorata* Arnold

*Cerceris ponderosa* Arnold, 1931:174, ♀, junior primary homonym of *Cerceris ponderosa* Brèthes, 1920. Holotype: ♀, Kenya: Embu (BMNH). – Empey, 1969a:319 (listed).

*Cerceris flavofemorata* Arnold, 1942:22, ♂. Holotype: ♂, Zimbabwe: Chirinda Forest (SAM). Synonymized with *Cerceris ponderosa* Arnold by Empey, 1972:66. – Empey, 1969a:307 (listed); R. Bohart and Menke, 1976:581 (listed). – **As *Cerceris querula flavofemorata***: Empey, 1983:184 (new status, listed).

*Cerceris maia* Arnold, 1951:114, ♂. Holotype: ♂, Ethiopia: Moggio (BMNH). Synonymized with *Cerceris flavofemorata* by Empey, 1969a:307.

### 635. *quettaensis* Cameron

*Cerceris quettaensis* Cameron, 1907d:86, ♂. Lectotype: ♂, Pakistan: Baluchistan: Quetta (BMNH), designated by Empey, 1984:79. – R. Turner, 1912e:797 (in revision of British India species); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:586 (listed).

### 636. *quinquefasciata* (Rossi)

*Crabro quinquefasciatus* Rossi, 1792:139, [♀]. Holotype or syntypes: Italy: Etruria, now Toscana: Pisa area (destroyed). – de Beaumont, 1950c:319 (interpretation of species). – **As *Cerceris quinquefasciata***: Vander Linden, 1829:117 (new combination, bibliographic references, redescription, Italy: Bologna); Wesmael, 1852:266 (Belgium); Taschenberg, 1858:82 (in key to Sphecidae of Germany), 1866:191 (in revision of Hymenoptera of Germany); A. Costa, 1867c:87 (in revision of Italian Sphecidae); Schenck, 1967a:354 (known from Germany); A. Costa, 1869b:103 (in revision of Italian Sphecidae); Radoszkowski, 1870:103 (synonyms listed); Thomson, 1870:249 (in revision of Swedish wasps); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Thomson, 1874:247 (in revision of Hymenoptera of Scandinavia); Kohl, 1880:163 (Austria: Tirol, and Italy: Trentino–Alto Adige); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen, Merseburg, Weissenfels); Kohl, 1883e:664 (Switzerland, as *5-fasciata*); Harwood, 1884:211 (England: Essex: Colchester area); von Heyden, 1884:119 (Germany: Frankfurt am Main area); Wüstnei, 1886:40 (Germany: Schleswig-Holstein: Husum, Sonderburg); Schletterer, 1887:428 (in revision of world *Cerceris*), 500 (listed); Ed. André, 1889:291, 294, 299, 306 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Schletterer, 1889a:901 (faunal records); Steck, 1890:169, 171 (in key to *Cerceris* of Switzerland); Kohl, 1893a:34 (Austria: Niederösterreich, as *5-fasciata*); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus); Sickmann, 1893:93 (Germany: Niedersachsen: Iburg, analysis of color variation); Baldini, 1894:56 (Italy: Modena area); Engel, 1894:53 (Germany: Friedrichsruh near Hamburg);

Krieger, 1894:12 (Germany: Kingdom of Saxony); Borries, 1897:58 (two generations in Denmark: July and August); Dalla Torre, 1897:472 (in catalog of world Hymenoptera); Kozhevnikov, 1897:15 (Russia: Moscow Government); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Strand, 1898b:95 (Norway); Adlerz, 1901:180 (nesting habits, as *5-fasciata*); Nordenström, 1901:206 (Sweden: Småland: Vernamo); N. Arnold, 1902:89 (Russia: Mohilev Province, now Belarus'); de Cobelli, 1903:109 (Italy: Province of Trentino); Adlerz, 1904:70 (nesting habits, as *5-fasciata*); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); Aurivillius, 1904:274 (in revision of Swedish Sphecidae); Zilahi Kiss, 1904:77 (Hungary: Hadad); Kubes, 1905:84 (Czech Republic: Kolín, Mančice); Mosolov, 1905:19 (Russia: Moscow Government: Mikhailovskoye); Móczár and Henter, 1907:205 (Hungary: Hatvan); Schmiedeknecht, 1907:241 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera, as *5-fasciata*); Cavro, 1910:685 (France: Département du Nord, as *5-fasciata*); Dittrich, 1911b:25 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Zavattari, 1911:3 (Italy: Piemonte: Valle del Maira); Birula, 1912:544 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:168 (Germany: Berlin area); B. Harwood, 1913:230 (prey: curculionid *Strophosomus faber*); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Alfken, 1914:282 (NW Germany); Birula, 1914:368 (additional specimens from Radomyshl'), 388 (Belarus': Ambrosovich and Luskanopol' near Vitebsk); Haines, 1914:129 (Great Britain: Dorset); Mercet, 1914:445 (listed from Spain); Shestakov, 1916:235 (Caucasus), 1917c:49 (Ukraine: Crimea); Strand, 1918:3 (Germany: Bayern: Kulmbach); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Kerenskiy, 1919:35 (Russia: Penza Government); O. Meyer, 1919:156 (Germany: Posen Province, now Poland: Poznań Region); Strand, 1920:23 (Germany: Berlin-Dahlem); A. Waagner, 1920:40 (Germany: Lower Elbe region); Dubois, 1921c:210, 212 (in key to Belgian Sphecidae); Hedicke, 1922:272 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:68 (Croatia); Shestakov, 1922:82 (Russia: Stavropol' area); Hellén, 1923:60 (recorded from Finland); Chevalier, 1924d:77 (prey: *Crioceris asparagi* Linnaeus, a curculionid; parasite: *Myobia pumila* Lucas, a tachinid); Maréchal, 1924:6 (Belgium: Loën); Berland, 1925d:61 (in Sphecid Fauna of France); Coulon, 1925:116 (France: Forêt de la Londe, Rouen; prey); Shestakov, 1925:37 (Russia: Yaroslavl' area); Hémon, 1926:199 (France: Finistère: Fouesnant); Shestakov, 1927a: 4 (Russia: Moskva and Yaroslavl' Oblast's), 5 (Kostroma Oblast'), 6 (Ryazan' Oblast'), 7 (Kursk Oblast'), 8 (Belarus': Minsk area), 10 (Ukraine: Odessa and Poltava Oblast's), 11 (Ukraine: Kherson Oblast'); Bouwman, 1928a:362 (in revision of Sphecidae of Netherlands); Benoist, 1928:409 (France: Hautes-Alpes); Grandi, 1928d:276 (nesting habits), 279 (description of egg and larva); Hamm and Richards, 1930:113 (summary of nesting habits), 125 (list of prey); Schmiedeknecht, 1930:701, 703, 704 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Grandi, 1931:56 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Bondroit, 1932:39 (Belgium: common in Bruxelles area); Giordani-Soika, 1932a:21 (Italy: Lido di Venezia); Balles, 1934:2113 localities (Germany: Baden-Württemberg: 13 localities); Bondroit, 1934:60 (Belgium: prey: a small *Meligethes*); Jansson, 1934:290 (Sweden); Minkiewicz, 1934:188 (nesting habits, occasional use of Chrysomelid prey); Bernard, 1935:63 (France: Var: Fréjus area); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Vergne, 1935:117 (France: Auvergne: Billom); Drogoszewski, 1936:130 (Poland: Łowicz, Opatów, as *5-fasciata*); Dulac, 1937:9 (France: Saône-et-Loire: Saint-Laurent d'Andenay, as *S. fasciata*); Goebel, 1937:47 (Poland: Poznań District: Poznań-Dębina, Strzeszyn); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Baťa, 1937:210 (in catalog of Sphecidae of Czechoslovakia); Maréchal, 1938b:209 (Belgium: Louvain area, on flowers of *Jasione montana* L.); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Waagner, 1938a:123 (northwestern Germany); Aerts, 1939:135 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Móczár, 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Giner Marí, 1941a:42 (in revision of Spanish *Cerceris*); Schneid, 1941:1049 (Germany: Bayern: Bamberg area); J. Perkins, 1942:200 (Sweden: Skåne: Degaberga); Boyd, 1943:163 (Great Britain: eastern Dorset); Giordani Soika, 1944:12 (Italy: Sicilia:Falcone); Guiglia, 1944b:15 (Italy); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Guiglia, 1947a:28 (Italy: PIANO MAIURI); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Šnoflak *in* Zavadil and Šnoflak, 1948:92, 95, 96 (in

key to Sphecidae of Czechoslovakia); de Andrade, 1949:12 (Portugal, after Giner Mari, 1939; Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Cavro, 1950:36 (France: Département du Nord); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km S Poznań); Caruel, 1951:100 (France: Marne Department); de Beaumont, 1951h:32 (Switzerland: Neuchâtel area), 1951f:364 (in North African found only in Tanger), 1952a:63 (France; redescription); Cleu, 1953:50 (France: Ardèche River basin); Glowacki, 1953:520 (Poland: Podkowa Leśna near Warszawa); Heldmann, 1953:112 (Germany: Hessen: Eberstädter Düne near Darmstadt); Móczár, 1953:310 (Hungary); Nouvel and Ribaut, 1953:177 (France: Central Pyrénées: Garonne River valley, Hautes-Pyrénées: Cauterets); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); de Beaumont, 1954e:87 (Italy); Grandi, 1954:237 (Italy); Aerts, 1955:64 (Germany: Rheinland); Harant and Leclercq, 1955:251 (France: Hérault: Fond-d'Azolles, Montpellier); Steiner, 1955:137 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:83 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:39, 44 (in key to Hungarian Sphecidae); Grandi, 1957:388 (Italy); Evans, 1957b:88 (discussion of larval characters); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:11 (in review of Dutch Sphecidae); Nouvel and Ribaut, 1958:10 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Puławski, 1958a:166 (Bulgaria: Kniazhevo and Vitosha Mtn. near Sofia, Varna); Tonapi, 1958a:510 (spiracular structures); de Beaumont, 1959a:15 (Italy); Diniz, 1959:28 (Portugal: Porto); Scobiola-Palade, 1959:495 (first record from Romania: Constanța Region: Techirghiol); Wolf, 1959b:31 (Germany: Nassau); Noskiewicz and Puławski, 1960:77, 79 (in key to Polish Sphecidae); Grandi, 1961:169 (nesting habits), 482 (larva); Babiý, 1964:117 (Austria: Land Salzburg); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland); Tsuneki, 1965d:3, 4 (prey record summary: Curculionidae, Chrysomelidae); Hoop, 1963b:7 (Germany: Schleswig-Holstein: Lehmrade); Lehrer and Scutaru, 1963:284 (Romania: Moldova: Baia and Rădășeni in Suceava District, Bîrnova and Mircești in Iași District, and Iași); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); Evans, 1964b:278 (discussion of Grandi, 1961, description of larva); B. Klug, 1965:138 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Tulcea); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); Gauss, 1967:551 (Germany: Baden-Württemberg); J. Heinrich, 1967:71 (Germany: Bayern: Unterfranken District); Miczulski, 1967:189 (Poland: Sławin near Lublin); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Băneasa, Hagieni), 1967b:41 (Romania); Benedek, 1968:71 (Hungary, floral records); Scobiola-Palade, 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: eight localities); de Beaumont, 1969:82 (Turkey); Benedek, 1969a:83 (Hungary; marshy meadow); Lefebvre, 1969c:233 (Netherlands: St. Pietersberg = Montagne Saint Pierre); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:96 (Hungary: Tapolca); Oehlke, 1970:684 (Democratic Germany); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology), 1971:237 (Germany: Berlin); Schmidt, 1971b:26 (Germany: Mainz area); Scobiola-Palade, 1971:205 (in review of *Cerceris* of Romania); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:412 (in Sphecid Fauna of Czechoslovakia); Haeseler, 1972:155, 200 (Germany: Schleswig-Holstein; anthropogenic habitats); Kofler, 1972:106 (Austria: eastern Tirol); Simon Thomas, 1972:178 (France: Landes); Scobiola-Palade, 1972b:252 (Romania); Felton, 1973:15 (England: Kent County, as *quinquefasciatus*); Erlandsson, 1974:63 (Spain); Kazenas, 1974b:110 (feeding on flowers of *Silaum besseri* L., Apiaceae, in Kazakhstan); Kofler, 1974:320 (Austria: Kärnten); Lomholdt, 1974:198 (map of distribution in Fennoscandia and Denmark); Simon Thomas, 1974:57 (Netherlands: Limburg); Lefebvre, 1975b:122 (Belgium); Lomholdt, 1975c:179 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:586 (listed); Guichard, 1977:254 (Great Britain: Surrey); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:62, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1197 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Pulawski, 1978:194, 196 (in key to Sphecidae of European part of former USSR); Schwammerberger, 1978:416 (Germany: Württemberg); Lefebvre, 1979:11 (in

checklist of Sphecidae of Netherlands), 28 (Netherlands: distribution map); Schmidt, 1979b:303 (Germany); Schwammburger, 1978:416 (Germany: Württemberg); Benedek, 1979:228 (Hungary: Bakony Hills); Pagliano, 1980:125 (Italy: Piemonte); Richards, 1980:85 (in key to Sphecidae of British Isles); Dollfuss and Ressler, 1981:324 (Austria: Niederösterreich: Scheibbs District); Woydak, 1981:39 (Germany: Westfalen: Hamm); Donath, 1982:212 (Germany: Cottbus Bezirk); Gayubo, 1982e:110 (Spain: Cádiz Province; (as *quinquefasciata quinquefasciata*); Skibińska, 1982:123 (Poland: Warszawa area); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Józán, 1983:98 (Hungary); Lefeber, 1983a:85 (Netherlands: Waddendistrict: Ameland Island); Riemann, 1983:83 (Germany: Bremen-Daverden area); Chevin and Silvestre de Sacy, 1984:10 (France: Yvelines Department); Haack, Tschartke, and Vidal, 1984:124 (Germany: Hamburg area); Kazenas, 1984a:147 (redescription); redescription); Lefeber, 1984:28 (Netherlands: Maastricht); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Józán, 1985a:181 (Hungary), 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Brechtel, 1986:58 (Germany: Südpfalz); Józán, 1986:375 (Hungary: Kiskunság National Park); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Pagliano, 1987:164 and 166 (Italy, in key); Riemann, 1987a:339 (Germany: Niedersachsen: Bremen area; (as *quinquefasciatus*); Schmidt and Westrich, 1987:358 (Germany: Mainz area); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Kowalczyk, 1988a:45 (Poland: Rogów), 1988b:64 (Poland: environs of Łódź); Pagliano, 1988:150 (Italy; revision); Riemann, 1988:222 (Germany: Bremen area); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Jacobs, 1989:28 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:218 (new records from Democratic Germany); Kowalczyk, 1990:291 (Poland: Góry Świętokrzyskie); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:69 (Czech Republic: Praha area); Riemann and Melber, 1990:119 (northwest Germany: *Calluna*-meadows); Schwammburger and Priesner, 1990:554 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:222 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:421 (Italy); Jakubzik, 1991:74 (Germany: Köln); Kowalczyk, 1991a:89, 97, 99, 101, 107 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Kuhlmann et al., 1991:87 (Germany: Senne Region); Delarze, 1992:67 (Switzerland: Valais: Les Follatères, as *cinquefasciata*); Józán, 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Józán, 1993:415 (Hungary: Bükk National Park); Kuhlmann, 1993:75 (Germany: known from Westfalen); Sorg and Wolf, 1993:59 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Gayubo and Borsato, 1994:224 (Italy: Veneto); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź); Schmid-Egger, 1994a:687 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Theunert, 1994c:34 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:106 (Hungary: projected Duna-Dráva National Park); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:92 (Italy: Ferrara Province); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:30 (Germany: Bayern: Karlstadt, Lohr; Hamburg: Boberg, Wohldorf; Slovenia: Portorož); Schmid-Egger, Risch, and Niehuis, 1995:169 (summary of records from Germany: Rheinland-Pfalz Province); Blösch, 1996:7 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Doronin, 1996:18 (Latvia: Garciems, nest parasitized by *Trichrysis cyanea* Linnaeus, a chrysidid); Flügel, 1996:524 (Germany: Freizeitpark Marienfelde S Berlin); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey, 1996:25 (Great Britain: Essex); Harvey and Plant, 1996:81 (Great Britain: summary of records from Essex); Jakubzik, 1996:251 (Germany: Köln); Jakubzik and Cölln, 1996b:398 (Germany: Rheinland-Pfalz); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: not endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt,

1996:105 (Germany: Brandenburg), 107 (locality records); Woydak, 1996:101 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:352 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Riemann, 1997:49 (Germany: Achim 14 km SE Bremen); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Celary, 1998:211 (Poland: Babia Góra National Park); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); Haeseler and Ritzau, 1998:50 (Germany: Bremen: Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Petit, 1998a:109 (Belgium: Bassenge, visiting flowers of *Polygonum cuspidatum* Siebold and Zucc.); van der Smissen, 1998:54 (Germany: Schleswig-Holstein, Mecklenburg-Vorpommern, Niedersachsen); K. Weber, 1998:134 (Germany: Bayern: Bamberg area); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Ljubomirov, 1999b:58 (Bulgaria: Mt. Vitosha near Sofia); Mandery, 1999:104 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten); Pagliano and Scaramozzino, 1999:160 (Italy: Piemonte: Borgomale); Pauly, 1999:111 (in catalog of Belgian aculeates); Riemann, 1999:834 (Germany: Niedersachsen: sand pits near Bremen); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Blösch, 2000:420 (in Sphecidae Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Gonzáles, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Jacobs, 2000:6 (Germany: Land Mecklenburg-Vorpommern: not endangered); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); Kuhlmann, 2000:64 (Germany: Hessen: Diemel River valley); M. Mader and Chalwatzis, 2000:59 (Germany: Hessen: Oderwald Mts.); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:74 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 253 (review of known biology), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:138 (distribution in Germany by provinces); Schmid-Egger, 2001:17 (France: Alsace: Bollenbergs); Szczepko and Kowalczyk, 2001:189 (Poland: Kampinos National Park near Warszawa); Tischendorf, 2001:30 (Germany: Hessen: Kühkopf-Knoblochsaue Nature Reserve); Wolf, 2001a:171 (Germany: Bayern: Lech valley from Augsburg to Donau); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Kazenas, 2002a:150 (geographic distribution, collecting localities in Kazakhstan); Litt, 2002:166 (Belgium); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:35 (Belarus': no specific locality); Cölln, Esser, and Jakubzik, 2003:61 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:134 (France: Haute-Savoie: mouth of Dranse; Hungary: Harkany); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:751 (Italy: Sicilia: Linguaglossa); Tischendorf and Treiber, 2003:120 (Germany: Hessen: 15 km SW Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:101 (Germany: Niedersachsen: Emsland area); Wiśniowski in Dylewska and Wiśniowski, 2003:179 (Poland: Ojców National Park); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:261 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Jakubzik, Niehuis, and Cölln, 2004:457 (Germany: Rheinland-Pfalz: Roßstein in Rhein valley at 50°06'42"N 7°43'87"E); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Szczepko and Kowalczyk, 2004:127 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:53 and 63 (in checklist of Polish Sphecidae); Blösch, 2005:8 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Dubitzky, Blank, and Schönitzer, 2005:271 (Germany: Bayern: area north of Dachau); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Kofler, 2005:185 (Austria: Tirol: Lienz District:



city of Lienz); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisolò, 2005:329 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1804 (Turkey: Erzurum, Kars, and Osmaniye provinces); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); U. Frommer, 2006:37 (Germany: Hessen: Runkel area); Gadoum and Barbier, 2006:44 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes and Saint-Cyr-en-Arthies); Ljubomirov, 2006:538 (Bulgaria: Rhodope Mountains: Peshtera, as *quinquefasciata quinquefasciata*); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund); Vepřek, 2006:509 (Czech Republic: Kokořínsko area); Flügel, 2007:39 (Germany: Hessen: Halberg near Neumorschen); Guldemond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:184, 188 (in key to Crabronidae of Germany); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Venne, Bleidorn, and Lauterbach, 2007:300 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:351 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Ban-Calefariu, 2008:204 (Romania: Maramureş District: Bârsana, Onceşti); Ljubomirov and Yildirim, 2008:148 (in catalog of Crabronidae of Turkey, as *quinquefasciatus*); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2008c:11 (Russia: first records from Kemerovo Oblast': Yurga, and Tyva: mouth of Chaa-Khol River); Flügel, 2009a:67 (Germany: Thüringen: Weimar), 2009b:63 (Germany: Hessen: Borken, in closed open brown coal mine); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castromoño – Vega del Duero, as *quinquefasciatus*); Nemkov, 2009b:150 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia, as *quinquefasciata quinquefasciata*); Pagliano, 2009:183 (Italy: Toscana: Fauglia; Valle d'Aosta: Ozein); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: France: first record from Aisne: Chézy-sur-Marne); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: relatively common).

*Cerceris nasuta* Dahlbom, 1844:215, ♀, ♂, junior primary homonym of *Cerceris nasuta* Latreille, 1809. Syntypes: Germany, England, Scandinavia (LUND). Synonymized with *Cerceris quinquefasciata* by Thomson, 1870:249. – Dahlbom, 1945:501 (in key); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Oberlausitz area); Wissmann, 1849:13 (Germany: Kingdom of Hannover: Münden, Regenstein); Tischbein, 1850:9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld, as *nasuta* Klug); Kirschbaum, 1853:46 (Germany: Herzogtum Nassau: Mainz-Mombach, Weilburg, and Wiesbaden); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:148 (in revision of fossorial wasps of Nassau Region, Germany); Assmus, 1859:613 (Russia: Moscow Oblast'); Funk, 1859:58 (Germany: Bayern: Bamberg, as *nasuta* Kl.); A. Costa, 1860:14 (in revision of Sphecidae of Kingdom of Naples, Italy); Schenck, 1860:147 (Germany: Nassau Region, as *nasuta* Kl.); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schenck, 1867a:354 (Germany: Nassau Region, as *nasuta* Kl.); Jaenicke, 1868:9 (Germany: Hessen: Kelsterbach, as *nasuta* Kl.); Wierzejski, 1868:117 (Poland: Kraków; Ukraine: Podole Region: Janów); Aichinger, 1870:317 (Austria: Tirol); Wierzejski, 1874:260 (Poland: Kraków; Ukraine: L'viv and Podole Region); Beuthin, 1876:231 (Germany: Hamburg area, as *nasuta* Klug); Brischke, 1888b:99 (Germany: Preussen Province, now Poland: Pomorze Region); Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia, as *nasuta* Klug); Meunier, 1896:272 (Belgium: Bruxelles area); Lüderwaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); Graeffe, 1911:48 (Italy: Trieste area); de Beaumont, 1953h:197 (study of syntypes; synonymy confirmed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris subdepressa* Lepeletier de Saint Fargeau, 1845:12, ♀. Syntypes: France: Paris area (MNHN). Synonymized with *Cerceris quinquefasciata* by Schletterer, 1887:428; synonymy confirmed by de Beaumont, 1950c:322. – Dours, 1874:144 (in catalog of Hymenoptera of France); Acloque, 1897:81 (in Sphecidae Fauna of France and Algeria); de Beaumont, 1950c:322 (study of syntypes).

**ssp. consobrina Kohl**

*Cerceris consobrina* Kohl, 1898a:342, ♀, ♂. Syntypes: Spain: Granada and Barcelona (NHMW). – Antiga and Bofill, 1904:21 (Spain: Cataluña Province); Dusmet y Alonso, 1906:7 (Spain); Mercet, 1914:445 (listed from Spain); Dusmet y Alonso, 1915:87 (Spain: Aragón); Giner Marí, 1941a:38 (in revision of Spanish *Cerceris*), 1943a:97 (in Sphecidae Fauna of Spain); de Andrade, 1949:12 (Portugal: Lisboa); Diniz, 1959:28 (Portugal: Lisboa); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain). – **As *Cerceris quinquefasciata consobrina***: de Beaumont, 1952a:64 (new status); Suárez, 1969:28 (Spain: Almería Province); R. Bohart and Menke, 1976:586 (listed); Gayubo, 1982b:57 (Spain: Ávila, Cáceres, and Salamanca provinces), 1983e:238 (Spain: Salamanca Province); Gayubo and Tormos, 1984:25 (Spain: Valencia); Gayubo, 1985c:172 (Spain: Valladolid: Cigales, Rioseco), 1986a:67 (Spain: Ciudad Real Province), 1986d:123 (Spain: Zamora Province); Gayubo and Sanza, 1986:89 (Spain: Burgos); Tormos and Jiménez, 1987a:128 (Spain: Valencia); Asís and Jiménez, 1988:277 (Spain: Castellón Province); Dollfuss, 1989:8 (type material in NHMW); Gayubo, Asís, and Tormos, 1990b:80 (Spain: Valladolid and Zaragoza Provinces); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); K. Schmidt, 2000:76 (in revision of Western Palearctic *Cerceris*).

*Cerceris boscae* Giner Marí, 1941a:70, ♀. Syntypes: ♀, Spain: Huesca Province: Benasque (MNCN). Synonymized with *Cerceris quinquefasciata consobrina* by de Beaumont, 1952a:64. – Dusmet y Alonso, 1935:100 (Spain: Benasque; nomen nudum). – Giner Marí, 1943a:104 (in Sphecidae Fauna of Spain); Ceballos, 1956:366 (in catalog of Hymenoptera of Spain). – **As *Cerceris quinquefasciata boscae***: Diniz, 1966:7 (new status, Portugal: Rezende).

**ssp. seoulensis Tsuneki**

*Cerceris quinquefasciata seoulensis* Tsuneki, 1961c:44, ♀, ♂. Holotype: ♀, Korea: Seoul (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:12, 18 (in key), 57 (China: Heilungkiang: Harbin), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:586 (listed); Kazenas, 1979d:80 (Russia: Primorskiy Krai; discussion), 85, 88 (in key); Tsuneki, 1982b:18 (known from Korea, as *cinquefasciata seoulensis*); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Kazenas in Nemkov, Kazenas, Budryks, et Antropov, 1995:473 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:181 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2009b:151 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**637. radjamandalae van der Vecht**

*Cerceris radjamandalae* van der Vecht, 1964:366, ♀, ♂. Holotype: ♀, Indonesia: Java: Radjamandala (RMNH). – R. Bohart and Menke, 1976:586 (listed).

**638. raptor F. Smith**

*Cerceris raptor* F. Smith, 1856:449, ♀. Holotype or syntypes: ♀, "West Africa: Whydah" (BMNH). – Schletterer, 1887:500 (listed); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); Arnold, 1931:186 (revision); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Empey, 1983:184 (listed, type examined).

*Cerceris raptirix* W. Schulz, 1906:195. Unjustified emendation of *Cerceris raptor* F. Smith.

**639. rasoherinae Arnold**

*Cerceris rasoherinae* Arnold, 1945:29, ♀, ♂ (as *Rasoherinae*, incorrect original capitalization). Lectotype: ♀, Madagascar: Bekily (MNHN), designated by Empey, 1983:184 (Article 74.6). – Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

*Cerceris rasoherinae* var. *debilis* Arnold, 1945:30, ♀, ♂. Lectotype: ♀, Madagascar: Bekily (MNHN), designated by Empey, 1983:185 (Article 74.6). Synonymized with *Cerceris rasoherinae* by Empey, 1983:202. – As *Cerceris rasoherinae debilis*: Empey, 1969a:320 (new status); R. Bohart and Menke, 1976:586 (listed).

**640. raymenti R. Turner**

*Cerceris raymenti* R. Turner, 1936:537, ♀. Holotype or syntypes: ♀, Australia: Victoria: Gunpower Island, Murray River (BMNH). – Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:586 (listed); Evans, 1982a:338 (revision); Cardale, 1985:301 (in catalog of Australian Sphecidae).

**641. reginula Brauns**

*Cerceris reginula* Brauns, 1926:304, ♀, ♂. Lectotype: South Africa: Cape Province: Willowmore (TMP), designated by Empey, 1983:185. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:141 and 148 (in key); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

**642. reicula Krombein**

*Cerceris reicula* Krombein, 1969b:20, ♀. Holotype: ♀, Papua New Guinea: Western Highlands Province: Eliptamin Valley (BISHOP). – Krombein, 1974a:466 (additional locality records, color variation); R. Bohart and Menke, 1976:586 (listed).

**643. rejecta R. Turner**

*Cerceris rejecta* R. Turner, 1917e:177, ♀. Holotype: ♀, India: Bihar: Chapra (BMNH). – R. Bohart and Menke, 1976:586 (listed).

**644. renominata R. Turner**

*Cerceris opulenta* R. Turner, 1912e:809, ♀, junior primary homonym of *Cerceris opulenta* Morice, 1911. Holotype or syntypes: ♀, Pakistan: Sindh: Shadipali (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897).

*Cerceris renominata* R. Turner, 1917e:178. Substitute name for *Cerceris opulenta* R. Turner, 1912. – R. Bohart and Menke, 1976:586 (listed)

**645. repraesentans R. Turner**

*Cerceris repraesentans* R. Turner, 1919d:49, ♀. Lectotype: ♀, Kenya: Masai Reserve (BMNH), designated by Empey, 1983:185 (Article 74.6). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae, as *representans*), 1931:137 (in key), 183 (original description copied); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Empey, 1983:185 (listed).

**646. reversa F. Smith**

*Cerceris reversa* F. Smith, 1873b:105, ♂ (as *reversus*, incorrect original termination). Holotype or syntypes: ♂, Brazil: Pará: Pará, now Belém (BMNH). – Schletterer, 1887:500 (listed); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**647. rhinoceros Kohl**

*Cerceris rhinoceros* Kohl, 1888a:137, ♀, ♂. Syntypes: Syria: no specific locality (TMB). – Ed. André, 1889:299 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:882 (original description copied); Ed. André,

1891:25\* (bibliographic references); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); de Beaumont, 1951f:391 (Egypt: Alexandria; diagnostic characters), 1967a:293 (Turkey); R. Bohart and Menke, 1976:586 (listed); K. Schmidt, 2000:188 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:149 (in catalog of Crabronidae of Turkey).

#### 648. *rhodesiae* Brauns

*Cerceris rhodesiae* Brauns, 1926:330, ♀, ♂. Lectotype: Zimbabwe: Salisbury, now Harare (TMP), designated by Empey, 1983:185. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:138 and 146 (in key), 1951:108 (Ethiopia: Haramaia); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Empey, 1983:185 (listed).

#### 649. *rhodesiensis* Empey

As *Cerceris heterospila*: Arnold, 1942:11, corrected to *Cerceris rhodesiensis* by Empey, 1971b:259.

*Cerceris rhodesiensis* Empey, 1971b:259, ♀, ♂. Holotype ♀, Zimbabwe: Matetsi (originally Bulawyo Mus., now SAM). – R. Bohart and Menke, 1976:586 (listed); Empey, 1983:185 (listed); Hancock, Chahwanda, and Mhlanga, 1995:38 (paratypes in Bulawayo Museum).

#### 650. *rhois* Rohwer

*Cerceris rhois* Rohwer, 1908e:325, ♂. Holotype or syntypes: ♂, USA: New Mexico: Rio Ruidoso in White Mountains (USNM). – Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:503 (in revision on North American *Cerceris*); Tsuneki, 1965d:3 (prey record summary: Curculionidae); R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:492 (listed); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument).

#### 651. *rigida* F. Smith

*Cerceris rigida* F. Smith, 1856:449, ♂. Lectotype: ♂, South Africa: Kwazulu Natal: Port Natal, now Durban (BMNH), designated by Empey, 1983:185 (Article 74.6). – Schletterer, 1887:500 (listed); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); Arnold, 1931:192 (original description copied, additional notes); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed).

*Cerceris charimorpha* Brauns, 1926:322, ♀. Holotype: ♀, Mozambique: Dondo (TMP). Paratype: South Africa: Natal: Durban (TMP). Synonymized with *Cerceris rigida* by Empey, 1969a:320. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:140 (in key); Empey, 1983:185 (unnecessary designation of lectotype).

#### 652. *rixosa* F. Smith

*Cerceris rixosa* F. Smith, 1856:460, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Villa Nova, now Parintins (BMNH). – Schletterer, 1887:500 (listed); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

#### 653. *rohweri* G. Ferguson

*Cerceris rohweri* G. Ferguson, 1983c:238, ♀, ♂. Holotype: ♀, Mexico: San Luis Potosi: 17 mi NE San Luis Potosi ((USNM). – G. Ferguson, 1984c:492 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

As *Cerceris gondarai* (corrected to *Cerceris rohweri* by G. Ferguson, 1983c:238): Scullen, 1968a:156 (Texas, as *gandarai*), 1972:82 (in revision of Mexican and Central American *Cerceris*, as *gandarai*); Amarante, 2005a:13 (correction to his 2002 catalog).

#### 654. *ropalidioides* Evans

*Cerceris ropalidioides* Evans, 1982a:336, ♀. Holotype: ♀, Australia: Queensland: Mt. Molloy near Mossman (ANIC). – Cardale, 1985:301 (in catalog of Australian Sphecidae).

**655. rossica Shestakov**

*Cerceris rossica* Shestakov, 1914b:409, ♀, ♂. Syntypes: Kazakhstan: Nikolai Island on Aral Lake (ZIN). – Shestakov, 1914b:408 (Nikolai Island in Aral Lake), 1917c:48 (Ukraine: Crimea: Evpatorya), 1918a:148 (Kazakhstan), 1927a:19 (Russia: Stalingrad Oblast', now Volgograd); Kolosov, 1931:94 (incorrectly regarded as junior synonym of *Cerceris fodiens*); Kazenas, 1972b:129 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp. and *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan); R. Bohart and Menke, 1976:586 (listed); Kazenas, 1978b:60, 67 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:192, 196 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:157 (redescription); K. Schmidt, 2000:76 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:150 (geographic distribution, collecting localities in Kazakhstan).

**656. rostrifera Brauns**

*Cerceris rostrifera* Brauns, 1926:335, ♀. Holotype: ♀, South Africa: Cape Province: Sunday River (TMP). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:138 (in key), 1942:24 (female head illustrated); Empey, 1969a:320 (listed); R. Bohart and Menke, 1976:586 (listed); Empey, 1983:185 (listed, type examined).

**657. rothi Giner Mari**

*Cerceris rothi* Giner Mari, 1942b:132, ♀. Holotype: ♀, China: Kuantun (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:586 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**658. rothneyi Cameron**

*Cerceris rothneyi* Cameron, 1890b:251, ♀ (as *Rothneyi*, incorrect original capitalization). Lectotype: ♀, India: West Bengal: Barrackpore (OXUM), designated by Empey, 1984:79 (Article 74.6). – Cameron, 1890:250 (India: Barrackpore); Bingham, 1897:302 (redescription); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); R. Turner, 1912e:508 (revision); R. Bohart and Menke, 1976:586 (listed); Empey, 1984:79 (listed); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris supposita* Kohl, 1916:122, ♂. Syntypes: Turkmenistan: Seraks (Kraków). Synonymized with *Cerceris rothneyi* by Kazenas, 2000a:49. – R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:58 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:79 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve).

**659. rozeni Scullen**

*Cerceris rozeni* Scullen, 1971:130, ♀. Holotype: ♀, Florida: Highlands County: Archbold Biological Station (AMNH). – R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:492 (listed); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species).

**660. rubida (Jurine)**

*Philanthus rubidus* Jurine, 1807:202 and pl. 10, Fig. 23, ♀. Holotype: ♀, Europe: no specific locality, perhaps France (MHNG). – Frei-Gessner, Kohl, and Kriechbaumer, 1882:393 (Jurine's name is valid). – As *Cerceris rubida*: A. Costa, 1867c:154 (in revision of Italian Sphecidae); Radoszkowski, 1870:104 (addition to Kirchner's catalog, 1867); A. Costa, 1871b:83 (in revision of Italian Sphecidae), 1872a:19 (in revision of Sphecidae of Kingdom of Naples, Italy); Schletterer, 1887:418 (in revision of world *Cerceris*; incorrectly regarded *argentifrons* as synonym of *rubida*), 500 (listed); Ed. André, 1889:263, 268, 322 (in revision of Sphecidae of Europe and Algeria); Gasperini, 1889:69 (Dalmatia: Spalato, now Croatia: Split); Schletterer, 1889a:901 (faunal records), 902 (may be the species illustrated by Savigny, 1817, pl. X, Fig. 4); Steck, 1890:169, 171 (in key to *Cerceris* of Switzerland); Ed. André, 1891:26\* (bibliographic references); F. Morawitz, 1891a:217 (Russia: Astrakhan Government); Kohl, 1893a:34 (Austria: Niederösterreich: Arnsdorf); Radoszkowski, 1893a:66 (Turkmenistan); Baldini, 1894:58 (Italy:

Modena area; as var. *albonotata*); Krieger, 1894:12 (Germany: occurring in Kingdom of Saxony according to Kiesenwetter, 1849); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); W. Schulz, 1904b:93 (Greece: Corfu; Kazakhstan: Semipalatinsk, Zaisan); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:240, 242 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Haupt, 1913:50 (Germany: Sachsen-Anhalt: Dübener Heide in Halle area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Hadrév, Nagyenyed); Mercet, 1914:445 (listed from Spain); Kohl, 1916:121 (specimens in O. Radoszkowski collection); Shestakov, 1916:234 (Caucasus: many localities), 1917c:49 (Ukraine: Crimea), 1918a:148 (Kazakhstan, Transcaspia); Maidl, 1922:68 (Dalmatia); Shestakov, 1922:82 (Russia: Stavropol' area); Berland, 1925d:62 (in Sphecidae Fauna of France); Grandi, 1926:284 (nesting habits; as var. *julii*), 288 (description of larva); Shestakov, 1927a:10 (Ukraine: Odessa Oblast'), 11 (Ukraine: Kherson and Nikolayev Oblast's), 17 (Russia: Orenburg Oblast'), 19 (Stalingrad Oblast', now Volgograd), 20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Schmiedeknecht, 1930:701, 703 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); Aptel, 1931:223 (list of prey); Giner Marí, 1934:131 (Spain; as *Cerceris rubida* var. *julii*); Giordani Soika, 1932a:21 (Italy: Lido di Venezia); Giner Marí, 1934:131 (Spain); Gussakovskij, 1934a:13 (China: Nei Mongol and Kansu Provinces), 1935:445 (Tajikistan: Kulab area, Sary Chashma); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šusterka, and Ba'ta, 1937:210 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills), 1939:5 (Hungary: Jászberény); Deleurance, 1941:277 (France: Camargue; communal nesting, prey: *Olibrus* sp., a phalacrid beetle); Giner Marí, 1941a:33 (in revision of Spanish *Cerceris*), 1943a:96 (in Sphecidae Fauna of Spain); Guiglia, 1943d:92 (Albania: Scutari); Grandi, 1944:64 (nest sharing by females); Guiglia, 1944b:15 (Italy); Deleurance, 1946b:62 (prey, mainly Phalacridae), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Balthasar, 1948:143 (Slovakia: Halimba); Šnoflak in Zavadil and Šnoflak, 1948:85, 90, 93, 96 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1952a:55 (France; redescription), 1954e:87 (Italy); Grandi, 1954:161 (nesting habits, list of prey), 237 (Italy; also var. *albonotata*); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Vogrin, 1955:33 (Yugoslavia); Bytinski-Salz, 1956:225 (Turkey: Fethiye, Kasaba); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain); Bajári, 1957a:30, 39 (in key to Hungarian Sphecidae); de Beaumont, 1957b:133 (n. Iran); Grandi, 1957:388 (Italy); de Beaumont, 1958d:273 (Greece); Pulawski, 1958a:166 (Bulgaria: Aitos, Nesebar, Sandanski, Sozopol, Varna); de Beaumont, 1959a:14 (Italy); Scobiola-Palade, 1959:496 (Romania: Constanța Region: Agiea, Techirghiol); de Beaumont, 1960a:7 (Greece: Rhodes Island); Noskiewicz and Puławski, 1960:74, 78 (in key to Polish Sphecidae, not yet found in Poland); de Beaumont, 1961e:3 (Iraq); Grandi, 1961:174 (nesting habits), 490 (larva); Tsuneki, 1961c:8, 14 (in key), 49 (China: Pekin), 55 (China: Heilungkiang: Harbin), 65 (China: Nei Mongol: Apaka, ca. 45°N, 116°E); Grandi, 1962:98 (Italy); Evans, 1964b:278 (discussion of Grandi, 1961, description of larva); de Beaumont, 1965a:20 (Greece); Tsuneki, 1965d:3, 4 (prey record summary: Curculionidae, Bruchidae, Chrysomelidae, Phalacridae, Nitidulidae); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:286 (Turkey); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Bugeac, Canara Fetei), 1967b:40 (Romania); Tsuneki, 1967e:2 (China: Heilungkiang); Benedek, 1968:71 (Hungary, floral records); Scobiola-Palade, 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Budești, Măgurele, Odaia, Turnu); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Kazenas, 1971:161 (Kazakhstan: Zailiyskiy Alatau Range; widely distributed in Kazakhstan); Scobiola-Palade, 1971:204 (in review of *Cerceris* of Romania); Tsuneki, 1971m:16 (China: Pekin; Nei Mongol: Apaka); Balthasar, 1972:405 (in Sphecidae Fauna of Czechoslovakia); Kazenas, 1972b:129 (Kazakhstan); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Fain, 1973:181 (parasite: *Crabrovidia leclercqi* Fain, a saprogyphid mite); Erlands-son, 1974:63 (Italy, Yugoslavia); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, and *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of

*Euphorbia* spp., Euphorbiaceae, *Daucus carota* L., Apiaceae, and *Silaum besseri* L., Apiaceae, in Kazakhstan), 111 (feeding on flowers of *Thymus marschallianus* Willd., Lamiaceae, *Achillea millefolium* L., Asteraceae, *Lepidium crassifolium* W. et K., Brassicaceae, and *Barbarea vulgaris* R. Br., Brassicaceae, in Kazakhstan), 112 (feeding on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan); R. Bohart and Menke, 1976:586 (listed); Georghiou, 1977:189 (Cyprus); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Guichard, 1978:270 (Greece); Kazenas, 1978b:59 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:86 (France: Pyrénées-Orientales); Pulawski, 1978:192 (in key to Sphecidae of European part of former USSR); Benedek, 1979:229 (Hungary: Bakony Hills); Kazenas, 1979d:81, 86 (in key); Pagliano, 1980:125 (Italy: Umbria); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria: Niederösterreich: Arnsdorf); Islamov and Kazenas, 1983:45 (Uzbekistan; prey: a halticine *Chaetocnemis hortensis* Cff.); Schmidt and Westrich, 1983:125 (Greece); Kazenas, 1984a:85 (redescription); Józán, 1985b:62 (Hungary: Pécs: Cserkut), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Islamov, 1986:518 (Uzbekistan: Tashkent Oblast'); Józán, 1986:375 (Hungary: Kiskunság National Park); Pagliano, 1987:162 and 165 (Italy, in key), 1988:157 (Italy; revision); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Pagliano, 1990:99 (in catalog of Italian Sphecidae); Chinin, 1991:111 (Russia: Samara Oblast'); Dollfuss, 1991:222 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:422 (Italy); Negrisoló, 1991:324 (Italy: Udine and Venezia Provinces); Gayubo, Borsato, and Osella, 1992:292 (France, Greece, Turkey); Gayubo and Borsato, 1994:224 (Italy: Sardegna); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:106 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470, 474 (in key to Sphecidae of Russian Far East); Negrisoló, 1995a:22 (Italy: Veneto); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:92 (Italy: Ferrara Province); Scharrer, 1995:30 (Croatia: Island of Krk; Hungary: Budapest area, Siófok; Italy: Cattolica); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Wu and Zhou, 1996a:177 (in revision in Economic Insect Fauna of China); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:356 (in Sphecid Fauna of Western Europe); Pagliano and Scaramozzino, 1999:160 (Italy: Piemonte: Borgomale); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Ljubomirov, 2000:6, 14 (Bulgaria, specimens in N. Nedelkov collection); Melo, 2000:100 (possible female associations for use of natal nest); K. Schmidt, 2000:128 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 253 (review of known biology); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Shkuratov, 2001:17 (prey: *Psylloides cyanoptera* Ill., a chrysomelid, *Melighetes brachialis* Fr. ?, a nitidulid, and *Spermophagus sericeus* Geoffr., a bruchid); Kazenas, 2002a:150 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Jacobi, 2003:19 (detailed observations on nesting habits in Corsica, France); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Jacobs, 2005a:441 (Bulgaria); Pagliano and Negrisoló, 2005:345 (in Sphecid Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1804 (Turkey: Artvin, Balikesir, Bilecik, Erzincan, Erzurum, Iğdir, Kars, and Konya provinces); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Ljubomirov, 2006:538 (Greece: previous record from Rhodope Mountains by Schmidt and Westrich, 1983, cited, as *rubida rubida*); Polidori, Federici, Papadia, and Andrietti, 2006:55 (nest sharing and provisioning activity); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Moravia and Slovakia), 234 (Schmidt's 2000 record from Czech Republic was not supported by evidence; first record from Czech RepublicZ: Moravia: Čejč); Danilov, 2008:351

(Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Kazenas, 2008b:115 (Kazakhstan: foothills of Zailiskiy Alatau: found among others on loess cliffs); Ljubomirov and Yildirim, 2008:150 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:151 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:183 (Italy: recorded from Puglia by Costa, 1860); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: observations on nesting habits by Jacobi, 2003, and Polidori et al., 2006, reported); Polidori, Gobbi, Chatenoud, Santoro, Montani, and Andrietti, 2010:544 (taxon-biased diet preference).

*Cerceris albonotata* Vander Linden, 1829:122, ♀. Holotype: ♀, Italy: Emilia-Romagna: Bologna area (Inst. Roy. Sci. Nat. Belgique, Bruxelles). Synonymized with *Cerceris rubida* by Pagliano, 1988:157. – Dahlbom, 1844:203 (in revision of Sphecidae and Pompilidae), 1845:498 (in key); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden); F. Smith, 1856:440 (in catalog of Hymenoptera in British Museum); Taschenberg, 1858:81 (in key to Sphecidae of Germany: Dresden area); Schenck, 1861:160 (Germany: Dresden, recognised by four white abdominal spots); Taschenberg, 1866:190 (in revision of Hymenoptera of Germany); A. Costa, 1867c:85 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); Schenck, 1967a:354 (known from Germany); Wierzejski, 1868:117 (Ukraine: Podole Region); A. Costa, 1869b:101 (in revision of Italian Sphecidae), 1872a:18 (in revision of Sphecidae of Kingdom of Naples, Italy). – **As *Cerceris rubida* var. *albonotata***: Coulon, 1925:117 (new status, Italy); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales). – **As *Cerceris rubida albonotata***: R. Bohart and Menke, 1976:586 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Pagliano, 1980:125 (Italy: Veneto); Kazenas, 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris modesta* F. Smith, 1856:440, ♀. Holotype or syntypes: ♀, Albania: no specific locality (BMNH). Synonymized with *Cerceris rubida* by Kohl, 1881:239 and by Frei-Gessner, Kohl, and Kriechbaumer, 1882:393. – Kirchner, 1867:221 (in catalog of European Hymenoptera).

As *Cerceris vagans* (partly): Radoszkowski, 1877:61 (Transcaspia), corrected to *Cerceris rubida* by Shestakov, 1918a:161.

As *Cerceris variabilis* (partly): Radoszkowski, 1877:63 (Transcaspia), corrected to *Cerceris rubida* by Shestakov, 1918a:161.

*Cerceris julii* Fabre, 1879:320, ♀ (as *Julii*, incorrect original capitalization). Syntypes: ♀, France: Var: Carpentras and Orange (MNHN). Synonymized with *Cerceris rubida* by Schletterer, 1889a:900, and by Berland, 1923a:173. – von Dalla Torre, 1881:153 (original description translated into German); Fauvel, 1883:162 (original description copied); Ed. André, 1889:258, 266 (in revision of Sphecidae of Europe and Algeria), 1891:27\* (bibliographic references); Medina, 1894b:262 (Spain: Calañas and Hornachuelos); Borries, 1897:53 (reference to Fabre, 1879:320); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Coulon, 1925:117 (France: Marseille). – **As *Cerceris rubida* var. *julii***: Bernard, 1935:63 (new status, France: Var: Fréjus area); Zavadil, 1939:121 (Slovakia: Parkan); Guiglia, 1943d:92 (Albania: Scutari), 1947a:28 (Italy: PIANO MAIURI); Bajári, 1956a:82 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain). – **As *Cerceris rubida julii***: Evans, 1957b:87 (new status, discussion of larval characters).

### ***ssp. conjuncta* Schletterer**

*Cerceris conjuncta* Schletterer, 1887:420, sex not indicated, origin unknown (NHMW). – de Beaumont, 1947b:385 (discussion). – **As *Cerceris rubida* var. *conjuncta***: Dalla Torre, 1897:473 (in new status, in new status, in new catalog of world Hymenoptera). – **As *Cerceris rubida conjuncta***: de Beaumont, 1958d:285 (discussion); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Chilia Veche); de Beaumont, 1970a:397 (Afghanistan); R. Bohart and Menke, 1976:586 (listed); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve).



**ssp. daradi K. Schmidt**

*Cerceris rubida daradi* K. Schmidt, 2000:131, ♂. Holotype: ♂, Morocco: Mhamid (OÖLM).

**ssp. pumilio Giner Marí**

*Cerceris pumilio* Giner Marí, 1945a:250, ♂, ♀. Syntypes: Cyprus: Limassol (MNCN). – Giner Marí, 1945a:248 (Cyprus); de Beaumont, 1947b:385 (Cyprus); Pittioni, 1950:22 (Cyprus). – **As *Cerceris rubida pumilio***: de Beaumont, 1958d:284 (new status, Cyprus); de Beaumont and Bytinski-Salz, 1959:123 (Israel; new status); R. Bohart and Menke, 1976:586 (listed); Guichard, 1991a:339 (Jordan); K. Schmidt, 2000:129 (in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2007:119 (Turkey: İçel: Aydıncık); Ljubomirov and Yildirim, 2008:149 (in catalog of Crabronidae of Turkey).

**ssp. turbata Shestakov**

*Cerceris turbata* Shestakov, 1918a:155, ♀, ♂. Syntypes: Uzbekistan: between Syr-Darya and Tashkent; and Turkmenistan: Farab (ZIN, ZMMU). – R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:59 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Cerceris rubida turbata***: Kazenas, 1984a:85 (new status); K. Schmidt, 2000:130 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia).

As *Cerceris vagans*: Radoszkowski, 1877:61 (Transcaspia) partly, corrected to *Cerceris turbata* by Shestakov, 1918a:161.

**661. rufiabdominalis Wu and Zhou**

*Cerceris rufiabdominalis* Wu and Zhou, 1996a:178, ♀. Holotype: ♀, China: Yunnan: Xishuangbanna (Inst. Zool., Acad. Sinica, Beijing).

**662. ruficapoides Strand**

*Cerceris ruficapoides* Strand, 1910a:137, ♂. Holotype: ♂, Paraguay: Asunción: Villa Morra (ZMHU). – R. Bohart and Menke, 1976:586 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**663. ruficauda Cameron**

*Cerceris ruficauda* Cameron, 1905m:224, ♀, actually ♂ (Empey, 1983:185). Lectotype: ♀, South Africa: Cape Province: Stellenbosch (BMNH), designated by Empey, 1983:185 (Article 74.6). – Brauns, 1926:296 (revision, description of ♂); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:138 and 146 (in key); Empey, 1969a:320 (listed), 1974:113 (taxonomic history); R. Bohart and Menke, 1976:586 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: criocerine chrysomelids), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in disturbed clayey soils; prey: Chrysomelidae; (as *ruficauda ruficauda*); Empey, 1983:185 (listed).

*Cerceris ludibunda* Arnold, 1931:155, ♂. Syntypes: ♂, South Africa: Orange Free State: Harrismith (BMNH). Synonymized with *Cerceris ruficauda* by Empey, 1969a:321.

**ssp. lichtenburgensis Brauns**

*Cerceris lichtenburgensis* Brauns, 1926:291, ♀, ♂. Lectotype: ♀, South Africa: Transvaal: Lichtenburg (TMP), designated by Empey, 1983:186. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae). – **As *Cerceris ruficauda* var. *lichtenburgensis***: Arnold, 1931:149 (new status). – **As *Cerceris ruficauda lichtenburgensis***: Empey, 1969a:321 (new status), 1974:114 (listed; R. Bohart and Menke, 1976:586 (listed).

**ssp. pictinoda Cameron**

*Cerceris pictinoda* Cameron, 1908a:277, "♀.", actually ♂ (Empey, 1974:114). Lectotype: ♀, Kenya: Mt. Kilimanjaro: Kibonoto (NRS), designated by Empey, 1983:186 (Article 74.6). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:199 (original description copied); Empey, 1969a:318 (listed), 1974:114 (information of type); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:186 (listed).

*Cerceris ruficauda* race *barbara* Arnold, 1931:152, ♀. Holotype: ♀, Kenya: Mogorr River (BMNH). Synonymized with *Cerceris ruficauda pictinoda* by Empey, 1974:113. – **As *Cerceris ruficauda barbara***: Empey, 1969a:321 (new status, listed); R. Bohart and Menke, 1976:586 (listed), 628 (synonymy with *Cerceris ruficauda pictinoda* recorded).

#### **ssp. *senegalensis* Empey**

*Cerceris ruficauda senegalensis* Empey, 1974:114, ♀, ♂. Holotype: ♀, Senegal: Casamance: Santiaba Forest (ORSTOM, may be MNHN). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:186 (listed).

#### **664. *ruficeps* F. Smith**

*Cerceris ruficeps* F. Smith, 1873b:107, ♀. Holotype or syntypes: Brazil: Amazonas: São Paulo de Olivença (BMNH). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

#### **665. *ruficornis* (Fabricius)**

*Philanthus ruficornis* Fabricius, 1793:292, sex not indicated. Lectotype: ♂, Italy: no specific locality (ZMK), designated by van der Vecht, 1961a:65. – Fabricius, 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:306 (redescription); Spinola, 1806:99 (as synonym of *Cerceris interrupta*); Thunberg, 1815a:127 (diagnostic characters), 130 (redescription), 1815b:288 (diagnostic characters). – **As *Cerceris ruficornis***: van der Vecht, 1961a:65 (new combination); Tsuneki, 1961c:13, 17 (in key), 44 (Korea); de Beaumont, 1964c:41 (in Sphecidae Fauna of Switzerland), 1965a:21 (Greece); B. Klug, 1965:138 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:287 (Turkey); Gauss, 1967:551 (Germany: Baden-Württemberg); Miczulski, 1967:189 (Poland: Felin near Lublin); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:41 (Romania); Benedek, 1968:71 (Hungary, floral records); Parré, 1968:122 (Germany: Sachsen-Anhalt: Staßfurt); Benedek, 1969a:83 (Hungary; marshy meadow); Lefeber, 1969c:233 (Netherlands: St. Pietersberg = Montagne Saint Pierre); Zangheri, 1969:1700 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:97 (Hungary: Tapolca); Oehlke, 1970:685 (Democratic Germany); Schmidt, 1971b:27 (Germany: Mainz area); Scobiola-Palade, 1971:206 (in review of *Cerceris* of Romania); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Kazenas, 1972b:130 (Kazakhstan); Scobiola-Palade, 1972b:252 (Romania); Kazenas, 1974:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, and *Silaum besseri* L., Apiaceae, in Kazakhstan); Simon Thomas, 1974:57 (Netherlands: Limburg); Benedek, 1975:251 (Hungary: onion pollinator); Lefeber, 1975:37 (Netherlands: s'Gravenpolder); Lomholdt, 1975c:181 (in Sphecidae Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:586 (listed); Simon Thomas, 1976:4 (France: Lot-et-Garonne); Tsuneki, 1976d:293 (China: Heilungkiang); Hoop, 1977:73 (Germany: Schleswig-Holstein: Ihlberg near Kiel-Russee); Guichard, 1977:254 (Great Britain: Surrey); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:63, 65 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1198 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Pulawski, 1978:195 (in key to Sphecidae of European part of former USSR); Schwammberger, 1978:416 (Germany: Württemberg); Benedek, 1979:229 (Hungary: Bakony Hills); Kazenas, 1979d:85, 88 (in key); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 29 (Netherlands: distribution map); Richards, 1979:402 (British Channel Islands); Schmidt, 1979b:303 (Germany); Pagliano, 1980:126 (Italy: Piemonte); Petit, 1980:44 (Belgium: Saeftinge); Richards, 1980:84, 85 (in key to Sphecidae of British Isles); Axelsson, 1982:79 (Sweden); Donath, 1982:212 (Germany: Cottbus Bezirk); Gayubo, 1982b:58 (Spain: Salamanca: Valdefuente de Sangusín); Radovic, Kronic and Brajkovic, 1982:31 (Yugoslavia); Tsuneki, 1982b:18 (known from Korea); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 77 (endangered in Burgenland, Austria), 78 (endangered in Oberösterreich and Salzburg area, Austria), 79 (endangered in Kärnten and Steiermark, Austria), 1983b:25 (in catalog of Sphecidae of Austria); Islamov and Kazenas, 1983:45 (Uzbekistan); Józán, 1983:98 (Hungary); Chevin and

Silvestre de Sacy, 1984:10 (France: Yvelines Department); Gayubo and Tormos, 1984:26 (Spain: Valencia); Janzon and Svensson, 1984:183 (Sweden: Öland Island); Kazenas, 1984a:116 (revision); Chevin and Chevin, 1985:39 (France: Aude); Józán, 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg); Gayubo, 1986a:67 (Spain: Ciudad Real Province), 1986b:41 (Spain: Andalucía); Nemkov, 1986:109 (Russia: Siberia: Irkutsk Oblast'); Gayubo and Sanza, 1986:89 (Spain: Soria); Islamov, 1986:519 (Uzbekistan: Surkhandarya and Tashkent Oblast's); Józán, 1986:375 (Hungary: Kiskunság National Park); Nilsson, 1986:87 (Sweden); Vikberg, 1986:78 (Finland); Skibińska, 1986b:160 (Poland: Warszawa: gardens); Pagliano, 1987:164 and 166 (Italy, in key); Schmidt and Westrich, 1987:359 (Germany: Mainz area); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Pagliano, 1988:151 (Italy; revision); Riemann, 1988: (Germany: Bremen area); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Jacobs, 1989:29 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Gayubo, Asís, and Tormos, 1990b:80 (Spain: León Province); Jacobs and Oehlke, 1990:218 (new records from Democratic Germany); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:69 (Czech Republic: Praha area); Pagliano, 1990:99 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:554 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Day, 1991:xiii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:222 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:422 (Italy); Kuhlmann et al., 1991:88 (Germany: Senne Region); van der Smissen, 1991:96 (nw. Germany); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Józán, 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); Nilsson, 1992:54 (Sweden); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Archer, 1993a:45 (Great Britain: Channel Islands); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Kuhlmann, 1993:75 (Germany: known from Westfalen); Theunert, 1994c:34 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:106 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:474, 478 (in key to Sphecidae of Russian Far East); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Scharer, 1995:30 (Croatia: Malinska in Inland of Krk; Germany: Bayern: Aschaffenburg, Eckertsmühle, Karlstadt, Lohr, Mainfranken, Retzbach; Croatia: Rudina in Island of Krk); Schmid-Egger, Risch, and Niehuis, 1995:169 (summary of records from Germany: Rheinland-Pfalz Province); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:81 (Great Britain: summary of records from Essex); Jakubzik, 1996:251 (Germany: Köln); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg), 107 (locality records); Woydak, 1996:102 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:358 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:7 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); van der Smissen, 1998:54 (Germany: Niedersachsen: Hühbeck); K. Weber, 1998:135 (Germany: Bayern: Bamberg area); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (threatened with extinction in Nordrhein-Westfalen State of Germany); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:111 (in catalog of Belgian aculeates); Petit, 1999:112 (Netherlands: Nieuw-Namen); Riemann, 1999:834 (Germany: Niedersachsen: sand pits near Bremen); Blösch, 2000:422 (in Sphecidae Fauna of Germany); Jacobs, 2000:6, 16 (Germany: Land Mecklenburg-Vorpommern: extinct); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:77 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 253

(review of known biology), 2001d:114, 116 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:138 (distribution in Germany by provinces); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Archer and Edwards, 2002:103 (Great Britain: West Sussex: Ambersham and Iping commons); Kazenas, 2002a:151 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Drewes, 2003:134 (Germany: Baden-Württemberg: Kaiserstuhl; Italy: Trentino: Arco, Torbole); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); von der Heide and Metscher, 2003:101 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: no longer endangered); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:261 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:53 and 63 (in checklist of Polish Sphecidae); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs, 2005a:441 (Bulgaria); Kofler, 2005:185 (Austria: Tirol: Lienz District: Lengberg in Nikolsdorf Common, Nikolsdorf); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Nemkov, 2005a:160 (Russia: Sakhalin Island); Pagliano and Negrisolò, 2005:329 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:546 (Germany: Niedersachsen: city of Bremen and adjacent area); Shoreenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1805 (Turkey: Artvin, Erzincan, Erzurum, and Kars provinces); Tomarchio and Turrisi, 2006:956 (Italy: first record from Sicilia: Mount Etna); Guldmond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:185, 187 (in key to Crabronidae of Germany); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:351 (Russia: Altayskiy Krai: Barnaul area); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Ljubomirov and Yildirim, 2008:151 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen); Nemkov, 2009b:151 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:183 (Italy: recorded from Campania by Costa, 1860, and from Basilicata and Sicilia by Tomarchio and Turrisi, 2006); Bitsch, 2010:119 (in supplement to vol. II of Faune de France, 1997: recent record from Sicily reported; France: first record from Hautes-Alpes: Chorges); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: rare).

*Crabro bidens* Schrank, 1802:... Synonymized with ...

*Crabro cunicularius* Schrank, 1802:234, ♀. Holotype (or syntypes?): Germany: Bayern (...). Synonymized with *Cerceris ruficornis* by van der Vecht, 1961a:65. – Germar, 1817:261 (Dalmatia: Spalatro, now Croatia: Split); Frauenfeld, 1861:103 (Croatia: Dalmatia, as *cunicularis*). – **As *Cerceris cunicularia***: Richards, 1935:... (new combination, *Cerceris cunicularia* is the correct name for *labiata*); Guichard, 1939:43 (Great Britain: southern Cornwall: Polperro); de Graham, 1941:99 (Great Britain: Lincolnshire); Schneid, 1941:1048 (Germany: Bayern: Bamberg area); J. Perkins, 1942:200 (Sweden: Skåne: Degaberga); Boyd, 1943:163 (Britain: eastern Dorset); Spooner, 1943:75 (Great Britain: Bournemouth, Chesil Beach, Studland); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Leclercq, 1948:205 (*Cerceris cunicularia* is the correct name, not *labiata* Fabricius); Šnoflak in Zavadil and Šnoflak, 1948:88, 95 (in key to Sphecidae of Czechoslovakia); Chambers, 1949:233 (Great Britain: Bedfordshire); Cavro, 1950:36 (France: Département du Nord); de Beaumont, 1951f:305 (in North Africa found only in Timhadit, Moyen Atlas), 1951h:32 (Switzerland: Neuchâtel area), 1952a:70 (France; redescription); Nouvel and Ribaut, 1953:177 (France: Central Pyrénées: lower parts of Garonne River valley); de Beaumont, 1954e:87 (Italy); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romburg); Grandi, 1954:237 (Italy); Aerts, 1955:63 (Germany:

- Rheinland); Steiner, 1955:137 (France; not found in Dordogne); Bajári, 1956a:85 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:35, 43 (in key to Hungarian Sphecidae); Grandi, 1957:388 (Italy); Benno, 1958b:11 (in review of Dutch Sphecidae); de Beaumont, 1959a:16 (Italy); Wolf, 1959b:31 (Germany: Nassau); Noskiewicz and Puławski, 1960:76, 78 (in key to Polish Sphecidae); Valkeila, 1962b:68 (southwestern Finland); Felton, 1963:179 (Great Britain: Kent County); Lehrer and Scutaru, 1963:284 (Romania: Moldova: Birnova and Mircești in Iași District, Baia in Suceava District); Richards, 1964:25 (heath-lands in southern England); Diniz, 1966:7 (Portugal: Serra do Gerez); J. Heinrich, 1967:71 (Germany: Bayern: Unterfranken District); Hoop, 1967a:40 (Germany: Schleswig-Holstein: Lehmrade); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Hagieni), 1968c:383 (Romania: Brănești, Periş); Balthasar, 1972:411 (in Sphecid Fauna of Czechoslovakia); Niedl and Deneš, 1972:153 (Czech Republic: Třeboň area); Simon Thomas, 1972:178 (France: Landes, Lot-et-Garonne); Skibińska, 1982:123 (Poland: Warszawa area); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Kowalczyk, 1988a:45 (Poland: Rogów), 1988b:64 (Poland: environs of Łódź), 1991b:120 (Poland: Augustów Forest); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960); Kowalczyk, 1990:290 (Poland: Góry Świętokrzyskie), 1991a:99, 101 (Poland: Łódź); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast').
- Mellinus quadricinctus* Fabricius, 1804:298, sex not indicated, junior secondary homonym of *Cerceris quadricincta* Panzer, 1799. Lectotype: ♂. Germany: no specific locality (ZMK), designated by van der Vecht, 1961a:65. Synonymized with *Cerceris ruficornis* by van der Vecht, 1961a:65. – Dahlbom, 1845:XXIII (type material not examined, may be *Gorytes campestris*); Dalla Torre, 1897:561 (in catalog of world Hymenoptera); Maidl and Klima, 1939:39 (in catalog of world Astatinae and Bembicinae).
- Philanthus trifidus* Fabricius, 1804:305, sex not indicated. Holotype: ♂, Germany: no specific locality (ZMK). Synonymized with *Cerceris ruficornis* by van der Vecht, 1961a:65. – Jurine, 1807:202 (listed); Thunberg, 1815b:289 (diagnostic characters), 294 (redescription); W. Schulz, 1912:70 (Thunberg's specimens missing in his collection).
- ? *Cerceris nasuta* Latreille, 1809:... Tentatively synonymized with ...
- Cerceris laminifera* A. Costa, 1867c:81, ♀ (Italy: Piemonte). Lectotype: ♀, Italy: Toscana: no specific locality (Napoli), designated by de Beaumont, 1950c:325 (may not be an original specimen). Synonymized with *Cerceris cucinularia* by de Beaumont, 1950c:325. – nec Schletterer, 1887:439 (= *Cerceris bucculata*); Schletterer, 1887:495 (listed); Ed. André, 1889:303 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Dalla Torre, 1897:465 (in catalog of world Hymenoptera); Balthasar, 1972:406 (in Sphecid Fauna of Czechoslovakia: may be expected in the country). – As *Cerceris ruficornis laminifera*: Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (new status, in catalog of Italian fauna).
- Cerceris laminifera* A. Costa, 1869b:97, ♀. Objective synonym of *Cerceris laminifera* A. Costa, 1867c:81
- As *Cerceris labiata* (Fabricius) which actually is a synonym of *Cerceris interrupta*: Vander Linden, 1829:113 (bibliographic references, redescription, Belgium: Bruxelles, southern France, larg part of Europe); Shuckard, 1837a:236 (in revision of British Aculeata); von Siebold, 1839:52 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); Dufour, 1841a:509 and 1841b:245 (digestive tract), 1841a:511 and 1841b:247 (male reproductive system), 1841a:512 and 1841b:248 (female reproductive system); Dahlbom, 1842a:16 (in review of Scandinavian aculeates), 1844:217 (in revision of Sphecidae and Pompilidae), 1845:501 (in key); Lepeletier de Saint Fargeau, 1845:2 (in revision of world Hymenoptera); Eversmann, 1849:406 (Russia: Orenburg Province, Ural Mts. foothills; Kazakhstan); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden and Oberlausitz area); Wissmann, 1849:13 (Germany: Kingdom of Hannover: Münden, Witzenhausen); F. Smith, 1849a:2373 (Great Britain: Devonshire), 1849b:2551 (prey: *Colletes succinctus*); Wesmael, 1852:267 (Belgium; diagnostic characters); Kirschbaum, 1853:46 (Germany: Herzogtum Nassau: Mainz-Mombach); F. Smith, 1856:437 (in catalog of Hymenoptera in British Museum); Kwall, 1857:24 (Kurland, now Latvia); Schenck, 1857:149 (in revision of fossorial wasps of Nassau Region, Germany); F. Smith, 1857d:41 (Great Britain: Kent: Kingsdown); Taschenberg, 1858:82 (in key to Sphecidae of Germany); Funk, 1859:58 (Germany:

Bayern: Bamberg); Six, 1959:18 (Netherlands: Driebergen); Schenck, 1860:147 (Germany: Nassau Region); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:191 (in revision of Hymenoptera of Germany); A. Costa, 1867c:80 (in revision of Italian Sphecidae); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area), 1868:9 (Germany: Hessen: Rüsselsheim); nec A. Costa, 1869b:96 (= *Cerceris ruficornis costai* de Beaumont); Schenck, 1867a:354 (Germany: Nassau Region); Aichinger, 1870:317 (Austria: Tirol); Radoszkowski, 1870:102 (synonyms listed); Thomson, 1870:249 (in revision of Swedish wasps); nec A. Costa, 1872a:34 (= *Cerceris ruficornis costai*); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Beletskiy, 1873:80 (Ukraine: vicinity of Khar'kov); Dours, 1874:144 (in catalog of Hymenoptera of France); Thomson, 1874:248 (in revision of Hymenoptera of Scandinavia); Wierzejski, 1874:260 (Poland: Kraków; Ukraine: Podole Region and L'viv); Marquet, 1875:204 (France: Montpellier, Toulouse); Taschenberg, 1875:390 (Germany: Sachsen: Halle); Beuthin, 1876:231 (Germany: Hamburg area); Frivaldszky, 1876:354 (Hungary: Ferenczfalva, now Romania: Caraș-Severin or Timiș District); Schmiedeknecht, 1876:186 (Germany: Thüringen: Rothensteiner Felsen); Radoszkowski, 1877:56 (Uzbekistan: Zeravshan valley; Kazakhstan: Chardara); Kohl, 1880:160 (Austria: Tirol, and Italy: Trentino–Alto Adige); Marquet, 1881:190 (southern France); Yaroshevskiy, 1881:124 (Ukraine: Khar'kiv Oblast': Kupyansk); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen, Merseburg, Weissenfels); Kohl, 1883e:664 (Switzerland); Harwood, 1884:211 (England: Essex: Colchester area); von Heyden, 1884:118 (Germany: Frankfurt am Main); Sickmann, 1885:179 (Germany: Niedersachsen: Wellingholthausen); Wüstnei, 1886:40 (Germany: Schleswig-Holstein: Husum); Gasperini, 1887:17 (recorded from Dalmatia, now Croatia, by Germar, 1817, Carrara, 1842, and Frauenfeld, 1861); Schletterer, 1887:442 (in revision of world *Cerceris*), 495 (listed); Brischke, 1888b:99 (Germany: Preussen Province, now Poland: Pomorze Region); Cuní y Martorell, 1888:164 (Spain: Barcelona); Ed. André, 1889:290, 291, 299, 304 (in revision of Sphecidae of Europe and Algeria), 23\* (bibliographic references); F. Morawitz, 1889a:160 (China: Gansu); Schletterer, 1889a:901 (faunal records); Steck, 1890:169, 170 (in key to *Cerceris* of Switzerland); Wüstnei, 1891a:26 (Germany: Schleswig-Holstein: Glücksburg); Kohl, 1893a:35 (Austria: Niederösterreich); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus; prey: *Eumolpus obscurus*), 1893b:420 (Russian Turkestan: Obburden); Sickmann, 1893:94 (Germany: Niedersachsen: Iburg, list of prey); Baldini, 1894:55 (Italy: Modena area); Krieger, 1894:12 (Germany: Kingdom of Saxony); Medina, 1894b:262 (Spain: Huévar); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Meunier, 1896:272 (Belgium: Bruxelles area); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria, as *labiata* Vander Linden); Borries, 1897:53 (reference to Fabre, 1879:58), 58 (preying on curculionids); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella); Dalla Torre, 1897:465 (in catalog of world Hymenoptera); Kozhevnikov, 1897:15 (Russia: Moscow Government); Lüderwaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Sladen, 1900:265 (Great Britain: Kent: Tilmanstone); Adlerz, 1901:179 (nesting habits); Hocking, 1901:68 (Great Britain: Surrey county); J. Nielsen, 1901a:267 (nesting habits); Rothney, 1901:150 (Great Britain: Cornwall: Tintagel); N. Arnold, 1902:89 (Russia: Mohilev Province, now Belarus'); Chyzer, 1902:33 (Hungary); Nevinson, 1902:12 (Great Britain: Cornwall: Newquay); E. Saunders, 1902b:143 (British Channel Islands); de Cobelli, 1903:109 (Italy: Province of Trentino); Adlerz, 1904:70 (nesting habits), 138 (known prey: Curculionidae); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); Aurivillius, 1904:275 (in revision of Swedish Sphecidae); E. Saunders, 1904c:639 (Spain); Zilahi Kiss, 1904:77 (Hungary: Tasnád); Arnold, 1905:262 (Great Britain: Hampshire: Brockenhurst); Kubes, 1905:84 (Czech Republic: Kolín, Mančice); von Heyden, 1905:82 (Germany: Hessen: Frankfurt; as *labita*); Móczár and Henter, 1907:205 (Hungary: Hatvan, Putnok); Schmiedeknecht, 1907:240, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Cavro, 1910:685 (France: Département du Nord); Ditrlich, 1911b:25 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:48 (Italy: Trieste area); Birula, 1912:544 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:168 (Germany: Berlin area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Hold-

világ, Nagyenyed, Remete, Szaszkeresztur); Alfken, 1914:281 (NW Germany); Mercet, 1914:445 (listed from Spain), 449 (in revision of Spanish Philantinae); Dusmet y Alonso, 1915:87 (Spain: Aragón; determination?); Kohl, 1916:116 (specimens in O. Radoszkowski collection); Shestakov, 1917b:410 (Finland), 1918a:140 (Tajikistan); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Kerenskiy, 1919:35 (Russia: Penza Government); O. Meyer, 1919:156 (Germany: Posen Province, now Poland: Poznań Region); Strand, 1920:23 (Germany: Berlin-Dahlem); A. Waagner, 1920:40 (Germany: Lower Elbe region); Dubois, 1921c:210, 211, 212 (in key to Belgian Sphecidae); Fahringer, 1922:178 (Turkey); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:69 (Croatia); R. Perkins, 1924a:229 (Great Britain: Devon); Berland, 1925d:58 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Poland: Białowieża); Coulon, 1925:116 (France, prey); Shestakov, 1925:37 (Russia: Yaroslavl' area); K. Strohm, 1925:212 (Germany: Baden-Württemberg: common); Friese, 1926:155 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Hémon, 1926:199 (France: Finistère: Fouesnant); Shestakov, 1927a:3 (Russia: Tver Oblast'), 4 (Moskva, Vladimir, and Yaroslavl' Oblast's), 5 (Russia: Kostroma Oblast'), 7 (Kursk Oblast'), 88 (Belarus': Minsk area), 11 (Ukraine: Kherson, Odessa, and Zhitomir Oblast's), 17 (Russia: Orenburg Oblast'); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:409 (France: Basses-Alpes: Faucon); Bouwman, 1928a:361 (in revision of Sphecidae of Netherlands); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Hamm and Richards, 1930:112 (summary of nesting habits), 125 (list of prey); Schmiedeknecht, 1930:700, 703 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy, 1930:64 (Russia: Orenburg Oblast'); Bischoff, 1931:9 (Spain); Bondroit, 1932:38 (Belgium: common in Bruxelles area); Drogoszewski, 1933:118 (Poland: Łowicz, Opatów, Włocławek); Dulac, 1933b:40 (description of ♂, France: Saône-et-Loire: Saint-Leu near Le Creusot); Balles, 1934:21 (Germany: Baden-Württemberg: eight localities); Minkiewicz, 1934:190 (preying of *Sitona sulcifrons* Thunberg, a curculionid); Bernard, 1935:63 (France: Var: Fréjus area); Forsius in Forsius and Hellén, 1935:12 (in checklist of Hymenoptera of Finland); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Vergne, 1935:117 (France: Auvergne: Billom, Les Martres-d'Artières); Crèvecoeur and Maréchal, 1936:254 (in catalog of Belgian Hymenoptera); Roller, 1936:315 (Austria: loess cliffs at Bisamberg near Vienna); Dulac, 1937:8 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Goebel, 1937:47 (Poland: Poznań District: Głuszyna, Poznań-Dębina, Strzeszyn, Strzeszynek, Zalasewo); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Bat'a, 1937:209 (in catalog of Sphecidae of Czechoslovakia); Maréchal, 1938b:209 (Belgium: Louvain area, on flowers of *Jasione montana* L.); A. Waagner, 1938a:123 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Giner Marí, 1941a:54 (in revision of Spanish *Cerceris*); Leclercq, 1941b:13 (Belgium: Liège area); Giner Marí, 1943a:101 (in Sphecidae Fauna of Spain); Guiglia, 1943d:92 (Albania: Scutari); Giordani Soika, 1944:12 (Italy: Sicilia: Siracusa, Taormina), Guiglia, 1944b:13 (Italy); Móczár, 1947a:60 (Hungary: Bars comitatus: Újbánya, now in Slovakia: historical region Tekov: Nová Baňa); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km S Poznań); Caruel, 1951:100 (France: Marne Department); Cleu, 1953:50 (France: Ardèche River basin); Głowacki, 1953:520 (Poland: Podkowa Lesna near Warszawa); Móczár, 1953:310 (Hungary); Vogrin, 1955:33 (Yugoslavia); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Diniz, 1959:28 (Portugal: Porto); Atanassov, 1962:125 (Bulgaria: Petrich area); Babi, 1964:117 (Austria: Land Salzburg); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 199 (visiting flowers of *Polygonum convolvulus* L. and *Valeriana officinalis* L.); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 48 (Bulgaria: Stara Planina Mountains); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Pagliano, 1980:126 (Italy: Lombardia).

As *Cerceris vagans*: Radoszkowski, 1877:61 (Transcaspia) partly, corrected to *Cerceris labiata* by Shestakov, 1877:61.

**ssp. costai de Beaumont**

As *Cerceris labiata*: A. Costa, 1869b:96 (in revision of Italian Sphecidae) and 1872a:34 (in revision of Sphecidae of Kingdom of Naples, Italy), corrected to *Cerceris costai* by de Beaumont, 1950c:326.

*Cerceris costai* de Beaumont, 1950c:326. Holotype: ♀, Italy: Lecce (Napoli). – As *Cerceris cunicularia costai*: de Beaumont, 1957d:336 (new status, discussion). – As *Cerceris ruficornis costai*: R. Bohart and Menke, 1976:586 (new subspecific combination, listed); Pagliano, 1990:99 (in catalog of Italian Sphecidae); Negrisolino in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); K. Schmidt, 2000:78 (in revision of Western Palearctic *Cerceris*).

**ssp. saghaliensis Tsuneki**

*Cerceris ruficornis saghaliensis* Tsuneki, 1968f:3, ♀, ♂. Holotype: ♀, Russia: Sakhalin: Toyohara (CAS). – R. Bohart and Menke, 1976:586 (listed); Pulawski, 1994:27 (CAS holotype no. 10245)

**666. rufimana Taschenberg**

*Cerceris rufimana* Taschenberg, 1875:390, ♀. Syntypes: ♀: Brazil: Paraná: no specific locality (Halle). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); Holmberg, 1903:486 (Argentina); Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Jörgensen, 1912:288 (Argentina: Mendoza Province, floral records); Schrottky, 1913a:230 (Argentina); Brèthes, 1920a:408 (Argentina); R. Bohart and Menke, 1976:586 (listed); Evans, Matthews, Alcock, and Fritz, 1976:127 (nesting habits Fritz and Mariluis, 1979:36 (in revision of the *gaudebunda* group); Melo, 2000:100 (possible female associations for use of natal nest); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

*Cerceris annulipes* Brèthes: Jörgensen, 1912:288, nomen nudum (Argentina: Mendoza Province).

*Cerceris annulipes* Brèthes, 1913:123, ♂. Lectotype: ♂, Argentina: Mendoza: no specific locality (MACN), designated by Fritz, 1968b:169. Synonymized with *Cerceris rufimana rufimana* by Fritz and Mariluis, 1979:36. – R. Bohart and Menke, 1976:577 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2005a:12 (correction to his 2002 catalog).

**ssp. colombica Fritz**

*Cerceris rufimana colombica* Fritz in Evans, Matthews, Alcock, and Fritz, 1976:127, ♀. Holotype: ♀, Colombia: Valle: Cali or vicinity (MCZ). – Evans, Matthews, Alcock, and Fritz, 1976:128 (nesting and prey); Fritz and Mariluis, 1979:38 (in revision of the *gaudebunda* group); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**667. rufinoda Cresson**

*Cerceris rufinoda* Cresson, 1865c:121, ♂. Holotype: ♂, USA: Colorado: Rocky Mountains: no specific locality (ANSP). – Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:501 (listed); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado), 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Cresson, 1916:101 (holotype in ANSP); Brimley, 1938:448 (North Carolina: Laurel Hill, Raleigh); Strickland, 1947:130 (Canada: Alberta: Medicine Hat); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen and Wold, 1970:212 (distribution and summary of prey records, as *rufinoda rufinoda*); R. Bohart and Menke, 1976:585 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:492 (listed). Nec Viereck and Cockerell, 1904b:138 and subsequent authors (= *Cerceris crucis*); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

*Cerceris argia* Mickel, 1916a:412, ♀. Holotype: ♀, USA: Nebraska: Lincoln (UNL). Synonymized with *Cerceris rufinoda* by G. Ferguson, 1984c:492. – Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL); Scullen, 1965b:357 (in revision of North American *Cerceris*),



1968a:158-159 (illustrations), 1972:19 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae).

### 668. *rufiscutis* Cameron

*Cerceris rufiscutis* Cameron, 1908a:278, ♀, ♂. Lectotype: ♀, Kenya: Mt. Kilimanjaro: Kibonoto (BMNH), designated by Empey, 1974:120. – G. Carpenter, 1927:12 (prey: *Systates* sp., a curculionid); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:181 (revision), 1942:15 (synonymy); Guiglia, 1939d:57 (Ethiopia: Sidamo: Neghelli, now Negele); Empey, 1969a:321 (listed), 1974:120 (taxonomic history, redescription); R. Bohart and Menke, 1976:586 (listed); Empey, 1983:186 (listed).

*Cerceris mochiana* Giordani Soika, 1942:205, ♀ (as *Mochiana*, incorrect original capitalization). Holotype: ♀, Ethiopia: Harar (Torino Univ.). Synonymized with *Cerceris rufiscutis* by Empey, 1974:121. – Empey, 1969a:314 (listed); R. Bohart and Menke, 1976:584 (listed), 628 (synonymy with *Cerceris rufiscutis* recorded).

### ssp. *aethiopica* Empey

*Cerceris rufiscutis aethiopica* [sic] Empey, 1974:125, ♀, ♂. Holotype: ♀, Eritrea: Asmara (TMP). – R. Bohart and Menke, 1976:629 (listed, as *aethiopica*); Empey, 1983:187 (listed).

### ssp. *conradsi* Giordani Soika

*Cerceris rufiscutis* var. *conradsi* Giordani Soika, 1942:206, ♀ (as *Conradsi*, incorrect original capitalization). Holotype: ♀, Tanzania: Ukerewe: Marienhof (A. Giordani Soika coll., Venezia; Univ. Torino according to Empey, 1974:122). – As *Cerceris rufiscutis conradsi*: Empey, 1969a:321 (new status), 1974:122 (; R. Bohart and Menke, 1976:586 (listed).

*Cerceris rufiscutis beniensis* Empey, 1974:125, ♀. Holotype: ♀, Zaire: Beni at 0°30'N 29°30'E. Synonymized with *Cerceris rufiscutis conradsi* by Empey, 1983:186. – R. Bohart and Menke, 1976:629 (listed).

### ssp. *decolorata* Arnold

*Cerceris rufiscutis* race *decolorata* Arnold, 1931:182, ♀, ♂. Lectotype: Kenya: 30 mi. from Magadi Junction (BMNH), designated by Empey, 1983:186. – Arnold, 1942:15 (varietal status), 1951:105 (Ethiopia, as *rufiscutis* var. *decolorata*). – As *Cerceris decolorata*: Empey, 1969a:304 (new status, listed), 1970:185 (Zaire: Garamba National Park); R. Bohart and Menke, 1976:579 (listed). – As *Cerceris rufiscutis decolorata*: Empey, 1983:186 (new status, listed).

### ssp. *kenyae* Empey

*Cerceris rufiscutis kenyae* Empey, 1974:126, ♀. Holotype: ♀, Kenya, Nairobi (TMP). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:187 (listed).

### ssp. *ndebele* Empey

*Cerceris rufiscutis matabele* Empey, 1974:122, ♀, ♂, junior primary homonym of *Cerceris varilineata* var. *matabele* Brauns, 1926. Holotype: ♀, Zimbabwe: Nyamandhlovu (TMP). – R. Bohart and Menke, 1976:629 (listed).

*Cerceris ndebele* Empey, 1983:187. New name for *Cerceris matabele* Empey, 1974. – Empey, 1983:187 (listed).

### ssp. *umtaliensis* Empey

*Cerceris rufiscutis umtaliensis* Empey, 1974:123, ♀, ♂. Holotype: Zimbabwe: Umtali (Mus. Bulawayo, now SAM). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:186 (listed).

### 669. *rufiventris* Lepeletier de Saint Fargeau

*Cerceris rufiventris* Lepeletier de Saint Fargeau, 1845:29, ♀. Holotype or syntypes: ♀, Algeria: Oran (MNHN). – Lucas, 1849:255 (Algeria: Oran; original description copied with modifications); Schletterer, 1887:410 (as synonym of *Cerceris capito*); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Borries, 1897:53 (reference

to Lepeletier, 1845:29); Giner Mari, 1941a:60 (in revision of Spanish *Cerceris*), 1941b:267 (in revision of North African *Cerceris*); de Beaumont, 1950c:323 (study of holotype), 1950f:397 (Algeria: Tlemcen), 1951b:177 (synonymy cited), 1951f:358 (Algeria, Morocco; diagnostic characters); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain); R. Bohart and Menke, 1976:586 (listed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Tormos and Jiménez, 1987a:128 (Spain: Valencia); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:360 (does not occur in Europe); K. Schmidt, 2000:78 (in revision of Western Palearctic *Cerceris*).

As *Cerceris lindenii*: Schletterer, 1887:409 (in revision of world *Cerceris*), corrected to *Cerceris rufiventris* by Giner Mari, 1941b:267.

### 670. *rufocincta* Gerstaecker

*Cerceris rufocincta* Gerstaecker in Peters, 1858:510, ♀. Holotype or syntypes: ♀, Mozambique: Inhambane (ZMHU). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); Arnold, 1931:202 (original description translated into English); Empey, 1969a:321 (listed), 1974 (discussion of subspecies); R. Bohart and Menke, 1976:586 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, as *rufo-cincta*); Empey, 1983:187 (listed); Guichard, 1993a:156 (Arabian Peninsula); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 235 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris rufocincta* Gerstaecker, 1862:476, ♀. Objective synonym of *Cerceris rufocincta* Gerstaecker, 1858.

*Cerceris varicincta* race *manicana* Arnold, 1931:154, ♀, ♂. Lectotype: ♀, Zimbabwe: Vumbu Mts: Umtali (SAM), designated by Empey, 1983:187. Synonymized with *Cerceris rufocincta* by Empey, 1969a:321. – Hancock, Chahwanda, and Mhlana, 1995:38 (paralectotypes in Bulawayo Museum).

### *ssp. basiornata* Cameron

*Cerceris basiornata* Cameron, 1908a:273, ♂. Lectotype: ♂, Kenya: Mt. Meru rainforest (NRS), designated by Empey, 1983:187 (Article 74.6). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:198 (original description copied); Empey, 1969a:302 (listed); R. Bohart and Menke, 1976:577 (listed). – As *Cerceris rufocincta basiornata*: Empey, 1974:104 (new status); R. Bohart and Menke, 1976:628 (listed); Empey, 1983:187 (listed).

*Cerceris bredoi* Arnold, 1958:130, ♀, ♂. Lectotype: Zambia: Kaputa in Mweru District (SAM), designated by Empey, 1983:187. Synonymized with *Cerceris rufocincta basiornata* by Empey, 1974:104. – Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:578 (listed).

### *ssp. polychroma* Gribodo

*Cerceris polychroma* Gribodo, 1895:355, ♀. Syntypes: ♀, South Africa: Natal: Howick (MSNG?). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:201 (original description translated into English); Empey, 1969a:319 (listed); R. Bohart and Menke, 1976:585 (listed). – As *Cerceris rufocincta polychroma*: Empey, 1974:103 (new status); R. Bohart and Menke, 1976:628 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: Tiphiidae and Mutillidae), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils); Empey, 1983:187 (listed).

*Cerceris jackal* Brauns, 1926:310, ♀, ♂. Lectotype: ♀, South Africa: Cape Province: Port Elizabeth (TMP), designated by Empey, 1983:187. Synonymized with *Cerceris rufocincta polychroma* by Empey, 1974:103. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:143 and 147 (in key), 1942:5 (geographic variation); Empey, 1969a:311 (listed); R. Bohart and Menke, 1976:582 (listed).

### *ssp. voltaica* Empey

*Cerceris rufocincta voltaica* Empey, 1974:104, ♀, ♂. Holotype: ♀, Upper Volta, now Burkina Faso: Bobo Diulasso Office de la Recherche Scientifique et Technique d'Outre-Mer, Bondy, France, may be in MNHN). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:188 (listed).

**671. *rufopicta* F. Smith**

*Cerceris rufopicta* F. Smith, 1856:467, ♂ (as *rufo-picta*, incorrect original hyphenation). Lectotype: ♂, USA: Florida: St. John's Bluff, now in Jacksonville (BMNH), designated by G. Ferguson, 1984b:483. – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:131 (original description copied); Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:430 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); Kurczewski and Miller, 1984:149 (nesting habits); G. Ferguson, 1984c:493 (listed); Spofford and Kurczewski, 1992:1000 (species of miltogrammine parasites listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Alexander and Asís, 1997:871 (nesting habits); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species); Buck, 2004:28 (in checklist of Sphecidae of Ontario, Canada); Buck, Paiero, and Marshall, 2006:41, 47 (in key to eastern Canadian *Cerceris*).

*Cerceris robertsonii* W. Fox, 1893c:55, ♀, ♂ (as *Robertsonii*, incorrect original capitalization). Lectotype: ♀, USA: South Dakota: Smithville (ANSP), designated by Cresson, 1928:49. Synonymized with *Cerceris rufopicta* by G. Ferguson, 1984c:493. – Ashmead, 1899d:296 (in checklist of North American Crabronidae); Banks, 1912:17 (in revision of eastern U.S. *Cerceris*); Rohwer, 1916b:697 (in catalog of Hymenoptera of Connecticut); J.Ch. Bradley, 1928:1017 (in catalog of New York Sphecidae); Brimley, 1938:448 (North Carolina: Bryson City, Pungo Lake, Raleigh, Southern Pines); Krombein, 1950a:271 (North Carolina: Dare County); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Krombein, 1952a:95 (USA: Virginia: Westmoreland State Park), 1953a:288 (nest, prey, egg, life cycle, parasite), 337 (North Carolina), 1953b:119 (nest, prey), 122 (visiting foliage of *Quercus marilandica*), 123 (visiting foliage of *Quercus virginiana* and *Liquidambar styraciflua*), 125 (attracted to a grass), 134 (North Carolina: Kill Devil Hills); Evans, 1957b:86 (description of larva), 1959b:156 (additional description of larva); Tsuneki, 1965d:4 (prey record summary: Chrysomelidae); Scullen and Wold, 1970:212 (distribution and summary of prey records); Evans, 1971:511 (nesting habits, as *robertsoni robertsoni*); R. Bohart and Menke, 1976:586 (listed); L. Davis, 1978:216 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1736 (in catalog of North American Hymenoptera, nesting sites, list of prey); Finnermore, 1982:256 (in Sphecid Fauna of Southern Quebec); Kurczewski, 1998d:250 (pine barrens in upstate New York); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species).

*Cerceris austrina* W. Fox, 1893e:556, ♀, ♂. Lectotype: ♀, southern Florida: no specific locality (ANSP), designated by Cresson, 1928:48. Synonymized with *Cerceris robertsonii* by Scullen, 1965b:426. – Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Krombein and Evans, 1955:234 (Florida).

*Cerceris pleuralis* H. Smith, 1908:366, ♀. Holotype: ♀, USA: Nebraska: Rock County: no specific locality (UNL). Synonymized with *Cerceris robertsonii* by Scullen in Muesebeck et al., 1951:1010. – Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); Brimley, 1938:448 (North Carolina: Kitty Hawk); Muma, 1952:17 (holotype in UNL), 24 (paratype in UNL).

*Cerceris robertsonii emmiltosa* Scullen, 1964a:144, ♀, ♂ (as *emmiltosus*, incorrect original termination). Holotype: ♀, USA: Florida: Miami (USNM). Synonymized with *Cerceris rufopicta* by G. Ferguson, 1984c:493. – Krombein, 1964c:22 (nest, prey, as *emmiltosus*); Scullen and Wold, 1970:212 (distribution and summary of prey records); R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera); Deyrup and Eisner, 2003:522 (a Floridian, red-marked species; as *miltosus*).

*Cerceris robertsonii bifida* Scullen, 1965b:428, ♀ (as *bifidus*, incorrect original termination). Holotype: ♀, USA: North Carolina: Kill Devil Hills (USNM). Synonymized with *Cerceris rufopicta* by G. Ferguson, 1984c:493. –

R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera, nesting sites, prey).

*Cerceris robertsonii miltosa* Scullen, 1965b:429, ♀ (as *miltosus*, incorrect original termination). Holotype: ♀, USA: Florida: Arcadia (USNM). Synonymized with *Cerceris rufopicta* by G. Ferguson, 1984c:493. – R. Bohart and Menke, 1976:586 (listed); Krombein, 1979b:1736 (in catalog of North American Hymenoptera).

#### 672. *rugosa* F. Smith

*Cerceris rugosa* F. Smith, 1856:461, ♀. Holotype or syntypes: ♀, Brazil: Pará: Santarém (BMNH). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

#### 673. *rugulosa* Schrottky

*Cerceris polychroma* Holmberg, 1903:483, ♂, junior primary homonym of *Cerceris polychroma* Gribodo, 1895. Lectotype: ♂, Argentina: Buenos Aires: Mercedes (MACN), designated by Fritz, 1970:164 (Article 74c). – Schrottky, 1913a:230 (Argentina: Buenos Aires); Fritz, 1962:65 (synonymy).

*Cerceris rugulosa* Schrottky, 1909b:248, ♀, ♂. Syntypes: Argentina: Catamarca and Mendoza: no specific localities (probably lost: Fritz, 1989:268). Synonymized with *Cerceris polychroma* Holmberg by Fritz, 1962:65. – Jørgensen, 1912:288 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Catamarca, Mendoza); R. Bohart and Menke, 1976:586 (listed); Fritz, 1989:268 (revision); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

*Cerceris rugulosa* forma *dismorphia* Schrottky, 1909b:249, ♂. Lectotype: ♂, Argentina: Catamarca: no specific locality (Mus. La Plata), designated by Fritz, 1989:268. Synonymized with *Cerceris rugulosa* by Fritz, 1989:268. – Schrottky, 1913a:230 (Argentina: Catamarca, Mendoza; (as *dismorphia*). – **As *Cerceris rugulosa dismorphia***: R. Bohart and Menke, 1976:586 (new status, listed).

#### 674. *rustica* Taschenberg

*Cerceris rustica* Taschenberg, 1875:393, ♀. Holotype or syntypes: ♀, Brazil: Rio de Janeiro (Halle). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:586 (listed); Dollfuss, 1989:8 (type material in NHMW); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

*Cerceris asuncionis* Strand, 1910a:136, ♂, primary homonym of *Cerceris asuncionis* Strand, 1910a:141, now in *Foxita*. Holotype: ♂, Paraguay: Villa Morra (ZMHU). Synonymized with *Cerceris rustica* by Scullen, 1962:58.

#### 675. *rutila* Spinola

*Cerceris rutila* Spinola, 1839:492, ♀. Syntypes: Egypt: no specific locality (Torino). – Schletterer, 1887:477 (original description copied), 501 (listed); Ed. André, 1889:340, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); Kohl, 1916:122 (specimens in O. Radoszkowski collection); Mochi, 1939:157 (in revision of Egyptian *Cerceris*), Guiglia, 1940a:282 (Libya: Cirenaica: Faidia); Giner Mari, 1941b:256 (in revision of North African *Cerceris*); Honoré, 1941a:149 (Egypt, correction to Mochi, 1939:fig. 4 of plate VI); Guiglia, 1942b:231 (Libya); de Beaumont, 1951b:176 (study of syntypes), 177 (synonymy cited), 1951f:361 (Egypt to Algeria; discussion), 1956a:187 (Libya); Bytinski-Salz, 1956:225 (Turkey); de Beaumont, 1960b:233 (Libya), 1967a:287 (Turkey); R. Bohart and Menke, 1976:586 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:360 (in Sphecoid Fauna of Western Europe); K. Schmidt, 2000:79 (in revision of Western Palearctic *Cerceris*).

*Cerceris excellens* Klug, 1845:[30], pl. 47, fig. 15, ♂. Holotype or syntypes: ♂, Egypt: Saqqara (ZMHU). Synonymized with *Cerceris rutila* by Honoré, 1941:69, synonymy confirmed by de Beaumont, 1951b:177. – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Walker, 1871:27 (Red Sea coast of Africa: Harkeko); Taschenberg, 1875:390 (redescription); Schletterer, 1887:468 (original description copied), 491 (listed); Ed. André,

1889:283 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945). *Cerceris rubecula* Schletterer, 1889a:899, ♀. Holotype: ♀, Egypt: Cairo (NHMW). Synonymized with *Cerceris rutila* by Kohl, 1916:123. – Dalla Torre, 1897:473 (in catalog of world Hymenoptera); von Schulthess, 1926b:211 (Tunisia, Libya); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Tobruk); nec Shestakov *in* Nadig, 1933:97 (= *Cerceris rutila lindenii*); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records). – **As *Cerceris quadricincta* var. *rubecula***: Graeffe, 1906:455 (new status, Tunisia: Tunis area). *Cerceris onophora* Schletterer, 1889b:1124, ♀. Holotype: ♀, Tunisia: Tunis (Zurich). Synonymized with *Cerceris rutila* by de Beaumont, 1951b:178. – Dalla Torre, 1897:469 (in catalog of world Hymenoptera); nec Schulz, 1905:57 (♀ = *Cerceris arenaria schulzi*, ♂ = *Cerceris spinipectus teterrima*); von Schulthess, 1926b:211 (Tunisia).

### **ssp. *lindenii* Lapeletier de Saint Fargeau**

*Cerceris lindenii* Lapeletier de Saint Fargeau, 1845:19, ♀ (as *Lindenii*, incorrect original capitalization). Holotype: ♀, Algeria: Oran (MNHN, Lucas coll.). – Lucas, 1849:253 (Algeria: Oran; original description copied with modifications); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); nec Schletterer, 1887:409 (= *Cerceris rufiventris*); Schletterer, 1887:496 (listed); Ed. André, 1889:295, 322 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:466 (in catalog of world Hymenoptera); Mercet, 1914:445 (listed from Spain); Shestakov *in* Nadig, 1933:98 (Morocco: Tanger); Dusmet y Alonso, 1935:107 (Spain: Cádiz: Puerto de Santa Maria); Giner Marí, 1941b:253 (in revision of North African *Cerceris*, description of ♂), 1943a:102 (in Sphecid Fauna of Spain); de Beaumont, 1950c:323 (study of holotype); Ceballos, 1956:369 (in catalog of Hymenoptera of Spain). – **As *Cerceris rutila lindenii***: de Beaumont, 1950c:323 (new status), 1951f:362 (W Algeria, Morocco; discussion); R. Bohart and Menke, 1976:586 (listed); K. Schmidt, 2000:80 (in revision of Western Palearctic *Cerceris*).

As *Cerceris rubecula*: Shestakov *in* Nadig, 1933:97 (Morocco: Mulay-Idris), corrected to *Cerceris rutila lindenii* by de Beaumont, 1951f:362.

### **ssp. *mavromoustakisi* Giner Marí**

*Cerceris mavromoustakisi* Giner Marí, 1945a:254, ♀, ♂. Syntypes: Cyprus: Limassol (MNCN). – Giner Marí, 1945a:248 (Cyprus); Pittioni, 1950:22 (Cyprus); Georghiou, 1977:189 (Cyprus). – **As *Cerceris rutila mavromoustakisi***: de Beaumont, 1951f:361 (new status); Bytinski-Salz, 1956:225 (Turkey: Antalya, Kasaba); de Beaumont, 1958d:285 (Cyprus), 1960a:8 (Greece: Rhodes Island); de Beaumont and Bytinski-Salz, 1959:123 (Israel; additional description); de Beaumont, 1969:82 (Turkey); R. Bohart and Menke, 1976:586 (listed); Guichard, 1991a:339 (Jordan); K. Schmidt, 2000:80 (in revision of Western Palearctic *Cerceris*); Drewes, 2003:134 (Cyprus: Amathus, Limassol); Yildirim and Ljubomirov, 2005:1805 (Turkey: Erzurum: University campus); Ljubomirov and Yildirim, 2008:151 (in catalog of Crabronidae of Turkey).

### **676. *rybyensis* (Linnaeus)**

*Sphex rybyensis* Linnaeus, 1771:13, sex not indicated. – Lectotype: ♀, Sweden: Södermanland: Ryby at 59°28'N 15°46'E (Linnean Society, London), designated by Day, 1979:71. – Day and Fitton, 1978:194 (recuration of Linnean type material). – **As *Philanthus rybyensis***: Thunberg, 1815a:127 (new combination, diagnostic characters), 132 (redescription), 1815b:288 (diagnostic characters), 292 (redescription). – **As *Cerceris ornata* var. *rybyensis***: Becker, 1880:151 (new combination, new status, Russia: Sarepta, now Krasnoarmeysk S Volgograd). – **As *Cerceris rybyensis***: Kohl, 1880:144 (new combination, Austria: Tirol, and Italy: Trentino–Alto Adige), 1883e:663 (Switzerland); Sickmann, 1883:82 (Germany: Niedersachsen: Wellingholthausen); von Heyden, 1884:118 (Germany: Frankfurt am Main); Sickmann, 1885:179 (Germany: Niedersachsen: Wellingholthausen); Wüstnei, 1886:40 (Germany: Schleswig-Holstein); Gasperini, 1887:16 (recorded from Dalmatia, now Croatia, by Germar, 1817, Frauenfeld, 1861, and Kirchner, 1869); Schletterer, 1887:375 (in revision of world *Cerceris*); Ed. André, 1889:265, 275 (in revision of Sphecidae of Europe and Algeria, as *rybiensis*); Steck, 1890:168, 170 (in key to *Cerceris* of

Switzerland); Ed. André, 1891:27\* (bibliographic references, as *rybiensis*); F. Morawitz, 1891a:213 (Russia: Astrakhan Government); Radoszkowski, 1892:590 (male genitalia); A. Costa, 1893b:8 (Tunisia); Kohl, 1893a:34 (Austria: Niederösterreich); F. Morawitz, 1893a:113 (Russia: Karelian Isthmus); Sickmann, 1893:92 (Germany: Niedersachsen: Iburg, analysis of color variation); Baldini, 1894:59 (Italy: Modena area); De Stefani Perez, 1894:216 (Italy: Sicilia); Krieger, 1894:12 (Germany: Kingdom of Saxony); Medina, 1894b:262 (Spain: Chiclana and Pozuelo de Calatrava); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Borries, 1897:54 (nesting habits); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); Kozhevnikov, 1897:15 (Russia: Moscow Government, as *rybiensis*); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Medina, 1898:153 (Portugal: Vallongo); Alfken, 1899:109 (nesting habits); nec Ferton, 1899:345 and 1901a:109 (= *Cerceris circularis dacica* and *sabulosa*); Adlerz, 1901:186 (nesting habits); de Cobelli, 1903:109 (Italy: Province of Trentino); Strand, 1903:7 (first record from Norway: Austad); Adlerz, 1904:66 (nesting habits), known prey: Apidae, as *rybiensis*); Antiga and Bofill, 1904:19 (Spain: Cataluña Province); Aurivillius, 1904:274 (in revision of Swedish Sphecidae, as *rybiensis*); E. Saunders, 1904c:638 (Spain); Zilahi Kiss, 1904:77 (Hungary: Peér); Kubes, 1905:83 (Czech Republic: Kolín); Mosolov, 1905:19 (Russia: Moscow Government: Mikhailovskoye); Dusmet y Alonso, 1906:7 (Spain, as *rybiensis*); Móczár and Henter, 1907:205 (Romania: Caraș-Severin: Mehadia); Schmiedeknecht, 1907:238, 242 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Cavro, 1910:685 (France: Département du Nord, as *rybiensis*); Ditttrich, 1911b:25 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:48 (Italy: Trieste area); Mantero, 1911:73 (Italy: Sardegna: Isola dell'Asinara, as *rybiensis*); Birula, 1912:544 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:168 (Germany: Berlin area); R. Turner, 1912e:800 (Kashmir, Simla; in revision of British India species); Zavattari, 1912:3 (Italy: Sardegna: Pantaleo); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Runk); Torka, 1913:35 (Germany: Provinz Posen, now Poland: Poznań Region); Alfken, 1914:281 (NW Germany, as *rybiensis*); Birula, 1914:387 (Belarus': Ambrosovichi near Vitebsk); Shestakov, 1914b:408 (Russia: Proval'skiy zavod in Oblast' Voiska Donskogo); Dusmet y Alonso, 1915:87 (Spain: Aragón); Kohl, 1916:123 (specimens in O. Radoszkowski collection); Ramakrishna Aiyar, 1916:557 (in catalog of Indian aculeates described after Bingham, 1897); Shestakov, 1916a:231 (Caucasus), 1917b:410 (Finland), 1917c:47 (Ukraine: Crimea, as *rybiensis*), 1918a:148 (Tajikistan and Turkmenistan); Dubois, 1919:96 (Belgium: Bruxelles: Uccle, as *rybiensis*); Hallett, 1919:262 (Great Britain: Island of Guernsey); O. Meyer, 1919:155 (Germany: Posen Province, now Poland: Poznań Region); Strand, 1920:23 (Germany: Berlin-Dahlem); A. Waagner, 1920:39 (Germany: Lower Elbe region); Berland, 1921:533 (Greece); Dubois, 1921c:210, 211, 212 (in key to Belgian Sphecidae); Fahringer, 1922:179 (Turkey); Gennerich, 1922:42 (cleaning apparatus); Hedicke, 1922:272 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:68 (Croatia); Shestakov, 1923:103, 105, 106 (in key to subgenus *Apiraptrix*, synonymy, distribution); Alfken, 1924:231 (N Germany); Berland, 1925d:54 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul; Poland: Białowieża); Coulon, 1925:116 (France; Romania: Bucharest; prey); Shestakov, 1925:36 (Russia: Yaroslavl' area); Friese, 1926:154 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Hémon, 1926:199 (France: Finistère: Fouesnant); K. Strohm, 1925:74 (reference to Roth von Schreckenstein, 1802, and Leininger, 1922); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Montserrat); von Schulthess, 1927:299 (Persian Gulf: "Marmagoa, Goa"); Shestakov, 1927a:3 (Russia: Leningrad, Novgorod, Pskov, and Smolensk Oblast's), 4 (Russia: Vladimir and Yaroslavl' Oblast's), 5 (Russia: Kostroma Oblast'), 7 (Kursk Oblast'), 8 (Belarus': Minsk area), 10 (Ukraine: Odessa and Poltava Oblast's), 11 (Ukraine: Kherson and Nikolayev Oblast's), 19 (Stalingrad Oblast', now Volgograd), 20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:409 (France: Basses-Alpes: Barcelonnette); Bouwman, 1928a:362 (in revision of Sphecidae of Netherlands); Bristowe, 1928:9 (list of prey); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); France); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Hamm and Richards, 1930:106 (summary of nesting habits), 125

(list of prey); A. Müller, 1930:181 (Bulgaria: Kaliakra, also former Bessarabia); Schmiedeknecht, 1930:699, 702 (in keys to Hymenoptera of North and Central Europe); Vorontsovskiy 1930:65 (Russia: Orenburg Oblast', as *rybiensis*); Bischoff, 1931:9 (Spain, as *rybiensis*); Grandi, 1931:56 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Molitor, 1931a:87 (preying behavior); Thomas, 1931:255 (cephalic malaxation of prey and its significance); Bondroit, 1932:38 (Belgium: abundant in Bruxelles area); Giordani Soika, 1932a:21 (Italy: Lido di Venezia); Mo-taş, 1932:8 (nesting habits, from literature); Chambers, 1933:188 (Great Britain: Bedfordshire); Drogoszewski, 1933:118 (Poland: Łowicz, Opatów, as *ribensis*); Minkiewicz, 1933:103 (nesting habits); Molitor, 1933a:164 (preying on *Halictus*); E. Nielsen, 1933:303 (summary of nesting habits, original observations); Balles, 1934:21 (Germany: Baden-Württemberg: seven localities); Bondroit, 1934:60 (Belgium: Ostende, as *rybiensis*); Giner Mari, 1934:131 (Spain); Jansson, 1934:290 (Sweden); Minkiewicz, 1934:190 (list of prey, nesting season); Nadig, 1934:33 (Italy: Sardegna: Aritzo, Cagliari); Forsius in Forsius and Hellén, 1935:12 (in checklist of Hymenoptera of Finland, as *rybiensis*); Grandi, 1935a:110 (Italy); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Molitor, 1935a:163 (homing); Vergne, 1935:117 (France: Auvergne: common); Crèvecoeur and Maréchal, 1936:254 (in catalog of Belgian Hymenoptera); Dulac, 1937:8 (France: Saône-et-Loire: Saint-Laurent d'Andenay, as *rybiensis*); Goebel, 1937:44 (Poland: Poznań District: Głuszyna, Kobylpole, Poznań-Dębina, Puszczykowo, Strzeszyn, Strzeszynek, Zalasewo; prey: *Halictus pauxillus* Shuckard; color variation); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šustera, and Bat'a, 1937:207 (in catalog of Sphecidae of Czechoslovakia); Guiglia, 1938b:8 (Italy: Sardegna); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Molitor, 1938:442, 443 (color recognition); A. Waagner, 1938a:123 (northwestern Germany); Aerts, 1939:135 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Guichard, 1939b:78 (Great Britain: Surrey: Limpsfield Common); Móczár, 1939:5 (Hungary: Jászberény); Yarrow, 1939:16 (Great Britain: Dorset: Lytchett Minster); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast', as *rybiensis*); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Giner Mari, 1941a:20 (in revision of Spanish *Cerceris*), 1941b:152 (in revision of North African *Cerceris*); Guiglia, 1941c:161 (Italy: Calabria: Grande Sila); Leclercq, 1941a:68 (Belgium: Pays de Liège), 1941b:13 (Belgium: Liège area); Schneid, 1941:1048 (Germany: Bayern: Bamberg area); Alfken, 1942:231 (Germany: Niedersachsen: Lüneburger Heide); Audcent, 1942:25 (parasites: *Metopia leucocephala* Rossi, *Pterella grisea* Meigen); J. Perkins, 1942:200 (Sweden: Skåne: Degaberga and Genarp); Spooner, 1942:110 (Great Britain: Bedfordshire); Boyd, 1943:163 (Great Britain: eastern Dorset); Giner Mari, 1943a:94 (in Sphecidae Fauna of Spain); Guiglia, 1943d:91 (Albania: Scutari); Spooner, 1943:75 (Great Britain: Brighton, Bristol, Isle of Wight); Guiglia, 1944b:11 (Italy); Richards, 1944b:135 (prey: *Halictus calceatus* Scopoli, now *Lasioglossum calceatum*); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Carl and de Beaumont, 1947:67 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Guiglia, 1947a:28 (Italy: Piano Maiuri); Bristowe, 1948:28 (nesting habits); de Hennin and Anciaux, 1948:74 (Belgium: between Sambre and Meuse rivers); Guichard and Yarrow, 1948:93 (Great Britain: London: Hampstead Heath); Šnoflak in Zavadil and Šnoflak, 1948:86, 94 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:10 (Portugal); Chambers, 1949:232 (Great Britain: Bedfordshire); Sala de Castellarnau, 1949:89 (Spain: Teruel: Bronchales); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln; prey); Balthasar, 1950:36 (individual variation); Cavro, 1950:37 (France: Département du Nord); de Beaumont, 1950f:397 (Algeria); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Niesiolowski, 1950:225 (Poland: Lubasz 40 km N Tarnów); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km S Poznań, as *rybiensis*); de Beaumont, 1951f:312 (Tunisia to Morocco; discussion), 1951h:32 (Switzerland); Leclercq, 1951b:67 (yellow body pigments are pterines); Caruel, 1952a:62 (France: Marne Department); de Beaumont, 1952a:39 (France; redescription); de Cleu, 1953:50 (France: Ardèche River basin); de Beaumont, 1953g:120 (Morocco); Głowacki, 1953:520 (Poland: Podkowa Leśna and Brwinów near Warszawa); Heldmann, 1953:112 (Germany: Hessen: Eberstädter Düne near Darmstadt); Nouvel and Ribaut, 1953:177 (France: Haute-Garonne: Luchon, Sain-Béat, Hautes-Pyrénées: Cauterets.); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); de Beaumont, 1954e:86 (Italy); Fahlander, 1954:252 (Sweden: Gästrikland Region);

Macko and Noskiewicz, 1954:180, 186 (Poland: Dolny Śląsk: Stolec at 50°35'N 16°53'E); Aerts, 1955:63 (Germany: Rheinland); Atanassov, 1955:203 (Bulgaria: five localities); Steiner, 1955:136 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:80 (in catalog of Hungarian *Cerceris*, with list of localities); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain, as *rybiensis*); Janvier, 1956b:203 (nests destroyed by rainy period); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:32, 41 (in key to Hungarian Sphecidae); Grandi, 1957:388 (Italy: Abruzzi); Yeo, 1957:20 (Great Britain: Middlesex, now in London); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:11 (in review of Dutch Sphecidae); de Beaumont, 1958c:202 (Swiss National Park), 1958d:270 (Greece); Nouvel and Ribaut, 1958:10 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Tonapi, 1958a:510 (spiracular structures); de Beaumont, 1959a:13 (Italy); Diniz, 1959:28 (Portugal: seven localities); Scobiola-Palade, 1959:496 (Romania: Constanța Region: Agigea); Suárez, 1959:54 (Spain: Almería Province); Wolf, 1959b:31 (Germany: Nassau); Noskiewicz and Puławski, 1960:74, 78 (in key to Polish Sphecidae); Hoop, 1961:66 (Germany: Schleswig-Holstein); Atanassov, 1962:125 (Bulgaria: Petrich area); de Beaumont, 1962b:20 (Spain); Grandi, 1962:98 (Italy); Valkeila, 1962b:67 (southwestern Finland); Erlandsson, 1963:66 (Denmark: Bornholm Island); Felton, 1963:179 (Great Britain: Kent County); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt); Babiý, 1964:117 (Austria: Land Salzburg); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae, as *rybiensis*); de Beaumont, 1964c:39 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 199 (visiting flowers of *Achillea millefolium* L., *Chaerophyllum temulum* L., *Cirsium arvense* L., and *Epilobium angustifolium* L., nest a vertical gallery, then horizontal); Valkeila, Brander, and Käpylä, 1964:75 (Finland: Southern Finland: Forssa, Näyte); de Beaumont, 1965a:18 (Greece); B. Klug, 1965:138 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Tsuneki, 1965d:5 (nesting habits review); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Cavalese, Montagna, Piazzòl); Diniz, 1966:6 (Portugal: twenty localities); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Tulcea); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:280 (Turkey; variation); Gauss, 1967:551 (Germany: Baden-Württemberg); J. Heinrich, 1967:70 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:40 (Romania); Benedek, 1968:71 (Hungary, floral records); Frozdanić and Vasić, 1968:131 (nesting habits); Leclercq, 1968b:39 (Great Britain: Kent); Parré, 1968:122 (Germany: Sachsen-Anhalt: Staßfurt); Scobiola-Palade, 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Cernica, Copăceni, Radulești, Urziceni); Tano, 1968:34 (Japan); Wolf, 1968:11 (Germany: Nordrhein-Westfalen: Siegen, inhabitant of forest edge); de Beaumont, 1969:82 (Turkey); Benedek, 1969a:83 (Hungary; marshy meadow); Dathe, 1969:439 (Germany: Berlin Zoological Garden); Lefeber, 1969c:233 (Netherlands: St. Pietersberg = Montagne Saint Pierre); Romanova, 1969:133 (Russia: North Caucasus); Zangheri, 1969:1700 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:96 (Hungary: Tapolca); Lefeber and Petit, 1970:130 (Belgium: Plombières); Oehlke, 1970:686 (Democratic Germany); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Petit, 1971:22 (Luxemburg: Echternach); Schmidt, 1971b:25 (Germany: Mainz area); Scobiola-Palade, 1971:201 (in review of *Cerceris* of Romania); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:397 (in Sphecid Fauna of Czechoslovakia); Haeseler, 1972:155, 168, 200 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:130 (Kazakhstan); Kofler, 1972:105 (Austria: eastern Tirol); Oehlke, 1972:135 (Germany: Hiddensee Island); Scobiola-Palade, 1972b:251 (Romania); Simon Thomas, 1972:177 (France); Erlandsson, 1974:63 (Spain: Ibiza); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Kofler, 1974:319 (Austria: Kärnten); Simon Thomas, 1974:57 (Netherlands: Limburg); Tsuneki, 1974a:371 (Korea); Frilli, and Pizzaghi, 1975:53 (Italy: Cerignale in Piacenza Province); Lefeber, 1975b:122 (Belgium); Lomholdt, 1975c:174 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:586 (listed); Cretin and Robert, 1976:45 (France: Doubs: Chassagne-Saint Denis); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Simon



Thomas, 1976:4 (France: Lot-et-Garonne); Guichard, 1977:254 (Great Britain: Surrey); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Ågren, 1978a:91 (mandibular gland), 1978b (malar gland); Guichard, 1978:270 (Greece); Kazenas, 1978b:53, 56 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1199 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Petit, 1978:86 (Belgium: Wollersheim); Pulawski, 1978:188, 190 (in key to Sphecidae of European part of former USSR); Schwammberger, 1978:416 (Germany: Württemberg); Benedek, 1979:227 (Hungary: Bakony Hills); S. Eck, 1979:21 (listed, as *rybyensis rybyensis*); Kazenas, 1979d:83, 87 (in key); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 30 (Netherlands: distribution map); Marchal and Leclercq, 1979:11 (Belgium: Gembloux); Richards, 1979:402 (British Channel Islands); Schmidt, 1979a:54 (Germany: Ost-Holstein), 1979b:305 (Germany); Schwammberger, 1979:114 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Pagliano, 1980:125 (Italy: Piemonte); Petit, 1980:44 (Belgium: Saeftinge); Richards, 1980:84 (in key to Sphecidae of British Isles); Dollfuss and Ressler, 1981:324 (Austria: Niederösterreich: Scheibbs District); Haeseler, 1981:50 (Germany: Friesian Island: Amrum Island); Woydak, 1981:39 (Germany: Westfalen: Hamm); Donath, 1982:212 (Germany: Cottbus Bezirk); Gayubo, 1982b:58 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:110 (Spain: Cádiz Province); Leclercq, 1982a:125 (Belgium: Liège); Tsuneki, 1982b:18 (known from Korea); Skibińska, 1982:123 (Poland: Warszawa area); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Gayubo, 1983e:239 (Spain: Salamanca Province); Janzon, 1983:171 (Sweden: Öland); Józán, 1983:99 (Hungary); Riemann, 1983:82 (Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:125 (Greece); Chevin and Silvestre de Sacy, 1984:10 (France: Yvelines Department); Gayubo and Tormos, 1984:26 (Spain: Valencia); Haack, Tschardtke, and Vidal, 1984:125 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Öland Island); Kazenas, 1984a:49 (redescription); redescription); Lefeber, 1984:28 (Netherlands: Maastricht); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Eiroa and Novoa, 1985:23 (Spain: Pontevedra: Barra beach near Cangas); Gayubo, 1985a:489 (prey: *Lasioglossum atrovirens* (Pérez)), 1985c:172 (Spain: Cantabria: Santoña; Palencia: Paradilla del Alcor); Józán, 1985a:181 (Hungary), 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Brechtel, 1986:58 (Germany: Südpfalz); Gayubo, 1986b:41 (Spain: Andalucía), 1986d:123 (Spain: Zamora Province); Gayubo and Heras, 1986:74 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:89 (Spain: Burgos, Soria, Segovia); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Nemkov, 1986:109 (Russia: Siberia: Irkutsk Oblast'); Nilsson, 1986:87 (Sweden); Vikberg, 1986:78 (Finland); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Pagliano, 1987:160 and 165 (Italy, in key); Riemann, 1987b:34 (Germany: Niedersachsen: Nature Reserve Voßberge); Schmidt and Westrich, 1987:359 (Germany: Mainz area); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Tormos and Jiménez, 1987a:128 (Spain: Valencia); Asís and Jiménez, 1988:277 (Spain: Castellón Province); Chevin, 1988:16 (France: La Manche Department); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:101 (Hungary: Kiskunság National Park); Kowalczyk, 1988a:45 (Poland: Rogów), 1988b:64 (Poland: environs of Łódź); Pagliano, 1988:159 (Italy; revision); Riemann, 1988:222 (Germany: Bremen area); Wolf, 1988b:143 (Germany: Rheinland-Westfalen); Ågren, 1989:532 (SEM study of flagellar sensilla); Jacobs, 1989:29 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr in Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:94 (Belarus: Berezinskiy Nature Reserve); Skibińska, 1989b:291 (Poland: moist meadow in Warszawa area); Weiffenbach, 1989:107 (Germany: Hessen: Gießen area); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Gayubo, Asís, and Tormos, 1990b:80 (Spain); Jacobs and Oehlke, 1990:219 (new records from Democratic Germany); Kowalczyk, 1990:290 (Poland: Góry Świętokrzyskie); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:69 (Czech Republic: Praha area); Pagliano, 1990:100 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:554 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Dollfuss, 1991:222 (in key to Sphecidae of North and Central

Europe); Gayubo, Borsato, and Osella, 1991:422 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Jakubzik, 1991:74 (Germany: Köln); Kowalczyk, 1991a:89, 93, 97, 99, 101, 105, 107 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Kuhlmann et al., 1991:88 (Germany: Senne Region); Negrisolo, 1991:324 (Italy: Venezia Province); Sorg and Wolf, 1991:195 (Germany: Koppelstein Reserve SE Koblenz); Tsuneki, 1991:201 (Korea); von der Heide, 1991:63 (Germany: peat bog near Oldenburg); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:292 (Greece); Józán, 1992a:230 (Hungary: Béda-Karapanca Protected Area), 1992c:290 (Hungary: Zselic Hills); N. Schneider, 1992:177 (Luxemburg); N. Schneider and Jacob-Remacle, 1992:42 (Luxemburg); Sorg and Cölln, 1992:132 (Germany: Rheinland-Pfalz: Gönnersdorf); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Józán, 1993:415 (Hungary: Bükk National Park); Kuhlmann, 1993:75 (Germany: known from Westfalen); Schubert and Schönitzer, 1993:264 (facial fovea not found); Sorg and Wolf, 1993:59 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Wiśniowski, 1993a:98 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Zeil, 1993a:198 (orientation flight), 1993b:207 (orientation and return flights); Blagoveshchenskaya, 1994: 92 (Russia: Ul'yanyovsk Oblast'); Gayubo and Borsato, 1994:224 (Italy: Piemonte, Veneto, Friuli); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź); Schmid-Egger, 1994a:687 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Theunert, 1994c:34 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:190, 227 (Spain: Albacete Province); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:106 (Hungary: projected Duna-Dráva National Park); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:471, 477 (in key to Sphecidae of Russian Far East); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills NW Samara); Negrisolo, 1995a:19 (visiting flowers of *Echinophora spinosa* L.), 23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:93 (Italy: Ferrara Province); Scharrer, 1995:31 (Germany: Bayern: Aschaffenburg, Kahl, Karlstadt, Rheinland-Pfalz: Fischbach); Schmid-Egger, Risch, and Niehuis, 1995:169 (summary of records from Germany: Rheinland-Pfalz Province); Wolf, 1995:18 (Germany: Rheinland-Pfalz: near Lorelei Rock on Rhein River); Archer, 1996a:59 (Great Britain: Channel Islands); Arens, 1996:442 (Germany: Bayern: Bayreuth area); Blösch, 1996:7 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:81 (Great Britain: summary of records from Essex); Jacobi, 1996:219 (method of hunting, prey); Jakubzik, 1996:251 (Germany: Köln); Jakubzik and Cölln, 1996b:398 (Germany: Rheinland-Pfalz); Pawlikowski and Kruszyński, 1996:86 (Poland: Toruń Basin); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: not endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg); Woydak, 1996:102 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:361 (in Sphecidae Fauna of Western Europe); Celary, 1997:61 (in checklist of Animals of Poland); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Schmidt and Schmid-Egger, 1997:8 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Haeseler and Ritzau, 1998:50 (Germany: Bremen: Harriersand Island in Weser River and Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Petit, 1998a:109 (Belgium: Bassenge, visiting flowers of *Polygonum cuspidatum* Siebold and Zucc.); van der Smissen, 1998:54 (Germany: Schleswig-Holstein, Mecklenburg-Vorpommern, Niedersachsen); K. Weber, 1998:135 (Germany: Bayern: Bamberg area); Erhardt, 1999:75 (Germany: Niedersachsen: Ammerland area); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Gusenleitner, 1999:601 (Austria: Vorarlberg: Koblach); Pagliano and Scaramozzino, 1999:161 (Italy: Piemonte: Borgomale); Herrmann, 1999:7 (Germany:

Niedersachsen: Oldenburg area; habitats size); Ljubomirov, 1999b:58 (Bulgaria: Mt. Vitosha near Sofia); Löhr, 1999:62 (Germany: Hessen: Mücke-Merlau near Gemünden); Mandery, 1999:104 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:111 (in catalog of Belgian aculeates); Petit, 1999:112 (Netherlands: Kruispolder, Nieuw-NamenPaal); Riemann, 1999:834 (Germany: Niedersachsen: sand pits near Bremen); Salzmänn-Wandeler and Rezbanyai-Reser, 1999:101 (Switzerland: Tessin: Monte Generoso); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Sörensen, Mauss, and Schindler, 1999:503 (Germany: Schleswig-Holstein); Tüzün, Gülmez, and Bağrıaçık, 1999:386 (Turkey: Aegean Region); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:422 (in Sphecid Fauna of Germany); Cartier, 2000a:74 (France: Hauts-de-Seine: Rueil-Malmaison); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Gonzáles, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Jacobs, 2000:6 (Germany: Land Mecklenburg-Vorpommern: not endangered); Kuhlmann, 2000:64 (Germany: Hessen: Diemel River valley); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); M. Mader and Chalwatzis, 2000:59 (Germany: Hessen: Oderwald Mts.); Mauss, Schröder, and Botta, 2000:76 (Germany: Bayern: Arber area in Bavarian Forest); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:173 (in revision of Western Palearctic *Cerceris*); Wiśniowski, 2000:162 (Poland: Bieszczady Mts.); Basset, 2001:85 (France: Département de Gironde); Cungs and Jakubzik, 2001:122, 123 (Luxemburg); Haeseler, 2001:265 (Germany: Niedersachsen: Brookdeich near Oldenburg); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 253 (review of known biology), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitosha near Sofia); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:138 (distribution in Germany by provinces); Salzmänn-Wandeler and Rezbanyai-Reser, 2001:158 (Switzerland: Tessin Canton: Meride area); Schmid-Egger, 2001:17 (France: Alsace: Bollenbergs); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Szczepko and Kowalczyk, 2001:189 (Poland: Kampinos National Park near Warszawa); Tischendorf, 2001:30 (Germany: Hessen: Kühkopf-Knoblochsaue Nature Reserve); Wolf, 2001a:171 (Germany: Bayern: Lech valley from Augsburg to Donau); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Archer and Edwards, 2002:103 (Great Britain: West Sussex: Ambersham and Iping commons); Beavis, 2002:111 (Great Britain: Kent: Tunbridge Wells area, prey: *Andrena dorsata*, *A. ovatula*, *Halictus rubicundus*, *Lasioglossum calceatum*, *L. laevigatum*, *L. leucozonium*, *L. zonulus*); Deván, 2002a:200 (Slovakia: Kobela Nature Reserve near Nové Mesto, as *rybiensis*); Kazenas, 2002a:151 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:155 (Poland: Kampinos National Park near Warszawa); Litt, 2002:166 (Belgium); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:35 (Belarus': no specific locality); von der Dunk and Amos, 2002:158 (Germany: Bayern: Schwaig near Nürnberg); Wiśniowski, 2002:73 (Poland: Ojców National Park); Ziska, 2002:7 (Germany: Berlin-Köpenick: Krumme Lake); Blösch, 2003b:82 (Germany: Bayern: Erlangen area); Cölln, Esser, and Jakubzik, 2003:61 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:134 (Croatia, France, Germany, Italy, Spain: miscellaneous locality records); Flügel, 2003:8 (Germany: Hessen: Knüllwald); Esser and Jakubzik, 2003:290 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Haeseler, 2003:339 (Germany: Harriersand Island near Bremen); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Schneider and Feitz, 2003:96 (monstrous specimens: fused flagellomeres III and IV); Tischendorf and Treiber, 2003:120 (Germany: Hessen: 15 km SW Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:101 (Germany: Niedersachsen: Emsland area); Wiśniowski in Dylewska and Wiśniowski, 2003:179 (Poland: Ojców National Park); Wiś-

niowski and Werstak, 2003:78 (Poland: Pieniny National Park); Archer, 2004:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve); Ebermann and Hall, 2004:942 (parasite: scutacarid mite *Imparipes breganti* Ebermann and Hall); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:261 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Hellrigl, 2004a:172 (Italy: Trentino-Alto Adige, as Südtirol: Vinschgau = Val Venosta: St. Martin im Kofel); Litt, 2004:222 (Switzerland: Valais: Vissoie); Salzmann-Wandeler and Rezbanyai-Reser, 2004:27 (central Switzerland); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Szczepko and Kowalczyk, 2004:127 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:53 and 63 (in checklist of Polish Sphecidae); Blösch, 2005:8 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Dubitzky, Blank, and Schönitzer, 2005:271 (Germany: Bayern: area north of Dachau); Fuhrmann, 2005:89 (Germany: Nordrhein-Westfalen: Grubengelände Littfeld Nature Reserve); Gregory and Wright, 2005:140 (Great Britain: Shotover Hill 5 km E Oxford); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs, 2005a:442 (Bulgaria); Kofler, 2005:185 (Austria: Tirol: Lienz District: many localities); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nemkov, 2005a:161 (Russia: Sakhalin Island); Pagliano and Negrisoló, 2005:337 (in Sphecid Fauna of Italy); Riemann and Hohmann, 2005:547 (Germany: Niedersachsen: city of Bremen and adjacent area); Shorenko, 2005a:168 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1805 (Turkey: Erzurum: seven localities); Archer, 2006b:84 (Great Britain: Yorkshire: Blaxton), 2006c:217 (Great Britain: Staffordshire: Highgate Common); Blösch, 2006:57 (males spend nights in galleries in wood); Dathe, 2006:38 (*Philanthus ornatus*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, is now *Cerceris rybyensis*); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); U. Frommer, 2006:37 (Germany: Hessen: Runkel area); Gadoum and Barbier, 2006:44 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français); Kaltenpoth et al, 2006:1405 (streptomycetes bacteria absent in female antennal glands); Ljubomirov, 2006:538 (Bulgaria: previous records from Rhodope Mountains summarized, also several additional localities, as *rybyensis rybyensis*); Magdalou, 2006a:8, 12 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund); Vepřek, 2006:509 (Czech Republic: Kokořínsko area); Archer, 2007b:151 (Great Britain: Dorset: Isle of Portland); Fateryga, Ivanov, and Novikov, 2007:149 (feeding on flowers of *Scrophularia umbrosa* Dumort. in Crimea); Flügel, 2007:39 (Germany: Hessen: Halberg near Neumorschen); Guldemond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:182, 186 (in key to Crabronidae of Germany); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Venne, Bleidorn, and Lauterbach, 2007:300 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Archer, 2008b:145 (Great Britain: South Essex: East Tilbury and West Tilbury); Danilov, 2008:351 (Russia: Altayskiy Krai: Barnaul area); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Haeseler, 2008:307 (Germany: Friesian Islands); Ljubomirov and Ban-Calefariu, 2008:204 (Romania: Maramureş District: Bistra, Săpânta, Vadul Izei); Ljubomirov and Yildirim, 2008:152 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); Flügel, 2009a:67 (Germany: Thüringen: Weimar); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:152 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:238 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); Pagliano, 2009:183 (Italy: Lig-

uria: Cavi); Archer, 2010:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren); Bitsch, 2010:119 (in supplement to vol. II of Faune de France, 1997: France: first records from: Aisne: Chézy-sur-Marne, Courtemont-Varenes, and Hautes-Alpes: Aspres-sur-Buech, Chorges); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:802 (Iran: East Azarbaijan: Marand: Zal); Ghazi-Soltani, Khaghaninia, and Shahim, 2010:638 (Iran: East Azerbaijan: Horand Forests); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: relatively common).

? *Vespa infundibuliformis* Fourcroy, 1771:...

*Philanthus ornatus* Fabricius, 1790:225, sex not indicated. Lectotype: ♀, Germany: no specific locality (ZMK), designated by van der Vecht, 1961a:62. Synonymized with *Cerceris variabilis* by Dahlbom, 1845:XXIV. – Fabricius, 1793:290 (redescription), 1796:137 (in Index to his Entomologia Systematica, 1793); Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Fabricius, 1804:304 (redescription); Jurine, 1807:202 (listed); Thunberg, 1815a:128 (diagnostic characters), 133 (redescription), 1815b:288 (diagnostic characters); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino). – **As *Vespa ornata***: Turton, 1801:529 (new combination, Germany). – **As *Cerceris ornata***: Latreille, [1805]:317 (new combination, redescription); Spinola, 1806:99 (Italy: Liguria, description of ♂); Walckenaer, 1817:37 (nesting habits, as *Cercère orné*), 80 (description, review of previous citations); Vander Linden, 1829:119 (bibliographic references, redescription, Belgium: Bruxelles, Italy, most of Europe); Goureau, 1834:86 (nesting habits, as *ornatus*); Klug in Walzl, 1835:87 (in list of Hymenoptera of Andalusia); Shuckard, 1837a:239 (in revision of British Aculeata); von Siebold, 1839:52 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); Dufour, 1841a:509 and 1841b:245 (digestive tract), 1841a:511 and 1841b:247 (male reproductive system), 1841a:512 and 1841b:248 (female reproductive system); Dahlbom, 1842a:16 (in review of Scandinavian aculeates); Lepeletier de Saint Fargeau, 1845:20 (in revision of world Hymenoptera); Wesmael, 1852:268 (Belgium); Fabre, 1856a:138 (France: Vaucluse: Avignon area), 1856b:185 (list of prey); F. Smith, 1856:436 (in catalog of Hymenoptera in British Museum); Belke, 1866:512 (Ukraine: Zhytomyr Oblast': Radomyshl'); A. Costa, 1867c:91 and 1869b:107 (in revision of Italian Sphecidae); Radoszkowski, 1870:104 (synonyms listed); Thomson, 1870:248 (in revision of Swedish wasps); A. Costa, 1872a:24 (in revision of Sphecidae of Kingdom of Naples, Italy); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Thomson, 1874:243 (in revision of Hymenoptera of Scandinavia); Marquet, 1875:204 (France: Languedoc); Taschenberg, 1875:390 (Germany: Halle); Dours, 1874:143 (in catalog of Hymenoptera of France); Frivaldszky, 1876:354 (Hungary: Temes Komitat: Grebenác, now in Timiș District, Romania); Girard, 1879:920 (morphology and habits); Siebke, 1880:66 (Norway); Marquet, 1881:190 (southern France, preying on small Hymenoptera); Yaroshevskiy, 1881:123 (Ukraine: Khar'kiv Oblast': Khar'kiv, Kupyansk); A. Costa, 1883:57 (Italy: Sardegna: monti del Limbara); Harwood, 1884:211 (England: Essex: Colchester area); Magretti, 1884c:597 (Sudan: Sawakin, record erroneous for zoogeographic regions); Baldini, 1894:59 (Italy: Modena area); De Stefani Perez, 1884b:199 (Costa's description copied); P. Marchal, 1887:27 (detailed study of nesting habits); Westerlund, 1893:26 (Russia: Karelian Republic: northern shore of Lake Ladoga); De Stefani Perez, 1894:216 (Italy: Sicilia); Laboulbène, 1895:180 (preying on Apidae); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella); Strand, 1898b:94 (Norway); Sladen, 1900:265 (Great Britain: Kent: St. Margaret's Bay); Barnes, 1902:266 (Great Britain: Berkshire: Wellington College in Crowthorne); Chyzer, 1902:33 (Hungary); E. Saunders, 1902b:143 (British Channel Islands: Guernsey and Jersey Islands; France: Bretagne: St. Briac), 1906:154 (*Cerceris ornata* is a synonym of *rybyensis*); Birula, 1912:532 (citation of Belke, 1866); R. Perkins, 1924a:229 (Great Britain: Devon); Chambers, 1933:188 (Great Britain: Bedfordshire).

*Sphex apifalco* Christ, 1791:270, sex not indicated. Holotype or syntypes: Germany: no specific locality (depository?). Synonymized with ...

*Philanthus semicinctus* Panzer, 1797:.... Synonymized with *Cerceris ornata* by Vander Linden, 1829:119. – **As *Cerceris ornata* var. *semicincta***: Frivaldszky, 1876:354 (new status, Hungary: Oravicza, now Romania: Caraș-Severin: Oravița); Chyzer, 1902:33 (Hungary).

*Philanthus hortorum* Panzer, 1799:... Synonymized with *Cerceris ornata* by Herrich-Schaeffer, 1840:296 (treated as *Cerceris ornata* var. *hortorum*). – **As *Cerceris hortorum***: Spinola, 1808:179 (new combination, Italy: Liguria: near Novas); Vander Linden, 1829:121 (bibliographic references, redescription, Italy: Rome); Dahlbom, 1844:203 (in revision of Sphecidae and Pompilidae); F. Smith, 1856:439 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenoptera). – **As *Cerceris rybyensis hortorum***: S. Eck, 1979:23 (new status); K. Schmidt, 2000:174 (recognition of this subspecies is unjustified).

*Crabro variabilis* Schrank, 1802:... Synonymized with *Cerceris ornata* by Dahlbom, 1845:XXIV. – **As *Cerceris variabilis***: Dahlbom, 1844:196 (new combination, in revision of Sphecidae and Pompilidae), 1845:498 (in key), determination corrected to *Cerceris ornata* by Thomson, 1870:248; Eversmann, 1849:402 (Russia: between Ural Mts. and Volga); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Dresden and Oberlausitz area); Wissmann, 1849:13 (Germany: Kingdom of Hannover: sandy habitats); Tischbein, 1850:9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Kirschbaum, 1853:46 (Germany: Herzogtum Nassau: Mainz-Mombach, Weilburg, and Wiesbaden); Kirchner, 1854:312 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:146 (in revision of fossorial wasps of Nassau Region, Germany); A. Costa, 1858:20 (Italy: Campania: Monti Partenii in Benevento Region); Taschenberg, 1858:81 (in key to Sphecidae of Germany); Assmus, 1859:613 (Russia: Moscow Oblast'); Funk, 1859:58 (Germany: Bayern: Bamberg); Six, 1959:18 (Netherlands: Driebergen); Schenck, 1860:147 (Germany: Nassau Region); Brischke, 1862:102 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:190 (in revision of Hymenoptera of Germany); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area); Kirchner, 1867:221 (in catalog of European Hymenoptera); Palma, 1867:42 (Italy: Sicilia settentrionale, as *variabilis* Dahlbom); Schenck, 1867a:354 (Germany: Nassau Region); Dietrich, 1868:363 (Switzerland: Zurich Canton); Jaenicke, 1868:9 (Germany: Hessen: Frankfurter Wald); Wierzejski, 1868:117 (Poland: Kraków area; Ukraine: L'viv and Podole region: common everywhere); Aichinger, 1870:317 (Austria: Tirol); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Mocsáry, 1874:120 (Siebenbürgen: Grossscheuern, now Romania: Transylvania); Wierzejski, 1874:260 (Poland: Kraków; Ukraine: L'viv and Podole Region: Kalinowce); Beuthin, 1876:231 (Germany: Hamburg area); Schmiedeknecht, 1876:186 (Germany: Thüringen: Rothensteiner Felsen); nec Radoszkowski, 1877:63 (= *Cerceris bicincta schulthessi, integra, lunata, puncticeps, rubida*); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Sajó, 1882:5 (Hungary); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen, Weissenfels); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Radoszkowski, 1886a:35 (Turkmenistan); Brischke, 1888b:98 (Germany: Preussen Province, now Poland: Pomorze Region); Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia); Meunier, 1896:271 (Belgium: Bruxelles area, as *variabilis* Dahlbom); Lüderwaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); N. Arnold, 1902:89 (Russia: Mohilev Province, now Belarus'); Mercet, 1914:445 (listed from Spain); Shestakov, 1918a:161 (revised data of Radoszkowski, 1877:63); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Philanthus biguttatus* Thunberg, 1815:132, sex not indicated. Lectotype: ♂, Sweden: no specific locality (Uppsala), designated by de Beaumont, 1950c:321. Synonymized with *Cerceris rybyensis* by ... – Thunberg, 1815a:127 (diagnostic characters), 1815b:288 (diagnostic characters).

*Philanthus colon* Thunberg, 1815:134, sex not indicated. Holotype or syntypes: ♂, origin unknown (Uppsala). Synonymized with *Cerceris rybyensis* by de Beaumont, 1950c:321. – Dalla Torre, 1897:484 (in catalog of world Hymenoptera). – **As *Cerceris colon***: Thunberg, 1815a:128 (new combination, diagnostic characters), 1815b:288 (diagnostic characters); Schulz, 1912:70 (new combination); R. Bohart and Menke, 1976:579 (listed). – **As *Crabro colon* Cresson**: Bridwell, 1899:209 (new combination, Kansas: Baldwin).

*Cerceris kashmirensis* Nurse, 1903a:524, ♀, ♂. Syntypes: India: Kashmir: no specific locality (BMNH). Synonymized with *Cerceris rybyensis* by R. Turner, 1912e:800.

*Cerceris rybyensis dittrichi* W. Schulz, 1904b:93, ♀ (as *Dittrichi*, incorrect original capitalization). Holotype or syntypes: ♀, Russia: e. Siberia: no specific locality (coll. W. Schulz, Strassburg?). Synonymized with *Cerceris rybyensis* by Ljubomirov, 2001b:54. – Shestakov, 1914b:408 (Russia: Don area; (as *Cerceris rybyensis* var. *dittrichi*). – **As *Cerceris rybyensis dittrichi***: Pulawski, 1965c:564 (new status, possibly synonym of *Cerceris rybyensis jacobsoni*); R. Bohart and Menke, 1976:586 (listed); R. Eck, 1979:21 (listed); Kazenas, 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris rybyensis reginae* S. Eck, 1979:22, ♀, ♂. Holotype: ♀, Sweden: Gotland: Lojsta (NRS). Synonymized with *Cerceris rybyensis* by K. Schmidt, 2000:173.

As *Cerceris albofasciata* (partly): Radoszkowski, 1877:62 (Uzbekistan), corrected to *Cerceris rybyensis* by Shestakov, 1918a:124.

As *Cerceris ariasi*: Giner Mari, 1945b:359 (Morocco: Ain Zorah), 369 (description of ♂), corrected to *Cerceris rybyensis* by de Beaumont, 1951f:312.

### **ssp. *fertoni* de Beaumont**

*Cerceris rybyensis fertoni* de Beaumont, 1952a:42, ♀, ♂. Holotype: ♀, France: Corse: Bonifacio (MNHN). – R. Bohart and Menke, 1976:587 (listed); S. Eck, 1979:21 (listed); Pagliano, 1990:100 (in catalog of Italian Sphecidae); Gayubo, Borsato, and Osella, 1992:293 (France: Corse); Gayubo and Borsato, 1994:224 (France: Corse); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); ); K. Schmidt, 2000:175 (in revision of Western Palearctic *Cerceris*); Pagliano and Negrisolo, 2005:338 (in Sphecidae Fauna of Italy).

*Cerceris lieftincki* Empey, 1969b:143, ♀, ♂. Holotype: France: Corse: Sartène (RMNH). Synonymized with *Cerceris rybyensis fertoni* by K. Schmidt, 2000:175. – **As *Cerceris sabulosa lieftincki***: R. Bohart and Menke, 1976:587 (new status, listed); Pagliano, 1990:100 (in catalog of Italian Sphecidae).

### **ssp. *jacobsoni* Shestakov**

*Cerceris jacobsoni* Shestakov, 1923:110, ♀, ♂. Syntypes: Russia: Siberia: Irkutsk Oblast': Melnikovo and Kuzmikh (ZIN). – Shestakov, 1923:103, 105 (in key to subgenus *Apiraptrix*). – **As *Cerceris rybyensis jacobsoni***: Pulawski, 1965c:564 (new status); R. Bohart and Menke, 1976:587 (listed as synonym of *Cerceris rybyensis dittrichi*).

### **677. *sabulosa* (Panzer)**

*Philanthus sabulosus* Panzer, 1799: ... – Thunberg, 1815b:289 (diagnostic characters), 296 (redescription); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino). – **As *Cerceris sabulosa***: Germar, 1817:262 (new combination, Dalmatia: Arbe, now Croatia: Rab); Shuckard, 1837a:244 (in revision of British Aculeata); von Siebold, 1839:52 (Germany: Danzig, now Poland: Gdańsk), record not confirmed by subsequent authors; F. Smith, 1856:438 (in catalog of Hymenoptera in British Museum); Frauenfeld, 1861:103 (Croatia: Dalmatia); A. Costa, 1864c:124 (Italy: Campania: Benevento area); Radoszkowski, 1877:60 (Kazakhstan: Syr Daria steppe; Kyrgyzstan: Shahimardan; Gulcha; Uzbekistan: Samarkand; Zaravschan valley; also: Djuzak); Harwood, 1884:211 (England: Essex: Colchester area); Radoszkowski, 1886a:35 (Turkmenistan), 1887a:44 (China: Tsinghai: Tsaidam region: no specific locality); E. Saunders, 1906:154 (*Cerceris sabulosa* of F. Smith is a synonym of *quadricincta*); Shestakov, 1918:148 (as synonym of *Cerceris emarginata*); Richards, 1935:169 (*Cerceris sabulosa* has priority over *emarginata*); Schneider, 1941:1048 (Germany: Bayern: Bamberg area); Balthasar, 1948:143 (Slovakia: Kovačov, Parkan); Šnoflak in Zavadič and Šnoflak, 1948:86, 94 (in key to Sphecidae of Czechoslovakia); Balthasar, 1950:36 (male with yellow gastral markings reduced to lateral spots); de Beaumont, 1952a:42 (France; redescription); Nouvel and Ribaut, 1953:177 (France: Central Pyrénées: common in lower parts of Garonne River valley); de Beaumont, 1954e:86 (Italy); Grandi, 1954:158 (nest structure, prey: *Halictus* spp.), 237 (Italy); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Noskiewicz, 1954:315 (first record from Poland: Góry Pieprzowe near Sandomierz); Steiner, 1955:136 (France: Dordogne); Bajári, 1956a:80 (Hungary: Gyűjtési); Bytinski-Salz, 1956:224 (Turkey: ten localities); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:32, 42 (in key to Hungarian Sphecidae); de Beaumont, 1957b:131 (n. Iran); Grandi,

1957:388 (Italy); Benno, 1958b:11 (in review of Dutch Sphecidae); de Beaumont, 1958d:271 (Greece), 278 (Cyprus; discussion); Nouvel and Ribaut, 1958:10 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:165 (Bulgaria: Aitos, Akhtopol, Kurilo, Nesebar, Sandanski, Sozopol; difference from *rybyensis*); van der Zanden, 1958b:90 (France: Pyrénées-Orientales: Los Masos); de Beaumont, 1959a:12 (Italy); de Beaumont and Bytinski-Salz, 1959:109 (Israel); Grandi, 1959b:287 (Italy: Ferrara: Valle Pega and Livorno: Quercianella); Suárez, 1959:54 (Spain: Almería Province); Wolf, 1959b:31 (Germany: Nassau); de Beaumont, 1960a:6 (Greece: Rhodes Island), 1960c:171 (Afghanistan), 1961b:273 (Afghanistan), 1961c:45 (Greece: Crete Island), 1961e:3 (Iraq); Grandi, 1961:170 (nesting habits), 488 (description of larva), 1962:98 (Italy); de Beaumont, 1962b:20 (Spain); Lehrer and Scutaru, 1963:284 (Romania: Moldova: Baia in Suceava District, Iași); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:40 (in Sphecid Fauna of Switzerland); Evans, 1964b:278 (discussion of Grandi, 1961, description of larva); de Beaumont, 1965a:18 (Greece); B. Klug, 1965:138 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Roberti, Frilli, and Pizzaghi, 1965:109 (Italy: Emilia-Romagna: Piacenza, Marsaglia and Nibbiano in Piacenza Province); Tsuneki, 1965d:5 (prey record summary: Hymenoptera); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Montagna); Diniz, 1966:6 (Portugal: twenty two localities); Scobiola-Palade, 1966b:392 (Romania: Tulcea District: C.A. Rosetti, Periprava); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); Benno, 1967:35 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:280 (Turkey); Gauss, 1967:551 (Germany: Baden-Württemberg); J. Heinrich, 1967:70 (Germany: Bayern: Karlstadt and between Marktheidenfeld and Homburg); Niedl and Deneš, 1967:85 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Comarova, Hagieni), 1967b:40 (Romania); Benedek, 1968:71 (Hungary, floral records); Leclercq, 1968:map 1200 (Belgium: distribution); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Alexandria, Andronache, Brănești, Comana, Ciornuleasa, Moara, Nanov, Păsarea, Sărată); de Beaumont, 1969:82 (Turkey)); Benedek, 1969a:83 (Hungary; marshy meadow); Zangheri, 1969:1700 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:96 (Hungary: Tapolca); de Beaumont, 1970a:396 (Afghanistan), 1970c:5 (Iran: Gilan); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Schmidt, 1971b:26 (S Germany); Scobiola-Palade, 1971:202 (in review of *Cerceris* of Romania); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Tsuneki, 1971:423 (Mongolia); Balthasar, 1972:398 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:130 (Kazakhstan); Myartseva, 1972a:93 (Turkmenistan); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:178 (France: Gironde, Landes, a misidentification: see Simon Thomas and Veendnaal, 1974:4); Erlandsson, 1974:63 (Greece, Italy, Malta, Spain, Yugoslavia); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, *Nitraria schoberi* L., Zygophyllaceae, and *Daucus carota* L., Apiaceae, in Kazakhstan), 111 (feeding on flowers of *Thymus marschallianus* Willd., Lamiaceae, *Mentha aquatica* L., Lamiaceae, and *Barbarea vulgaris* R. Br., Brassicaceae, in Kazakhstan); Kofler, 1974:320 (Austria: Kärnten); Scobiola-Palade, 1974:144 (Romania: Sărăturile sandbank in Danube delta), 112 (feeding on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan); Simon Thomas and Veendnaal, 1974b:4 (France); R. Bohart and Menke, 1976:587 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:53, 56 (in key to Sphecidae of Kazakhstan and Central Asia); Leclercq, 1978b:map 1200 (distribution in Belgium); Marion, 1978:86 (France: Nièvre Department); Pulawski, 1978:190 (in key to Sphecidae of European part of former USSR); Benedek, 1979:227 (Hungary: Bakony Hills); Kazenas, 1979d:68 (Russia: Primorskiy Kray; discussion); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 32 (Netherlands: distribution map); Schmidt, 1979b:305 (Germany); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Guichard, 1980:230 (Oman); Pagliano, 1980:125 (Italy: Piemonte); Richards, 1980:84 (in key to Sphecidae of British Isles); Józán, 1981:304 (Hungary: Hortobágy National Park); van der Zanden, 1981:130 (Netherlands: Rhenen); Gayubo, 1982b:59 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:111 (Spain: Cádiz Province); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria); Gayubo, 1983a:126 (prey: *Halictus* sp.),



1983e:239 (Spain: Salamanca Province); Islamov and Kazenas, 1983:45 (Uzbekistan); Józán, 1983:99 (Hungary); Schmidt and Westrich, 1983:125 (Greece); Gayubo, 1984c:384 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:26 (Spain: Valencia); Kazenas, 1984a:53 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1985c:173 (Spain: Valladolid: Hornillos, Puenteuro, Rioseco, Valladolid); Józán, 1985a:182 (Hungary), 1985b:62 (Hungary S Lake Balaton), 82 (floral records), 85 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden Württemberg); Wolf, 1985a:6 (Germany: Frankfurt area); Gayubo, 1986a:68 (Spain: Ciudad Real Province), 1986b:42 (Spain: Andalucía), 1986d:124 (Spain: Zamora Province); Gayubo and Heras, 1986:74 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:89 (Spain: Burgos, Soria); Gayubo and Tormos, 1986a:19 (Spain: Castellón de la Plana); Islamov, 1986:519 (Uzbekistan: Surkhandarya and Tashkent Oblast's); Józán, 1986:375 (Hungary: Kiskunság National Park); Pagliano, 1987:160 and 165 (Italy, in key); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Tormos and Jiménez, 1987a:128 (Spain: Valencia), 1987b:317 (Spain: Valencia Province: Dehesa de El Saler); Asís and Jiménez, 1988:277 (Spain: Castellón Province); Dollfuss, 1988:20, 31 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:101 (Hungary: Kiskunság National Park); Pagliano, 1988:165 (Italy; revision); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Gayubo, Asís, and Tormos, 1990b:81 (Spain); Jacobs and Oehlke, 1990:122 and 219 (not collected in Democratic Germany after 1960); Kuznetzova, 1990:18 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:69 (Czech Republic: Praha area); Pagliano, 1990:100 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:554 (Austria: Kärnten); Asís, Gayubo, and Tormos, 1991d:7 (nest an prey); Chinin, 1991:111 (Russia: Samara Oblast'); Dollfuss, 1991:222 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:423 (Italy); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Józán, 1991:605 (Hungary: Bátorliget Nature Reserve); Negrisoló, 1991:324 (Italy: Udine and Venezia Provinces); Schembri, 1991:178 (Malta); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:29 (Greece); Józán, 1992c:290 (Hungary: Zselic Hills); K. Weber, 1992:86 (Germany: Bayern: Bamberg District); Guichard, 1993a:157 (Arabian Peninsula); Józán, 1992a:230 (Hungary: Bédakarapancsa Protected Area); Nemkov, 1992b:251 (Russia: Far East: Dim near Khingan Nature Reserve); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Torregrosa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Blagoveshchenskaya, 1994:92 (Russia: Ul'yanovsk Oblast'); Gayubo and Borsato, 1994:224 (Italy: Veneto, Friuli, Toscana, Sardegna; France: Corse); Roche and Zalát, 1994:117 (Egypt: Sinai Peninsula); Schmid-Egger, 1994b:17 (Germany: conservation in upper Rhein area); Tormos, Asís, and Gayubo, 1994:190, 227 (Spain: Albacete Province); Gorobchishin, 1995:19 (Ukraine: Kanev Nature Reserve); Józán, 1995:106 (Hungary: projected Duna-Dráva National Park); Negrisoló, 1995a:18 (visiting flowers of *Eryngium maritimum* L.), 19 (visiting flowers of *Echinophora spinosa* L.), 23 (Italy: Veneto); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:93 (Italy: Ferrara Province); Scharrer, 1995:31 (Austria: Wien area; France: Gard: Nîmes; Slovenia: Piran, Portorož); Schmid-Egger, Risch, and Niehuis, 1995:169 (previous records from Germany: Rheinland-Pfalz Province are not confirmed); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:81 (Great Britain: records from Essex are questionable); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:363 (in Sphecidae Fauna of Western Europe); Celary, 1997:61 (in checklist of Animals of Poland); Schmid-Egger and Niehuis, 1997:14 (Germany: Rheinland-Pfalz); Schmidt and Schmid-Egger, 1997:8 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:525 (Austria: summary of collecting records from Burgenland); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Weber, 1998:135 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Neumayer, Schwarz, and Bregant, 1999:223 (Austria: in checklist of Sphecidae of Land Kärnten);

Pagliano and Scaramozzino, 1999:161 (Italy: Piemonte: Borgomale); Pauly, 1999:111 (in catalog of Belgian aculeates); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Tüzün, Gülmez, and Bağriaçık, 1999:386 (Turkey: Aegean Region); Blösch, 2000:427 (in Sphecid Fauna of Germany); Dressler, 2000:31 (Germany: Hesse: Darmstadt area); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Ljubomirov, 2000:7, 14 (Bulgaria, specimens in N. Nedelkov collection); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); K. Schmidt, 2000:175 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 254 (review of known biology), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:54 (Bulgaria: Mount Vitosha near Sofia); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:138 (distribution in Germany by provinces); Salzmann-Wandeler and Rezbanyai-Reser, 2001:158 (Switzerland: Tessin Canton: Meride area); Schmid-Egger, 2001:17 (France: Alsace: Bollenbergs), 119 (distribution in Central Europe); Kazenas, 2002a:152 (geographic distribution, collecting localities in Kazakhstan); Zettel, Gross, and Mazzucco, 2001:81 (Austria: Wien); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:134 (Croatia, France, Hungary, Italy, Spain: miscellaneous locality records); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:63 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:751 (Italy: Sicilia: five localities; Malta: Mgarr); Wagemann, 2003:27 (Germany: Rheinland-Pfalz: Ebenberg Nature Reserve); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: no longer endangered); Ebermann and Hall, 2004:942 (parasite: scutacarid mite *Imparipes breganti* Ebermann and Hall); Gadallah and Assery, 2004a:235 (in catalog of Sphecidae of Saudi Arabia); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Hellrigl, 2004a:172 (Italy: Trentino-Alto Adige, as Südtirol: Bozen = Bolzano); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Nazarova, 2004:108 (Tajikistan: Badakhshan Region: Rushan District: villages Dasht and Visav in Bartang River valley); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: found before 1950); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniewski, 2004:53 and 63 (in checklist of Polish Sphecidae); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Ebrahimi, 2005:130 (in key to selected Iranian Sphecidae); Jacobs, 2005a:442 (Bulgaria); Kofler, 2005:185 (Austria: Tirol: Lienz District: Auwald in Lavant Common); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisoló, 2005:339 (in Sphecid Fauna of Italy); Shorenko, 2005a:168 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1805 (Turkey: Artvin, Balıkesir, Bayburt, Bilecik, Bingöl, Erzincan, Erzurum, Iğdır, İçel, Kahramanmaraş, and Kars provinces); Ljubomirov, 2006:538 (Bulgaria: previous records from Rhodope Mountains summarized, also Peshtera, and Teshel Village, as *sabulosa sabulosa*); Magdalou, 2006a:8, 12 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Archer, 2007e:79 (Great Britain: extinct or vagrant); Jacobs, 2007:182, 186 (in key to Crabronidae of Germany); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia, as *sabulosa sabulosa*); Yildirim and Ljubomirov, 2007:119 (Turkey: İçel, Konya, and Malatya provinces); Danilov, 2008:352 (Russia: Altayskiy Kray: Barnaul area); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:115 (Kazakhstan: foothills of Zailiskiy Alatau: found among others on loess cliffs); Ljubomirov and Ban-Calefariu, 2008:204 (Romania: Maramureş District:

Mara); Ljubomirov and Yildirim, 2008:152 (in catalog of Crabronidae of Turkey); U. Frommer, 2009a:26 (Germany: in checklist of Sphecidae of central Hessen), 31 (Germany: Hessen: Bergen-Enkheim Protected Area, in Germany only in SW areas); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Zettel, Wagner, Zimmermann, Wiesbauer, Sorger, Ockermüller, and Seyfert, 2009:10 (Austria: Oberösterreich: Pfaffstätten); Bitsch, 2010:119 (in supplement to vol. II of Faune de France, 1997: France: first records from: Hautes-Alpes: Aspres-sur-Buech, Chorges, Gap, Mont-Dauphin, Réotier, and Loir-et-Cher: Suèvres); Schmid-Egger, 2010a:14 (in red list of Aculeata of Germany: very rare). – **As *Cerceris ornata* var. *sabulosa***: Chyzer, 1902:33 (new status, Hungary).

*Philanthus emarginatus* Panzer, 1799:... Synonymized with *Cerceris sabulosa* by Herrich-Schaeffer, 1840:296 and Richards, 1935:169. – Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino). – Jurine, 1807:202 (listed). – **As *Cerceris emarginata***: Spinola, 1806:97 (new combination, Italy: Liguria); Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area); F. Smith, 1856:437 (in catalog of Hymenoptera in British Museum); A. Costa, 1867c:90 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); A. Costa, 1869b:106 (in revision of Italian Sphecidae), 1872a:23 (in revision of Sphecidae of Kingdom of Naples, Italy), 1882b:23 (Italy: Sardegna); Kohl, 1883e:663 (Switzerland); Gasperini, 1887:17 (Dalmatia: Spalato, Brusije, and Lissa Island, now Croatia: Split, Brusje on Hvar Island, and Vis Island); Schletterer, 1887:379 (revision), 490 (listed); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige; diagnostic characters); Ed. André, 1889:274, 275 (in revision of Sphecidae of Europe and Algeria); Kohl and Handlirsch, 1889:278 (Turkmenistan); F. Morawitz, 1889:156 (China: Gansu: Sigu); Schletterer, 1889a:900 (correction to earlier description), 901 (faunal records), 1889b:1126 (Armenia: Arax Valley); Steck, 1890:168, 170 (in key to *Cerceris* of Switzerland); Ed. André, 1891:28\* (bibliographic references); F. Morawitz, 1891a:213 (Russia: Astrakhan Government); Kohl, 1893a:34 (Austria: Niederösterreich); F. Morawitz, 1893b:419 (Tajikistan); Baldini, 1894:59 (Italy: Modena area); Medina, 1894b:263 (Spain); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:458 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Medina, 1899:115 (Spain: Huévar); Chyzer, 1902:33 (Hungary); de Cobelli, 1903:110 (Italy: Province of Trentino: Levico, Rovereto); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); E. Saunders, 1904c:608 (Spain: Mayorca), 638 (France: Cerbère; Spain); Zilahi Kiss, 1904:77 (Hungary: Hadad); Ferton, 1905:65 (list of prey); Kubes, 1905:83 (Czech Republic: Mančice); von Heyden, 1905:82 (Germany: Hessen: Frankfurt); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); Vängel, 1905:167 (Hungary); Dusmet y Alonso, 1906:7 (Spain); Móczár and Henter, 1907:205 (Hungary: Hatvan, Tiszaalpár); Schmiedeknecht, 1907:238, 242 (in key to Hymenoptera of Central Europe); Cecconi, 1908:23 (Italy: Puglia: Isole Tremiti); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Ferton, 1910:153 (prey, prey carrying); Zavattari, 1910:4 (Italy: Isola d'Elba: Portoferraio); Graeffe, 1911:48 (Italy: Trieste area); Mantero, 1911:73 (Italy: Sardegna: Isola dell'Asinara); Morice, 1911:81 (Algeria: Biskra; floral records); Birula, 1912:544 (Ukraine: Zhytomyr Oblast': Radomyshl'); R. Turner, 1912e:802 (Pakistan: Pishin, Quetta; in revision of British India species); Haupt, 1913:50 (Germany: Sachsen-Anhalt: Brachwitz quarry and Erdebörn in Halle area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Fugad, Nagyenyed, Nagyoklos, Nyírmező); Birula, 1914:368 (specimens from Radomyshl' are determined correctly); Mercet, 1914:445 (listed from Spain); Dusmet y Alonso, 1915:87 (Spain: Aragón); Kohl, 1916:111 (specimens in O. Radoszkowski collection); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Shestakov, 1916:231 (Caucasus); R. Perkins, 1916:231 (specimen from Great Britain: Kingstown in F. Smith collection); Shestakov, 1918a:131 (Uzbekistan, Tajikistan and Turkmenistan); Dubois, 1921c:210, 211 (in key to Belgian Sphecidae); Morice, 1921:822 (Iran: Qazvin; Iraq: Amara, Baquba); Enslin, 1922c:247 (Germany: Bayern: Thüringersheim); Fahringer, 1922:178 (Turkey); Maidl, 1922:68 (Albania, Croatia, Montenegro); Shestakov, 1923:104, 105, 113 (in key to subgenus *Apiraptrix*, synonymy, distribution);

Roth, 1924:124 (Algeria: Nemours, now Ghazaouet); Berland, 1925d:54 (in Sphecidae Fauna of France); Coulon, 1925:117 (France: Evreux, Seine-et-Oise; Italy, Spain); Lauterborn, 1925:355 (Germany: Baden-Württemberg: Neuenburg); von Schulthess, 1926b:210 (Tunisia, Libya); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Poblet); Shestakov, 1927a:7 (Russia: Kursk Oblast'); Bouwman, 1928a:361 (in revision of Sphecidae of Netherlands); Grandi, 1928d:267 (nesting habits), 274 (description of egg, larva, and cocoon), 1929:288 (Italy: Toscana: valle della Limentra); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Bardia); Bischoff, 1930:217 (Tajikistan: Pamir: Maz); Grandi, 1930:308 (nest parasite: *Miltogramma oestraceum* Meigen), 340 (Italy: Toscana: Maremma); Hamm and Richards, 1930:109 (summary of nesting habits); Schmiedeknecht, 1930:699, 702 (in keys to Hymenoptera of North and Central Europe); Grandi, 1931:56 (Italy: Toscana: Vallata delle Pozze near Le Mandriole), 58 (Italy: Toscana: Taviano); Dusmet y Alonso, 1931:7 (Portugal: Évora); Grandi, 1931:44 (additional prey); Giordani Soika, 1932a:21 (Italy: Lido di Venezia); Motaş, 1932:14 (nest parasite: *Setulia melanura* Meigen, a tachinid); Bischoff, 1933:5 (Spain, Morocco); Maidl, 1933b:122 (Morocco); Shestakov *in* Nadig, 1933:97 (Morocco); Balles, 1934:21 (Germany: Baden-Württemberg: Mosbach); Giner Marí, 1934:131 (Spain); Grandi, 1934:129 (Italy: Emilia-Romagna: vicinity of Bologna, Lazio: Acilia, and Toscana: San Vincenzo); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records); Maidl, 1934:64 (Greece: Aegean Islands: Ikaria); Nadig, 1934:33 (France: Corse; Bastia, Cap Corse; Italy: Sardegna: Aritzo, Cagliari); Bernard, 1935:62 (France: Var: Fréjus area); Grandi, 1935a:110 (Italy); Gussakovskij, 1935:444 (Tajikistan); Vergne, 1935:117 (France: Auvergne: common); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, Šusterka, and Bat'a, 1937:208 (in catalog of Sphecidae of Czechoslovakia); Guiglia, 1938b:8 (Italy: Sardegna); Móczár, 1938c:81 (Hungary: Kőszeg Hills), 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Deleurance, 1941:27 (France: Nice; communal nesting); Giner Marí, 1941a:22 (in revision of Spanish *Cerceris*), 1941b:154 (in revision of North African *Cerceris*); Guiglia, 1941c:161 (Italy: Calabria: Grande Sila), 1942a:56 (Greece: Rhodes Island: Kremasti, Villanova); Giner Marí, 1943a:94 (in Sphecidae Fauna of Spain); Guiglia, 1943b:70 (Albania: Kopluku); Giordani Soika, 1944:12 (Italy: Sicilia: Taormina); Guiglia, 1944a:146 (Cyprus: Cherkas, Limassol), 1944b:11 (Italy); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Giner Marí, 1945a:248 (Cyprus; Greece: Rhodes Island, Lebanon), nec 1945b:359 (= *Cerceris sabulosa algerica*); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); de Beaumont, 1947b:384 (Cyprus); Dulac, 1947:53 (France: Saône-et-Loire Department: Creusot area); Guiglia, 1947a:28 (Italy: Piano Maiuri), 1948c:200 (Italy: Sardegna: Cagliari); de Andrade, 1949:10 (Portugal, as *emmarginata*); Cavro, 1950:36 (France: Département du Nord); nec de Beaumont, 1950f:397 (= *Cerceris sabulosa algerica*); Georgel, 1950:63 (France: Seine-et-Oise: Sucy-en-Brie); Pittioni, 1950:21 (Cyprus); Cleu, 1953:50 (France: Ardèche River basin); Móczár, 1953:309 (Hungary); Vogrin, 1955:32 (Yugoslavia); Ceballos, 1956:367 (in catalog of Hymenoptera of Spain); Zirngiebl, 1957:184 (Germany: Rheinland-Pfalz: Pfalz region); Compte Sart, 1959:132 (Spain: Mayorca; on *Mentha rotundifolia*); Diniz, 1959:28 (Portugal: nine localities); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae, as *emarginata*); Georghiou, 1977:189 (Cyprus).

*Philanthus tricinctus* Spinola, 1805:18, ♂. Syntypes: Italy: Liguria: no specific locality (depository?). Synonymized with *Cerceris emarginata* by Spinola, 1808:... – As *Cerceris tricincta*: Spinola, 1806:27 (new combination, redescription); Vander Linden, 1829:118 (bibliographic references, description of ♀); de Beaumont, 1951b:175 (unrecognizable); Pagliano, 1988:172 (unrecognizable), 1990:101 (in catalog of Italian Sphecidae, as nomen dubium); Pagliano and Negrisola, 2005:489 (in Sphecidae Fauna of Italy, as nomen dubium).

? *Philanthus pygmaeus* Thunberg, 1815b:296. Holotype or syntypes: origin unknown (originally Uppsala, now lost, see Schulz, 1912:70). – Thunberg, 1815b:289 (diagnostic characters), 296 (...); Dalla Torre, 1897:489 (in catalog of world Hymenoptera); de Beaumont, 1950c:321 (possible synonym of *Cerceris sabulosa*).

*Cerceris minuta* Lepeletier de Saint Fargeau, 1845:27, ♀, ♂. Syntypes: France: Saint Séver and Nevers (MNHN). Synonymized with *Cerceris sabulosa* by ..., synonymy confirmed by de Beaumont, 1950c:323. – F. Smith, 1856:439 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:221 (in catalog of European Hymenop-

tera); Dours, 1874:144 (in catalog of Hymenoptera of France); Marquet, 1875:204 (France: Languedoc), 1881:190 (southern France, preying on Coleoptera); Yaroshevskiy, 1881:124 (Ukraine: Khar'kiv Oblast': Kupyansk); Margretti, 1884b:106 (Italy: Firenze area); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Cuní y Martorell, 1888:164 (Spain: Barcelona); De Stefani Perez, 1894:216 (Italy: Sicilia); Acloque, 1897:82 (in Sphecid Fauna of France and Algeria); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella); de Beaumont, 1950:323 (study of syntypes). – **As *Cerceris sabulosa minuta***: R. Bohart and Menke, 1976:587 (new status, listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Pagliano, 1990:100 (in catalog of Italian Sphecidae).

*Cerceris superba* Shestakov, 1923:106, ♀. Holotype: ♀, Spain: Andalusia: no specific locality (ZIN). Synonymized with *Cerceris sabulosa* by Pulawski, 1965c:564. – Shestakov, 1923:103, 106 (in key to subgenus *Apiraptrix*); Giner Marí, 1941a:24 (in revision of Spanish *Cerceris*); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain); de Beaumont, 1957d:327 (synonymy with *Cerceris sabulosa* supposed); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae).

As *Cerceris albofasciata* (collectively corrected to *Cerceris sabulosa* by de Beaumont, 1950c:319): Dahlbom, 1844:201 (in revision of Sphecidae and Pompilidae), 1845:499 (in key); Schenck, 1857:153 (in revision of fossorial wasps of Germany); Taschenberg, 1866:190 (in revision of Hymenoptera of Germany); Radoszkowski, 1870:102 (*Cerceris tricineta* listed as synonym of *Cerceris albofasciata*); Yaroshevskiy, 1881:124 (Ukraine: Khar'kiv Oblast': Khar'kiv); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen, Merseburg, Weissenfels); Radoszkowski, 1890b:507 (Armenia: Mount Ararat); Krieger, 1894:12 (Germany: Kingdom of Saxony: Leipzig and Zwickau); Mocsáry, 1897:80 (Kingdom of Hungary, some localities are in today's Croatia and Romania); Schmiedeknecht, 1907:239, 242 (in key to Hymenoptera of Central Europe); Shestakov, 1914b:408 (Georgia: Tiflis, now Tbilisi), 1917c:47 (Ukraine: Crimea); Noskiewicz, 1922b:231 (Poland: Podole Region, now Ukraine); Shestakov, 1922:81 (Russia: Stavropol'); Lauterborn, 1925:355 (Germany: Baden- Württemberg: Kaiserstuhl ); Friese, 1926:154 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Shestakov, 1927a:7 (Russia: Kursk Oblast'), 9 (Ukraine: Lubni area in Poltava Oblast'), 10 (Ukraine: Odessa and Poltava Oblast's), 11 (Ukraine: Kherson, Nikolayev, and Zhitomir Oblast's), 19 (Russia: Stalingrad Oblast', now Volgograd), 19 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1928:45 (Russia: vicinity of Orenburg); A. Müller, 1930:181 (Bulgaria: Kavarna); Schmiedeknecht, 1930:699, 702 (in keys to Hymenoptera of North and Central Europe); Kolosov, 1937:218 (Ukraine: Kupyansk); Zavadil, Šusterka, and Bat'a, 1937:208 (in catalog of Sphecidae of Czechoslovakia); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Šnoflak *in* Zavadil and Šnoflak, 1948:87, 94 (in key to Sphecidae of Czechoslovakia); Vogrin, 1955:32 (Yugoslavia); Ceballos, 1956:366 (in catalog of Hymenoptera of Spain);

As *Cerceris rybyensis* (part): Fertton, 1899:345 and 1901a:109 (France: Corse: Bonifacio; list of prey), corrected to *Cerceris emarginata* by Fertton, 1905:65.

### ***spp. algirica* Thunberg**

*Philanthus algiricus* Thunberg, 1815:136, ♀. Holotype or syntypes: ♀, Barbaria, now Algeria: no specific locality (Uppsala). – Thunberg, 1815a:128 (diagnostic characters), 1815b:288 (diagnostic characters); Dalla Torre, 1897:482 (in catalog of world Hymenoptera). – **As *Cerceris algirica***: W. Schulz, 1912:70 (new combination). – **As *Cerceris sabulosa algirica***: de Beaumont, 1950c:320 (new status, study of type material), 1951f:311 (Tunisia to Morocco), 1953g:120 (Morocco), 1956a:185 (Libya); Guiglia, 1957:145 (Italy: Isole Pelagie); de Beaumont, 1960b:229 (Libya); Guiglia, 1960:360 (Italy: Isole Pelagie: Lampedusa); R. Bohart and Menke, 1976:587 (listed); Pagliano, 1990:100 (in catalog of Italian Sphecidae: Isola di Lampedusa); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:729 (Italy: Island of Lampedusa); Pagliano, 2003b:128 (Italy: Islands of Lampedusa and Pantelleria).

*Cerceris ariasi* Giner Marí, 1941b:181, ♀. Holotype or syntypes: ♀, Morocco: Melilla (MNCN). Synonymized with *Cerceris sabulosa algerica* by de Beaumont, 1951f:311. – Nec Giner Marí, 1945b:359, 369 (= *Cerceris rybyensis*). As *Cerceris emarginata* (present correction to *Cerceris sabulosa algerica*): Giner Marí, 1945b:359 (Morocco: Ain Zorah, Muley Ali); de Beaumont, 1950f:397 (Algeria, Morocco).

### **ssp. dahlbomi de Beaumont**

As *Cercers albofasciata*: Dahlbom, 1843:201 (description), 1845:499 (in key), corrected to *Cerceris sabulosa dahlbomi* by de Beaumont, 1950c:319; Taschenberg, 1858:81 (in key to Sphecidae of Germany); Schenck, 1967a:354 (known from Germany); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Taschenberg, 1875:390 (Germany: Salziger See near Eisleben); Radoszkowski, 1877:62 (Kazakhstan, Kyrgyzstan, Uzbekistan), partly, corrected to *Cerceris emarginata* by Shestakov, 1918a:124; Schletterer, 1887:383 (revision) and 1889a:901 (faunal records), corrected to *Cerceris sabulosa dahlbomi* by de Beaumont, 1951b:177; Ed. André, 1889:262, 274 (in revision of Sphecidae of Europe and Algeria); Steck, 1890:168, 170 (in key to *Cerceris* of Switzerland), present correction; Ed. André, 1891:26\* (bibliographic references); Antiga and Bofill, 1904:20 (Spain: Cataluña Province); Shestakov, 1914b:408 (Georgia: Tbilisi), 1918a:124 (unknown from Transcaspia), 1918a:141 (Tajikistan); Łoziński, 1920:121 (Poland: Kraków); Shestakov, 1922:81 (Russia: Stavropol' area), 1923:104, 105 (in key), 113 (synonymy, distribution; in subgenus *Apiraptrix*); Lauterborn, 1925:355 (Germany: Kaiserstuhl in Rheinland); Vrontsovskiy, 1930:66 (Russia: Orenburg Oblast').

*Cerceris sabulosa dahlbomi* de Beaumont, 1950c:319. Substitute name for *Cerceris albofasciata* of Dahlbom, 1845, and Schletterer, 1887. Holotype: ♂, Germany: Neustadt-Eberswalde (Lund), designated by de Beaumont, 1953h:198. – de Beaumont, 1951b:177 (*Cerceris albofasciata* of Schletterer, 1887 = *sabulosa dahlbomi*); Krysiński, 1957:308 (Poland: Jarosław, Krzyżanowice, Przemyśl, Przeworsk, Sandomierz, Żurawica near Przemyśl); Noskiewicz and Puławski, 1960:75, 78 (in key to Polish Sphecidae); Oehlke, 1970:686 (Democratic Germany); R. Bohart and Menke, 1976:587 (listed); Kazenas, 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Bohemia), 235 (Bohemia: Praha–Horní Počernice; *Cerceris albofasciata* of Pádr, 1990 = *sabulosa dahlbomi*).

### **ssp. duplipunctata Tsuneki**

*Cerceris sabulosa duplipunctata* Tsuneki, 1971i:423, ♂. Holotype: ♂, Mongolia: Hovd Aymag: Mongol Altai (TMB). – R. Bohart and Menke, 1976:587 (listed).

### **ssp. sinica Tsuneki**

*Cerceris sabulosa sinica* Tsuneki, 1961c:46, ♀. Holotype: ♀, China: Peking (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:10 (in key), 1971m:16 (China: Peking); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1979d:83 (in key); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:471 (in key to Sphecidae of Russian Far East); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

### **ssp. subgibbosa Yasumatsu**

*Cerceris subgibbosa* Yasumatsu, 1935a:15 and 25, ♀. Holotype: ♀, China: Hopeh Province: Cheng-teh (depository?) – Nagase, 2006b:2 (specimens collected by First Scientific Expedition to Manchoukou, 1933, now part of eastern China). – As *Cerceris sabulosa subgibbosa*: Tsuneki, 1961c:10, 16 (in key), 36 (new status), 63 (citation), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1979d:83, 87 (in key); Tsuneki, 1982b:13 (Korea; comments), 18 (known from Korea); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:471, 477 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**ssp. *talynensis* Tsuneki**

*Cerceris sabulosa talynensis* Tsuneki, 1971:424, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Tsagan Bogd ul (TMB). – R. Bohart and Menke, 1976:587 (listed).

**678. *saegeri* Empey**

*Cerceris saegeri* Empey, 1970:180, ♀. Holotype: ♀, Zaire: Garamba National Park: no specific locality (MRAC). – R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (listed).

**679. *saevissima* F. Smith**

*Cerceris saevissima* F. Smith, 1856:461, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Villa Nova, now Parintins (BMNH). – Schletterer, 1887:501 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:587 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**680. *sahlbergi* Shestakov**

*Cerceris sahlbergi* Shestakov, 1918a:149, ♀. Holotype or syntypes: ♀, Uzbekistan: Kutentaysk (ZIN). – Kazenas, 1972b:128 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:63 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:149 (redescription), 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:152 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ili River valley: 15 km E Ayak-Kalkan, near Kapchagay, 20 km S and 60 km E Kapchagay, Sortogay in low course of Charyn River, Zharkent, ).

**681. *saishuensis* Tsuneki**

*Cerceris saishuensis* Tsuneki, 1968:53, ♂. Holotype: ♂, S Korea: Quelquepart Island: Mt. Hanna (originally K. Tsuneki coll., now Hyogo Mus.). – R. Bohart and Menke, 1976:587 (listed); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.).

**682. *salai* Giner Marí**

*Cerceris salai* Giner Marí, 1945c:852, ♂. Holotype: ♂, India: Maharashtra: Bandra (MNCN). – R. Bohart and Menke, 1976:587 (listed).

**683. *samarensis* Tsuneki**

*Cerceris samarensis* Tsuneki, 1968f:27, ♀. Holotype: ♀, Philippines: Samar Island (Cornell Univ.). – R. Bohart and Menke, 1976:587 (listed); Tsuneki et al., 1992c:46 (in key), 65 (comparison with *Cerceris vafra*).

**684. *sanluis* Fritz and Toro**

*Cerceris sanluis* Fritz and Toro, 1969:147, ♀. Holotype: ♀, Argentina: San Luis: Carolina (originally Colegio Máximo, San Miguel, now M. Fritz coll.). – R. Bohart and Menke, 1976:587 (listed); Fritz, 1993:17 (holotype in M. Fritz coll., dated 1969); Amarante, 2002:61 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**685. *saussurei* Radoszkowski**

*Cerceris saussurei* Radoszkowski, 1877:60, ♂ (as *Saussurei*, incorrect original capitalization). Holotype or syntypes: ♂, Kazakhstan: Syr-Daria steppe: no specific locality (ZMMU). – Schletterer, 1887:477 (original description copied), 502 (listed); Ed. André, 1889:317, 330 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); R. Turner, 1912e:488 (revision; Pakistan: Baluchistan: Quetta); Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Shestakov, 1918a:150 (synonymized with *Cerceris capito*; synonymy impossible for geographic rea-

sons); R. Bohart and Menke, 1976:587 (listed); Kazenas, 2001b:58 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia).

**686. *scapularis* Schletterer**

*Cerceris scapularis* Schletterer, 1887:457, ♀. Lectotype: ♀, Mexico: Orizaba (NHMW), designated by Scullen, 1972:94. – Schletterer, 1887:502 (listed); Cameron, 1891a:129 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Kohl, 1916:110 (diagnostic charactes); Scullen, 1972:93 (as synonym of *Cerceris simulans*); G. Ferguson, 1984c:493 (revised status); Dollfuss, 1989:8 (lectotype in NHMW); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**687. *schaeuffelei* de Beaumont**

*Cerceris schaeuffelei* de Beaumont, 1970c:5, ♀. Holotype: ♀, Iran: Baluchistan: SW Iranshar (Ludwigsburg). – R. Bohart and Menke, 1976:587 (listed); K. Schmidt, 2000:177 (in revision of Western Palearctic *Cerceris*).

**688. *schariniensis* Kazenas**

*Cerceris schariniensis* Kazenas, 1972b:135, ♀, ♂. Holotype: ♀, Kazakhstan: Turaighyr, 180 km E Alma-Ata (V. Kazenas coll.). – R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:60 (in key to Sphecidae of Kazakhstan and Central Asia, as *shariniensis*), 1984a:114 (redescription), 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia, as *schariniensis*), 2002a:152 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: 15 km SE Borandysu, 10 km SE Chilik, 10 km NW Chundza).

*Cerceris sitora* Kazenas, 1979b:857, ♀. Holotype: ♀, Kazakhstan: Karatau Mts. near Chiili (ZIN). Synonymized with *Cerceris schariniensis* by Kazenas, 1984a:114.

**689. *schlettereri* Radoszkowski**

*Cerceris schlettereri* Radoszkowski, 1888a:335, ♀. Syntypes: Uzbekistan: Hodzha, Tashkent (Kraków). – Kohl, 1888a:139 (redescription); Schletterer, 1889a:893 (Kohl's redescription copied); Ed. André, 1889:331 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Shestakov, 1918a:151 (citation); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1984a:216 (revision), 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia).

**690. *schmiedeknechti* Kohl**

*Cerceris schmiedeknechti* Kohl, 1898b:94, ♂, ♀. Lectotype: ♀, Algeria: Oran (NHMW), designated by de Beaumont, 1951f:367 (Article 74.6). – Morice, 1911:92 (Algeria: Biskra); von Schulthess, 1926b:211 (Algeria: Biskra); Giner Mari, 1941b:209 (in revision of North African *Cerceris*); Honoré, 1941a:156 (not included in Mochi's 1939 revision of Egyptian *Cerceris*); de Beaumont, 1950f:397 (Algeria, Morocco), 1951f:367 (Algeria, Morocco; discussion), 1953g:123 (Morocco); Empey, 1972:67 (lectotype in NHMW); R. Bohart and Menke, 1976:587 (as synonym of *Cerceris specularis*); Dollfuss, 1989:8 (lectotype in NHMW); K. Schmidt, 2000:184 (in revision of Western Palearctic *Cerceris*).

**691. *schoutedeni* Brauns**

*Cerceris schoutedeni* Brauns, 1914:235, ♀, ♂ (as *Schoutedeni*, incorrect original capitalization). Lectotype: ♀, Zaire: Katanga: Elizabethville, now Lubumbashi (MRAC). – Brauns, 1926:286 (revision, as sp. n.); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire); Arnold, 1931:138 and 146 (in key), 1942:24 (gastral base illustrated), 25 (variation in gaster color); Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (listed).



**692. schultzei Bischoff**

*Cerceris schultzei* Bischoff, 1913b:116, ♂. Lectotype: ♂, Botswana: Severelela-Kakir (ZMHU), designated by Empey, 1983:188. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:138 and 144 (in key), 1935a:499 (South Africa: Kalahari); Empey, 1969a:323 (as new synonym of *Cerceris trichionota*); R. Bohart and Menke, 1976:588 (as synonym of *Cerceris trichionota*), 628 (resurrected status reported); Empey, 1983:188 (listed).

*Cerceris transvaalicola* Brauns, 1914:232, ♀, ♂. Lectotype: ♀, South Africa: Transvaal: Lichtenburg (TMP), designated by Empey, 1983:188. Synonymized with *Cerceris schultzei* by Arnold, 1931:149; and with *Cerceris trichionota* by Empey, 1969a:323. – Brauns, 1926:284 (revision); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:628 (restored synonymy with *Cerceris schultzei* recorded).

**693. scutifera Shestakov**

*Cerceris scutifera* Shestakov, 1914a:92, ♀, ♂. Syntypes: Uzbekistan: Kyzil-Kum Desert: Murun-kuduk (ZIN). – Shestakov, 1918a:151 (Uzbekistan), 1922:82 (Russia: Zimnyaya Stavka in lower Kuma River area); Kazenas, 1972b:131 (Kazakhstan; determination?); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:63, 65 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:195 (in key to Sphecidae of European part of former USSR); Islamov and Kazenas, 1983:45 (Uzbekistan); Kazenas, 1984a:129 (revision); Islamov, 1986:521 (Uzbekistan: Tashkent Oblast': Khumsan); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Schmidt, 2000:80 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:152 (geographic distribution, collecting localities in Kazakhstan), 2004b:113 (Kazakhstan: western Tien Shan), 2008a:107 (Southeastern Kazakhstan: 10 km NW Alma Ata, near Borandysu).

*Cerceris tadzhika* Gussakovskij, 1952:286, ♀, ♂. Syntypes: Tajikistan: Dushanbe (as Stalinabad), Kangurt (ZIN). Synonymized with *Cerceris scutifera* by Kazenas, 1984a:129. – R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:64 (in key to Sphecidae of Kazakhstan and Central Asia, as *tadzica*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**694. sedula Evans (preoccupied)**

*Cerceris sedula* Evans, 1982a:320, ♀, ♂, junior primary homonym of *Cerceris sedula* Arnold, 1940. Holotype: ♀, Australia: Victoria: Wyperfeld National Park 40 km N Rainbow (ANIC). Paratypes: South Australia. – Cardale, 1985:302 (in catalog of Australian Sphecidae).

**695. seleucos K. Schmidt**

*Cerceris seleucos* K. Schmidt, 2000:81, ♀, ♂. Holotype: Turkey: Silifke Province: 30 km NW Erdemli (OÖLM Linz). – Ljubomirov and Yildirim, 2008:153 (in catalog of Crabronidae of Turkey).

**696. semenovi Shestakov**

*Cerceris semenovi* Shestakov, 1914a:90, ♀, ♂. Syntypes: Uzbekistan: Kyzil Kum Desert: Nil-Kuduk and Nurchitay-uialy (ZIN). – Shestakov, 1918a:151 (Uzbekistan); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:95 (Turkmenistan: Akibay), 1972a:93 (Turkmenistan); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:70, 72 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:222 (redescription), 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:123, 124 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:152 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: 35-60 km E Chilik, 10 km NW Chundza).

**697. semilunata Radoszkowski**

*Cerceris semilunata* Radoszkowski, 1870:105, ♀. Holotype or syntypes: ♀, Russia: Amur area (depository?). – Schletterer, 1887:477 (original description copied), 502 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Kohl, 1916:123 (type not in O. Radoszkowski collection); Gussakovskij, 1932:33 (Russia: Ussuri area: Sedanka; determination questionable), 1934a:14 (China); R. Bohart and Menke, 1976:587 (listed); Nemkov,

1986:109 (Russia: Siberia: Irkutsk Oblast'), 1992b:251 (Russia: Far East: Natalino near Khingan Nature Reserve); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:474, 478 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2009b:152 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

*Cerceris hokkanzana* Tsuneki, 1961c:42, ♀, ♂. Holotype: ♀, Korea: Hokkazan: Keijo (originally K. Tsuneki coll., now USNM). Synonymized with *Cerceris semilunata* by Kazenas *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:474. – Tsuneki, 1961c:13, 17 (in key), 1974a:372 (Korea); R. Bohart and Menke, 1976:582 (listed); Tsuneki, 1976d:293 (China: Heilungkiang); Kazenas, 1979d:78 (Russia: Primorskiy Kray; discussion), 86, 88 (in key); Tsuneki, 1982b:18 (known from Korea), 1991:201 (Korea); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### 698. *seminigra* Taschenberg

*Cerceris seminigra* Taschenberg, 1875:401, ♀. Holotype or syntypes: Sudan: Khartum (Halle). – Schletterer, 1887:502 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (listed).

### 699. *semipetiolata* de Saussure

*Cerceris semipetiolata* de Saussure, 1867:88, ♂. Holotype: ♂, Mexico: Orizaba (type lost: Scullen, 1972:52). – Schletterer, 1887:502 (listed); Cameron, 1890a:118 (description of ♀); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); R. Bohart and Menke, 1976:587 (listed); G. Ferguson, 1984c:493 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris williamsi* Scullen, 1972:54, ♀. Holotype: ♀, Mexico: Veracruz: Fortín de las Flores. Synonymized with *Cerceris semipetiolata* by G. Ferguson, 1984c:493. – R. Bohart and Menke, 1976:589 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### 700. *sepulchralis* F. Smith

*Cerceris sepulchralis* F. Smith, 1858a:107, ♀. Lectotype: ♀, Malaysia: Sarawak: no specific locality (OXUM), designated by Empey, 1984:79 (Article 74.6). – F. Smith, 1865:87 (Indonesia: Moluku: Gilolo Island, now Halmahera, as *sepulchralis*); Schletterer, 1887:502 (listed); Cameron, 1890b:250 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera, as *sepulchralis*); R. Bohart and Menke, 1976:587 (listed). – **As *Cerceris sepulchralis sepulchralis* [sic]:** Empey, 1984:79 (new status, listed).

*Cerceris crassidens* Cameron, 1902a:98, ♀. Lectotype: ♀, East Malaysia: Sarawak: Pankalan Ampat (BMNH), designated by Empey, 1984:79. Synonymized with *Cerceris sepulchralis* by Empey, 1984:79. – R. Bohart and Menke, 1976:579.

### *ssp. vafra* Bingham

*Cerceris vafra* Bingham, 1895:443, ♀. Holotype: ♀, Philippines: Luzon: Cape Engano (BMNH). – Ashmead, 1904a:6 (Philippines: Luzon), 1904d:150 (Philippines); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); R. Brown, 1906:687 (in catalog of Philippine Hymenoptera); Baltazar, 1966:351 (in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:588 (listed); Tsuneki et al., 1992c:46 (in key), 53 (redescription). – **As *Cerceris sepulchralis* [sic] *vafra*:** Empey, 1984:79 (new status).

*Cerceris angularis* Cockerell, 1914a:220, ♀. Holotype or syntypes: ♀, Philippines: Luzon: Mt. Makiling (USNM). Synonymized with *Cerceris vafra* by Tsuneki et al., 1992c:53. – F. Williams, 1919d:146 (Philippines: Luzon: Los Baños: nesting habits); Evans, 1957b:87 (description of larva); Tsuneki, 1965d:4 (prey record summary: ? Cerambycidae); Baltazar, 1966:351 (in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:577 (listed).

**701. *serrana* Fritz**

*Cerceris serrana* Fritz, 1989:267, ♀, ♂. Holotype: ♀, Argentina: Córdoba: Tanti (M. Fritz coll.). Paratypes: Paraguay. – Fritz, 1989:262 (in key), Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**702. *severini* Kohl**

*Cerceris severini* Kohl, 1913a:207, ♀ (as *Severini*, incorrect original capitalization). Holotype: ♀, Zaire: no specific locality (MRAC). – Brauns, 1926:289 (original description translated into English, description of ♂); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:93 (Zaire); Arnold, 1931:149 (the ♂ described by Brauns is likely to be *Cerceris proteles*), 1942:24 (gastral base illustrated), 1951:107 (Ethiopia, Mali, Niger); Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (listed, type examined).

*Cerceris nigeriae* Brauns, 1926:287, ♀. Holotype: ♀, Nigeria: Afikpo (BMNH). Synonymized with *Cerceris severini* by Empey, 1983:188. – Arnold, 1930:11 (in checklist of Afrotropical Sphecidae); Empey, 1969a:316 (listed); R. Bohart and Menke, 1976:584 (listed).

**703. *sexta* Say**

*Cerceris sexta* Say, 1837:382, sex not indicated. Holotype or syntypes: USA: Missouri: no specific locality (lost). Neotype: ♂, Colorado: no specific locality (ANSP), designated by Scullen, 1965b:506. – F. Smith, 1856:465 (in catalog of Hymenoptera in British Museum); Le Conte, 1859b:763 (original description copied); Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:119 (in revision of North American Philanthinae); Packard, 1866:61 (listed); Cresson, 1875:717 (Colorado); Patton, 1879d:361 (USA: nw. Kansas); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:502 (listed); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); H. Smith, 1908b:365 (in revision of Nebraskan Sphecidae); Banks, 1913b:424 (California, Wyoming); Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Banks, 1947:10 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:505 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:587 (listed); G. Ferguson, 1984c:494 (listed); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Amarante, 2005a:5 (in addendum to his 2002 catalog of Neotropical Crabronidae and Sphecidae).

*Cerceris biungulata* Cresson, 1865c:118, ♀. Holotype: ♀, USA, Colorado: Rocky Mountains: no specific locality (ANSP). Synonymized with *Cerceris sexta* by Scullen, 1960:79. – Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:487 (listed); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado, as *biungulatus*); Dalla Torre, 1897:454 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Cresson, 1916:99 (holotype in ANSP); Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera).

*Cerceris alceste* Mickel, 1918a:333, ♀. Holotype: ♀, USA, Nebraska: Mitchell (UNL). Synonymized with *Cerceris sexta* by G. Ferguson, 1984c:494. – Mickel, 1918b:449 (in catalog of Nebraskan Sphecidae); Scullen *in* Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL); Scullen, 1965b:455 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera).

*Cerceris fugatrix* Mickel, 1918a:335, ♂. Holotype: ♂, USA: Nebraska: Mitchell (UNL). Synonymized with *Cerceris stigmosalis* by Scullen, 1960:79, and with *Cerceris sexta* by G. Ferguson, 1984c:494. – Mickel, 1918b:452 (in catalog of Nebraskan Sphecidae); Scullen *in* Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL).

*Cerceris sayi* Banks, 1923:21, ♀, ♂. Lectotype: ♀, USA, North Dakota: Steele (MCZ), designated by G. Ferguson, 1983b:232. Synonymized with *Cerceris fugatrix* by Scullen in Muesebeck et al., 1951:1008, with *Cerceris stigmatalis* by Scullen, 1960:79, and with *Cerceris sexta* by G. Ferguson, 1984c:494.

*Cerceris stenseni* Banks, 1923:22, [♀]. Lectotype: ♀, USA, North Dakota: Steele (MCZ), designated by G. Ferguson, 1983b:233. Synonymized with *Cerceris fugatrix* by Scullen in Muesebeck et al., 1951:1008, with *Cerceris stigmatalis* by Scullen, 1960:79, and with *Cerceris sexta* by G. Ferguson, 1984c:494.

*Cerceris orphne* Banks, 1947:15, ♂. Holotype: ♂, USA: New Mexico: Jemez Springs (MCZ). Synonymized with *Cerceris sexta* by Scullen, 1961:47. – Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:231 (study of holotype).

#### 704. *sextoides* Banks

*Cerceris sextoides* Banks, 1947:10, ♀, ♂. Holotype: ♀, USA, Washington: Yakima River: Lone Tree (MCZ). – Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Spencer, 1957:23 (Canada: British Columbia: Kamloops); Scullen, 1961:48 (as new synonym of *Cerceris tepaneca*), 1969:284 (valid species); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); R. Bohart and Grissell, 1975:51 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:587 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera, list of prey); G. Ferguson, 1983b:232 (study of holotype), 1984c:494 (listed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris eurymele* Banks, 1947:11, ♀, ♂. Holotype: ♀, USA: California: Davis (MCZ). Synonymized with *Cerceris sextoides* by Scullen in Muesebeck et al., 1951:1010, with *Cerceris tepaneca* by Scullen, 1965b:509, and with *Cerceris sextoides* by Scullen, 1969:283. – G. Ferguson, 1983b:228 (study of holotype)

#### 705. *seyrigi* Arnold

*Cerceris seyrigi* Arnold, 1945:27, ♀, nec ♂ (as *Seyrigi*, incorrect original capitalization). Lectotype: ♀, Madagascar: Bekily (MNHN), designated by Empey, 1983:188 (Article 74.6). – Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (the ♂ described by Arnold is an undescribed species); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

#### 706. *shelfordi* R. Turner

*Cerceris shelfordi* R. Turner, 1912e:815, ♀. Holotype or syntypes: ♀, East Malaysia: Sarawak: Kuching (OXUM). – R. Bohart and Menke, 1976:587 (listed).

#### 707. *shestakovi* Gussakovskij

*Cerceris shestakovi* Gussakovskij, 1952:285, ♀, ♂. Syntypes: Tajikistan: Stalinabad, now Dushanbe, Kurgan-Tyube (ZIN). – R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:65 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:131 (redescription); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### 708. *shestakoviana* Gussakovskij

*Cerceris shestakoviana* Gussakovskij, 1952:282, ♀, ♂. Syntypes: Tajikistan: between Djilikul and Mikoyanabad (now Kabadian); Uzbekistan: Golodnaya Step (ZIN). – R. Bohart and Menke, 1976:587 (listed); Kazenas, 1984a:21 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 108 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:152 (geographic distribution, collecting localities in Kazakhstan).

*Cerceris geniculata* Kazenas, 1974a:101, ♀, ♂ (as *geniculatus*, incorrect original termination), junior primary homonym of *Cerceris geniculata* Cameron, 1890. Holotype: ♀, Kazakhstan: 40 km SE Bakanas in Semiretchye (ZIN or V.L. Kazenas coll.?). Synonymized with *Cerceris shestakoviana* by Kazenas, 1984a:21. – R. Bohart and Menke, 1976:629 (listed).

*Cerceris lehri* Kazenas, 1977b:431. Synonymized with *Cerceris shestakoviana* by Kazenas, 1984a:21. – Kazenas, 1978b:52 (in key to Sphecidae of Kazakhstan and Central Asia).

**709. *shirozui* Tsuneki**

*Cerceris shirozui* Tsuneki, 1968l:51, ♀. Holotype: ♀, S Korea: Quelquepart Island : Mt. Hanna (originally K. Tsuneki coll., now Hyogo Mus.). – R. Bohart and Menke, 1976:587 (listed); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.).

**710. *sibirica* F. Morawitz**

*Cerceris sibirica* F. Morawitz, 1892:159, ♀. Holotype: ♀, Russia: Siberia: Krasnoyarsk Kray: Minussinsk (ZIN). – Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Tsuneki, 1961c:14, 19 (in key), 60 (China: Heilungkiang: Harbin; redescription), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1979d:86, 89 (in key); Nemkov, 1990c:85 (Russia: Buryat Republic), 1992b:251 (Russia: Far East: Bureya River near Khingan Nature Reserve); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:474, 480 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:181 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2009b:152 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**711. *siccata* Evans**

*Cerceris siccata* Evans, 1982a:355, ♀, ♂. Holotype: ♀, Australia: New South Wales: Packsaddle 179 km N Broken Hill (ANIC). Paratypes: Northern Territory, Victoria. – Cardale, 1985:302 (in catalog of Australian Sphecidae).

**712. *silvana* Schletterer**

*Cerceris silvana* Schletterer, 1887:462, ♀, ♂. Syntypes: Brazil: no specific locality. (NHMW). – Schletterer, 1887:502 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:587 (listed); Dollfuss, 1989:8 (holotype in NHMW); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

**713. *simulans* de Saussure**

*Cerceris simulans* de Saussure, 1867:87, ♂. Holotype: ♂, Mexico: "in Cordillera orientali" (NHMW or MHNG). Designation of neotype by Scullen, 1972:94 was illegal (Ferguson, 1984b:439). – Schletterer, 1887:502 (listed); Cameron, 1890a:108 (listed); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:93 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:587 (listed); G. Ferguson, 1984c:494 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris rostrata* F. Smith, 1873c:409, ♀. Holotype or syntypes: ♀, Mexico: no specific locality (BMNH). Synonymized with *Cerceris simulans* by G. Ferguson, 1984c:494. – Schletterer, 1887:500 (listed); Cameron, 1890a:127 (listed, diagnostic characters); Dalla Torre, 1897:473 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:93 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:586 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris chrysogastra* Schletterer, 1887:458, ♂. Lectotype: ♂, Mexico: Orizaba (NHMW), designated by Scullen, 1972:95. Synonymized with *Cerceris simulans* by Scullen, 1972:93. – Schletterer, 1887:488 (listed, as *chrysogaster*); Cameron, 1890a:127 (listed); Dalla Torre, 1897:455 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Kohl, 1916:108 (description of ♀); Dollfuss, 1989:8 (lectotype in NHMW, as *chrysogaster*).

**714. *sinaitica* de Beaumont**

As *Cerceris Döderleini*: Mochi, 1939:164 (in revision of Egyptian *Cerceris*), corrected to *Cerceris sinaitica* by de Beaumont, 1951b:179.

*Cerceris sinaitica* de Beaumont, 1951b:179. Substitute name for *Cerceris doederleini* of Mochi, 1939. Holotype: ♀, Egypt: Sinai Peninsula: Wadi um Mitla (?USNM). – de Beaumont, 1951f:401 (discussion); de Beaumont and Bytinski-Salz, 1959:132 (Israel: Beersheba); R. Bohart and Menke, 1976:587 (listed); Roche and Zalot, 1994:117 (Egypt: Sinai Peninsula); K. Schmidt, 2000:120 (in revision of Western Palearctic *Cerceris*).

**715. *sinensis* F. Smith**

*Cerceris sinensis* F. Smith, 1856:456, ♀. Holotype or syntypes: ♀, North China: no specific locality (BMNH). – Schletterer, 1887:478 (original description copied), 502 (listed); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Strand, 1913b:161 (Taiwan, redescription); Giner Mari, 1943d:212 (redescription); Tsuneki, 1967i:385 (Taiwan), 1970c:15 (Taiwan); Haneda, 1971b:32 (Taiwan); Tsuneki, 1972c:5 (Taiwan); Murota, 1973b:117 (Taiwan); R. Bohart and Menke, 1976:587 (listed); Tsuneki, 1977j:263 (Taiwan); Wu and Zhou, 1996a:176 (in revision in Economic Insect Fauna of China); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Li and He, 2004:1114 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**716. *sirdariensis* Radoszkowski**

*Cerceris sirdariensis* Radoszkowski, 1877:54, ♀, ♂ (as *Sirdariensis*, incorrect original capitalization). Syntypes: Uzbekistan: Samarkand; Kazakhstan: Syr-Daria steppe (ZMMU). – Schletterer, 1887:479 (original description copied), 502 (listed); Ed. André, 1889:282, 323 (in revision of Sphecidae of Europe and Algeria), 22\* (bibliographic references); Radoszkowski, 1893a:66 (Turkmenistan); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); nec Kohl, 1916:123 (= *Cerceris pseudoflavescens*); Shestakov, 1918a:151 (redescription), 1926:240 (interpretation of species; misspelled *syrdariensis*); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:64 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:166 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:58 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:114, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:153 (geographic distribution, collecting localities in Kazakhstan), 2004b:113 (Kazakhstan: western Tien Shan).

**717. *sobo* Yasumatsu and Okabe**

*Cerceris sobo* Yasumatsu and Okabe, 1936:497, ♀. Holotype: ♀, Japan: Kyushu: Kôbaru (...). – Yasumatsu and Okabe, 1936:500 (list of prey species, all curculionids); Tsuneki, 1961c:7, 15, 23, 24 (in key), 31 (Korea), 39 (description of ♂), 1965d:3 (prey record summary: Curculionidae), 32 (nesting habits); Haneda, 1972b:54 (nesting habits); Suda, 1972c:52 (Japan); Nambu, 1973d:152 (Japan: Saitama Prefecture); Suda, 1973:123 (Japan: Yamana-nashi Prefecture); Tsuneki, 1973r:127 (Japan: Fukui Prefecture, nest and prey), 1974a:372 (Korea); Nambu, 1975b:72 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1979d:81, 86 (in key); Tano, Kurokawa and Nozaka, 1982, Hymen. Communic. 14:33 (Japan: Kyushu); Tsuneki, 1982b:18 (known from Korea), 1991:201 (Korea); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:468, 476 (in key to Sphecidae of Russian Far East); Haneda, Inoue, Nozaka, Tano, Kurokawa, and H. and T. Murota, 2005:67 (Japan: Fukui Prefecture: Mount Monju); Terayama and Tano, 2005:2, 5 (in key to Japanese *Cerceris*).

***ssp. aponis* Tsuneki**

*Cerceris sobo aponis* Tsuneki, 1984b:55, ♀, ♂. Holotype: ♀, Philippines: Mindanao: Mount Apo (originally K. Tsuneki coll., now USNM). – Tsuneki et al., 1992c:47, 50 (in key), 66 (variation); Nuhn and Menke, 1994:26 (holotype not transferred to USNM, possibly returned to T. Tano, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:46 (holotype in K. Tsuneki collection).

**718. sokotrae Kohl**

*Cerceris sokotrae* Kohl, 1906a:207, ♀, ♂. Lectotype: ♀, Yemen: Socotra Island: Ras Shoab (NHMW), designated by Empey, 1973:9. – de Beaumont, 1966:208 (comparison with *Cerceris berenice*); Empey, 1973:6 (Kenya, Ethiopia; redescription), 1974:103 (as *Cerceris rufocincta sokotrae*, new status); R. Bohart and Menke, 1976:587 (listed), 628 (as *Cerceris rufocincta sokotrae*); Guichard, 1980:230 (Oman, as *Cerceris rufocincta sokotrae*); Empey, 1983:187 (listed, as *Cerceris rufocincta sokotrae*); Dollfuss, 1989:8 (lectotype in NHMW); Guichard, 1993a:156 (Arabian Peninsula, resurrected to full species status); Gadallah and Assery, 2004a:235 (in catalog of Sphecidae of Saudi Arabia).

**719. solitaria Dahlbom**

*Cerceris solitaria* Dahlbom, 1845:502, ♂. Holotype: ♂, Egypt: no specific locality (NRS). – F. Smith, 1856:445 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:479 (original description copied), 503 (listed); Ed. André, 1889:324 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Giner Mari, 1941b:289 (original description copied, comments); de Beaumont, 1950c:325 (study of holotype), 1950d:8 (Egypt: Siwa oasis; synonymy), 1950f:397 (Algeria: Tadjerouna), 1951f:391 (Egypt to Morocco; discussion), 1953g:124 (Morocco), 1956a:187 (Chad: Tibesti); de Beaumont and Bytinski-Salz, 1959:131 (Israel; discussion); Grandi, 1959b:287 (Algeria: Biskra, Goriana in Hodna district); Pulawski, 1964:74 (Egypt: Abu Rawash, Ghiza, Kom Osheim, Maadi); Empey, 1969a:326 (listed); Empey, 1969a:326 (listed); R. Bohart and Menke, 1976:587 (listed); Guichard, 1980:230 (Oman), 1993a:160 (Arabian Peninsula); Roche and Zalat, 1994:117 (Egypt: Sinai Peninsula, as *sloitaria*); K. Schmidt, 2000:189 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 235 (in catalog of Sphecidae of Saudi Arabia: Hadasham 120 km E Jeddah).

*Cerceris erythrocephala* Dahlbom, 1845:502, ♀. Holotype or syntypes: ♀, Egypt: no specific locality (NRS). Synonymized with *Cerceris solitaria* by de Beaumont, 1950c:325. – F. Smith, 1856:444 (in catalog of Hymenoptera in British Museum); nec Schletterer, 1887:393 (= *pseudoerythrocephala* von Schulthess); Schletterer, 1887:490 (listed); Ed. André, 1889:257 (in revision of Sphecidae of Europe and Algeria), 23\* (bibliographic references); Schletterer, 1889a:902 (Savigny, 1817, pl. X, Fig. 1 represents *erythrocephala*); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Graeffe, 1906:455 (Tunisia: Hammam el Lif); Kohl, 1906:206 (Arabian Peninsula, redescription); von Schulthess, 1926a:150 (*Cerceris erythrocephala* of Schletterer is a different species); Mochi, 1939:146 (in revision of Egyptian *Cerceris*); Honoré, 1941a:148 (nomenclatural history); Giner Mari, 1941b:244 (in revision of North African *Cerceris*); Arnold, 1942:23 (extending as far south as 16°N).

*Cerceris nasuta* Lepeletier de Saint Fargeau, 1845:6, ♀, junior primary homonym of *Cerceris nasuta* Latreille, 1809, and of *Cerceris nasuta* Dahlbom, 1844. Holotype or syntypes: ♀, Algeria: Oran (MNHN, Lucas coll.). Synonymized with *Cerceris erythrocephala* by von Schulthess, 1926a:150, and with *Cerceris solitaria* by de Beaumont, 1950c:322. – Lucas, 1849:250 (Algeria: Oran, original description copied with modifications); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); Ed. André, 1889:335 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Bingham, 1902:214 (South Africa, "indistinguishable from Algerian specimens"); Morice, 1911:88 (Algeria: Biskra); von Schulthess, 1926a:150 (tentatively synonymized *Cerceris nasuta* with *solitaria*), 1926b:211 (Tunisia); de Beaumont, 1950c:322 (study of holotype).

As *Cerceris laticincta* (♂ only), corrected to *Cerceris solitaria* by de Beaumont, 1951f:391; Lepeletier de Saint Fargeau, 1845:18; Lucas, 1849:252.

*Cerceris fasciata* Lepeletier de Saint Fargeau, 1845:30, ♂, junior primary homonym of *Cerceris fasciata* Spinola, 1806. Holotype or syntypes: ♂, Algeria: Oran (MNHN, Lucas coll.). Synonymized with *Cerceris solitaria* by Roth in von Schulthess, 1926b:211, synonymy confirmed by de Beaumont, 1950c:323 (study of syntypes). – Lucas, 1849:256 (Algeria: Oran; original description copied with modifications); F. Smith, 1856:446 (in catalog of

Hymenoptera in British Museum); Ed. André, 1889:328 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:459 (in catalog of world Hymenoptera); Strand, 1910e:217 (Algeria: Constantine Province); von Schulthess, 1926b:211 (Tunisia).

*Cerceris rufa* Taschenberg, 1875:400, ♀. Holotype or syntypes: Sudan: Khartum (Halle). Synonymized with *Cerceris solitaria* by Empey, 1969a:326. – Schletterer, 1887:500 (listed); Ed. André, 1889:336 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:474 (in catalog of world Hymenoptera); .

*Cerceris variegata* Taschenberg, 1875:401, ♂. Syntypes: ♂, Sudan: Khartum (Halle Univ.). Synonymized with *Cerceris solitaria* by Empey, 1969a:326. – Schletterer, 1887:505 (listed); Ed. André, 1889:336 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae).

*Cerceris selifera* Schletterer, 1887:454, ♂. Lectotype: ♂, "Ost Afrika": Suakim (NHMW), designated by Empey, 1969a:326 (Article 74.6). Synonymized with *Cerceris erythrocephala* by Kohl, 1906:204 – Schletterer, 1887:502 (listed); Dalla Torre, 1897:476 (in catalog of world Hymenoptera); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:196 (original description translated into English).

*Cerceris algerica* Schletterer, 1887:464, junior secondary homonym of *Cerceris algerica* (Thunberg, 1815). Substitute name for *Cerceris fasciata* Lepeletier de Saint Fargeau, 1845. – Schletterer, 1887:464 (Lepeletier's original description copied), 485 (listed).

*Cerceris delepineyi* Arnold, 1935b:2 and 8, ♀ (as *Delepineyi*, incorrect original capitalization). Syntypes: ♀, Mauritania: Nema (SAM). Synonymized with *Cerceris erythrocephala* by Arnold, 1942:23, and with *Cerceris solitaria* by Empey, 1969a:326.

*Cerceris nemaensis* Arnold, 1935b:3 and 8, ♂. Holotype: ♂, Mauritania: Nema (SAM). Synonymized with *Cerceris erythrocephala* by Arnold, 1942:23, and with *Cerceris solitaria* by Empey, 1969a:326.

*Cerceris erythrocephala* var. *gynochroma* Mochi, 1939:149, ♂. Syntypes: Egypt: no specific locality (USNM). Synonymized with *Cerceris solitaria* by de Beaumont, 1951f:391. – As *Cerceris gynochroma*: Giner Mari, 1941b:224 (new status, in revision of North African *Cerceris*); Menke in Mochi, 1987:43 (type material in USNM).

As *Cerceris tuberculata* varietas (= *Cerceris erythrocephala*): Morice, 1897:304 (Egypt: Abbasiya near Cairo).

### 720. *somalica* Arnold

*Cerceris somalica* Arnold, 1940:106, ♂. Holotype: ♂, Somalia: Mogadishu (originally A. Giordani Soika coll., now Torino Univ.). – Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:188 (listed, type examined).

### 721. *somotorensis* Balthasar

*Cerceris somotorensis* Balthasar, 1956:202 (May), ♂. Holotype: ♂, Slovakia: Somotor (originally V. Balthasar coll., now NATL. MUS. PRAGUE). – de Beaumont, 1957d:332 (synonymy, diagnostic characters); Balthasar, 1972:408 (in Sphecidae Fauna of Czechoslovakia); R. Bohart and Menke, 1976:587 (listed); Pulawski, 1978:192, 196 (in key to Sphecidae of European part of former USSR, as *somotoriensis*); Dollfuss, 1983b:25 (in catalog of Sphecidae of Austria: Niederösterreich: Oberweiden); Kazenas, 1984a:151 (redescription); Józán, 1985b:62 (Hungary: Somogytúr), 72 (map of distribution in Hungary), 82 (floral records), 85 (ecological and zoogeographic characteristics); Dollfuss, 1988 (Austria: Niederösterreich: Oberweiden), 1991:222 (in key to Sphecidae of North and Central Europe); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:365 (in Sphecidae Fauna of Western Europe); K. Schmidt, 2000:84 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:113, 117 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:153 (geographic distribution, collecting localities in Kazakhstan); Shorenko, 2007b:258 (Ukraine: Crimea: Shchelkino village in Leninskiy District);



Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia).

*Cerceris beaumonti* Bajári, 1956a:83. Nomen nudum (in catalog of Hungarian *Cerceris*, with locality list).

*Cerceris beaumonti* Bajári, 1956b:208 (July), ♀, ♂ (as *Beaumonti*, incorrect original capitalization). Holotype: ♂, Hungary: Deliblát-Fehértelep (TMB). Synonymized with *Cerceris somotorensis* by de Beaumont, 1957d:332. – Bajári, 1957a:36, 44 (in key to Hungarian Sphecidae); Scobiola-Palade, 1971:207 (in review of *Cerceris* of Romania).

As *Cerceris bucculata*: Kohl, 1893a:34 (Austria: Niederösterreich: Oberweiden), corrected to *Cerceris somotorensis* by de Beaumont, 1957d:332.

### 722. *songhai* Guichard

*Cerceris songhai* Guichard, 1993a:158, ♀, ♂. Holotype: ♀, Mali: Gao (BMNH). Paratypes: Saudi Arabia. – Gadallah and Assery, 2004a:235 (in catalog of Sphecidae of Saudi Arabia)

### 723. *sororcula* Brèthes

*Cerceris sororcula* Brèthes: Jörgensen, 1912:287, nomen nudum (Argentina: Mendoza Province, floral records).

*Cerceris sororcula* Brèthes, 1913:125, ♂. Holotype: ♂, Argentina: Mendoza: no specific locality (MACN). – Fritz, 1968b:170 (study of holotype); R. Bohart and Menke, 1976:587 (listed); Genise, 1990:26 (type material in MACN); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

### 724. *spathulifera* Brèthes

*Cerceris spathulifera* Brèthes, 1913:124, ♀. Lectotype: ♀, Argentina: La Pampa?: no specific locality (MACN), designated by Fritz, 1968b:170. – R. Bohart and Menke, 1976:587 (listed); Fritz and Mariluis, 1976:97 (revision); Genise, 1990:26 (type material in MACN); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

### 725. *spatulata* Reyes

*Cerceris spatulata* Reyes, 1986:104, ♀. Holotype: ♀, Philippines: Basilan Island: no specific locality (USNM). – Tsuneki et al., 1992c:48 (in key), 67 (bibliographic reference).

### 726. *specifica* R. Turner

*Cerceris specifica* R. Turner, 1912e:495, ♀, ♂. Holotype: ♀, Sri Lanka: Kandy (BMNH). – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:587 (listed); Krombein, 1981:44 (in revision of Sri Lanka Philanthinae); Tsuneki et al., 1992c:52 (in key).

*Cerceris nagamasa* Tsuneki, 1963c:32, ♂. Holotype: ♂, Thailand: Chantaburi (Sasayama Univ.). Synonymized with *Cerceris specifica* by Krombein, 1981:44. – R. Bohart and Menke, 1976:584 (listed).

### *ssp. alticola* Tsuneki

*Cerceris specifica alticola* Tsuneki, 1984b:56, ♂. Holotype: ♂, Philippines: Mindanao: Mount Apo (K. Tsuneki coll.). – Tsuneki et al., 1992c:53 (in key), 67 (bibliographic reference); Nuhn and Menke, 1994:26 (holotype not transferred to USNM, possibly returned to T. Tano, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:46 (holotype in K. Tsuneki collection).

### *ssp. vicicola* Tsuneki

*Cerceris specifica vicicola* Tsuneki in Tsuneki et al., 1992c:67, ♂. Holotype: ♂, Philippines: Mindanao: Bukidnon, Talakag (depository not indicated originally, now USNM). – Tsuneki et al., 1992c:53 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

### 727. *spectabilis* Radoszkowski

*Cerceris spectabilis* Radoszkowski, 1886a:36, ♀, ♂. Syntypes: Turkmenistan: no specific locality (KRAKÓW). – Schletterer, 1887:377 (in revision of world *Cerceris*), 503 (listed); Ed. André, 1889:298 (in revision of Sphecidae

of Europe and Algeria), 22\* (bibliographic references); Radoszkowski, 1892:591 (reference to Radoszkowski, 1886); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); R. Turner, 1912e:795 (Pakistan: Baluchistan: Quetta; in revision of British India species); Kohl, 1916:124 (specimens in O. Radoszkowski collection, additional description); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); Shestakov, 1918a:152 (citation), 1923:102 (in key), 114 (citation, distribution); de Beaumont, 1970c:5 (Iran: Baluchistan); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:52, 55 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:45 (possibly the valid name for *Cerceris meditata*); K. Schmidt, 2000:178 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:153 (geographic distribution, collecting localities in Kazakhstan); Ljubomirov and Yildirim, 2008:153 (in catalog of Crabronidae of Turkey).

### 728. *spectrum* Arnold

*Cerceris spectrum* Arnold, 1936:1, ♀, ♂. Lectotype: ♀, Zimbabwe: Matetsi (SAM), designated by Empey, 1983:188. – Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed).

### *ssp. multipictoides* Giordani Soika

*Cerceris spectrum* subsp. *multipictoides* Giordani Soika, 1942:208, ♀, ♂. Lectotype: ♀, Kenya: Ikutha (originally Giordani Soika coll., now UNIV. TORINO), designated by Empey, 1983:189 (Article 74.6). – Empey, 1969a:322 (listed); R. Bohart and Menke, 1976:587 (listed).

### 729. *specularis* A. Costa

*Cerceris specularis* A. Costa, 1867c:85, ♀, ♂. Lectotype: ♀, S Italy: Calabria: Brancaleone (NAPOLI), designated by de Beaumont, 1950c:326. – A. Costa, 1872a:17 (in revision of Sphecidae of Kingdom of Naples, Italy), 1883:57 (Italy: Sardegna: Aggius and Tempio); Schletterer, 1887:431 (in revision of world *Cerceris*), 503 (listed); Ed. André, 1889:297 (in revision of Sphecidae of Europe and Algeria); Gasperini, 1889:69 (Dalmatia: Spalato, now Croatia: Split); Schletterer, 1889a:901 (Spain: Madrid area); Ed. André, 1891:29\* (bibliographic references); F. Morawitz, 1891a:217 (Russia: Astrakhan Government); Baldini, 1894:60 (Italy: Modena area); Medina, 1894b:263 (Spain: Sevilla); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Ferton, 1901a:109 (list of prey); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); W. Schulz, 1906:45 (Greece: Crete); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Zavattari, 1912:3 (Italy: Sardegna: Pantaleo); Mercet, 1914:445 (listed from Spain); Kohl, 1916:125 (specimens in O. Radoszkowski collection); Shestakov, 1916a:234 (Caucasus), 1917c:49 (Ukraine: Crimea), 1918a:154 (Transcaspia); Berland, 1925d:61 (in Sphecid Fauna of France); Shestakov, 1927a:17 (Russia: Orenburg Oblast'); Vorontsovskiy, 1928:44 (Russia: vicinity of Orenburg); Nadig, 1934:33 (Italy: Sardegna: Iglesias); Guiglia, 1938b:8 (Italy: Sardegna); Móczár, 1938:64 (Hungary); Giner Marí, 1941a:34 (in revision of Spanish *Cerceris*), 1943a:97 (in Sphecid Fauna of Spain); Guiglia, 1944b:15 (Italy); Giner Marí, 1945a:248 (Cyprus, Greece: Rhodes Island); Guiglia, 1948c:200 (Italy: Sardegna: Macomer); Pittioni, 1950:22 (Cyprus); de Beaumont, 1952a:72 (S France; redescription); Grandi, 1954:237 (Italy); Vogrin, 1955:33 (Yugoslavia); Ceballos, 1956:371 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); de Beaumont, 1958d:273 (Greece); Nouvel and Ribaut, 1958:10 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:167 (Bulgaria: Aitos, Kniazhevo near Sofia, Sozopol); de Beaumont, 1959a:16 (Italy); nec de Beaumont and Bytinski-Salz, 1959:124 (= *Cerceris specularis fergusoni*); de Beaumont, 1961c:46 (Greece: Crete Island), 1965a:21 (Greece); Tsuneki, 1965d:3 (review of nesting habits); Diniz, 1966:7 (Portugal: Aljustrel, Monte Gordo); Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:288 (Turkey), 1969:82 (Turkey); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Balthasar, 1972:403 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:587 (listed); Georghiou, 1977:190 (Cyprus); Kazenas, 1978b:70 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:197, 198 (in key to Sphecidae of

European part of former USSR); Pagliano, 1980:126 (Italy: Piemonte); Gayubo, 1982b:60 (Spain: Ávila and Salamanca provinces), 1982e:111 (Spain: Cádiz Province), 1983e:239 (Spain: Salamanca Province); Islamov and Kazenas, 1983:45 (Uzbekistan); Schmidt and Westrich, 1983:125 (Greece); Gayubo and Tormos, 1984:27 (Spain: Valencia); Kazenas, 1984a:191 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1986a:68 (Spain: Ciudad Real Province); Gayubo and Sanza, 1986:90 (Spain: Burgos); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast': Khumsan); Pagliano, 1987:162 and 166 (Italy, in key), 1988:169 (Italy; revision); Gayubo, Asís, and Tormos, 1990b:81 (Spain: Cáceres Province); Pagliano, 1990:100 (in catalog of Italian Sphecidae); Dollfuss, 1991:223 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:423 (Italy), 1992:293 (Greece: Euboea); Torregrasa, Gayubo, Tormos, and Asís, 1993:21 (Spain: Alicante Province); Tormos, Asís, and Gayubo, 1994:190, 227 (Spain: Albacete Province); Negrísolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:366 (in Sphecid Fauna of Western Europe); González, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Pagliano and Scaramozzino, 1999:161 (Italy: Piemonte: Borgomale); K. Schmidt, 2000:184 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 254 (reported prey reported by Ferton, 1901), 2001d:122 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:153 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Jacobi, 2003:19 (detailed observations on nesting habits in Corsica, France); Schmid-Egger, 2003:751 (Italy: Sicilia: Randazzo); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:442 (Bulgaria: Arkutino near Burgas, Primorsko); Pagliano and Negrísolo, 2005:344 (in Sphecid Fauna of Italy); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Gayubo, González, Tormos, and Asís, 2008:140 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:154 (in catalog of Crabronidae of Turkey); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Bitsch, 2010:118 (in supplement to vol. II of Faune de France, 1997: observations on nesting habits by Jacobi, 2003, reported).

*Cerceris specularis* A. Costa, 1869b:101, ♀, ♂. Objective synonym of *Cerceris specularis* A. Costa, 1867c:85.

*Cerceris specularis* var. *punctosa* Schletterer, 1887:432, sex not indicated. Holotype or syntypes: Italy or Greece (NHMW). Synonymized with *Cerceris specularis* by Empey, 1972:67. – Dalla Torre, 1897:477 (in catalog of world Hymenoptera, as *punctuosa*); R. Bohart and Menke, 1976:587 (listed as synonym of *Cerceris specularis*, misspelled *punctuosa*, and as *Cerceris specularis punctosa*, new status). – **As *Cerceris specularis punctosa***: Kazenas, 2001d:121 (new status, in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris octonotata* Radoszkowski, 1877:56, ♀ (as *octonotata*, incorrect original hyphenation). Holotype or syntypes: Uzbekistan: Zeravshan valley (ZMMU). Synonymized with *Cerceris specularis* by Shestakov, 1918a:147. – Schletterer, 1887:476 (original description copied), 498 (listed); Ed. André, 1889:319 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:469 (in catalog of world Hymenoptera).

*Cerceris schmiedeknechti* Kohl, 1898b:94, ♀, ♂. Lectotype: ♀, Algeria: Oran (NHMW), designated by de Beaumont, 1951f:367 (Article 74.6). Synonymized with *Cerceris specularis* by Empey, 1972:67. – Morice, 1911:92 (Algeria: Biskra); Giner Marí, 1941b:209 (in revision of North African *Cerceris*); de Beaumont, 1950f:397 (Algeria, Morocco), 1951f:367 (Algeria, Morocco; discussion), 1953g:123 (Morocco); Empey, 1972:67 (lectotype in NHMW); Dollfuss, 1989:8 (lectotype in NHMW).

### ***ssp. fergusonii* de Beaumont**

As *Cerceris specularis*: de Beaumont and Bytinski-Salz, 1959:124 (Israel), present correction based on geographic distribution.

*Cerceris specularis fergusonii* de Beaumont, 1958d:286, ♀, ♂. Holotype: ♀, Cyprus: Limassol (originally J. de Beaumont coll., now LAUSANNE). – K. Schmidt, 2000:186 (in revision of Western Palearctic *Cerceris*); Yildirim and Ljubomirov, 2005:1806 (Turkey: Diyarbakır, Erzincan, and Erzurum provinces); Ljubomirov and Yildirim, 2008:154 (in catalog of Crabronidae of Turkey).

### 730. *spilota* Evans

*Cerceris spilota* Evans, 1982a:374, ♀, ♂. Holotype: ♀, Australia: New South Wales: Clifton Downs (ANIC). – Cardale, 1985:302 (in catalog of Australian Sphecidae).

### 731. *spinaea* de Beaumont

*Cerceris spinipleuris* de Beaumont in de Beaumont and Bytinski-Salz, 1959:111, ♀, ♂, junior primary homonym of *Cerceris spinipleuris* R. Turner, 1918. Holotype: ♀, Israel: Gvulot (originally J. de Beaumont coll., now MZL).

*Cerceris spinaea* de Beaumont, 1970b:38. Substitute name for *Cerceris spinipleuris* de Beaumont, 1959. – R. Bohart and Menke, 1976:587 (listed); K. Schmidt, 2000:180 (in revision of Western Palearctic *Cerceris*).

### 732. *spinicaudata* Cameron

*Cerceris spinicaudata* Cameron, 1905m:216, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Pearston (TMP), designated by Empey, 1983:189 (Article 74.6). – Brauns, 1917:239 (discussion of type), 1926:336 (revision); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:143 and 148 (in key); Scott in Arnold, 1933a:369 (Ethiopia: Harar District); Arnold, 1935a:499 (South Africa: Kalahari), 1942:5 (citation), 1951:113 (Ethiopia, Ghana, Senegal); Leclercq, 1955i:411 (Burundi); Empey, 1969a:322 (listed), 1970:185 (Zaire: Garamba and Upemba National Parks), 1974:116 (taxonomic history); R. Bohart and Menke, 1976:587 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), 88 (prey: small halictid bees), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils; as *spinicaudata spinicaudata*); Empey, 1983:189 (listed, type examined).

*Cerceris rufifrons* Arnold, 1932:10, ♂. Holotype: ♂, Zaire: Ubangi District: Duma (Zool. Mus. Hamburg, destroyed by bombing during World War II). Synonymized with *Cerceris spinicaudata* by Empey, 1983:189. – Empey, 1969a:321 (listed); R. Bohart and Menke, 1976:586 (listed).

### *ssp. maliensis* Empey

*Cerceris spinicaudata maliensis* Empey, 1974:116, ♀, ♂. Holotype: ♀, Mali: Ségou (ORSTOM, now MNHN?). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:189 (listed).

### 733. *spinifera* Kazenas

*Cerceris spinifera* Kazenas, 1974a:99, ♀ (as *spiniferus*, incorrect original termination). Holotype: ♀, Kazakhstan: 17 km NW Bakanas in Ili River valley (V.L. Kazenas coll. ?). – As *Cerceris spinifera*: R. Bohart and Menke, 1976:629 (listed); Kazenas, 1978b:52 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:42 (redescription); K. Schmidt, 2000:180 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:153 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: 20 km N Aydarly, 17 km NW Bakanas).

### *ssp. haladai* K. Schmidt

*Cerceris haladai* K. Schmidt, 2000:181, ♀, ♂. Holotype: ♀, Turkey: Siirt Province: 15 km S Siirt (coll. M. Halada, Chlum, Czech Republic). – Ljubomirov and Yildirim, 2008:155 (in catalog of Crabronidae of Turkey).

### 734. *spiniger* Rohwer

*Cerceris spiniger* Rohwer in F. Williams, 1919:148, ♀. Holotype: ♀, Philippines: Luzon: Mt. Makiling (USNM). – F. Williams, 1919d:148 (Philippines: Luzon: Los Baños: nesting habits); Tsuneki, 1965d:3, 4 (prey record summary: Anthribidae, Chrysomelidae, Curculionidae); Baltazar, 1966:351 (in catalog of Hymenoptera of Philip-

pines); Tsuneki, 1968f:21 (as synonym of *Cerceris luzonensis*); Tsuneki et al., 1992c:47 (in key), 60 (resurrected species status, redescription).

### 735. *spinipectus* F. Smith

*Cerceris spinipectus* F. Smith, 1856:443, ♀, ♂. Syntypes: Turkey: Trabzon: Trebizond, now Trabzon (BMNH). – Schletterer, 1887:479 (original description copied), 503 (listed); Ed. André, 1889:323 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Bingham, 1898a:109 (Yemen: Aden); Morice, 1921:822 (Iraq: Amara); de Beaumont, 1951b:177 (synonymy), 1957d:336 (in Europe in Greece only); de Beaumont and Bytinski-Salz, 1959:126 (Israel); de Beaumont, 1962c:222 (Arabia: Riad), 1965a:22 (Greece), 1967a:290 (Turkey); R. Bohart and Menke, 1976:587 (listed); Kazenas, 1978b:70, 72 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:217 (redescription); Guichard, 1991a:339 (Jordan), 1993a:160 (Arabian Peninsula); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:367 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:101 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 254 (prey reported by Gussakovskij, 1952: tenebrionid *Gnathosia karelini* Men.), 2002a:153 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:135 (Croatia: Moščenicka Draga); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 235 (in catalog of Sphecidae of Saudi Arabia); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Ljubomirov and Yildirim, 2008:155 (in catalog of Crabronidae of Turkey).

*Cerceris prisca* Schletterer, 1887:411, ♀, ♂. Syntypes: Hungary; Russia: Caspian Sea area, Greece: Athens, Corfu Island; Turkey: Brussa, Syra (NHMW). Synonymized with *Cerceris spinipectus* by Morice, 1921:822, synonymy confirmed by de Beaumont, 1951b:177. – Schletterer, 1887:499 (listed); Ed. André, 1889:308, 309 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:901 (Turkmenistan), 903 (Savigny, 1817, pl. X, Fig. 12 attributed to *prisca*, clearly an error), 1889a:900 (male midbasitarsus curved), 901 (Dalmatia, now in Croatia); Ed. André, 1891:25\* (bibliographic references); Dalla Torre, 1897:470 (in catalog of world Hymenoptera); W. Schulz, 1906:45 (Greece: Crete); Maidl, 1913:560 (diagnostic characters), Kohl, 1916:120 (specimens in O. Radoszkowski collection); Shestakov, 1918a:147 (citation); Coulon, 1925:117 (Greece: Attica); von Schulthess, 1926b:211 (Libya); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Bardia); Guiglia, 1934b:297 (Libya: bibliography and summary of locality records); Giner Mari, 1941b:236 (in revision of North African *Cerceris*), 1945a:248 (Cyprus); de Beaumont, 1947b:385 (Cyprus); Pittioni, 1950:22 (Cyprus); de Beaumont, 1958d:273 (Greece; as *Cerceris spinipectus prisca*), 287 (Cyprus; as *Cerceris spinipectus prisca*), 1960a:8 (Greece: Rhodes Island; as *Cerceris spinipectus prisca*); Georghiou, 1977:189 (Cyprus); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris pallida* Arnold, 1935:5 and 9, ♀. Holotype: ♀, Mauritania: Nema (SAM). Synonymized with *Cerceris spinipectus* by Guichard, 1993a:160. – Empey, 1969a:318 (listed); R. Bohart and Menke, 1976:585 (listed); Empey, 1983:182 (listed, type examined).

*Cerceris pallida* var. *lutulenta* Arnold, 1951:102, ♀. Holotype: ♀, Mauritania: Boghé (BMNH). Synonymized with *Cerceris pallida* by Empey, 1969a:318.

### *ssp. accola* Kohl

*Cerceris accola* Kohl, 1916:115, ♀, ♂. Syntypes: Turkmenistan: no specific locality (Kraków). – Gussakovskij, 1935:445 (Tajikistan: Kulab area; prey: *Gnathosia karelini* Men., a tenebrionid), 1952:285 (S Tajikistan; prey: the tenebrionid *Gnaphosia karelini* Mén.). – As *Cerceris spinipectus accola*: de Beaumont, 1961b:273 (new status, Afghanistan; apparently new status); R. Bohart and Menke, 1976:587 (listed as questionable subspecies of *Cerceris spinipectus*); K. Schmidt, 2000:102 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:123, 124 (in key to *Cerceris* of Kazakhstan and Central Asia).

**ssp. *peloponesia* de Beaumont**

*Cerceris spinipectus peloponesia* de Beaumont, 1963a:300, ♀, ♂. Holotype: ♀, Greece: Peloponesus: Pyrgos (Lausanne). – R. Bohart and Menke, 1976:587 (listed); K. Schmidt, 2000:102 (in revision of Western Palearctic *Cerceris*).

**ssp. *spinolica* Schletterer**

*Cerceris flaviventris* Spinola, 1839:495, ♂, junior primary homonym of *Cerceris flaviventris* Vander Linden, 1829. Holotype or syntypes: ♂, Egypt: no specific locality (Torino). – W. Schulz, 1911b:169 (type not found in M. Spinola collection in Torino); de Beaumont, 1951b:176 (study of syntypes).

*Cerceris spinolica* Schletterer, 1887:480. Substitute name for *Cerceris flaviventris* Spinola, 1839. – Schletterer, 1887:480 (Spinola's original description copied), 503 (listed); Ed. André, 1889:318 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Giner Mari, 1941b:285 (original description of *flaviventris* Spinola copied, comments). – **As *Cerceris spinipectus spinolica***: de Beaumont, 1951b:176, 179 (new status), 1951f:387 (Egypt, Libya; geographic variation); de Beaumont and Bytinski-Salz, 1959:127 (Israel: Negev); de Beaumont, 1960b:233 (Libya); Pulawski, 1964:74 (Egypt: Abu Rawash, Ghiza, Maadi, Kom Osheim); Empey, 1973:22 (Saudi Arabia); R. Bohart and Menke, 1976:587 (listed); K. Schmidt, 2000:103 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:235 (in catalog of Sphecidae of Saudi Arabia); Ljubomirov and Yildirim, 2008:156 (in catalog of Crabronidae of Turkey).

As *Cerceris capito*: Mochi, 1939:150 (in revision of Egyptian *Cerceris*) and Honor'e, 1941a:149 (Egypt), corrected to *Cerceris spinipectus spinolica* by de Beaumont, 1951b:179.

**ssp. *teterrima* Gribodo**

*Cerceris teterrima* Gribodo, 1894b:22, ♀. Lectotype: ♀, Tunisia: Tunis (Genova), designated by de Beaumont, 1950e:266. – de Beaumont, 1950f:397 (Algeria: Tadjerouna), 1951f:386 (S Algeria, S Tunisia; discussion), 1956a:187 (Libya). – **As *Cerceris spinipectus teterrima***: de Beaumont, 1960b:234 (new status, Libya); R. Bohart and Menke, 1976:587 (listed); K. Schmidt, 2000:103 (in revision of Western Palearctic *Cerceris*).

*Cerceris hartliebi* Schulz, 1905b:55, ♀ (as *Hartliebi*, incorrect original capitalization). Holotype: ♀, Tunisia: Sfax (depository?). Synonymized with *Cerceris teterrima* by de Beaumont, 1950e:266. – Morice, 1911:87 (Algeria: Biskra); von Schulthess, 1926b:211 (Tunisia); Giner Mari, 1941b:241 (in revision of North African *Cerceris*).

As *Cerceris onophora*: Schulz, 1905b:57, ♂, corrected to *Cerceris teterrima* by de Beaumont, 1951f:386.

**736. *spinipleuris* R. Turner**

*Cerceris varipes* F. Smith, 1873c:413, ♀, junior primary homonym of *Cerceris varipes* F. Smith, 1856. Holotype or syntypes: ♀, Australia: South Australia: Adelaide (BMNH). – Schletterer, 1887:505 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:489 (in catalog of world Hymenoptera, under *varipes* F. Smith, 1856); R. Turner, 1910b:421 (in key), 1912d:668 (in revision of Australian *Cerceris*).

*Cerceris spinipleuris* R. Turner, 1918:356. Substitute name for *Cerceris varipes* F. Smith, 1873. – Tsuneki, 1968e:2 (in key); R. Bohart and Menke, 1976:587 (listed); Evans, 1982a:314 (revision); Cardale, 1985:302 (in catalog of Australian Sphecidae).

**737. *spirans* de Saussure**

*Cerceris spirans* de Saussure, 1892:553, ♀, ♂. Lectotype: ♀, Madagascar: Bezanozano Province: Anosibé (MHNG), designated by Empey, 1983:189. – Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Arnold, 1945:19 (citation); Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:587 (listed); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

**738. *splendidissima* Giordani Soika**

*Cerceris splendidissima* Giordani Soika, 1942:198, ♀. Holotype: ♀, Tanzania: Bukoba in Usumbura Mts. (originally A. Giordani Soika coll., now Univ. Torino). – Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:587 (listed); Empey, 1983:189 (listed, type examined).

**739. *squamulifera* Mickel**

*Cerceris squamulifera* Mickel, 1916a:411, ♀. Holotype: ♀, USA: Nebraska: Imperial (UNL). – Mickel, 1918b:451 (in catalog of Nebraskan Sphecidae); Scullen *in* Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL); Scullen, 1965b:433 (in revision on North American *Cerceris*), 1968a:154 (description of ♂); R. Bohart and Menke, 1976:587 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:495 (listed, diagnostic characters); Ahlstrom, 1995:114 (in checklist of insects of North Carolina).

**740. *stefanii* Ed. André**

*Cerceris stefanii* Ed. Ed. André, 1889:225, ♀ (as *Stefanii*, incorrect original capitalization). Holotype or syntypes: ♀, Italy: Sicilia: no specific locality (depository?). – De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); de Beaumont, 1957d:328 (unrecognizable species of the *rybyensis* group); R. Bohart and Menke, 1976:587 (listed); Pagliano, 1988:172 (unrecognizable), 1990:100 (in catalog of Italian Sphecidae, as nomen dubium); Pagliano and Negrisol, 2005:489 (in Sphecid Fauna of Italy, as nomen dubium).

**741. *stella* Shestakov**

*Cerceris stella* Shestakov, 1914a:93, ♀. Holotype: ♀, Russia Siberia: Minussinsk (ZIN). – R. Bohart and Menke, 1976:587 (listed); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2009a:66 (is an endemic of Krasnoyarskiy Krai, Russia), 2009b:153 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**742. *sternodonta* Gussakovskij**

*Cerceris sternodonta* Gussakovskij, 1938:10, ♀, ♂. Syntypes: China: Kiangsu Province: no specific locality (NRS). – R. Bohart and Menke, 1976:587 (listed); Wu and Zhou, 1996a:169 (in revision in Economic Insect Fauna of China); Li and He, 2004:1114 (in hymenopterous fauna of Zhejiang Province, China, as *sternodonta sternodonta*); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

? *Cerceris fervida* F. Smith, 1856:455, ♀. Holotype or syntypes: ♀, North China: no specific locality (BMNH). Tentatively synonymized with *Cerceris sternodonta* by R. Bohart and Menke, 1976:587. – Schletterer, 1887:469 (original description copied), 491 (listed); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**ssp. *fukiensis* Giner Marí**

*Cerceris fukiensis* Giner Marí, 1942b:140, ♂, ♀. Syntypes: E China: Shaowu and Kwangtseh (Mus. A. Koenig, Bonn). – As *Cerceris sternodonta fukiensis*: Tsuneki, 1968f:9 (new status, China, discussion); R. Bohart and Menke, 1976:587 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**743. *stoekleini* Giner Marí**

*Cerceris stoekleini* Giner Marí, 1942b:123, ♂, ♀ (as *stöckleini*, incorrect original diacritic mark). Syntypes: China: Shaowu, Kwantseh (Mus. A. Koenig, Bonn). – R. Bohart and Menke, 1976:588 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**744. *storeyi* Evans**

*Cerceris storeyi* Evans, 1988:3, ♀, ♂. Holotype: ♀, Australia: Queensland: 15 km SW Mareeba (ANIC). – Evans, 1988:7 (nesting habits; prey: Curculionidae); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York).

**745. *straminea* Dufour**

? *Cerceris waltlii* Spinola, 1839:496, ♂ (as *Waltlii*, incorrect original capitalization). Holotype: ♂, Egypt: no specific locality (not in Torino, lost?). – Schletterer, 1887:484 (original description copied), 506 (listed); Ed. André, 1889:324, 334 (in revision of Sphecidae of Europe and Algeria, as *waltlii* on p. 324), 1891:27\* (bibliographic references); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Giner Marí, 1941b:290 (original description copied, comments); de Beaumont, 1951b:176 (type not found in Torino; probable synonym of *Cerceris straminea*).

*Cerceris straminea* Dufour, 1854b:388, ♀. Syntypes: ♀, Algeria: Pontéba, now Oumm ed Drou, and Orléansville, now El-Asnam (MNHN). – Schletterer, 1887:480 (original description copied), 503 (listed); Ed. André, 1889:337, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:477 (in catalog of world Hymenoptera); nec Morice, 1911:81 (= *Cerceris pruinosa*); Morice, 1911:81 (Algeria: single ♂ from Biskra may belong to this species); Shestakov, 1928:267 (study of holotype); Shestakov *in* Nadig, 1933:97 (Morocco: Marrakech); Giner Marí, 1941b:200 (in revision of North African *Cerceris*), 1945e:230 (Western Sahara); de Beaumont, 1950c:324 (study of holotype), 1950f:397 (Algeria), 1951f:389 (Egypt to Morocco; discussion), 1953g:124 (Morocco: Ksar es Souk), 1956a:187 (Libya); Pulawski, 1964:74 (Egypt: Kom Osheim); R. Bohart and Menke, 1976:588 (listed); Guichard, 1980:230 (Oman); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Kazenas, 1984a:220 (redescription); Guichard, 1993a:160 (Arabian Peninsula); K. Schmidt, 2000:103 (in revision of Western Palearctic *Cerceris*) Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia); Gadallah and Assery, 2004a:236 (in catalog of Sphecidae of Saudi Arabia).

*Cerceris hirtiventris* Morice, 1897:303, ♂. Holotype: ♂, Egypt: Zeitun near Cairo (OXUM). Synonymized with *Cerceris straminea* by Giner Marí, 1941b:200.

*Cerceris morici* Shestakov, 1918a:138, ♂. Holotype (or syntypes?): ♂, Algeria: Biskra (OXUM). Synonymized with *Cerceris straminea* by Shestakov, 1928:267 (as *moricei*).

As *Cerceris elegans*: Radoszkowski, 1877:64 (Kazakhstan: Karak; Kyrgyzstan: Shahimardan; Uzbekistan: Samarkand), corrected to *Cerceris straminea komarovii* by ...

As *Cerceris komarovii*: Morice, 1911:86 (Algeria: Biskra), corrected to *Cerceris morici* by Shestakov, 1918a:138; Mochi, 1939:160 (in revision of Egyptian *Cerceris*) and Honoré, 1941a:149 (Egypt: Hawamdieh), corrected to *Cerceris straminea* by Giner Marí, 1941b:200 and de Beaumont, 1951b:179.

***spp. hebraea* de Beaumont**

*Cerceris straminea hebraea* de Beaumont *in* de Beaumont and Bytinski-Salz, 1959:127, ♀, ♂. Holotype: ♀, Israel: Beersheba (Lausanne). – R. Bohart and Menke, 1976:588 (listed); K. Schmidt, 2000:104 (in revision of Western Palearctic *Cerceris*); Ljubomirov and Yildirim, 2008:156 (in catalog of Crabronidae of Turkey).

As *Cerceris komarovi*: Balthasar, 1954b:280 (Israel), corrected to *Cerceris straminea hebraea* by de Beaumont *in* de Beaumont and Bytinski-Salz, 1959:127.

***spp. komarovii* Radoszkowski**

*Cerceris komarovii* Radoszkowski, 1886a:35, ♀, ♂ (as *Komarovii*, incorrect original capitalization). Lectotype: Turkmenistan: no specific locality (Kraków), designated by Kohl, 1916:114 (specimen used by Radoszkowski for illustration). – Schletterer, 1887:448 (in revision of world *Cerceris*), 496 (listed); Ed. André, 1889:334 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Radoszkowski, 1892:591 (reference to Radoszkowski, 1886); Dalla Torre, 1897:464 (in catalog of world Hymenoptera); nec Morice, 1911:86 (= *Cerceris straminea*); Kohl, 1916:114 (redescription); Shestakov, 1918a:137 (Uzbekistan and Turkmenistan); Gussakovskij, 1935:445 (Tajikistan: Kulab area); nec Mochi, 1939:160 (= *Cerceris straminea*); nec Balthasar, 1954b:280 (= *Cerceris straminea hebraea*); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:94 (Turkmenistan: Akibay, Mary district, Murgab district, Sakar-Chagin district); Kazenas, 1978b:70, 72 (in key to Sphecidae of Kazakhstan and Central Asia). – As *Cerceris straminea komarovii*: de Beaumont, 1970c:7 (new status, Iran: Khorasan; as *komarovi*); Myartseva, 1972:93 (Turkmenistan); R. Bohart and Menke, 1976:588 (listed); Nazarova,



1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Schmidt, 2000:105 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001d:123 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris transversa* Schletterer, 1889a:898, ♂. Syntypes: ♂, Uzbekistan: Samarkand (NHMW). Synonymized with *Cerceris komarovii* by Shestakov, 1918a:126, 154. – Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Dollfuss, 1989:8 (type material in NHMW).

*Cerceris cavicornis* F. Morawitz, 1890:596, ♂. Holotype: ♂, Turkmenistan: Tedjen (ZIN). Synonymized with *Cerceris transversa* by Shestakov, 1915:15, and with *Cerceris komarovii* by Kohl, 1916:115, and Shestakov, 1918a:126. – Dalla Torre, 1897:455 (in catalog of world Hymenoptera).

As *Cerceris capito* (present correction to *Cerceris straminea komarovi*): Radoszkowski, 1877:64 (Uzbekistan: Zaravshan valley); F. Morawitz, 1893b:420 (Tajikistan: Iskander-kul in Zeravshan valley), 1894:353 (Turkmenistan: Serax); Shestakov, 1914b:408 (Kazakhstan: Nikolai Island on Aral Lake), 1918a:125 (Transcaspiya; = *Cerceris saussurei*), 130 (= specimens determined as *Cerceris elegans* Eversmann by Radoszkowski, 1877:64); Balthasar, 1954b:280 (Palestine: Wadi el Kelt near Jericho); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:92 (Turkmenistan: Bayram-Ali district); Kazenas, 1972b:131 (Kazakhstan); Myartseva, 1972a:92 (Turkmenistan); Kazenas, 1974:109 (feeding on flowers of *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan).

#### 746. *strandii* Giner Mari

*Cerceris strandii* Giner Mari, 1943d:215, ♀, ♂. Lectotype: ♀, Taiwan: Kankau: Koshun (DEI), designated by Oehlke and Wudowenz, 1974:425. – Tsuneki, 1968f:17 (description), 1970c:16 (Taiwan); Haneda, 1971b:32 (Taiwan); Murota, 1973b:117 (Taiwan); Tsuneki, 1973f:42 (Taiwan, redescription); R. Bohart and Menke, 1976:588 (listed); Tsuneki et al., 1992c:71 (as questionable senior synonym of *Cerceris clarebaltazarae*); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### *spp. koulingensis* Tsuneki

*Cerceris strandii koulingensis* Tsuneki, 1968f:17, ♀. Holotype: ♀, China: Kou-Ling (Cornell Univ.). – As *Cerceris koulingensis*: R. Bohart and Menke, 1976:583 (listed); Zhou and Wu, 1993a:671 (China: Wuling Mountains); Wu and Zhou, 1996a:168 (in revision in Economic Insect Fauna of China); Li and He, 2004:1111 (in hymenopterous fauna of Zhejiang Province, China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### 747. *stratiotes* Schletterer

*Cerceris stratiotes* Schletterer, 1887:402, ♀, ♂. Syntypes: Hungary, Greece: Corfu Island (NHMW). – Schletterer, 1887:503 (listed); Ed. André, 1889:256, 261, 269, 296 (in revision of Sphecidae of Europe and Algeria); Schletterer, 1889a:903 (Savigny, 1817, pl. X, Fig. 11 attributed to *stratiotes*, clearly an error), 1889b:1126 (Armenia: Arax Valley); Ed. André, 1891:26\* (bibliographic references); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Hungary: Grebenáč and Jassenova, currently in Romania); Schmiedeknecht, 1907:240, 242 (in key to Hymenoptera of Central Europe); Shestakov, 1914b:408 (Kazakhstan: Tash-Bulag on Aral Lake); Zilahi Kiss, 1915:80 (Hungary: Boksánbánya, Versecz); Shestakov, 1916:230 (Armenia), 1917c:46 (Ukraine: Crimea); Maidl, 1922:68 (Croatia); Shestakov, 1922:81 (Russia: Stavropol' area); Grandi, 1927:188 (France: Provence; Italy: Toscana: Monte Stanco near Grizzana; prey: *Stilbula cynipiformis* (Rossi)), 1928d:285 (no new observations); Schmiedeknecht, 1930:701, 703 (in keys to Hymenoptera of North and Central Europe); Šnoflak in Zavadil and Šnoflak, 1948:91, 96 (in key to Sphecidae of Czechoslovakia); Grandi, 1950:4 (new observation confirming previous data); Balthasar, 1948:143 (first record from Czechoslovakia: Slovakia: Kovačov), 1950:36 (Slovakia: Kovačov); de Beaumont, 1954e:87 (Italy); Grandi, 1954:158 (nesting habits, prey: *Stilbula cynipiformis* (Rossi)); Vogrin, 1955:33 (Yugoslavia); Bajári, 1956a:82 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:31, 39 (in key to Hungarian Sphecidae); de Beaumont, 1957d:328 (diagnostic characters), 1958d:272 (Greece); Pulawski, 1958a:166 (Bulgaria: Aitos, Kurilo, Varna); Scobiola-Palade, 1959:496 (Romania: Constanța Region: Agigea, Mangalia); Grandi, 1961:177 (nesting habits); de Beaumont, 1965a:20 (Greece);

Balthasar, Hrubant, and Hrubant, 1967:174 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:285 (Turkey; variation); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Mangalia); de Beaumont, 1969:82 (Turkey); Scobiola-Palade, 1971:206 (in review of *Cerceris* of Romania); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 48 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:409 (in Sphecicid Fauna of Czechoslovakia); R. Bohart and Menke, 1976:588 (listed); Guichard, 1978:270 (Greece); Kazenas, 1978b:59 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:192 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:65 (redescription); Józán, 1985b:62 (recorded from Hidas by Bajári, 1956), 85 (ecological and zoogeographic characteristics); Pagliano, 1987:162 and 165 (Italy, in key), 1988:153 (Italy; revision); Dollfuss, 1989:8 (type material in NHMW); Pádr *in* Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pagliano, 1990:100 (in catalog of Italian Sphecidae); Dollfuss, 1991:223 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:423 (Italy: Emilia: Grizzana); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:368 (in Sphecicid Fauna of Western Europe); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:110 (Greece); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:88 (in revision of Western Palearctic *Cerceris*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:111 (in key to *Cerceris* of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:136 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:154 (geographic distribution, collecting localities in Kazakhstan), 2004b:113 (Kazakhstan: western Tien Shan); Pagliano and Negrisolo, 2005:331 (in Sphecicid Fauna of Italy); Shorenko, 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1806 (Turkey: Artvin, Erzincan, Erzurum, Iğdır, and Konya provinces); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Ljubomirov and Yildirim, 2008:157 (in catalog of Crabronidae of Turkey).

#### 748. *stratonike* K. Schmidt

*Cerceris stratonike* K. Schmidt, 2000:121, ♀, ♂. Holotype: ♂, Turkey: Mardin Province: 40 km E Midyat (OÖLM). – Yildirim and Ljubomirov, 2005:1806 (Turkey: Diyarbakır: Silvan, as *stratonikae*), 2007:119 (Turkey: Konya: Dİnlendik); Ljubomirov and Yildirim, 2008:157 (in catalog of Crabronidae of Turkey).

#### 749. *striata* F. Smith

*Cerceris striata* F. Smith, 1873c:409, ♀. Holotype or syntypes: ♀, Brazil: Pará: probably Belém (BMNH). – Schletterer, 1887:503 (listed); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:588 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae).

#### 750. *strigosa* Cameron

*Cerceris strigosa* Cameron, 1890:110, ♀, ♂. Lectotype: ♀, Mexico: Durango: Ciudad (BMNH), designated by G. Ferguson, 1984b:439. – Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:95 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:588 (listed); G. Ferguson, 1984c:495 (listed); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

#### 751. *sulphurea* Cameron

*Cerceris sulphurea* Cameron, 1890b:261, ♂. Holotype or syntypes: ♂, India: Maharashtra: Bombay (OXUM, lost? Empey, 1984:79). – Cameron, 1890b:250 (India: Bombay); nec Bingham, 1897:305 (= *Cerceris flavopicta*); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); R. Turner, 1912e:501 (revision); R. Bohart and Menke, 1976:588 (listed); Empey, 1984:79 (listed).

**752. *sungari* Tsuneki**

*Cerceris sungari* Tsuneki, 1961c:58, ♂. Holotype: ♂, China: Heilungkiang: Harbin (RMNH). – Tsuneki, 1961c:18 (in key); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1979d:88 (in key); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:479 (in key to Sphecidae of Russian Far East); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**753. *supraconica* Tsuneki**

*Cerceris supraconica* Tsuneki, 1961c:38, ♀, ♂. Holotype: ♀, Korea: Mont Kaya (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:8, 15 (in key); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1979d:83, 86 (in key); Tsuneki, 1982b:18 (known from Korea); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470, 476 (in key to Sphecidae of Russian Far East).

**754. *stevensoni* Brauns**

*Cerceris stevensoni* Brauns, 1926:300, ♀ (as *Stevensoni*, incorrect original capitalization). Holotype: ♀, Mozambique: Dondo (SAM). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:140 (in key); Empey, 1969a:323 (listed); Empey, 1974:107 (as new synonym of *Cerceris kilimanjaroensis*); R. Bohart and Menke, 1976:587 (listed), 628 (synonymy with *Cerceris kilimanjaroensis* recorded); Empey, 1983:189 (listed, valid species).

**755. *synagroides* R. Turner**

*Cerceris synagroides* R. Turner, 1912:413, ♀. Holotype: ♀, Malawi: Mombera District (BMNH). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:186 (original description copied); Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:588 (listed).

**756. *szechuana* Tsuneki**

*Cerceris szechuana* Tsuneki, 1968f:13, ♂. Holotype: ♂, China: Szechuan: Mowchow (USNM). – R. Bohart and Menke, 1976:588 (listed); Nuhn and Menke, 1994:26 (holotype in USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**757. *tango* Shestakov**

*Cerceris tango* Shestakov, 1918b:18, ♀. Holotype or syntypes: ♀, China: Alashan : oasis Dyn-Yuan-In (ZIN). – R. Bohart and Menke, 1976:588 (listed).

**758. *tenuiventris* Arnold**

*Cerceris tenuiventris* Arnold, 1958:132, ♂. Syntypes: Zimbabwe: Victoria Falls (SAM). – Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:189 (listed, type examined).

**759. *tenuivittata* Dufour**

*Cerceris tenuivittata* Dufour, 1849:92, ♀. Holotype or syntypes: ♀, Spain, Madrid (MNHN). – Kirchner, 1867:221 (in catalog of European Hymenoptera); Marquet, 1875:205 (France: Haute-Garonne: Toulouse), 1881:189 (France: Hérault: Cette, now Sète, and Vias); Schletterer, 1887:481 (original description copied), 504 (listed); Ed. André, 1889:277 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Schmiedeknecht, 1907:237, 243 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Mercet, 1914:445 (listed from Spain); Kohl, 1916:125 (specimens in O. Radoszkowski collection); Berland, 1925d:62 (in Sphecid Fauna of France); Shestakov, 1928:267 (study of holotype); Schmiedeknecht, 1930:698, 704 (in keys to Hymenoptera of North and Central Europe); Despax, 1931:71 (prey: *Cassida* spp.); Bernard, 1935:62 (France: Var: Fréjus area); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Giner Mari, 1941a:47 (in revision of Spanish *Cerceris*), 1943a:99 (in Sphecid Fauna of Spain); Šnoflak *in* Zavadil and Šnoflak, 1948:90, 96 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain); Balthasar, 1958:339 (first record from Slovakia: Kovačov); de Beaumont, 1950c:324 (study of holotype), 1951b:177 (synonymy cited),

1952a:73 (southern France; redescription); Bajári, 1956a:85 (in catalog of Hungarian *Cerceris*, with list of localities), 1957a:34, 42 (in key to Hungarian Sphecidae); de Beaumont, 1958d:287 (Cyprus), 1959a:16 (Italy); de Beaumont and Bytinski-Salz, 1959:124 (Israel); Scobiola, 1960a:168 (first record from Romania: Mureş Region: Sighişoara); de Beaumont, 1965a:22 (Greece); Scobiola-Palade, 1967b:41 (Romania); de Beaumont, 1969:82 (Turkey); Scobiola-Palade, 1971:206 (in review of *Cerceris* of Romania); Balthasar, 1972:405 (in Sphecidae Fauna of Czechoslovakia); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:68 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:196 (in key to Sphecidae of European part of former USSR); Kazenas, 1984a:183 (redescription); Józán, 1985b:62 (recorded from Simontornya by Bajári, 1956), 72 (map of distribution in Hungary), 85 (ecological and zoogeographic characteristics); Gayubo, 1986a:68 (Spain: Ciudad Real Province); Pagliano, 1987:162 and 166 (Italy, in key); Tormos and Jiménez, 1987a:128 (Spain: Valencia); Pagliano, 1988:143 (Italy, revision); Józán, 1989:102 (Hungary: Tihany Natural Reserve); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Pagliano, 1990:101 (in catalog of Italian Sphecidae); Dollfuss, 1991:223 (in key to Sphecidae of North and Central Europe); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:370 (in Sphecidae Fauna of Western Europe); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); Pagliano and Scaramozzino, 1999:162 (Italy: Piemonte: Borgomale); K. Schmidt, 2000:32 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:154 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Jacobs, 2005a:442 (Bulgaria); Pagliano and Negrisoló, 2005:321 (in Sphecidae Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea); Yildirim and Ljubomirov, 2005:1806 (Turkey: Erzurum: University campus); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Ljubomirov and Yildirim, 2008:158 (in catalog of Crabronidae of Turkey).

*Cerceris rufipes* F. Smith, 1856:442, ♀, junior secondary homonym of *Cerceris rufipes* (Fabricius, 1787). Holotype or syntypes: ♀, Polish Ukraine, now western Ukraine: no specific locality (BMNH). Synonymized with *Cerceris tenuivittata* by de Beaumont, 1950c:324. – Kirchner, 1867:221 (in catalog of European Hymenoptera).

*Cerceris fuscipennis* A. Costa, 1867c:89, ♀, ♂. Syntypes: Italy: Piemonte and Toscana: no specific localities (Napoli). Synonymized with *Cerceris tenuivittata* by de Beaumont, 1950c:324. – de Beaumont, 1950c:326 (study of syntype); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris fuscipennis* A. Costa, 1869b:105, ♀. Objective synonym of *Cerceris fuscipennis* A. Costa, 1867c:89.

*Cerceris melanothorax* Schletterer, 1887:403, ♂. Syntypes: ♂, Hungary, Spain: no specific localities (NHMW). Synonymized with *Cerceris tenuivittata* by Giner Mari, 1941a:89 and de Beaumont, 1950c:324. – Schletterer, 1887:497 (listed); Ed. André, 1889:287 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:467 (in catalog of world Hymenoptera); Mocsáry, 1897:80 (Kingdom of Hungary: Jassenova, now in Romania); Mercet, 1914:445 (listed from Spain); de Beaumont, 1951b:177 (synonymy confirmed).

### 760. *tepaneca* de Saussure

*Cerceris tepaneca* de Saussure, 1867:90, ♂. Lectotype: ♂, Mexico: Orizaba (NHMW), designated by Scullen, 1961:48. – Schletterer, 1887:504 (listed); Cameron, 1890a:125 (Mexico, redescription); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1965b:509 (in revision on North American *Cerceris*), 1969:283 (as *Cerceris clypeata tepaneca*, new status); Scullen and Wold, 1970:213 (distribution and summary of prey records); Scullen, 1972:76 (in revision of Mexican and Central American *Cerceris*, as *clypeata tepaneca*); R. Bohart and Menke, 1976:579 (listed, as *Cerceris clypeata te*

*paneca*); G. Ferguson, 1984c:495 (listed, reverted to full species status). Dollfuss, 1989:8 (lectotype in NHMW); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument, as *tepanica*); Amarante, 2002:61 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:667 (in checklist of Mexican Sphecidae; as *clypeata tepaneca*).

*Cerceris morata* Cresson, 1873:230, ♀. Lectotype: ♀, USA: Texas: Bosque County: no specific locality (ANSP), designated by Cresson, 1916:101. Synonymized with *Cerceris tepaneca* by G. Ferguson, 1984c:495. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:497 (listed); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:19 (in revision of eastern U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1009 (in catalog of North American Hymenoptera); Scullen, 1965b:489 (in revision on North American *Cerceris*); Carillo and Gibson, 1966:111 (...); C.S. Lin, 1966d:582 (prey: *Eleodes opaca* Say, a tenebrionid); Scullen, 1972:89 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:584 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles).

*Cerceris thermophila* Schletterer, 1887:463, ♀. Lectotype: ♀, Mexico: no specific locality (NHMW), designated by Scullen, 1972:77. Synonymized with *Cerceris tepaneca* by G. Ferguson, 1984c:496. – Schletterer, 1887:504 (listed); Cameron, 1891a:129 (listed); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:96 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:579 (as synonym of *Cerceris clypeata tepaneca*) and 588 (listed as good species); Dollfuss, 1989:8 (lectotype in NHMW); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris nasica* Viereck and Cockerell, 1904b:132, ♀b. Holotype: ♀, USA: New Mexico: no specific locality (ANSP). Synonymized with *Cerceris morata* by Scullen, 1942:188. – Cresson, 1928:49 (holotype in ANSP); Banks, 1947:20 (in revision of western U.S. *Cerceris*).

*Cerceris platyrhina* Viereck and Cockerell, 1904b:133, ♀. Holotype: ♀, New Mexico: Fillmore Canyon in Oregon Mountains (ANSP). Synonymized with *Cerceris morata* by Scullen, 1942:188, with *Cerceris vicina* by Scullen 1965b:517, and with *Cerceris tepaneca* by G. Ferguson, 1984c:495. – Cresson, 1928:49 (holotype in ANSP).

### 761. *teranishii* Sato

*Cerceris teranishii* Sato, 1927:.... – Tsuneki, 1961c:13, 18, 25, 26 (in key, as *Cerceris eversmanni teranishii*), 27 (as *Cerceris eversmanni teranishii*, new status), 1967h:45 (as good species); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1979d:85, 89 (in key, as *Cerceris eversmanni teranishii*); Kazenas in Nemkov, Kazenas, Budryš, et Antropov, 1995:474, 479 (in key to Sphecidae of Russian Far East, as *Cerceris eversmanni teranishii*); Mitai, 2005:54 (Japan: recorded from Kyushu); Terayama and Tano, 2005:2, 4 (in key to Japanese *Cerceris*).

### 762. *tetradonta* Cameron

*Cerceris tetradonta* Cameron, 1890b:261, ♀, ♂. Syntypes: India: Maharashtra: Poona (BMNH, lost? Empey, 1984:80). – Cameron, 1890:250 (India: Poona); Bingham, 1897:304 (original description copied); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Bingham, 1908:358 (India: Purneah); R. Turner, 1912e:506 (revision); R. Bohart and Menke, 1976:588 (listed); Krombein, 1981:15 (nesting habits; prey: *Cassida* sp.), 50 (in revision of Sri Lanka Philanthinae); Empey, 1984:80 (listed); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:119, 122 (in key to *Cerceris* of Kazakhstan and Central Asia); Ljubomirov and Yildirim, 2008:158 (in catalog of Crabronidae of Turkey).

*Cerceris barreii* Radoszkowski, 1893a:68, ♀, ♂ (as *Barrei*, incorrect original capitalization). Syntypes: Turkmenistan: Serax (Kraków). Synonymized with *Cerceris tetradonta* by Kazenas, 2000a:49. – Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Kohl, 1916:107 (redescription); Shestakov, 1918a:125 (citation); Gussakovskij, 1935:445 (Tajikistan: Kulab area); R. Bohart and Menke, 1976:577 (listed); Kazenas, 1978b:68, 70 (in key to

Sphecidae of Kazakhstan and Central Asia); Islamov and Kazenas, 1983:44 (Uzbekistan); Kazenas, 1984a:185 (revision); Islamov, 1986:521 (Uzbekistan: Tashkent Oblast'); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); K. Schmidt, 2000:29 (in revision of Western Palearctic *Cerceris*); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan).

### 763. *texana* Scullen

*Cerceris texana* Scullen, 1965b:511, ♀. Holotype: ♀, USA: Texas: Del Rio (Kansas Univ.). – R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:496 (listed); Dollfuss, 1989:8 (paratype in NHMW).

### 764. *tibialis* Brèthes

*Cerceris tibialis* Brèthes, 1910a:267, ♀, ♂. Lectotype: ♀, Argentina: Mendoza: Cachueta (MACN), designated by Fritz, 1968b:166. – Jörgensen, 1912:287 (Argentina: Mendoza Province); Schrottky, 1913a:230 (Argentina: Entre Ríos, Mendoza); Brèthes, 1920a:408 (Argentina); R. Bohart and Menke, 1976:588 (listed); Fritz and Mariluis, 1979:29 (in revision of the *gaudebunda* group); Genise, 1990:26 (type material in MACN); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

*Cerceris pauxilla* Brèthes: Jörgensen, 1912:288, nomen nudum (Argentina: Mendoza Province).

*Cerceris pauxilla* Brèthes, 1913:122, ♂. Holotype: ♂, Argentina: Mendoza: no specific locality (MACN). Synonymized with *Cerceris tibialis* by Fritz and Mariluis, 1979:29. – Brèthes, 1920a:408 (Argentina); Fritz, 1968b:169 (study of holotype); R. Bohart and Menke, 1976:585 (listed); Genise, 1990:26 (type material in MACN).

### 765. *tienchiao* Tsuneki

*Cerceris tienchiao* Tsuneki, 1968f:13, ♂. Holotype: ♂, China: Peking (originally K. Tsuneki coll., now USNM). – Tsuneki, 1971m:18 (China: Peking); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1979d:88 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

As *Cerceris tiendang*: Tsuneki, 1961c:52 (China: Peking; ♂ only), corrected to *Cerceris tienchiao* by Tsuneki, 1968f:13.

### 766. *tiendang* Tsuneki

*Cerceris tiendang* Tsuneki, 1961c:51, ♀, ♂ (♂ = *Cerceris tienchiao*). Holotype: ♀, China: Peking: Tiendang (originally K. Tsuneki coll., now USNM). – Tsuneki, 1961c:11, 17 (in key), 1968f:11 (China: Peking; discussion), 1971l:437 (Mongolia), 1971m:17 (China: Peking: Tiendang; Nei Mongol: Apaka, ca. 45°N, 116°E); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1979d:84 (in key); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:472, 479 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:174 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris gegen* Tsuneki, 1961c:69, ♂. Holotype: ♂, China: Nei Mongol: Apaka, ca. 45°N, 116°E (originally K. Tsuneki coll., now USNM). Synonymized with *Cerceris tiendang* by Tsuneki, 1968f:11. – Tsuneki, 1961c:18 (in key); Nuhn and Menke, 1994:25 (holotype transferred to USNM).

### 767. *tingi* Fritz and Mariluis

*Cerceris tingi* Fritz and Mariluis, 1976:104, ♀. Holotype: ♀, Peru: Tingo María (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**768. *tinnula* Gussakovskij**

*Cerceris tinnula* Gussakovskij, 1952:284, ♀, ♂ (as Shestakov's MS name). Syntypes: Tajikistan: Kurgan-Tyube, Makhram near Kanibadam; Uzbekistan: Kuropatkino, Ak-Tash, Kengrak (ZIN). – R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:60 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov and Kazenas, 1983:45 (Uzbekistan); Kazenas, 1984a:104 (revision); Islamov, 1986:520 (Uzbekistan: Surkhandarya and Tashkent Oblast's), 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112, 115 (in key to *Cerceris* of Kazakhstan and Central Asia).

**769. *tolteca* de Saussure**

*Cerceris tolteca* de Saussure, 1867:94, ♀, ♂. Lectotype: ♀, Mexico: Morelos: Cuernavaca (MHNG), designated by Scullen, 1961:48. – Schletterer, 1887:504 (listed); Cameron, 1890a:109 (Mexico, redescription); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1965b:512 (in revision on North American *Cerceris*), 1972:97 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:496 (listed); Maes, 1989:95 (in catalog of Nicaraguan Sphecidae); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

*Cerceris cosmiocephala* Cameron, 1904h:67, ♂. Holotype: ♂, Nicaragua: San Marcos (BMNH). Synonymized with *Cerceris tolteca* by Scullen, 1961:48.

**770. *tomiyamai* Sk. Yamane and Tano**

*Cerceris tomiyamai* Sk. Yamane and Tano, 1995:18, ♀, ♂. Holotype: ♀, Japan: central Ryukyu Islands: Okinoerabujima; Oyama: (depository not indicated). – Yamane, Ikudome, and Terayama, 1999:500 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:3, 6 (in key to Japanese *Cerceris*).

**771. *tonkinensis* R. Turner**

*Cerceris tonkinensis* R. Turner, 1919f:393, ♂. Holotype: ♂, Vietnam: Tonkin: no specific locality (BMNH). – R. Bohart and Menke, 1976:588 (listed).

**772. *townsendi* Viereck and Cockerell**

*Cerceris townsendi* Viereck and Cockerell, 1904b:140, ♀. Holotype: ♀, USA: New Mexico: Las Cruces (ANSP). – Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:520 (unrecognizable species); R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:496 (listed).

**773. *toxopeusi* Krombein**

*Cerceris toxopeusi* Krombein, 1969b:29, ♀. Holotype: ♀, Indonesia: Irian Jaya (= Indonesian New Guinea): Hollandia, now Djajapura (RMNH). – R. Bohart and Menke, 1976:588 (listed).

**774. *triangulata* Cresson**

*Cerceris triangulata* Cresson, 1865a:154, ♀. Holotype: ♀, Cuba (IZAC). – Cresson, 1865c:123 (in revision of North American Philanthinae); Packard, 1866:62 (listed); Schletterer, 1887:504 (listed); Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Cresson, 1916:101 (holotype in Gundlach collection); Giner Marí, 1943c:332 (in revision of Cuban *Cerceris*); Alayo Dalmau, 1968a:8 (in revision of Cuban Sphecidae), 1973:190 (in catalog of Cuban Hymenoptera), 1976:15, 16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:588 (listed); G. Ferguson, 1984c:496 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Fernández, Sariol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Portuondo and Fernández, 2004:134 (Cuba: Sierra Maestra);

Amarante 2005a:13 (correction to his 2002 catalog); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud).

*Cerceris bilunata* Cresson, 1865a:155, ♂. Lectotype: ♂, Cuba: no specific locality (ANSP), designated by Cresson, 1916:99. Synonymized with *Cerceris triangulata* by Alayo Dalmau, 1968a:8. – Cresson, 1865c:123 (in revision of North American Philanthinae); Packard, 1866:62 (listed); Schletterer, 1887:487 (listed, as *bilinieata*); Dalla Torre, 1897:453 (in catalog of world Hymenoptera); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Giner Marí, 1943c:329 (in revision of Cuban *Cerceris*).

**775. *triangularis* Reyes**

*Cerceris triangularis* Reyes, 1986:110, ♀, ♂. Holotype: ♀, Philippines: Luzon: Abatan 60 km S Bontoc (BISH). – Tsuneki et al., 1992c:48, 51 (in key), 69 (additional description).

**776. *trica* Fritz and Mariluis**

*Cerceris trica* Fritz and Mariluis, 1976:103, ♂. Holotype: ♂, Argentina: Salta: Yacochuya (Instituto Miguel Lillo). – Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

**777. *trichionota* Cameron**

*Cerceris trichionota* Cameron, 1908a:275, ♂. Lectotype: ♂, Kenya: Mt. Meru lowlands: Ngare na nyuki (NRS), designated by Empey, 1983:189 (Article 74.6). – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:199 (original description copied); Empey, 1969a:323 (listed), 1974:117 (taxonomic history, description of ♀); R. Bohart and Menke, 1976:588 (listed).

***ssp. ovambo* Empey**

*Cerceris kalaharica ovambo* Empey, 1972:58, ♀, ♂. Holotype: ♀, Namibia: Outjo District: Kamanjab (SAM). – R. Bohart and Menke, 1976:582 (listed). – **As *Cerceris trichionota ovambo***: Empey, 1974:119 (new subspecific combination); R. Bohart and Menke, 1976:628 (listed); Empey, 1983:189 (listed).

***ssp. somereni* Empey**

*Cerceris trichionota somereni* Empey, 1974:119, ♀. Holotype: ♀, Kenya: Nyeri (BMNH). – R. Bohart and Menke, 1976:629 (listed); Empey, 1983:190 (listed).

**778. *trichiosoma* Cameron**

*Cerceris trichiosoma* Cameron, 1890a:127, ♂. Holotype or syntypes: ♂, Mexico: Durango: Ciudad (BMNH). – Dalla Torre, 1897:478 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen, 1972:97 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:588 (listed); G. Ferguson, 1984c:496 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruiz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**779. *trichobunda* Strand**

*Cerceris trichobunda* Strand, 1913b:163, ♀. Holotype: ♀, Taiwan: Suisharyo (DEI). – Giner Marí, 1943d:217 (redescription); Tsuneki, 1970c:23 (Taiwan); Oehlke and Wudowenz, 1974:426 (holotype in DEI); R. Bohart and Menke, 1976:588 (listed); Tsuneki, 1977j:263 (Taiwan; description of ♂); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**780. *tricolor* F. Smith**

*Cerceris tricolor* F. Smith, 1856:462, ♀, ♂. Syntypes: Brazil: Pará: Santarém (BMNH). – Schletterer, 1887:504 (listed); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:688 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).



**781. *tricolorata* Spinola**

*Cerceris tricolorata* Spinola, 1839:493, ♀. Holotype or syntypes: ♀, Egypt: no specific locality (Torino). – Schletterer, 1887:481 (original description copied), 504 (listed); Ed. André, 1889:321 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); nec Mochi, 1939:190 (= *Cerceris hathor*); nec Giner Mari, 1941b:174 (= *Cerceris hathor*); nec de Beaumont, 1950f:397 (= *Cerceris hathor*); de Beaumont, 1951b:176 (study of holotype), 1951f:338 (Egypt to Morocco; diagnostic characters), 1953g:122 (Morocco: Goulimine), 1956a:186 (Chad, Libya), 1957b:133 (n. Iran), 1958b:59 (Algeria: Tassili des Ajjer); de Beaumont and Bytinski-Salz, 1959:122 (Israel); de Beaumont, 1961e:3 (Iraq); Pulawski, 1964:73 (Egypt: Kom Osheim); R. Bohart and Menke, 1976:588 (listed); Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino); Guichard, 1980:230 (Oman); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Empey, 1983:190 (listed, synonymy); Guichard, 1993a:161 (Arabian Peninsula); Roche and Zalut, 1994:117 (Egypt: Sinai Peninsula); K. Schmidt, 2000:95 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 236 (in catalog of Sphecidae of Saudi Arabia: Hadasham 120 km E Jeddah); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:801 (Iran: East Azarbaijan: Marand: Yam).

*Cerceris vidua* Klug, 1845:[29], pl. 47, fig. 11, ♂. Holotype or syntypes?: ♂, Saudi Arabia: no specific locality (ZMHU). Synonymized with *Cerceris tricolorata* by de Beaumont, 1951b:177. – F. Smith, 1856:444 (in catalog of Hymenoptera in British Museum); Walker, 1871:27 (Sinai: Wadi Feiran; Djibouti: Tajura; and Red Sea coast of Africa: Harkeko); Ritsema, 1874:198 (redescription); Schletterer, 1887:506 (listed); Ed. André, 1889:267 (in revision of Sphecidae of Europe and Algeria), 1891:27\* (bibliographic references); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Morice, 1897:304 (Egypt; description of ♂); Bingham, 1898a:109 (Yemen: Aden); Innes Bey, 1912:113 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Wadi Feiran and Tajura); nec Honoré, 1941:150 and 1942:69 (= *Cerceris hathor*); Giner Mari, 1941b:227 (in revision of North African *Cerceris*); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945).

*Cerceris insignis* Klug, 1845:[29], pl. 47, fig. 12, ♀. Holotype or syntypes: Saudi Arabia: no specific locality (ZMHU). Synonymized with *Cerceris tricolorata* by de Beaumont, 1951b:177. – F. Smith, 1856:444 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:472 (original description copied), 494 (listed); Ed. André, 1889:322 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:463 (in catalog of world Hymenoptera); Bingham, 1898a:109 (Yemen: Aden); Morice, 1911:77 (Algeria: Biskra; redescription), 1921:77 (Iraq: Amara); Honoré, 1941a:151 (Egypt); D. Baker, 1997b:183 (in catalog of insects described by Klug, 1945).

As *Cerceris alboatra*: Mochi, 1939:187 (in revision of Egyptian *Cerceris*), corrected to *Cerceris tricolorata* by de Beaumont, 1951b:176; Honoré, 1941a:150 (sexe correlation accepted by Mochi, 1939:187 is correct), corrected to *Cerceris tricolorata* by de Beaumont, 1951b:179.

*Cerceris congesta* Giordani Soika, 1942:203, ♂. Holotype: ♂, Somalia: Ischia Baidoa (Univ. Torino). Synonymized with *Cerceris tricolorata* by Empey, 1983:190. – Empey, 1969a:303 (listed); R. Bohart and Menke, 1976:579 (listed).

*Cerceris bulloni* Giner Mari, 1945e:226, ♀. Holotype: ♀, Western Sahara: Tuisguirrentz (MNCN), name proposed for *Cerceris insignis* of Morice, 1911:77. Synonymized with *Cerceris tricolorata* by de Beaumont, 1951b:176. – Giner Mari, 1947:20 (Spanish Sahara; additional description).

**ssp. *amaura* Schletterer**

*Cerceris amaura* Schletterer, 1891:16, ♀. Holotype: ♀, Zaire: Equateur Province: no specific locality (Inst. Roy. Sci. Natur. Bruxelles). – Dalla Torre, 1897:450 (in catalog of world Hymenoptera, authorship incorrectly attributed to Kohl); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae, authorship incorrectly attributed to Kohl), 1931:200 (original description translated, authorship incorrectly attributed to Kohl). – As *Cerceris nigrifrons*

*amaura* : Empey, 1969a:316 (new status, listed, authorship incorrectly attributed to Kohl); R. Bohart and Menke, 1976:584 (listed, authorship incorrectly attributed to Kohl). – **As *Cerceris tricolorata amaura***: Empey, 1983:190 (new subspecific combination, listed, authorship incorrectly attributed to Kohl).

*Cerceris theryi* Arnold, 1932:11, ♀ (as *Theryi*, incorrect original capitalization). Holotype: ♀, Zaire: Gundji (SAM). Synonymized with *Cerceris nigrifrons amaura* by Empey, 1969a:316.

*Cerceris nigrifrons ancilla* Arnold, 1942:7, ♀, ♂. Lectotype: ♀, Liberia: Gbanga (SAM), designated by Empey, 1983:190. Synonymized with *Cerceris nigrifrons amaura* by Empey, 1969a:316.

### **ssp. *nigrifrons* F. Smith**

*Cerceris nigrifrons* F. Smith, 1856:450, ♂. Holotype or syntypes: ♂, Africa: no specific locality (BMNH). – Schletterer, 1887:498 (listed); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Cameron, 1905m:225 (South Africa, discussion of characters); Brauns, 1926:319 (revision); Arnold, 1930:11 (in checklist of Afrotropical Sphecidae), 1931:142 and 144 (in key), 1942:plate I fig. 11 (male genitalia); Leclercq, 1955i:411 (Rwanda); Empey, 1969a:316 (listed); R. Bohart and Menke, 1976:584 (listed); Gess, 1980a:86 (South Africa: Hilton Farm 18 km WNW Grahamstown), (prey: buprestid beetles according to Brauns, 1926:320), 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in sandy soils; as *nigrifrons nigrifrons*). – **As *Cerceris tricolorata nigrifrons***: Empey, 1983:190 (new status, type examined).

*Cerceris trivialis* Gerstaecker in Peters, 1858:510, ♀. Holotype or syntypes: Mozambique: no specific locality (ZMHU). Synonymized with *Cerceris nigrifrons* by Brauns, 1926:320. – Schletterer, 1887:504 (listed); Magretti, 1884c:598 (Eritrea: Keren; Ethiopia: Metemma); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); Brauns, 1926:320 (in the Berlin Museum this species (*nigrifrons*) is under the name *trivialis*).

*Cerceris trivialis* Gerstaecker, 1862:475, ♀. Objective synonym of *Cerceris trivialis* Gerstaecker, 1858.

*Cerceris erythrospila* Cameron, 1910:148, ♂. Holotype or syntypes: ♂, South Africa: Kalahari: no specific locality (originally TMP, now missing: Empey, 1983:190). Synonymized with *Cerceris nigrifrons* by Empey, 1969a:316. – Bischoff, 1913b:119 (Botswana: Sevrelela in Kakia District); Arnold, 1931:197 (original description copied); Empey, 1974:106 (synonymy confirmed); R. Bohart and Menke, 1976:580 (listed).

*Cerceris ventriloba* Brauns: Empey, 1983:190. Nomen nudum, as synonym of *Cerceris tricolorata nigrifrons*.

### **782. *tridentata* Maidl**

*Cerceris tridentata* Maidl, 1926:226, ♀. Holotype: ♀, Indonesia: Sumatra: no specific locality (RMNH). – R. Bohart and Menke, 1976:588 (listed).

### **783. *trifasciata* F. Smith**

*Cerceris trifasciata* F. Smith, 1856:441, ♀. Holotype or syntypes: ♀, Polish Ukraine: now western Ukraine: no specific locality (BMNH?). – Kirchner, 1867:221 (in catalog of European Hymenoptera); Schletterer, 1887:481 (original description copied), 504 (listed); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:588 (listed).

### **784. *trifida* Evans**

*Cerceris trifida* Evans, 1982a:375, ♀, ♂. Holotype: ♀, Australia: Queensland: 48 km S Cunnamulla (ANIC). Paratypes: New South Wales, South Australia, Victoria. – Cardale, 1985:302 (in catalog of Australian Sphecidae).

### **785. *trimaculata* Maidl**

*Cerceris trimaculata* Maidl, 1926:234, ♂. Holotype: ♂, Indonesia: Java: no specific locality (NHMW). – von Schulthess, 1935:305 (Indonesia: Java: Buitenzorg, now Bogor); van der Vecht, 1964:356 (in revisions of Javan species); Tsuneki, 1968f:22 (Philippines); R. Bohart and Menke, 1976:588 (listed); Tsuneki, 1984b:55 (Philippines); Tsuneki et al., 1992c:45, 49 (in key), 63 (bibliographic references).

**786. trinitaria Alayo Dalmau**

*Cerceris trinitaria* Alayo Dalmau, 1968a:10, ♀, ♂. Syntypes: Cuba: Trinidad (IZAC). – Alayo Dalmau, 1973:191 (in catalog of Cuban Hymenoptera), 1976:15, 16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:588 (listed); G. Ferguson, 1984c:496 (listed); Reyes and Hernández, 1995:3 (holotype in Inst. Ecol. Sist., La Havana, Cuba); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae).

**787. tristior Morice**

*Cerceris tristior* Morice, 1911:91, ♀. Syntypes: ♀, Algeria: Constantine (OXUM). – Giner Marí, 1941b:230 (in revision of North African *Cerceris*; description of ♂); de Beaumont, 1951f:350 (Algeria, Morocco, Tunisia; discussion), 1953g:122 (Morocco: Tiznit); R. Bohart and Menke, 1976:588 (listed); K. Schmidt, 2000:89 (in revision of Western Palearctic *Cerceris*).

**788. truncata Cameron**

*Cerceris truncata* Cameron, 1890a:121, ♀, ♂. Lectotype: ♀, Mexico: n. Yucatán: Temax (BMNH), designated by G. Ferguson, 1984b:440. – Dalla Torre, 1897:479 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Werner, 1960:43 (prey: Bruchidae; nesting site); Scullen, 1965b:396 (in revision of North American *Cerceris*); Scullen and Wold, 1970:213 (distribution and summary of prey records); Scullen, 1972:36 (in revision of Mexican and Central American species); R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera, nesting sites, list of prey); G. Ferguson, 1984c:496 (listed); Hook, 1987:108 (nesting habits); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

**789. tshontandae Arnold**

*Cerceris tshontandae* Arnold, 1946:82, ♀. Holotype: ♀, Zimbabwe: Tshontande in Wankie District, now Hwangie (SAM). – Empey, 1969a:323 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:190 (listed, type examined).

**790. tuberculata (de Villers)**

*Crabro rufipes* Fabricius, 1787:297, ♂, junior secondary synonym of *Vespa rufipes* Fabricius, 1775 in the following combination: *Vespa rufipes* (Fabricius, 1787) Gmelin, 1789:2764. Syntypes: ♂, Spain: no specific locality (ZMK). Synonymized with *Cerceris tuberculata* by Dahlbom, 1845:XXIV. – Olivier, 1792:516 (redescription). – **As *Sphex rufipes***: de Villers, 1789:235, 246 (new combination, redescription, southern France). – **As *Vespa rufipes***: Gmelin, 1790:2764 (new combination, in synonymy of *Vespa hispanica*, secondary junior homonym of *Vespa rufipes*). – **As *Philanthus rufipes***: Fabricius, 1790:225 (new combination, redescription), 1793:290 (redescription), 1796:137 (in Index to his Entomologia Systematica, 1793), 1804:303 (redescription); Spinola, 1806:99 (as synonym of *Cerceris interrupta*); Thunberg, 1815a:128 (diagnostic characters), 138 (redescription), 1815b:290 (diagnostic characters), 298 (redescription). – **As *Cerceris rufipes***: Lepeletier de Saint Fargeau, 1845:10 (new combination, in revision of world Hymenoptera); Eversmann, 1849:408 (Russia: Astrakhan, Orenburg, and Saratov Provinces); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Magretti, 1882b:160 (Italy: Sardegna); Marquet, 1881:189 (France: Hérault: Cette, now Sète); Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:479 (in catalog of world Hymenoptera); W. Schulz, 1904b:94 (Kazakhstan: Semipalatinsk; Russia: Yekaterinodar, now Krasnodar); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Mercet, 1914:445 (listed from Spain); Shestakov, 1927a:17 (Russia: Orenburg Oblast'), 19 (Stalingrad Oblast', now Volgograd, as *tuberculaia*), 19, 20 (Russia: Ural'sk Oblast', now Kazakhstan: Oral); Vorontsovskiy, 1930:65 (Russia: Orenburg Oblast'); de Beaumont, 1950c:318 (interpretation of species), 1951f:390 (occurrence in Africa doubtful), 1952a:79

(southern France; redescription); Hertzog, 1954:100 (France: Bouches-du-Rhône: Camargue); Bajári, 1956a:85 (in catalog of Hungarian *Cerceris*, with list of localities); Bytinski-Salz, 1956:225 (Turkey: Karapınar); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:35, 43 (in key to Hungarian Sphecidae); de Beaumont, 1957b:134 (n. Iran); Grandi, 1957:345 (on flowers of *Eryngium maritimum* L. and *Echinophora spinosa* L, prey: *Cleonus piger* Scopoli), 388 (Italy); de Beaumont, 1958d:273 (Greece: Crete); Pulawski, 1958a:167 (Bulgaria: Aitos, Kurilo); de Beaumont and Bytinski-Salz, 1959:130 (Israel; geographic variation); Suárez, 1959:54 (Spain: Almería Province); de Beaumont, 1960a:9 (Greece: Rhodes Island), 1961c:46 (Greece: Crete Island); Grandi, 1961:180 (nesting habits); van der Vecht, 1961a:66 (study of type material); de Beaumont, 1962b:21 (Spain: Lerida); Grandi, 1962:58 (the northernmost locality in Italy: Emilia-Romagna: Ronzano), 98 (Italy); Ceballos, 1964:89 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:22 (Greece); Tsuneki, 1965d:3 (prey record summary: Curculionidae); Diniz, 1966:8 (Portugal: Ajuda, Aljustrel); Scobiola-Palade, 1966b:391 (Romania: Tulcea District: Chilia Veche, Periprava); de Beaumont, 1967a:291 (Turkey); Scobiola-Palade, 1967b:40 (Romania), 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:383 (Romania: Brănești); Romanova, 1969:133 (Russia: North Caucasus); de Beaumont, 1970c:7 (Iran: Khorassan); Scobiola-Palade, 1971:206 (in review of *Cerceris* of Romania); Balthasar, 1972:402 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:130 (Kazakhstan); Myartseva, 1972a:93 (Turkmenistan), Kazenas, 1974b:109 (feeding on flowers of *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:69, 70 (in key to Sphecidae of Kazakhstan and Central Asia); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Pádr in Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Gayubo, Borsato, and Osella, 1991:424 (Italy); Blagoveshchenskaya, 1994:91 (Russia: Ul'yanovsk Oblast').

*Sphex tuberculatus* de Villers, 1789:253, sex not indicated (as *tuberculata*, incorrect original termination). Holotype or syntypes: southern France: no specific locality (destroyed). – **As *Cerceris tuberculata***: Germar, 1817:261 (new combination, Dalmatia: Arbe and Spalatro, now Croatia: Rab and Split); Vander Linden, 1829:110 (bibliographic references, southern Europe); Dahlbom, 1844:220 (in revision of Sphecidae and Pompilidae), 1845:501 (in key); Dufour, 1855:262 (one of the *Cerceris* observed by J. H. Fabre); F. Smith, 1856:439 (in catalog of Hymenoptera in British Museum); A. Costa, 1860:7 (in revision of Sphecidae of Kingdom of Naples, Italy); Frauenfeld, 1861:103 (Croatia: Dalmatia); Sichel, 1861:752 (Italy: Sicilia); A. Costa, 1867c:79 (in revision of Italian Sphecidae); Kirchner, 1867:221 (in catalog of European Hymenoptera); Palma, 1867:42 (Italy: Sicilia settentrionale); A. Costa, 1869b:95 (in revision of Italian Sphecidae); Radoszkowski, 1870:103 (synonyms listed); P. Ivanov, 1872:152 (Ukraine: Khar'kov Oblast': Kupyansk area); Ghiliani, 1873 (Italy: Piemonte: Susa); Dours, 1874:144 (in catalog of Hymenoptera of France); Marquet, 1875:205 (France: Hérault: Cette, now Sète); Mocsáry, 1874:120 (Siebenbürgen, now Romania: Transylvania: no specific locality); Girard, 1879:922 (morphology and habits); Yaroshevskiy, 1881:123 (Ukraine: Khar'kov Oblast': Khar'kov); De Stefani Perez, 1886:171 (Italy: Sicilia: monte di Renda near Palermo); Gasperini, 1887:17 (Dalmatia: Zara, now Croatia: Zadar); Schletterer, 1887:4 (in revision of world *Cerceris*), 504 (listed); Ed. André, 1889:281, 285, 298, 325, 328, 332 (in revision of Sphecidae of Europe and Algeria), 23\* (bibliographic references); Gasperini, 1889:69 (Dalmatia: Lesina, now Croatia: Lesina); Kohl and Handlirsch, 1889:278 (Turkmenistan: Krasnovodsk); Schletterer, 1889a:901 (faunal records); F. Morawitz, 1891a:217 (Russia: Astrakhan Government); Baldini, 1894:56 (Italy: Modena area); Medina, 1894b:262 (Spain: Sevilla and Puerto Real); Mocsáry, 1884:222 (Hungary: Budapest, Jassenova; Romania: Transylvania: Mezöség); O. Schultz, 1896:362 (L. Dufour's observation reported); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Borries, 1897:52 (review of nesting habits); nec Morice, 1897:304 (= *Cerceris solitaria*); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Romania, and Slovakia); Antiga and Bofill, 1904:21 (Spain: Cataluña Province); Schmiedeknecht, 1907:239, 242 (in key to Hymenoptera of Central Europe); Graeffe, 1911:48 (Italy: Trieste area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Szilády, 1913:89 (Hungary: Torda); Kohl, 1916:125 (specimens in O. Radoszkowski collection); Shestakov, 1916:234 (Caucasus), 1917c:48 (Ukraine: Crimea), 1918a:154 (Kazakhstan and Transcaspa); Berland, 1921:533 (Greece); Fahringer, 1922:179

(Turkey); Maidl, 1922:69 (Albania, Montenegro); Shestakov, 1922:81 (Russia: Stavropol' area); Berland, 1925d:57 (in Sphecidae Fauna of France); Coulon, 1925:117 (Spain); Friese, 1926:156, 157 (illustrations of nest site and of prey); Shestakov, 1927a:10 (Ukraine: Poltava Oblast'); Vorontsovskiy, 1928:43 (Russia: vicinity of Orenburg); A. Müller, 1930:181 (Bessarabia: Tarutino, may be in Moldova or Ukraine); Schmiedeknecht, 1930:700, 702 (in keys to Hymenoptera of North and Central Europe); Giordani Soika, 1932a:21 (Italy: Lido di Venezia); Motaş, 1932:8 (nesting habits, from literature); Molitor, 1933b:101 (Austria: Burgenland: Neusiedlersee area); Giner Mari, 1934:131 (Spain); Grandi, 1935a:111 (Italy); Gussakovskij, 1935:445 (Tajikistan: Kulab area); Kolosov, 1937:219 (Ukraine: Kupyansk); Zavadil, 1937a:73 (eastern Slovakia); Zavadil, Šusterka, and Bat'a, 1937:209 (in catalog of Sphecidae of Czechoslovakia); Deleurance, 1941:276 (France: Camargue; the curculionid *Cleonus ophthalmicus* is the only prey); Giner Mari, 1941a:36 (in revision of Spanish *Cerceris*), 1941b:233 (in revision of North African *Cerceris*), 1943a:97 (in Sphecidae Fauna of Spain); Guiglia, 1943d:91 (Albania:Scutari); Giordani Soika, 1944:12 (Italy: Sicilia: Falcone); de Beaumont, 1947b:386 (Cyprus); Balthasar, 1948:143 (Slovakia: Nove Mesto, Parkan); Šnoflak in Zavadil and Šnoflak, 1948:88, 95 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:11 (Portugal: Lisboa); de Beaumont, 1950c:318 (interpretation of species); Pittioni, 1950:22 (Cyprus); Zavadil, 1951:86 (Slovakia: Kovačov); Grandi, 1954:237 (Italy); Atanassov, 1955:203 (Bulgaria: four localities); Vogrin, 1955:33 (Yugoslavia); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain); Diniz, 1959:28 (Portugal: Lisboa); Scobiola-Palade, 1959:496 (Romania: Constanța Region: Techirghiol); Islamov, 1970:63, 64 (Uzbekistan: Chirchik Basin); Atanassov, 1972a:192 (Bulgaria: Stara Planina Mountains), 1972b:32, 49 (Bulgaria: Stara Planina Mountains); R. Bohart and Menke, 1976:588 (listed); Georghiou, 1977:190 (Cyprus); Pulawski, 1978:197 (in key to Sphecidae of European part of former USSR); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino); Pagliano, 1980:126 (Italy: Veneto); Gayubo, 1983e:239 (Spain: Salamanca Province); Gayubo and Tormos, 1984:27 (Spain: Valencia); Islamov and Kazenas, 1983:45 (Uzbekistan); Kazenas, 1984a:205 (redescription); Chevin and Chevin, 1985:39 (France: Aude); Józán, 1985b:62 (Hungary: recorded from three localities by Bajári, 1956), 85 (ecological and zoogeographic characteristics); Islamov, 1986:520 (Uzbekistan: Tashkent Oblast'); Józán, 1986:375 (Hungary: Kiskunság National Park); Gayubo and Heras, 1986:75 (Spain: Valladolid Province; floral records); Pagliano, 1987:162 and 166 (Italy, in key), 1988:167 (Italy; revision); Gayubo, Asís, and Tormos, 1990b:81 (Spain: Avila and Salamanca Provinces); Pagliano, 1990:101 (in catalog of Italian Sphecidae); Dollfuss, 1991:223 (in key to Sphecidae of North and Central Europe); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Negrisolo and Pagliano, 1993:94 (Italy: Sardegna); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills NW Samara); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:8 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:93 (Italy: Ferrara Province); Scharrer, 1995:31 (Croatia: Island of Krk; Slovenia: Portorož); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:371 (in Sphecidae Fauna of Western Europe); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); Ljubomirov, 2000:14 (Bulgaria, specimens in N. Nedelkov collection); K. Schmidt, 2000:190 (in revision of Western Palearctic *Cerceris*); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 255 (review of known biology), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:154 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan); Pagliano and Negrisolo, 2005:345 (in Sphecidae Fauna of Italy); Shorenko, 2005a:169 (Ukraine: Crimea), 2005b:99 (Ukraine: Crimea: Karadagh Nature Reserve); Ebrahimi, 2006:1 (Iran); Standfuss and Standfuss, 2006b:100 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Tezcan, Yildirim, Anlaş, and Beyaz, 2006:58 (Turkey: Manisa: Alaşehir: Osmaniye, on flowers of *Origanum* sp.); Kazenas, 2007a:94 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:210 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Ljubomirov and Yildirim, 2008:159 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia).

- Vespa hispanica* Gmelin, 1790:2764. Substitute name for *Vespa rufipes* (Fabricius, 1787) Gmelin, 1790:2764, nec *Vespa rufipes* Fabricius, 1775.
- Bembex ? vespoides* Rossi, 1790:82, sex not indicated. Holotype or syntypes: Italy: Etruri: now Toscana (destroyed). – **As *Crabro vespoides***: Rossi, 1792:137 (new combination, Italy: Toscana: Pisa area). – **As *Cerceris vespoides***: Illiger, 1807b:134 (new combination, synonymy, redescription); de Beaumont, 1950c:319 (unrecognizable from the description, possibly a male of *Cerceris tuberculata* or *flavicornis*).
- Sphex caspius* Gmelin, 1790:2735, [♀] (as *caspia*, incorrect original termination). Holotype or syntypes: ♀, Russia: Yayka steppe north of Caspian Sea (destroyed). Synonymized with *Cerceris tuberculata* by Bischoff, 1940:69. – Dalla Torre, 1897:418 (in catalog of world Hymenoptera).
- Cerceris major* Spinola, 1808: 50, ♀, ♂. Syntypes: Italy (Torino). Synonymized with *Cerceris tuberculata* by Lepeletier de Saint Fargeau, 1845:10. – Ghiliani, 1842:25 (listed from Italy: Sicilia: Palermo); de Beaumont, 1951b:175 (study of syntypes; synonymy with *Cerceris tuberculata* confirmed); Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).
- Cerceris dufouriana* Fabre, 1855:147, ♀, ♂ (as *Dufouriana*, incorrect original capitalization). Syntypes: France: Avignon area (MNHN?). Synonymized with *Cerceris tuberculata* by Dufour, 1855:262.
- Cerceris gigantea* Gistel in Gistel and Bromme, 1848:626, [♀]. Holotype or syntypes: ♀, Dalmatia, now Croatia: no specific locality (ZSBS). Synonymized with *Cerceris tuberculata* by K. Schmidt, 2000:190. – Strand, 1916c:98 (in review of Gistel, 1857).
- Cerceris semirufa* F. Smith, 1856:442, ♀. Holotype or syntypes: ♀, Russia: Siberia: no specific locality (BMNH). Synonymized with ... – Schletterer, 1887:478 (original description copied), 502 (listed); Ed. André, 1889:326 (in revision of Sphecidae of Europe and Algeria), 1891:30\* (bibliographic references); Dalla Torre, 1897:476 (in catalog of world Hymenoptera).
- Cerceris gigantea* Gistel, 1857:50, [♀]. Objective synonym of *Cerceris gigantea* Gistel, 1848. – R. Bohart and Menke, 1976:581 (listed).
- Cerceris rufipes cypria* de Beaumont, 1958d:288, ♀, ♂. Holotype: ♀, Cyprus: Zakaki (Lausanne). Synonymized with *Cerceris tuberculata* by K. Schmidt, 2000:190. – **As *Cerceris tuberculata cypria***: R. Bohart and Menke, 1976:588 (new subspecific combination, listed).
- Le *Cerceris tuberculé*: Fabre, 1879:51 (nesting habits), 262 (experiments on homing).

### **ssp. *evecta* Shestakov**

- As *Cerceris tuberculata* var. *bicornuta*: Sickmann, 1894:204 (China: Hopei Province: Tientsin, also spelled Tianjin), corrected to *Cerceris tuberculata draco* by Shestakov, 1927b:31, and to *Cerceris rufipes evecta* by Tsuneki, 1961c:53.
- Cerceris evecta* Shestakov, 1918b:3, ♀, ♂. Syntypes: ♀, China: Tientsin, also spelled Tianjin (ZIN). – Gussakovskij, 1938:15 (Mongolia); Yasumatsu, 1940:31 (China: Nei Mongol: Kunshan-tagh Desert), 1942c:107 (China: Nei Mongol: Apaka at 44°N 114.96°E). – **As *Cerceris rufipes evecta***: Yasumatsu, 1942:107 (new status, China: Beijing and Apaka); Tsuneki, 1961c:12, 16 (in key), 53 (China: Peking; new status), 63 (China: Heilungkiang: Harbin), 70 (China: Nei Mongol: Apaka, ca. 45°N, 116°E); nec Tsuneki, 1961c:71 and 1965d:39-40 (= *Cerceris morawitzi mongolensis*); Tsuneki, 1965d:36 (nesting habits), 1967e:2 (China: Heilungkiang); nec Tsuneki, 1968f:10 (= *Cerceris morawitzi mongolensis*); 1971m:19 (China: Peking: Tiendang); Kazenas, 1978b:69 (in key to Sphecidae of Kazakhstan and Central Asia), 1979d:85, 87 (in key). – **As *Cerceris tuberculata evecta***: R. Bohart and Menke, 1976:588 (new subspecific combination, listed); Nemkov, 1990c:85 (Russia: Buryat Republic: Chita Oblast'); Kazenas in Nemkov, Kazenas, Budrys, et Antropov, 1995:473, 477 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:170 (in revision in Economic Insect Fauna of China); Li and He, 2004:1114 (in hymenopterous fauna of Zhejiang Province, China); He, 2006:143 in X. Chen and J. He (description, habits, distribution, illustration of habitus); Nemkov, 2009b:153 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia). – **As *Cerceris um-***

*binifera evecta* [sic]: Hua, 2006:278 (new subspecific combination, in list of Chinese insects, geographic distribution).

*Cerceris hunchuz* Shestakov, 1927b:31, ♀. Holotype: ♀, China: Heilungkiang: valley of river Dalya-o-he (ZIN).

Synonymized with *Cerceris tuberculata evecta* by ... (R. Bohart and Menke, 1976:588 recognize this synonymy).

*Cerceris draco* Shestakov, 1927b:31. Substitute name for *Cerceris tuberculata* var. *bicornuta* of Sickman, 1895:204.

Synonymized with *Cerceris rufipes evecta* by Tsuneki, 1971m:19.

*Cerceris mickeli* Giner Mari, 1942b:136, ♂, ♀. Syntypes: China: Kwangtseh (Mus. A. Koenig, Bonn). Synonymized with *Cerceris rufipes evecta* by Tsuneki, 1968f:10.

#### **ssp. gemmina Shestakov**

*Cerceris gemmina* Shestakov, 1927b:31, ♀. Holotype: ♀, Azerbaijan: Vladimirskeye in Mugan' Step (ZIN). –

R. Bohart and Menke, 1976:581 (listed); K. Schmidt, 2000:191 (is a relative of *Cerceris tuberculata*). – As *Cer-*

*cerceris tuberculata gemmina*: Yildirim and Ljubomirov, 2005:1806 (new status, Turkey: Erzurum: İspir, Şenkaya, Turnalı; Konya: Güneysınır); Ljubomirov and Yildirim, 2008:158 (in catalog of Crabronidae of Turkey).

#### **ssp. ogotai Tsuneki**

*Cerceris rufipes ogotai* Tsuneki, 1971l:445, ♂. Holotype: ♂, Mongolia: Hovd Aymag: Somon Bulgan (TMB). – As

*Cerceris tuberculata ogotai*: R. Bohart and Menke, 1976:588 (new subspecific combination, listed).

#### **791. tucuman Fritz and Toro**

*Cerceris tucuman* Fritz and Toro, 1974:3, ♀, ♂. Holotype: ♀, Argentina: Tucumán: "km 93 Tafi" (IML). – R. Bohart and Menke, 1976:629 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

#### **792. tumulorum F. Smith**

*Cerceris tumulorum* F. Smith, 1865:87, ♀. Holotype or syntypes: ♀, Indonesia: Moluku: Gilolo Island, now Hal-mahera (BMNH). – Schletterer, 1887:504 (listed); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:588 (listed).

#### **793. turanica Kazenas**

As *Cerceris variabilis*, var. : Radoszkowski, 1877:63 (Uzbekistan or Kyrghyzstan), corrected to *Cerceris tuberculata turanica* by Kazenas, 19.....

*Cerceris turanica* Kazenas, 1980d: ♀, ♂. Holotype: ♀, Tajikistan: near Dangara (depository not indicated, but probably ZIL). – Kazenas, 1984a:38 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:106, 107 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:154 (geographic distribution, collecting localities in Kazakhstan), 2004b:113 (Kazakhstan: western Tien Shan).

#### **794. turkmenica Kazenas**

*Cerceris turkmenica* Kazenas, 1984a:203, ♀. Holotype: ♀, Turkmenistan: Uzboy, 40 km village Yakhan (ZIN). – Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### **795. turneri Shestakov**

As *Cerceris maculata*: R. Turner, 1912e:819 (Iran: Basuft), corrected to *Cerceris turneri* by Shestakov, 1918a:142.

*Cerceris turneri* Shestakov, 1918a:142. Holotype or syntypes: ♀, Iran: Basuft (BMNH). – R. Bohart and Menke, 1976:588 (listed).

**796. tyrannica F. Smith**

*Cerceris tyrannica* F. Smith, 1856:447, ♀. Lectotype: ♀, Gambia: no specific locality (BMNH), designated by Empey, 1983:190 (Article 74.6). – Walker, 1871:27 (Djibouti: Tajura, and Eritrea: Dahlak Archipelago); Schletterer, 1887:504 (listed); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); Innes Bey, 1912:112 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Tajura); Arnold, 1931:193 (original description copied, additional notes); Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:190 (listed); K. Schmidt, 2000:109 (in revision of Western Palearctic *Cerceris*).

*Cerceris sulcipyga* Mochi, 1939:154, ♀, ♂. Syntypes: SE Egypt: Gebel Elba: El Wasta (depository?). Synonymized with *Cerceris tyrannica* by Empey, 1983:190. – Giner Mari, 1941b:239 (in revision of North African *Cerceris*); de Beaumont, 1951b:179 (interpretation of species), 1951f:383 (Egypt, discussion); R. Bohart and Menke, 1976:587 (listed).

**797. ugandensis Arnold**

*Cerceris ugandensis* Arnold, 1931:179, ♀. Holotype: ♀, Uganda: Unyoro in Budongo Forest (BMNH), see Empey, 1969a:324. – Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:191 (unnecessary designation of lectotype).

**798. ulcerosa Arnold**

*Cerceris ulcerosa* Arnold, 1936:4, ♀, ♂ (♂ = *Cerceris erythrosoma*). Syntypes: Zimbabwe: Matetsi (SAM). – R. Bohart and Menke, 1976:588 (listed); Empey, 1983:191 (listed, incorrectly referred to holotype).

**799. umbelliferarum Schrottky**

*Cerceris umbelliferarum* Schrottky, 1911:28, ♀, ♂. Syntypes: Paraguay: Encarnación (depository?). – Schrottky, 1913a:230 (Paraguay); R. Bohart and Menke, 1976:588 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**800. umbinifera Maidl**

*Cerceris umbinifera* Maidl, 1926:229, ♀, ♂. Syntypes: Indonesia: Java: no specific locality (NHMW) and Sumatra: Kur (RMNH). – van der Vecht, 1964:354 (in revision of Javan species); Tsuneki, 1972c:4 (Taiwan); R. Bohart and Menke, 1976:588 (listed); Dollfuss, 1989:8 (type material in NHMW); Porter, Stange, and Wang, 1999:14 (in checklist of Sphecidae of Taiwan).

**ssp. kentinensis Tsuneki**

*Cerceris umbinifera kentinensis* Tsuneki, 1977c:3, ♂. Holotype: ♂, Taiwan: Pingtung Prefecture: Kentin Park (originally K. Tsuneki coll., now USNM). – Nuhn and Menke, 1994:26 (holotype transferred to USNM). –As *Cerceris tuberculata kentiensis* [sic]: Hua, 2006:278 (new subspecific combination, in list of Chinese insects, geographic distribution).

**801. umhlangae Arnold**

*Cerceris umhlangae* Arnold, 1942:15, ♀. Holotype: ♀, South Africa: Natal: Umhlanga (SAM). – Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:191 (listed, type examined).

**802. uncifera Arnold**

*Cerceris uncifera* Arnold, 1931:156, ♂. Holotype: ♂, Nigeria: Lanwa (BMNH). – Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:588 (listed).

**803. uncta Arnold**

*Cerceris uncta* Arnold, 1931:175, ♀. Holotype: ♀, Gambia: no specific locality (BMNH). – Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:588 (listed); Empey, 1983:191 (listed, type examined).



**804. unidentata F. Morawitz**

*Cerceris unidentata* F. Morawitz, 1890:601, ♀. Holotype or syntypes: ♀, Turkmenistan: Chuli in Kopet-Dagh Mts. (ZIN). – Shestakov, 1918a:161 (Turkmenistan: Kopet Dagh); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:62 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:178 (redescription); K. Schmidt, 2000:119 (in revision of Western Palearctic *Cerceris*; may be synonymous with *Cerceris euryanthe palaestina*); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:112 (in key to *Cerceris* of Kazakhstan and Central Asia).

*Cerceris rhynchophora* R. Turner, 1912e:510, ♀, ♂. Syntypes: Pakistan: Baluchistan: Quetta (BMNH). Synonymized with *Cerceris unidentata* by Kazenas, 2000a:50. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:586 (listed).

**805. unifasciata F. Smith**

*Cerceris unifasciata* F. Smith, 1856:456, ♀. Holotype or syntypes: ♀, North China: no specific locality (BMNH). – F. Smith, 1858b:19 (Indonesia: Sulawesi); Schletterer, 1887:482 (original description copied), 505 (listed); Bingham, 1897:310 (redescription, ♂ = *fortinata* Cameron); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); nec Matsumura, 1911:115 (= *Cerceris hortivaga*); Iwata and Yoshikawa, 1961:399 (Thailand); R. Bohart and Menke, 1976:588 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**806. unispinosa R. Turner**

*Cerceris unispinosa* R. Turner, 1917a:105, ♀. Holotype or syntypes: ♀, Australia: Queensland: Darra near Brisbane (BMNH). – Tsuneki, 1968e:4 (in key); R. Bohart and Menke, 1976:588 (listed); Evans 1982a:365 (revision); Evans and Hook, 1882b:160 (occasional communal nesting); Cardale, 1985:302 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:29 (nesting habits), 1986b:1303 (prey: *Myllocerus* spp., Curculionidae).

**807. uvarovi Kazenas**

*Cerceris uvarovi* Kazenas, 1984a:224, ♀, ♂. Holotype: ♀, Turkmenistan: Ashgabat (ZIN). – Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:123, 124 (in key to *Cerceris* of Kazakhstan and Central Asia).

**808. vagans Radoszkowski**

*Cerceris rufonodis* Radoszkowski, 1877:56, ♀, ♂ (as *rufo-nodis*, incorrect original hyphenation), junior primary homonym of *Cerceris rufinodis* F. Smith, 1856 (Article 58.12: use of different connecting vowel). Syntypes: Kazakhstan: Djisak; Uzbekistan: Tashkent (ZMMU). – Kohl, 1916:121 (specimens in O. Radoszkowski collection); Shestakov, 1918a:148 (valid species); Ulrich, 1922:257 (valid name, not a homonym, not a synonym of *Cerceris rubida*); R. Bohart and Menke, 1976:588 (misspelled the name *rufonoda*, treated it as homonym of *rufinoda* Cresson, 1865, invoking Article 58: different connecting vowel).

*Cerceris vagans* Radoszkowski, 1877:61, sex not indicated. Syntypes: Uzbekistan: Zaravshan valley, Samarkand, Tashkent; Tadjikistan: Varzaminor; also Djuzak (ZMMU). Synonymized with *Cerceris rufonodis* by Shestakov, 1918a:158. – Schletterer, 1887:482 (original description copied), 505 (listed); Ed. André, 1889:339, and 1891:30\* (unrecognizable species); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); Shestakov, 1918a:161 (syntypes of *vagans* include *Cerceris rubida*, *turkestanica*, *labiata*, *turbata*, and *integra*); Kazenas, 2001b:59 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia); Ljubomirov and Yildirim, 2008:160 (in catalog of Crabronidae of Turkey).

*Cerceris turkestanica* Radoszkowski, 1893a:66. Substitute name for *Cerceris rufonodis* Radoszkowski, 1877 (incorrectly treated as a junior primary homonym of *Cerceris rufinoda* Cresson, 1865). – Shestakov, 1916:232 (Transcaucasia), 1918a:158 (redescription), 1923:104, 105, 114 (in key, synonymy, distribution); Gussakovskij, 1935:444 (Tajikistan); de Beaumont, 1957b:132 (n. Iran, s. Turkey), 1961b:273 (Afghanistan); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:95 (Turkmenistan: Akibay, Kara-Yab in Sakar-Chaginsk dis-

trict, Pechekly in Mary district, Murgab district, Bayram-Ali district); de Beaumont, 1967a:284 (Turkey), 1970c:5 (Iran: Khorassan); Islamov, 1970:64 (Uzbekistan: Chirchik Basin); Myartseva, 1972a:93 (Turkmenistan); R. Bohart and Menke, 1976:588 (listed); Kazenas, 1978b:53, 55 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:34 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:59 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:107, 109 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:154 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan).

*Cerceris compta* R. Turner, 1912e:803, ♀. Holotype or syntypes: ♀, Pakistan: Karachi (BMNH). Synonymized with *Cerceris turkestanica* by Kazenas, 2000a:50. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:579 (listed).

### 809. *vagula* Kohl

*Cerceris vagula* Kohl, 1906a:209, ♀. Holotype: ♀, Yemen: Aden: Ras Fartak (NHMW). – Empey, 1969a:324 (listed), 1973:10 (redescription); R. Bohart and Menke, 1976:588 (listed); Guichard, 1980:230 (Oman); Empey, 1983:191 (listed, type examined); Dollfuss, 1989:8 (holotype in NHMW); Guichard, 1993a:162 (Arabian Peninsula); Gaddalah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 236 (in catalog of Sphecidae of Saudi Arabia).

### 810. *vanduzeei* Banks

*Cerceris vanduzeei* Banks, 1917:114, ♀. Holotype: ♀, USA: California: San Diego County: no specific locality (MCZ); designation by G. Ferguson, 1983b:233, was unnecessary. – Banks, 1947:32 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:398 (in revision of North American *Cerceris*, as *Cerceris vanduzeei vanduzeei*); R. Bohart and Grissell, 1975:52 (in revision of North American Philanthinae); R. Bohart and Menke, 1976:588 (listed); Krombein, 1979b:1737 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:496 (listed).

*Cerceris complanata* Mickel, 1918a:340, ♀, ♂. Holotype: ♀, USA: California: Auburn (UNL). Synonymized with *Cerceris vanduzeei* by Scullen, 1960:80. – Banks, 1947:31 (in revision of western U.S. *Cerceris*); Scullen in Muesebeck et al., 1951:1006 (in catalog of North American Hymenoptera); Muma, 1952:17 (holotype in UNL), 24 (paratypes in UNL).

*Cerceris vanduzeei eburnea* Scullen, 1965a:399, ♀. Holotype: ♀, USA: Oregon: Union County: North Powder (USNM). Synonymized with *Cerceris vanduzeei* by R. Bohart and Grissell, 1975:52, and R. Bohart in R. Bohart and Menke, 1976:588. – Zack, 1984:39 (paratypes in James Entomological Collection, Washington State University).

### 811. *varicincta* Cameron

*Cerceris varicincta* Cameron, 1905m:224, ♀. Lectotype: ♀, South Africa: Eastern Cape Province: Dunbrody, 33°29'S 25°33'E (BMNH), designated by Empey, 1983:191. – Brauns, 1926:318 (revision, description of ♂); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:143 and 148 (in key), 1942:7 (redescription); Empey, 1969a:324 (listed), 1974:119 (taxonomic history); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:191 (listed).

*Cerceris mutabilis* Arnold, 1931:157, ♂. Holotype: ♂, South Africa: Kwazulu Natal: Van Reenen (BMNH), see Empey 1971b:265 for type locality. Synonymized with *Cerceris varicincta* by Empey, 1983:191. – Arnold, 1942:plate II fig. 32 (male genitalia); Empey, 1969a:315 (listed), 1971b:262 (description of ♀); R. Bohart and Menke, 1976:584 (listed).

*Cerceris empeyi* Arnold, 1962:848, ♂. Holotype: ♂, South Africa: Transvaal: Florida: Strubens Valley (SAM). Synonymized with *Cerceris mutabilis* by Empey, 1969a:315.

**812. varipes F. Smith**

*Cerceris varipes* F. Smith, 1858b:19, ♂. Holotype or syntypes: ♂, Indonesia: Sulawesi: no specific locality (BMNH). – Dalla Torre, 1897:480 (in catalog of world Hymenoptera, as *variipes*); R. Bohart and Menke, 1976:589 (listed).

**813. vechti Krombein**

*Cerceris vechti* Krombein, 1969b:24, ♀. Holotype: ♀, Papua New Guinea: Eastern Highland Province: Karimui S Goroka (BISHOP). – Krombein, 1974a:466 (description of ♂); R. Bohart and Menke, 1976:589 (listed).

**814. vegeta Arnold**

*Cerceris vegeta* Arnold, 1940:108, ♂. Holotype: ♂, Zimbabwe: Chirinda Forest (SAM). – Arnold, 1960a:462 (additional males); Empey, 1969a:324 (listed, holotype examined); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:191 (listed).

**815. vellensis Krombein**

*Cerceris vellensis* Krombein, 1969b:30, ♀. Holotype: ♀, Solomon Islands: Vella Lavella (USNM). – R. Bohart and Menke, 1976:589 (listed).

**ssp. obrieni Krombein**

*Cerceris vellensis obrieni* Krombein, 1969b:31, ♀, ♂. Holotype: ♀, Solomon Islands: Santa Ysabel: Molao (BISHOP). – R. Bohart and Menke, 1976:589 (listed).

**ssp. fordi Krombein**

*Cerceris vellensis fordi* Krombein, 1969b:31, ♀, ♂. Holotype: ♀, Papua New Guinea: Solomon Islands: Bougainville Island: Kokura (BISHOP). – R. Bohart and Menke, 1976:589 (listed).

**ssp. segiensis Krombein**

*Cerceris vellensis segiensis* Krombein, 1969b:32, ♀. Holotype: ♀, Solomon Islands: New Georgia Island: Segi (BISHOP). – R. Bohart and Menke, 1976:589 (listed).

**816. velutina Taschenberg**

*Cerceris velutina* Taschenberg, 1875:397, ♀. Holotype or syntypes: ♀, Brazil: Minas Gerais: Lagoa Santa (Halle). – Schletterer, 1887:505 (listed); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:589 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**817. ventricornis Reyes**

*Cerceris ventricornis* Reyes, 1988:17, ♀. Holotype: ♀, Philippines: Palawan Island: Iruhuan River W Puerto Princessa (CAS). Paratype: Borneo.

**818. ventripilosa Empey**

*Cerceris turneri* Arnold, 1931:168, ♀, ♂ (as *Turneri*, incorrect original capitalization). Lectotype: ♀, Namibia: Okahandja (BMNH), designated by Empey, 1983:192, junior primary homonym of *Cerceris turneri* Shestakov, 1918. – Empey, 1969a:324 (listed).

*Cerceris ventripilosa* Empey, 1972:66. Substitute name for *Cerceris turneri* Arnold, 1931. – R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**819. venusta F. Smith**

*Cerceris venusta* F. Smith, 1873c:413, ♀. Holotype or syntypes: ♀, Australia: Queensland: no specific locality (BMNH). – Schletterer, 1887:505 (listed); Froggatt, 1892:222 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:480 (in catalog of world Hymenoptera); R. Turner, 1908:473 (Australia: Queensland; color variation), 1910b:421 (in key), 1912d:674 (in revision of Australian *Cerceris*); nec Krombein, 1969b:25 (= *Cerceris god-*

*darði*); Tsuneki, 1968e:6 (in key), 26 (Australia; additional description); R. Bohart and Menke, 1976:589 (listed); Evans, 1982a:350 (revision); Cardale, 1985:302 (in catalog of Australian Sphecidae).

**ssp. *atrescens* Krombein**

*Cerceris venusta atrescens* Krombein, 1969:27, ♀, ♂. Holotype: ♀, Papua New Guinea: Western Highland Province: Suanimbu 20 km E Maprik (BISHOP). – R. Bohart and Menke, 1976:589 (listed).

**ssp. *keiensis* Strand**

*Cerceris venusta* var. *keiensis* Strand, 1911b:232, ♀. Holotype: ♀, Indonesia: Moluccas: Kei Island: Kei Dulah (Senckenberg Mus.). – Krombein, 1969b:27 (in revision of Melanesian *Cerceris*, new status, description of ♂); R. Bohart and Menke, 1976:589 (listed).

**ssp. *oceanica* Brèthes**

*Cerceris oceanica* Brèthes, 1920:411, ♂. Holotype: ♂, Papua New Guinea: Central Province: Iule Island W Port Moresby (MNHN). – Genise, 1990:26 (depository of type material unknown). – **As *Cerceris venusta oceanica***: Krombein, 1969b:25 (new status, revision); R. Bohart and Menke, 1976:589 (listed).

**820. *verecunda* Arnold**

*Cerceris verecunda* Arnold, 1958:132, ♀. Holotype: ♀, Zambia: Kaputa Mweru (SAM). – Empey, 1969a:324 (listed); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**821. *verhoeffi* Tsuneki**

*Cerceris verhoeffi* Tsuneki, 1961c:55, ♀, ♂. Holotype: ♀, China: Heilungkiang: Harbin (RMNH). – Tsuneki, 1961c:8, 14 (in key), 1967e:2 (China: Heilungkiang); R. Bohart and Menke, 1976:589 (listed); Tsuneki, 1976d:293 (China: Heilungkiang); Kazenas, 1979d:70 (Russia: Primorskiy Kray; discussion), 81, 86 (in key); Nemkov, 1992b:251 (Russia: Far East: Novospasskiy near Khingan Nature Reserve); Kazenas *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:470, 475 (in key to Sphecidae of Russian Far East); Wu and Zhou, 1996a:182 (in revision in Economic Insect Fauna of China); Hua, 2006:278 (in list of Chinese insects, geographic distribution); Nemkov, 2008b:26 (in catalog of Crabronidae of Asiatic Russia), 2009b:153 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

**822. *vernayi* Arnold**

*Cerceris vernayi* Arnold, 1935a:501, ♂. Holotype: ♂, Botswana: Kuke Pan (TMP). – Empey, 1969a:325 (listed); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**823. *versicolor* Schrottky**

*Cerceris versicolor* Schrottky, 1909b:247, ♀. Holotype or syntypes: ♀, Argentina: Catamarca: no specific locality (depository unknown). – Schrottky, 1913a:230 (Argentina: Catamarca); R. Bohart and Menke, 1976:589 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**824. *verticalis* F. Smith**

*Cerceris verticalis* F. Smith, 1856:466, ♀. Lectotype: ♀, USA: Georgia: no specific locality (BMNH), designated by Scullen, 1961:48 (Article 74.6). – Cresson, 1862:237 (in catalog of North American Hymenoptera), 1865c:130 (original description copied); Packard, 1866:64 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:505 (listed); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); Scullen *in* Muesebeck et al., 1951:1010 (in catalog of North American Hymenoptera); Scullen, 1965b:515 (in revision on North American *Cerceris*), 1972:98 (in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:589 (listed); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:497 (listed); Ahlstrom, 1995:114 (in checklist of insects of North Carolina); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado

Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

*Cerceris gnara* Cresson, 1873:229, ♂. Lectotype: ♂, USA: Texas: Dallas or Comal County: no specific locality (ANSP), designated by Cresson, 1916:100. Synonymized with *Cerceris verticalis* by Scullen, 1961:48. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:493 (listed); Dalla Torre, 1897:462 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:22 (in revision of eastern U.S. *Cerceris*); Mickel, 1918b:449 (in catalog of Nebraskan Sphecidae); Brimley, 1938:448 (North Carolina: Raleigh); Scullen *in* Muesebeck et al., 1951:1008 (in catalog of North American Hymenoptera).

*Cerceris firma* Cresson, 1873:229, ♀. Lectotype: ♀, USA: Texas: no specific locality (ANSP), designated by Cresson, 1916:100. Synonymized with *Cerceris gnara* by Scullen, 1960:78. – Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:491 (listed); Dalla Torre, 1897:460 (in catalog of world Hymenoptera); Ashmead, 1899d:295 (in checklist of North American Crabronidae); Banks, 1912:20 (in revision of eastern U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera).

### 825. *vianai* Fritz and Toro

*Cerceris vianai* Fritz and Toro, 1969:153, ♀. Holotype: Argentina: Río Negro: Lamarque ((M. Fritz coll.). – R. Bohart and Menke, 1976:589 (listed); Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

### 826. *vicaria* Shestakov

*Cerceris vicaria* Shestakov, 1915:9, ♀. Syntypes: ♀, Turkmenistan: Repetek (ZIN). – Shestakov, 1918a:162 (Turkmenistan: Repetek); R. Bohart and Menke, 1976:589 (listed); Kazenas, 1978b:69 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:193 (redescription); Kazenas, 2001b:60 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121, 122 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:155 (geographic distribution, collecting localities in Kazakhstan), 2008a:107 (Southeastern Kazakhstan: Ili River valley: 8 km S, 3 km SE, and 35 km NW Kapchagay).

### 827. *vicina* Cresson

*Cerceris vicina* Cresson, 1865c:120, ♀. Lectotype: ♀, USA: Colorado: no specific locality (ANSP), designated by Cresson, 1916:101. – Packard, 1866:61 (listed); Cresson, 1887:282 (in catalog of North American Hymenoptera); Schletterer, 1887:505 (listed); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae); H. Smith, 1908b:367 (in revision of Nebraskan Sphecidae); Mickel, 1918b:450 (in catalog of Nebraskan Sphecidae); Banks, 1947:20 (in revision of western U.S. *Cerceris*); Scullen *in* Muesebeck et al., 1951:1011 (in catalog of North American Hymenoptera); Scullen, 1965b:517 (in revision on North American *Cerceris*); R. Bohart and Menke, 1976:589 (listed); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); G. Ferguson, 1984c:497 (listed).

*Cerceris dakotensis* Banks, 1915:402, ♀, ♂. Lectotype: ♀, USA: North Dakota: Fargo (MCZ), designated by G. Ferguson, 1983b:227. Synonymized with *Cerceris vicina* by G. Ferguson, 1984c:497. – Stevens, 1917:422 (North Dakota); Scullen *in* Muesebeck et al., 1951:1007 (in catalog of North American Hymenoptera). – **As *Cerceris clypeata dakotensis***: Scullen, 1965b:472 (new status, in revision on North American *Cerceris*); R. Bohart and Menke, 1976:579 (listed); Krombein, 1979b:1731 (in catalog of North American Hymenoptera).

### 828. *vicinoides* Viereck and Cockerell

*Cerceris vicinoides* Viereck and Cockerell, 1904b:140, ♂. Holotype: ♀, USA: New Mexico: Pecos (ANSP). – Cresson, 1928:50 (holotype in ANSP); Scullen *in* Muesebeck et al., 1951:1004 (as new synonym of *Cerceris*

*aequalis*); R. Bohart and Grissell, 1975:38 (as synonym of *Cerceris aequalis*); R. Bohart and Menke, 1976:576 (as synonym of *Cerceris aequalis*); G. Ferguson, 1984c:497 (revised status; listed).

### 829. *victori* Genaro

*Cerceris victori* Genaro, 2009:107, ♀, ♂. Holotype: ♀, Puerto Rico: Guayanilla: Loma Ventana (FSCA).

### 830. *victrix* R. Turner

*Cerceris victrix* R. Turner, 1910b:422, ♀, ♂. Syntypes: Australia: Queensland: Cairns and Moreton Bay (BMNH). – R. Turner, 1910b:420 (in key), 1912d:670 (in revision of Australian *Cerceris*); Tsuneki, 1968e:2 (in key); R. Bohart and Menke, 1976:589 (listed); Evans, 1982a:325 (revision); Cardale, 1985:302 (in catalog of Australian Sphecidae).

### 831. *vierecki* Banks

*Cerceris vierecki* Banks, 1947:30, ♀. Holotype: ♀, USA: Arizona: Tempe (MCZ). – Scullen in Muesebeck et al., 1951:1011 (in catalog of North American Hymenoptera); R. Bohart and Grissell, 1975:46 (as new synonym of *Cerceris finitima*); R. Bohart and Menke, 1976:580 (as new synonym of *Cerceris finitima* by R. Bohart); G. Ferguson, 1983b:233 (study of holotype), 1984c:497 (listed as valid species). – **As *Cerceris finitima vierecki***: Scullen, 1960:80 (new status), 1965b:382 (in revision of North American *Cerceris*), 1972:26 (in revision of Mexican and Central American *Cerceris*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

*Cerceris arizonella* Banks, 1947:32, ♂. Holotype: ♂, USA: Arizona: Tempe (MCZ). Synonymized with *Cerceris vierecki* by G. Ferguson, 1984c:497. – Scullen in Muesebeck et al., 1951:1005 (in catalog of North American Hymenoptera); Scullen, 1965b:359 (in revision of North American *Cerceris*); R. Bohart and Menke, 1976:577 (listed); Krombein, 1979b:1729 (in catalog of North American Hymenoptera); G. Ferguson, 1983b:225 (study of holotype).

### 832. *vigilans* F. Smith

*Cerceris vigilans* F. Smith, 1856:456, ♂. Lectotype: ♂, India: Madras (BMNH), designated by Empey, 1983:192. – Schletterer, 1887:506 (listed); Cameron, 1890b:250 (India: Barrackpore, Poona, description of ♀); Bingham, 1897:308 (redescription), 358 (India: Calcutta); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); R. Turner, 1912e:511 (revision); Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed); S. Gupta, 1995:86 (India: Uttar Pradesh).

*Cerceris lanata* Cameron, 1907a:1009, ♂. Lectotype: ♂, India: Rajasthan: Mount Abu (BMNH), designated by Empey, 1983:192. Synonymized with *Cerceris vigilans* by R. Turner, 1912e:511

*Cerceris vigilans* ssp. *pervigilans* R. Turner, 1913:744, ♀, ♂. Holotype: Kenya: Simba (BMNH). – Arnold, 1931:136 and 145 (in key). Synonymized with *Cerceris vigilans* by Empey, 1983:192. – **As *Cerceris vigilans race pervigilans***: Arnold, 1930:12 (new status, in checklist of Afrotropical Sphecidae). – **As *Cerceris vigilans pervigilans***: Guiglia, 1939d:56 (Ethiopia: Sidamo: Neghelli, now Negele), 1943c:75 (Ethiopia: Gamo Gofa: Sagan–Omo region), 1950:234 (Ethiopia: Gamo Gofa: Banno); Empey, 1969a:325 (listed); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (type locality, unnecessary designation of lectotype).

*Cerceris trilineata* Bischoff, 1913b:116, ♀. Syntypes: Botswana: Ku-Gudië (ZMHU). Synonymized with *Cerceris vigilans pervigilans* by Arnold, 1931:149. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae).

*Cerceris fongosi* Brauns, 1926:272, ♀, ♂. Syntypes: South Africa: Natal: Zululand: M'Fongosi (TMP). – Synonymized with *Cerceris vigilans pervigilans* by Arnold, 1931:149.

**833. villiersi Berland**

*Cerceris villiersi* Berland, 1950b:298, ♂ (as *Villiersi*, incorrect original capitalization). Holotype: ♂, Niger: Niamey (MNHN). – R. Bohart and Menke, 1976:589 (listed, as *villiersi*).

**834. violaceipennis Cameron**

*Cerceris violaceipennis* Cameron, 1904f:292, ♂. Lectotype: ♂, India: Assam: Khasia Hills (OXUM), designated by Empey, 1984:80 (Article 74.6). – R. Turner, 1912e:486 (revision); Ramakrishna Aiyar, 1916:557 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:589 (listed); Empey, 1984:80 (listed).

*Cerceris rufoplagiata* Cameron, 1905c:221, ♀. Holotype or syntypes: ♀, India: Assam: Khasia Hills (OXUM). Synonymized with *Cerceris violaceipennis* by R. Turner, 1912e:486.

**835. vischnu Cameron**

*Cerceris vischnu* Cameron, 1890b:254, ♀, ♂ (as *Vischnu*, incorrect original capitalization). Syntypes: India: Barrackpore, Poona (OXUM, now lost? Empey, 1984:80). – Cameron, 1890b:250 (India: Barrackpore, Poona); Bingham, 1897:308 (redescription, as *vishnu*); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); R. Turner, 1912e:812 (in revision of British India species); Ramakrishna Aiyar, 1916:557 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:589 (listed); Krombein, 1981:13 (nesting habits; prey: Chrysomelidae), 36 (in revision of Sri Lanka Philanthinae, as *vischnu vischnu*, new status); Empey, 1984:80 (listed); Pu, 1986:8 (China); S. Gupta, 1995:86 (India: Uttar Pradesh); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

*Cerceris dolosa* Nurse, 1903a:525, ♀, ♂. Lectotype: ♀, India: Rajasthan: Mount Abu (BMNH), designated by Krombein, 1981:36. Synonymized with *Cerceris vischnu* by R. Turner, 1912e:812, synonymy confirmed by Krombein, 1981:36. – Giner Marí, 1945c:851 (India: Maharashtra: Khandala).

**ssp. borneata Empey**

*Cerceris excavata* Cameron, 1902b:135, ♂. Lectotype, ♂, Borneo: no specific locality (BMNH), designated by Empey, 1984:80 (Article 74.6), junior primary homonym of *Cerceris excavata* Schletterer, 1889. – R. Turner, 1912e:818 (in revision of British India species); R. Bohart and Menke, 1976:580 (listed).

*Cerceris vischnu borneata* Empey, 1984:80. Substitute name for *Cerceris excavata* Cameron, 1902 (new status).

**ssp. roepkei Maidl**

*Cerceris roepkei* Maidl, 1926:225, ♀. Holotype: ♀, Indonesia: Java: Buitenzorg, now Bogor (NHMW). – van der Vecht, 1964:358 (in revisions of Javan species); R. Bohart and Menke, 1976:586 (listed). – As *Cerceris vischnu roepkei*: Krombein, 1981:37 (new status).

**836. vittata Lepeletier de Saint Fargeau**

*Cerceris vittata* Lepeletier de Saint Fargeau, 1845:24, ♀. Holotype or syntypes: ♀, Algeria: Oran (MNHN, Lucas coll.). – Lucas, 1849:254 (Algeria: Oran; original description copied with modifications); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:483 (original description copied), 506 (listed); Ed. André, 1889:278 (in revision of Sphecidae of Europe and Algeria), 1891:27\* (bibliographic references); Acloque, 1897:81 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Giner Marí, 1941b:275 (in revision of North African *Cerceris*); de Beaumont, 1950c:323 (study of holotype), 1951f:373, 374 (Tunisia to Morocco; redescription), 1956a:187 (Libya); R. Bohart and Menke, 1976:589 (listed); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:372 (in Sphecid Fauna of Western Europe); K. Schmidt, 2000:19 (in revision of Western Palearctic *Cerceris*).

*Cerceris foveata* Lepeletier de Saint Fargeau, 1845:31, ♂. Holotype or syntypes: ♂, Algeria: Oran (MNHN, Lucas coll.). Synonymized with *Cerceris vittata* by Giner Marí, 1941b:275. – Lucas, 1849:257 (Algeria: Oran; original description copied with modifications); F. Smith, 1856:446 (in catalog of Hymenoptera in British Museum);

Schletterer, 1887:470 (original description copied), 492 (listed); Ed. André, 1889:282, 310 (in revision of Sphecidae of Europe and Algeria), 24\* (bibliographic references); Dalla Torre, 1897:461 (in catalog of world Hymenoptera); de Beaumont, 1950c:323 (study of holotype).

*Cerceris nigrocincta* Dufour, 1854a:380, ♀ (as *nigro-cincta*, incorrect original hyphenation). Holotype or syntypes: ♀, Algeria: Ponteba (MNHN). Synonymized with *Cerceris vittata* by de Beaumont, 1950c:324. – Schletterer, 1887:475 (original description copied), 498 (listed); Ed. André, 1889:313 (in revision of Sphecidae of Europe and Algeria), 1891:29\* (bibliographic references); Dalla Torre, 1897:468 (in catalog of world Hymenoptera); Shestakov, 1928:266 (study of syntypes; as synonym of *Cerceris hispanica* Radoszkowski = *abdominalis*); Shestakov in Nadig, 1933:98 (Morocco: Tanger); nec Giner Mari, 1941a:62, 1941b:278, and 1943a:102 (= *Cerceris abdominalis*); de Beaumont, 1950c:324 (study of syntypes); nec Ceballos, 1956:370 (= *Cerceris abdominalis*).

As *Cerceris eurypyga*: Giner Mari, 1941b:271 (in revision of North African *Cerceris*, ♀ only), corrected to *Cerceris vittata vittata* by de Beaumont, 1951f:374.

### **ssp. eurypyga Kohl**

*Cerceris eurypyga* Kohl, 1898a:346, ♀, ♂. Syntypes: Algeria: Tiout oasis near Ain Sefra (NHMW). – Shestakov, 1915:15 (as new synonym of *Cerceris tricolorata*); Giner Mari, 1941b:377 (in revision of North African *Cerceris*; ♂, nec ♀); de Beaumont, 1950f:397 (Algeria). – As *Cerceris vittata eurypyga*: de Beaumont, 1951f:377 (new status; discussion); R. Bohart and Menke, 1976:589 (listed); Dollfuss, 1989:8 (type material in NHMW); Guichard, 1993a:160 (Arabian Peninsula); K. Schmidt, 2000:20 (in revision of Western Palearctic *Cerceris*); Gadallah and Assery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 236 (in catalog of Sphecidae of Saudi Arabia, as *eurypyga*).

### **ssp. littorea de Beaumont**

*Cerceris vittata littorea* de Beaumont, 1951f:376, ♀, ♂. Holotype: Morocco: Sidi Moussa near Tiznit (Lausanne). – de Beaumont, 1953g:124 (Morocco); R. Bohart and Menke, 1976:589 (listed); K. Schmidt, 2000:21 (in revision of Western Palearctic *Cerceris*).

### **837. vitticollis F. Morawitz**

*Cerceris vitticollis* F. Morawitz, 1894:348, ♀. Holotype or syntypes: ♀, Turkmenistan: Serax (ZIN). – Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Shestakov, 1918a:162 (Turkmenistan: Serax, Tedjen); R. Bohart and Menke, 1976:589 (listed); Kazenas, 1978b:69 (in key to Sphecidae of Kazakhstan and Central Asia), 1984a:197 (redescription); Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve, as *vitticollis*); Kazenas, 2001b:60 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:121, 122 (in key to *Cerceris* of Kazakhstan and Central Asia), 2002a:155 (geographic distribution, collecting localities in Kazakhstan); Shorenko, 2005a:169 (Ukraine: Crimea).

### **838. vulcanica van der Vecht**

*Cerceris vulcanica* van der Vecht, 1964:361, ♀, ♂. Holotype: ♀, Indonesia: Java: Mount Gedeh: Tjibodas (RMNH). – R. Bohart and Menke, 1976:589 (listed).

### **ssp. ardjunae van der Vecht**

*Cerceris vulcanica ardjunae* van der Vecht, 1964:362, ♀, ♂. Holotype: ♀, Indonesia: Java: Mt. Ardjuna (RMNH). – R. Bohart and Menke, 1976:589 (listed).

### **ssp. merbabuana van der Vecht**

*Cerceris vulcanica merbabuana* van der Vecht, 1964: 362, ♀, ♂. Holotype: ♀, Indonesia: Java: Mt. Merbabu: Koping (RMNH). – R. Bohart and Menke, 1976:589 (listed).



**ssp. patuhana van der Vecht**

*Cerceris vulcanica patuhana* van der Vecht, 1964:362, ♀, ♂. Holotype: ♀, Indonesia: Java: Mt. Patuha: Rantjabali (RMNH). – R. Bohart and Menke, 1976:589 (listed).

**839. vulpecula Empey**

*Cerceris vulpecula vulpecula* Empey, 1971b:256, ♀, ♂. Holotype: Namibia: Outjo District: Kamanjab (SAM). – R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**ssp. fuscicauda Empey**

*Cerceris vulpecula fuscicauda* Empey, 1971b:259, ♂. Holotype: ♂, South Africa: Northern Cape Province: Upington (originally H. Empey coll., now TMP). – R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**840. vulpinides Strand**

*Cerceris vulpinides* Strand, 1910a:135, ♂. Holotype: ♂, Paraguay: Villa Morra (ZMHU). – R. Bohart and Menke, 1976:589 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**841. waltoni Arnold**

*Cerceris waltoni* Arnold, 1940:107, ♀ (as *Waltoni*, incorrect original capitalization). Holotype: ♀, South Africa: Cape Province: Resolution in Albany District (TMP). – Empey, 1969a:325; R. Bohart and Menke, 1976:589 (listed); Empey, 1983:192 (listed).

**842. watlingnesis Elliott and Sahlbert**

*Cerceris watlingnesis* Elliott and Sahlbert in Elliott, Kurczewski, Clafin, and Sahlbert, 1979:359, ♀, ♂. Holotype: ♀, Bahamas Islands: San Salvador Island (USNM). – Sahlbert and Elliot, 1979a:318 (unique aspects of nesting habits), 1979b:591 (nesting habits); Elliott, 1984:85 (male behavior); G. Ferguson, 1984c:498 (listed); Elliott, Shlotzhauer, and Elliott, 1986:994 (nest sharing by females); Melo, 2000:100 (female associations for use of natal nest).

**843. wickwari R. Turner**

*Cerceris wickwari* R. Turner, 1912e:799, ♀, ♂. Lectotype: ♀, Sri Lanka: Colombo (BMNH), designated by Krombein, 1981:29. – Ramakrishna Aiyar, 1916:558 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:589 (listed); Krombein, 1981:28 (in revision of Sri Lanka Philanthinae).

**844. willineri Fritz**

*Cerceris willineri* Fritz, 1960:70, ♀. Holotype: ♀, Argentina: San Luis: Carolina (M. Fritz coll.). – R. Bohart and Menke, 1976:589 (listed); Fritz, 1989:262 (in key), 268 (revision), 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**845. willinki Fritz**

*Cerceris willinki* Fritz, 1983b:166, ♀. Holotype: ♀, Argentina: Córdoba: Salsacate (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**846. windorum Tsuneki**

*Cerceris windorum* Tsuneki, 1968e:20, ♀, ♂. Holotype: ♀, Australia: Queensland: Prince of Wales Island (USNM). – Tsuneki, 1968e:5 (in key); R. Bohart and Menke, 1976:589 (listed); Evans 1982a:371 (revision); Evans and Hook, 1882b:160 (occasional communal nesting); Cardale, 1985:303 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:297 (nesting habits), 1986b:1300 (prey: *Ataenius*, Scarabaeidae Aphodiinae); Nuhn and Menke, 1994:26 (holotype in USNM).

As *Cerceris minuscula*: Evans and Matthews, 1970:156 (nesting habits), corrected to *Cerceris windorum* by Evans, 1982a:371.

**847. wroughtoni Cameron**

*Cerceris wroughtoni* Cameron, 1890:258, ♀, ♂ (as *Wroughtoni*, incorrect original capitalization). Lectotype: ♀, India: no specific locality (BMNH), designated by Empey, 1984:76. – Bingham, 1897:306 (original description copied); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); W. Schulz, 1912:90 (conspicuously different from *Cerceris cornuta*); R. Turner, 1912:502 (revision); van der Vecht, 1961a:66 (thought that W. Schulz synonymized *wroughtoni* with *cornuta*); R. Bohart and Menke, 1976:579 (as synonym of *Cerceris cornigera*).

#### 848. *wyomingensis* Scullen

*Cerceris wyomingensis* Scullen, 1965b:519, ♀. Holotype: ♀, USA: Wyoming: 28 mi E Laramie (USNM). – R. Bohart and Menke, 1976:589 (listed); Krombein, 1979b:1738 (in catalog of North American Hymenoptera); Evans, 1983a:46 (nesting habits); G. Ferguson, 1984c:498 (listed); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument).

#### 849. *xanthogaster* Arnold

*Cerceris xanthogaster* Arnold, 1942:21, ♀ (♂ quoted erroneously). Holotype: ♀, Zimbabwe: Bulawayo: Spongweni (SAM). – Empey, 1969a:325 (listed); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:193 (listed, holotype examined); Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

#### 850. *xanthosoma* Yamane and Tano

*Cerceris xanthosoma* Yamane and Tano, 1995:20, ♂. Holotype: ♂, Japan: central Ryukyu Islands: Amami-ōshima: Yuwan-dake (depository not indicated). – Yamane, Ikudome, and Terayama, 1999:548 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:5 (in key to Japanese *Cerceris*).

#### 851. *xanthostigma* Arnold

*Cerceris xanthostigma* Arnold, 1945:39, ♀. Holotype: ♀, Madagascar: Rogez in East Coast Forest (MNHN). – R. Bohart and Menke, 1976:589 (listed); Empey, 1983:193 (listed, type examined); Pulawski, 2003b:799 (in checklist of Malagasy Sphecidae).

#### 852. *xanthura* Evans

*Cerceris xanthura* Evans, 1982a:345, ♀, ♂. Holotype: ♀, Australia: Queensland: Brisbane: Blunder Creek (Queensland Museum, Brisbane). Paratypes: New South Wales, South Australia, Victoria. – Evans and Hook, 1882b:160 (occasional communal nesting); Cardale, 1985:303 (in catalog of Australian Sphecidae); Evans and Hook, 1986a:283 (nesting habits), 1986b:1299 (prey: Curculionidae).

#### 853. *xosa* Brauns

*Cerceris xosa* Brauns, 1926:274, ♀, ♂. Lectotype: ♀, South Africa: Natal: Malvern (TMP), designated by Empey, 1983:193. – Arnold, 1931:137 (in key), 1942:14 (additional description of ♂); Empey, 1969a:325 (listed), 1970:186 (Zaire: Garamba National Park); R. Bohart and Menke, 1976:589 (listed).

*Cerceris rectinodes* Giner Mari: Empey, 1983:193. Nomen nudum. Synonymized with *Cerceris xosa* by Empey, 1983:192.

#### 854. *yalensis* R. Turner

*Cerceris yalensis* R. Turner, 1913:744, ♀, ♂ (♂ = *Cerceris iniqua cratocephala*). Lectotype: ♀, Kenya: Yala River, southern edge of Kakumga Forest (BMNH), designated by Empey, 1983:193. – R. Turner, 1918a:91 (♂ described as *yalensis* actually is *cratocephala*); Arnold, 1930:12 (in checklist of Afrotropical Sphecidae), 1931:189 (original description copied); Empey, 1969a:325 (listed), 1972:50 (redescription, description of ♂); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:193 (listed).

*Cerceris uxor* Leclercq, 1955i:417, ♀. Holotype: ♀, Ruanda: Shangugu Territory: Dendezi (MRAC). Synonymized with *Cerceris yalensis* by Empey, 1969a:325.

**855. *yenpingensis* Tsuneki**

*Cerceris yenpingensis* Tsuneki, 1968f:7, ♂. Holotype: ♂, China: Yenping (AMNH). – R. Bohart and Menke, 1976:589 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**856. *yingvei* Cameron**

*Cerceris yingvei* Cameron, 1908a:273, ♀ (as *Yngvei*, incorrect original capitalization). Lectotype: ♀, Kenya: Mt. Kilimanjaro: Kibonoto (NRS), designated by Empey, 1983:193. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae, as *yingvei*), 1931:190 (revision, as *Yngvei*); Scott in Arnold, 1933a:369 (Ethiopia: Harar District and Higo Samula); Giordani Soika, 1939c:102 (Eritrea: Adi Caie); Arnold, 1951:112 (Ethiopia: Bishoftu, as *yingvei*); Leclercq, 1955i:411 (Burundi, as *yingvei*); Empey, 1969a:3325 (listed, as *yingvei*), 1974:112 (taxonomic history, type location); R. Bohart and Menke, 1976:589 (listed).

*Cerceris massaica* Cameron, 1908a:274, ♂. Holotype or syntypes: ♂, Kenya: Mt. Kilimanjaro: Kibonoto (NRS). Synonymized with *Cerceris yingvei* by Arnold, 1931:190. – Arnold, 1930:12 (in checklist of Afrotropical Sphecidae).

*Cerceris vumbui* Arnold, 1931:180, ♀, ♂. Syntypes: Zimbabwe: Vumbu in Umtali Mts (SAM). Synonymized with *Cerceris yingvei* by Empey, 1969a:326. – Hancock, Chahwanda, and Mhlanga, 1995:38 (paralectotype in Bulawayo Museum).

**857. *yunnanensis* Tsuneki**

*Cerceris yunnanensis* Tsuneki, 1968f:18, ♀. Holotype: ♀, China: Yunnan: Kunming (originally Utah State Univ., now USNM). – R. Bohart and Menke, 1976:589 (listed); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

**858. *yuwanensis* Tsuneki**

*Cerceris yuwanensis* Tsuneki, 1982h:77, ♂. Holotype: ♂, Japan: Ryukyu Islands: Amami-Oshima Island: Yuwan (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:8 (holotype in K. Tsuneki collection, as *yamanensis*); Sk. Yamane and Tano, 1995:18 (Japan: Ryukyu Islands); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Yamane, Ikudome, and Terayama, 1999:548 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Terayama and Tano, 2005:5 (in key to Japanese *Cerceris*).

**859. *zacatecas* Scullen**

*Cerceris zacatecas* Scullen, 1972:98, ♀. Holotype: ♀, Mexico: Zacatecas: 9 mi N Ojo Caliente (UCD). – R. Bohart and Menke, 1976:589 (listed); G. Ferguson, 1984c:498 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

**860. *zain* Fritz**

*Cerceris zain* Fritz, 1990:156, ♀. Holotype: ♀, Argentina: Corrientes: Ituzaingo (M.A. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll.); Amarante, 2002:62 (in catalog of Neotropical Crabronidae).

**861. *zapoteca* de Saussure**

*Cerceris zapoteca* de Saussure, 1867:89, ♂. Lectotype: ♂, Mexico: "prope Tampico" (NHMW), designated by G. Ferguson, 1984b:440. – Schletterer, 1887:506 (listed); Cameron, 1890a:118 (listed); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae, as *zapoteca*); G. Ferguson, 1984c:498 (full species status; listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae). – As *Cerceris kennicottii zapoteca*: Scullen, 1972:30 (new status, in revision of Mexican and Central American species); R. Bohart and Menke, 1976:583 (listed); Krombein, 1979b:1735 (in catalog of North American Hymenoptera); Dollfuss, 1989:8 (lectotype in NHMW); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170

(Mexico: recorded from Tamaulipas State); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas).

*Cerceris smithiana* Cameron, 1890a:119, ♀. Lectotype: ♀, Mexico: Veracruz: Atoyac (BMNH), designated by G. Ferguson, 1984b:439. Synonymized with *Cerceris zapoteca* by G. Ferguson, 1984c:498. – Dalla Torre, 1897:477 (in catalog of world Hymenoptera); Ashmead, 1899d:296 (in checklist of North American Crabronidae). – As *Cerceris kennicottii smithiana*: Scullen, 1972:29 (new status, in revision of Mexican and Central American *Cerceris*); R. Bohart and Menke, 1976:583 (listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

#### 862. *zavattarii* Guiglia

*Cerceris zavattarii* Guiglia, 1939:58, ♀, ♂ (as *Zavattarii*, incorrect original capitalization). Holotype: ♀, Ethiopia: Sidamo: Neghelli, now Negele (Genova). – Guiglia, 1943c:75 (Ethiopia: Gamo Gofa: Sagan–Omo region), 1950:235 (Ethiopia: Gamo Gofa: Banno, Caschei, El Dire, headwaters of Sagan); Arnold, 1951:107 (Ethiopia: Bishoftu); Empey, 1969a:326 (listed); R. Bohart and Menke, 1976:589 (listed); Empey, 1983:193 (listed).

#### 863. *zhdankoi* Kazenas

*Cerceris zhdankoi* Kazenas, 2006:31, ♀. Holotype: ♀, Kazakhstan: 20 km SE village Bakanas at 44°39'52"N 76°29'03"E (ZIN?).

#### 864. *zebra* Guichard

*Cerceris zebra* Guichard, 1993a:153, ♂. Holotype: ♂, Oman: Behla, 23°00'N, 57°05'E (BMNH). – Gadallah and As-sery, 2004a:218 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 236 (in catalog of Sphecidae of Saudi Arabia: Hadasham E Jeddah, description of ♀).

#### 865. *zelichi* Fritz and Mariluis

*Cerceris zelichi* Fritz and Mariluis, 1976:106, ♀, ♂. Holotype: ♀, Argentina: Entre Ríos: Palmar de Colón (M. Fritz coll.). – Fritz, 1993:17 (holotype in M. Fritz coll., dated 1977); Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

#### 866. *zhelochovtsevi* Kazenas

*Cerceris zhelochovtsevi* Kazenas, 1984a:171, ♂. Holotype: ♂, Tajikistan: Khatynrabat in Amu-Daria headwaters (ZMMU). – Nazarova, 1998:42 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:60 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2001d:116 (in key to *Cerceris* of Kazakhstan and Central Asia).

#### 867. *zoellneri* Sielfeld

*Cerceris zoellneri* Sielfeld, 1971:258, ♀. Holotype: ♀, Chile: Atacama Desert: Copiapo at Río Jorquera (W. Sielfeld coll.). – not listed by Bohart and Menke, 1976; Sielfeld, 1981b:75 (in checklist of Chilean Sphecidae); Amarante, 2002:62 (in catalog of Neotropical Crabronidae), 2005a:13 (correction to his 2002 catalog).

#### 868. *zonalis* F. Smith

*Cerceris zonalis* F. Smith, 1852b:35, ♀ (as *Zonali*, incorrect original capitalization). Holotype or syntypes: ♀, North China: no specific locality (BMNH). – F. Smith, 1856:457 (in catalog of Hymenoptera in British Museum); Schletterer, 1887:484 (original description copied), 506 (listed); Dalla Torre, 1897:481 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:589 (listed); Hua, 2006:278 (in list of Chinese insects, geographic distribution).

#### 869. *zonata* Cresson

*Cerceris zonata* Cresson, 1865a:156, ♀, ♂. Lectotype: ♀, Cuba: no specific locality (ANSP), designated by Cresson, 1916:101. – Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Holland, 1917:295 (Cuba: Isla de Pinos, now Isla de la Juventud); Alayo Dalmau, 1976:16 (in key to Cuban *Cerceris*), 31 (in checklist of Cuban Spheci-

dae); R. Bohart and Menke, 1976:579 (listed); Elliott, Kurczewski, Claflin, and Salbert, 1979:363 (Bahama Islands: San Salvador Island); Elliott, Elliott, and Salbert, 1981:127 (nesting behavior); Amarante, 2002:62 (in catalog of Neotropical Crabronidae; Portuendo and Fernández, 2004:134 (Cuba: Nipe-Sagua-Baracoa mountains).

*Cerceris cubensis* Cresson, 1865c:123. Unnecessary substitute name for *Cerceris zonata* Cresson, nec *Cerceris zonalis* F. Smith, 1856 (a similar name, but not a homonym). – Packard, 1866:62 (listed); Schletterer, 1887:489 (listed); Dalla Torre, 1897:457 (in catalog of world Hymenoptera, as valid name); Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Giner Mari, 1943c:323 (in revision of Cuban *Cerceris*); Alayo Dalmau, 1968a:13 (in revision of Cuban Sphecidae), 1973:191 (in catalog of Cuban Hymenoptera); G. Ferguson, 1984c:478 (listed); Genaro and Sanchez, 1993:41 (nesting habits); Genaro, 2006:58 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud and Bahamas: San Salvador Island).

### 870. *zumpango* Scullen

*Cerceris zumpango* Scullen, 1972:38, ♀. Holotype: ♀, Mexico: Guerrero: Zumpango (UCD). – R. Bohart and Menke, 1976:589 (listed); G. Ferguson, 1984c:498 (listed); Amarante, 2002:62 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:668 (in checklist of Mexican Sphecidae).

### sp.

Magretti, 1882b:160 (Italy: Sardegna); W. Fox, 1894c:106 (Mexico: Baja California); Sickmann, 1894:205 (China: Hopei Province: Tientsin); Friese, 1900:268 (Madagascar: Nosy-Be); Morice, 1921:822 (Iran: Qazvin); von Schulthess, 1926b:210 (near *klugii*, Tunisia); J.Ch. Bradley, 1926:175 (New York: Lloyd-Cornell Reservation near McLean); Gussakovskij, 1932:33 (Soviet Far East; sp. of the *rybyensis* group); Hendrickson, 1930:160 (Iowa, near *jucunda*); Arnold, 1933a:355 (Ethiopia, similar to *spinicaudata* Cameron); Bischoff, 1933:5 (Morocco); Rau, 1933:164 (Panama: Barro Colorado Island, prey carrying, nest, sp. near *mexicana*); Molitor, 1935:126 (flower visiting); von Schulthess, 1935:305 (Australia: New South Wales: Kiandra, Kosziusko; Indonesia: Flores: Kelimotoe); Yasumatsu, 1942c:109 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Arnold, 1943:75 (Zaire); de Beaumont, 1950f:397 (Algeria; sp. of the *arenaria* group); Krombein, 1953a:298 and 337 (= *Cerceris floridensis*); Krombein and Evans, 1954:235 (Florida), 1955:234 (Florida); de Beaumont, 1957b:134 (n. Iran; four species), 1958d:271 (Greece), 1959b:91 (Kashmir; teratological specimen), 1960b:232 (Libya), 1960c:171 (Afghanistan), 1961e (Iraq), 1967a:287, 288 (Turkey; spp.), 1967b:506 (South Africa); Tsuneki, 1968e:30 (Australia; sp. No. 1), 31 (Australia; sp. No. 2); de Beaumont, 1970a:398 (Afghanistan; sp. aff. *specularis*), 1970c:7 (Iran: Khorassan; sp. aff. *angustata*); Haneda, 1971b:32 (Taiwan); Fain, 1973:177 (parasite: *Crabrovidia oudemansi* Fain, a saproglyphid mite); Al-Ali, 1977:100 (Iraq: Baghdad); C. Ward et al., 1977:56 (associated with mesquite (*Prosopis*)); Gess, 1981:21 (South Africa: 18 km WNW Grahamstown; nesting in friable soils); Roche, 1981:5 (in checklist of Sphecidae of United Arab Emirates); Rodgers and Homewood, 1982:233 (Tanzania: Usambara Mountains); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Bernhardt, 1987:48 (visiting flowers of *Acacia*); Hua, 1989:117 (China); Maes, 1989:95 (in catalog of Nicaraguan Sphecidae); Callan, 1991a:12 (Trinidad); Guichard, 1991a:338 (Jordan, sp. aff. *eugenia*); Snelling, 1992:14 (Virgin Islands: Guana Island); Amarante, 1993:20 (ne. Brazil); Cambra, 1993:16 (Peru: Pakitza, 11°57'S, 71°17'W); Snelling, 1993:18 (British Virgin Islands: Guana Island); Hanson and Menke, 1995:649 (known from Costa Rica); S. Gess, 1996:273 (floral records); Naumann, 1998:186, 187 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); K. Schmidt, 2000:50 (in revision of Western Palearctic *Cerceris*); Skevington et al., 2001:127 (Canada: Ontario: Lambton County); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies); Gadallah and Assery, 2004b:1398 (skeletal parts of sting apparatus); Kazenas, 2004b:113 (Kazakhstan: western Tien Shan, sp. aff. *integra*); Kephart and Theiss, 2004:270 (pollinating flowers of *Asclepias*); Danilov and Tshernyshev, 2008:44 (Russia: Novosibirsk Oblast': Karasuk area); Ljubomirov and Yildirim, 2008:160 (in cata-

log of Crabronidae of Turkey); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:801 (Iran: East Azarbaijan: Tabriz: Azarshahr).

### INCORRECTLY LISTED IN *CERCERIS*

*Ceropales marcia* Nurse, 1903a:513. – Listed in *Cerceris*: Zoological Records for 1903; R. Bohart and Menke, 1976:583

*Cerceris crepitans* Leclercq: R. Bohart and Menke, 1967:569 (a mistake for *Liris crepitans*).

### UNRECOGNIZABLE MISSPELLING:

*Cerceris inuta* Lep.: P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area), probably *ornata*.

*Cerceris limata* Costa: Marion, 1978:86 (Morocco).

*Cerceris 4maculata* F.: von der Dunk and Amos, 2002:158 (Germany: Bayern: Schwaig near Nürnberg).

*Cerceris quadripunctata* v. d. L.: Berland, 1921:533 (Greece).

### FOSSIL *CERCERIS*

#### ***berlandi* Timon-David (preoccupied)**

*Cerceris berlandi* Timon David, 1944:40, [♂] (as *Berlandi*, incorrect original capitalization). Holotype: ♂, France: Bouche-du Rhône: Camoins in Bassin de Marseille. Oligocene (depository?), junior primary homonym of *Cerceris berlandi* Giner Mari, 1941.

### NOMINA NUDA IN *CERCERIS*

*Cerceris baridius* Harris. Catalog of the insects of Massachusetts, 2<sup>nd</sup> edition. – Cresson, 1862:237 (in catalog of North American Hymenoptera)

*Cerceris cantabrica*: Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris corticina*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris crocata*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris cruentata*: Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris distans* Shestakov: Grandi, 1931:58 (Italy: Livorno).

*Cerceris hirsutula*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris holosericea*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris kirbyensis* (as *Kirbyensis*, incorrect original capitalization): Engel, 1894:53 (Germany: Reinbek near Hamburg).

*Cerceris macei*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris morio*: Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris nivalis* Tsuneki, 1971:...

*Cerceris nodosa*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris pedalis* Cresson: Cresson, 1876:207 (Utah: Spring Lake);

*Cerceris porus*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris procera*: Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris producta*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris romeliaca*: Casolari and Casolari Moreno, 1980:124 (specimens in M. Spinola collection, Torino).

*Cerceris spiniventris*: Pagden, 1934b:384 (prey: *Crabro fimbriata*).

*Cerceris tumida*: Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

*Cerceris valida* Pérez: Antiga and Bofill, 1904:22, as *Valida*, incorrect original capitalization (Spain: Cataluña Province); Ceballos, 1956:372 (in catalog of Hymenoptera of Spain).

*Cerceris varipes* Herrich-Schaeffer, 1840:296 (Germany: Bayern: Regensburg area), as *Varipes*, incorrect original capitalization.

*Cerceris vesiculosa* Casolari and Casolari Moreno, 1980:123 (specimens in M. Spinola collection, Torino).

#### **SPECIES DESCRIBED IN *CERCERIS* AND TRANSFERRED TO OTHER GENERA**

*asuncionis* Strand, 1910a:141 = *Foxita*

*bidentata* Say, 1823 = *Eucerceris canaliculata* Say, 1823

*sonorensis* Cameron, 1891 = *Eucerceris montana* Cresson, 1882

*vespiformis* de Saussure, 1855:79 = *Ceramius cerceriformis* de Saussure, 1853:xxi according to Richards, 1962:97 (A revisionary study of the Masarid wasps).