Last updated: 21 July 2014

# *PRIONYX*

*Prionyx* Vander Linden, 1827:362. Type species: *Ammophila kirbii* Vander Linden, 1827, by monotypy.

*Priononyx* Dahlbom, 1843:28. Type species: *Pepsis thomae* (Fabricius, 1804) [= *Sphex thomae* Fabricius, 1775], by monotypy.

*Enodia* Dahlbom, 1843:28, junior homonym of *Enodia* Hübner, 1819. Type species: *Sphex albisectus* Lepeletier de Saint Fargeau and Serville, 1828 [= *Ammophila kirbii* Vander Linden, 1827], designated by Kohl, 1885b:164. Synonymized with *Prionyx* Vander Linden by Pate, 1935:250.

*Harpactopus* F. Smith, 1856:264. Type species: *Harpactopus crudelis* F. Smith, designated by Patton, 1880a:384.

*Parasphex* F. Smith, 1856:267. Type species: *Sphex albisectus* Lepeletier de Saint Fargeau and Serville, 1828 [= *Ammophila kirbii* Vander Linden, 1827], designated by Kohl, 1885b:164. Synonymized with *Prionyx* Vander Linden by Pate, 1935:250.

*Gastrosphaeria* A. Costa, 1858b:10. Type species: *Gastrosphaeria anthracina* A. Costa, 1858 [= *Sphex subfuscatus* Dahlbom, 1845], by monotypy.

*Pseudosphex* Taschenberg, 1869:420, junior homonym of *Pseudosphex* Hübner, 1818. Type species: *Pseudosphex pumilio* Taschenberg, 1869, by monotypy.

*Calosphex* Kohl, 1890b:113. Type species: *Sphex niveatus* Dufour, 1853, designated by Pate, 1937c:15. – As *Callosphex*: Rohwer, 1913:450 (misspelling).

*Neosphex* Reed, 1894:627. Type species: *Neosphex albospiniferus* Reed, 1894 [*Pseudosphex pumilio* Taschenberg, 1869], by monotypy.

Key to species: F. Parker, 1960 (North American species); Mingo and Gayubo, 1983:152 (Spanish species); Pagliano, 1984:366 (Italian species); Guichard, 1988a:119 (Arabian Peninsula); Danilov, 2012a, b (species of Russia and adjacent countries).

Classification: de Beaumont, 1968b:148 (Mediterranean species).

Review of biology: Kazenas: 2001b:81.

## 1. *afghaniensis* (de Beaumont)

*Sphex afghaniensis* de Beaumont, 1970a:391, ♀. Holotype: ♀, Afghanistan: Kabul (Brno Mus.). – **As *Prionyx afghaniensis***: R. Bohart and Menke, 1976:131 (new combination, in checklist of world Sphecidae).

## 2. *atratus* (Lepeletier de Saint Fargeau)

*Sphex atratus* Lepeletier de Saint Fargeau, 1845:355, ♀. Holotype or syntypes: ♀, origin unknown (originally J. Serville coll., now M. Spinola collection, Torino). – Cresson, 1863:319 (in catalog of North American Hymenoptera), 1868:379 (New Mexico), 1876:208 (Colorado: Cannon City); Kohl, 1890b:357 (in revision of world Sphecini); Dalla Torre, 1897:415 (in catalog of world Hymenoptera); Strand, 1916:100 (diagnostic characters); Berland, 1926c:202 (specimens in MNHN); Murray *in* Muesebeck et al., 1951:973 (in catalog of North American Hymenoptera); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection, Torino); Pagliano, 2008:527 (unpublished lectotype in M. Spinola collection, Torino). – **As *Prionony x atratus***: F. Smith, 1856:266 (new combination, in catalog of Hymenoptera in British Museum); Cresson, 1865b:464 (specimens in ANSP collection), 1868:379 (New Mexico), 1873:213 (Texas), 1875:715 (Colorado, New Mexico), 1876:208 (Colorado: Canon City); Riley, 1878:318 (Colorado, preying on pupae of *Melanoplus spretus* (Walsh), an acridid); Patton, 1879d:354 (USA: nw. Kansas); Snow, 1881:96 (in checklist of Hymenoptera of Kansas: Douglas County: no specific locality); Cresson, 1887:276 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado, as *atrata*); C. Robertson, 1892:107 (visiting flowers of *Pycnanthemum linifolium* Ph., as *atrata*), 114 (visiting flowers of *Blephilia ciliata* Raf., as *atrata*), 1894:456 (visiting

flowers of *S. canadensis* Linnaeus, as *atrata*), 458 (visiting flowers of *Solidago lanceolata* Linnaeus, as *atrata*), 469 (visiting flowers of *Lepachys pinnata* Torr. and Gray), 470 (visiting flowers of *Helianthus grosse-serratus* Martens), 475 (visiting flowers of *Helenium autumnale* Linnaeus), 1896:72 (visiting flowers of *Polygonum pennsylvanicum* Linnaeus, as *atrata*), 73 (visiting flowers of *Polygonum hydropiperoides* Michx.); G. Peckham and E. Peckham, 1898:171 (nesting habits, as *atrata*); Ashmead, 1899d:353 (in checklist of North American Sphecidae); Bridwell, 1899:209 (Kansas: Baldwin, as *atrata*); J. Smith, 1900:523 (in list of insects of New Jersey, as *atrata*); Adlerz, 1904:138 (known prey: tettigoniids); Hart, 1907:255 (Illinois); Rau and Rau, 1918:159 (nest digging and closing, prey: *Dissosteira carolina* (Linnaeus),nest structure, nest parasites, as *atratum*); Rau, 1922:23 (USA: Missouri: St. Louis, prey); G. Carpenter, 1930b:294, 295 (nest closure); Rau, 1938b:541 (sleeping habits, as *atratum*); Strickland, 1947:128 (Canada: Alberta: Lethbridge, Medicine Hat); Evans and Lin, 1956a:142 (description of larva); R. Bohart, 1958b:92, 93 (in key to North American *Prionyx*); Evans, 1958a:178 (nesting behavior), 1959b:147 (additional larval characters); F. Parker, 1960:206, 207 (in key to North American *Prionyx*, as *atrata*). – **As *Chlorion atratum***: Fernald, 1906:338 (new combination, in revision of Sphecini of North America and West Indies); H. Smith, 1908b:332 (in revision of Nebraskan Sphecidae); J. Smith, 1910:677 (in new list of insects of New Jersey); Rohwer, 1916b:679 (in catalog of Hymenoptera of Connecticut); Stevens, 1917:420 (North Dakota); Mickel, 1918b:397 (in catalog of Nebraskan Sphecidae); Carter, 1925:132 (Canada: Alberta); Rohwer *in* Viereck, 1925:679 (in key to Sphecidae of Connecticut); J.Ch. Bradley, 1928:1011 (in catalog of New York Sphecidae); Fernald, 1931a:441 (Oregon, Washington); Krombein, 1936:98 (New York: Buffalo; floral records); Brimley, 1938:444 (North Carolina: Highlands, Raleigh, Wrightsville); Dreisbach, 1944:268 (in key to Sphecinae of Michigan), 272 (Michigan: locality records); Strandtmann, 1945a:308 (Texas, nest and prey); Spencer and Wellington, 1948:10 (British Columbia); Krombein, 1958f:191 (in supplement to catalog of North American Hymenoptera: description of larva by Evans and Lin, 1956a, reported); Piek and Spanjer, 1986:182 (in list of Sphecidae with known prey). – **As *Prionyx atratus***: R. Bohart and Menke, 1963:154 (new combination, in revision of Nearctic Sphecini); Lavigne and Pfadt, 1966:31 (Wyoming; preying on grasshopper *Melanoplus sanguinipes*); Pilon and Steiner, 1966:483 (locality records from Michigan and Quebec); Horning and Barr, 1970:104 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:131 (in checklist of world Sphecidae); Kumar, Lavigne, Lloyd, and Pfadt, 1976:51 (USA: Colorado: Pawnee National Grassland); Krombein, 1979b:1585 (in catalog of North American Hymenoptera); Finnamore, 1982:18 (in Sphecid Fauna of Southern Quebec); Brockmann, 1985b:312 (nest closure summary); Radović, 1985:64 (sting apparatus analyzed); Piek and Spanjer, 1986:188 (in list of Sphecidae with known prey, as *astratus*); Steiner, 1986:96 (references to papers on nesting habits); O'Brien, 1989b:206 (distribution in Michigan); Spofford, Kurczewski, and Downes, 1989:256 (reference to publication on nest parasite *Metopia argyrocephala* (Meigen), a miltogrammine fly); Kurczewski and Acciavatti, 1990:59 (New York: Cayuga County); Ahlstrom, 1995:107 (in checklist of insects of North Carolina); O'Neil, 1995:248 (Montana, list of grasshopper prey); Kurczewski, 1998d:250 (pine barrens in upstate New York); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada); Hua, 2006:276 (in list of Chinese insects, geographic distribution, obviously in error); Miller, Pearce, and O'Neill, 2009:3 (known to be parasitized by *Paraxenos duryi* (Pierce)).

*Sphex labrosus* Harris, 1835:588. Nomen nudum. Synonymized with *Chlorion atratum* by Fernald, 1906:338.

*Priononyx brunnipes* Cresson, 1873:213, ♂. Holotype: ♂, USA: Texas: Bosque County: no specific locality (USNM). Synonymized with *Chlorion atratum* by Fernald, 1906:338. – Cresson, 1887:276 (in catalog of North American Hymenoptera); Ashmead, 1899d:353 (in checklist of North American Sphecidae, as *brunneipes*; Cresson, 1916:93 (holotype in USNM). – **As *Sphex brunnipes***: Kohl, 1890b:440 (new combination, original description copied); Dalla Torre, 1897:417 (in catalog of world Hymenoptera); J. Smith, 1900:523 (in list of insects of New Jersey, as *brunneipes*).

### 3. *bifoveolatus* (Taschenberg)

*Priononyx bifoveolatus* Taschenberg, 1869:408, ♂ (as *bifoveolata*, incorrect original termination) . Syntypes: ♂, Brazil: Rio de Janeiro: Nova Friburgo (HALLE). – F. Lynch Arribálzaga, 1878:329 (Argentina: Buenos Aires area); W. Fox,

1897b:378 (Brazil: Chapada and Corumbá); Harrington, 1902:224 (Canada: Ontario: Ottawa); Hart, 1907:255 (Illinois); Rau, 1922:23 (USA: Missouri: St. Louis, prey carrying); K. Cooper, 1950:105 (Massachusetts: Cape Code: Woods Hole). – **As *Chlorion bifoveolatum***: Fernald, 1906:346 (new combination, in revision of Sphecini of North America and West Indies); H. Smith, 1908b:333 (in revision of Nebraskan Sphecidae); J. Smith, 1910:677 (in new list of insects of New Jersey); Rohwer, 1916b:679 (in catalog of Hymenoptera of Connecticut); Strand, 1916b:99 (Kohl's 1890 reference to North America is in error); Mickel, 1918b:398 (in catalog of Nebraskan Sphecidae); Carter, 1925:132 (Canada: Alberta; as *bifoveolatum* Fabricius); Rohwer *in* Viereck, 1925:679 (in key to Sphecidae of Connecticut; Milford); J.Ch. Bradley, 1928:1011 (in catalog of New York Sphecidae); Fernald, 1931a:441 (as synonym of *Chlorion pubidorsum*); Spencer and Wellington, 1948:10 (British Columbia). – **As *Sphex bifoveolatus:*** Kohl, 1890b:360 (new combination, in revision of world Sphecini); Dalla Torre, 1897:417 (in catalog of world Hymenoptera); J. Smith, 1900:522 (in list of insects of New Jersey); Berland, 1926c:204 (Mexico: Guadalajara).– **As *Prionyx bifoveolatus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Genise, 1981b:19 (influence of meteorological factors on activity); Vardy, 1995a:12 (sleeping aggregation); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Dollfuss, 2008b:1408 (locality records from Chile); Buys, 2009e:277 (Brazil: Rio de Janeiro: Nova Friburgo, Petrópolis, Teresópolios).

*Sphex striatulus* Brèthes, 1908:147, ♀, ♂. Lectotype: ♂, Argentina: Buenos Aires (MACN), designated by Menke *in* Bohart and Menke, 1976:133. Synonymized with *Prionyx bifoveolatus* by Menke *in* Bohart and Menke, 1976:133. – Liebermann, 1931:23 (in revision of Argentinean Sphecini). – **As *Prononyx*** striatulus: Jörgensen, 1912:286 (new combination, Argentina: Mendoza Province); Schrottky, 1913a:225 (Argentina); Evans, 1958a:185 (observations by Lieberman, 1931). – **As *Chlorion striatulum***: Willink, 1948a:315 (new combination, diagnostic characters), 318 (differences between *thomae* and *striatulus*), 320 (in key), 1951:190 (in revision of Argentinian Sphecini); Zapata, 1974:37 (Chile: Lampa near Santiago).

*Sphex subexcisus* Brèthes, 1908:148, ♀, ♂. Lectotype: ♀, Argentina?: no specific locality (MACN), designated by Menke *in* Bohart and Menke, 1976:133. Synonymized with *Chlorion striatulum* by Willink, 1948a:316, and with *Prionyx bifoveolatus* by Menke *in* Bohart and Menke, 1976:133. – Liebermann, 1931:80 (in revision of Argentinean Sphecini). – **As *Prononyx subexcisus***: Schrottky, 1913a:225 (new combination, Argentina).

*Sphex wagneri* Berland, 1926c:204, ♀, ♂. Lectotype: ♂, Argentina: Santiago de Estero: Icano (MNHN), designated by Menke *in* Bohart and Menke, 1976:133. Synonymized with *Chlorion striatulum* by Willink, 1948a:316 and with *Prionyx bifoveolatus* by Menke *in* Bohart and Menke, 1976:133. – Liebermann, 1931:25 (in revision of Argentinian Sphecini).

*Sphex caridei* Liebermann, 1931:85, ♀, ♂. Holotype: ♀, Argentina: Buenos Aires: Partido de Guaminí: Distrito Casbas: estancia La Flora (MACN). Synonymized with *Chlorion striatulum* by Willink, 1948a:316 and with *Prionyx bifoveolatus* by Menke *in* Bohart and Menke, 1976:133.

## 4. *binghami* Jha and Farooqi

*Prionyx binghami* Jha and Farooqi, 1996:15, ♀. Holotype: ♀, India: Bihar: Pusa (depository?).

## 5. *canadensis* (Provancher)

*Prononyx canadensis* Provancher, 1887:258, ♀. Lectotype: ♂ [sic], Canada: Ontario: Ottawa (Laval Univ.), designated by Gahan and Rohwer, 1918:170. – F. Parker, 1960:206, 207 (resurrected from synonymy, in key to North American *Prononyx*). – **As *Sphex canadensis***: Kohl, 1890b:360, footnote (new combination, original description copied, as tentative synonym of *Sphex bifoveolatus*). – **As *Chlorion canadense***: Fernald, 1906:346 (new combination, as synonym of *Chlorion bifoveolatum*). – **As *Prionyx canadensis***: R. Bohart and Menke, 1963:157 (new combination, in revision of Nearctic Sphecini); Lavigne and Pfadt, 1966:31 (Wyoming; preying on grasshopper *Aulocara elliotti*); Horning and Barr, 1970:104 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:133 (in checklist of world Sphecidae); Krombein, 1979b:1585 (in catalog of North American Hymenoptera); Rust, Hanks and Bechtel, 1983:405 (Nevada: Churchill County: Sand Mountain); Rust, Menke, and Miller, 1985:46 (California: Channel Islands);

Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Ohl and Linde, 2003:149 (number of ovarioles, identification tentative); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 74 (Bohart and Menke, 1963, map indicates two Ontario localities: London and Point Pelee); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007:48 (Mexico: Tamaulipas).

*Sphex excisus* Kohl, 1890b:362, ♀, ♂. Syntypes: Canada: British Columbia: Vancouver Island (NHMW). Synonymized with *Chlorion pubidorsum* by Fernald, 1931a:441 and with *Prionyx canadensis* by R. Bohart and Menke, 1963:157. – Dalla Torre, 1897:422 (in catalog of world Hymenoptera); Fernald, 1906:417 (unidentified species); Dollfuss, 1989:12 (type material in NHMW). – **As *Priononyx excisus***: Ashmead, 1899d:353 (new combination, in checklist of North American Sphecidae).

### 6. *chilensis* (Spinola)

*Sphex chilensis* Spinola, 1851a:399, ♀, ♂. Lectotype: ♀, Chile: no specific locality (Torino), designated by Menke *in* Bohart and Menke, 1976:134. – Ruiz Pereira, 1924:101 (Chile: Cerro San Cristóbal); Janvier, 1926:59 (nesting habits), 1928:203 (nesting habits); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes"); Ruíz Pereira and Stuardo, 1936:321 (Chile: Las Termas de Chillan); Ruíz Pereira, 1937:164 (Chile: Coquimbo Province); Sokup, 1943:265 (Peru); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Piek and Spanjer, 1986:189 (in list of Sphecidae with known prey); Cabrera La Rosa, 1993:71 (Peru: La Molina); Pagliano, 2008:532 (specimens in M. Spinola collection, Torino, including lectotype; some specimens are *Prionyx bifoveolatus* and *neoxenus*). – **As *Ammophila chilensis***: Fraga, 1938:200 (new combination, Chile: Hacienda Mauro).– **As *Priononyx chilensis***: Reed, 1894:626 (new combination, revision). – **As *Prionyx chilensis***: R. Bohart and Menke 1976:134 (in checklist of world Sphecidae, incorrectly regarded as junior homonym of *Sphex chiliensis* Lepeletier de Saint Fargeau); Amarante, 2002:72 (new combination, in catalog of Neotropical Sphecidae); Dollfuss, 2008b:1408 (locality records from Argentina and Chile); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru); Buys, 2011a:411 (Peru: Arequipa); Buys and Rodrigues, 2014:40 (Brazil: State of Espírito Santo: Linhares).

*Sphex spinolae* F. Smith, 1856:260 (as *Spinolae*, incorrect original capitalization). Unnecessary substitute name for *Sphex chilensis* Spinola, 1845 (incorrectly regarded as junior homonym of *Sphex chiliensis* Lepeletier de Saint Fargeau, 1845). – Kohl, 1890b:364 (in revision of world Sphecini); Dalla Torre, 1897:441 (in catalog of world Hymenoptera); Gribodo, 1895:211 (Chile); Brèthes, 1908:144 (revision; Chile, Patagonia); Kieffer and Herbst, 1909:122 (visiting galls of *Lecanium resinatum*); Herbst, 1921a:107 (comparison with *Sphex omissus* Kohl); Berland, 1929b:312 (miscellaneous locality records); Liebermann, 1931:26 (in revision of Argentinean Sphecini). – **As *Harpactopus spinolae***: Schrottky, 1913a:225 (new combination, Argentina: Santa Cruz). – **As *Chlorion spinolae***: Willink, 1948a:319 (new combination, in key); Zapata, 1974:37 (Chile: Lampa near Santiago). – **As *Priononyx spinolae***: Evans, 1958a:185 (new combination, observations by Claude-Joseph, 1928). – **As *Prionyx spinolae***: R. Bohart and Menke, 1963:151 (new combination, member of *pumilio* group), 1976:134 (in checklist of world Sphecidae); Sielfeld, 1981b:72 (in checklist of Chilean Sphecidae); Steiner, 1986:97 (references to papers on nesting habits); Amarante, 1993:19 (ne. Brazil); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality).

### 7. *chobauti* (Roth)

*Sphex chobauti* Roth, 1925:388 (as *Chobauti*, incorrect original capitalization). Syntypes: ♀, ♂, Algeria: Ain Sefra and Sidi-bou-Rziguine; Morocco: Dar-Salem (MNHN). – Berland, 1926c:200 (Morocco: locality records); de Beaumont, 1951e:268 (Morocco); Leclercq, 1955h:26 (bibliographic references, faunal records); de Beaumont, 1956a:181 (Libya; as *chobauti* subsp.), 1968b:150 (member of *macula* species group); R. Bohart and Menke, 1976:133 (in checklist of world Sphecidae).

### 8. *crudelis* (F. Smith)

*Sphex rufipennis* Fabricius, 1793:200, sex not indicated, junior primary homonym of *Sphex rufipennis* De Geer, 1778. Syntypes: ♀, India: Tamil Nadu: Tranquebar (ZMUC). – Fabricius, 1796:156 (in Index to his Entomologia Systematica,

1793); Lepeletier de Saint Fargeau and Serville, 1828:462 (listed); Dahlbom, 1845:XXI (specimens in collection Fabricius), 436 (in key); Lepeletier de Saint Fargeau, 1845:334 (in revision of world Hymenoptera); F. Smith, 1856:252 (in catalog of Hymenoptera in British Museum, probably a Brazilian species); A. Costa, 1864a:60 (three specimens from Mexico in Napoli Museum, clearly in error) A. Costa, 1864b:112 (two specimens from Guadalupe in Museo Zoologico di Napoli, clearly in error); Taschenberg, 1869:411 (redescription based on specimens from Brazil); nec Kohl, 1885b:198 (= …); Ed. André, 1888:150 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); Cameron, 1889c:108 (listed), 112 (records from South America refer to a different species; specimens described by Kohl, 1885b:198, are *luteipennis*); Kohl, 1889a:26 (specimens treated under this name by André, 1888, are several species); Kohl, 1890:408 (as a variety of *Sphex argentatus* which = *Sphex diabolicus*); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection, Torino); Pagliano, 2008:524, 526 (specimens in M. Spinola collection, Torino). – **As *Sphex umbrosus* var. *rufipennis***: Ashmead, 1904d:150 (new status, Philippines).

? *Sphex hirtipes* Fabricius, 1793: 207, sex not indicated. Holotype or syntypes: Guinea (depository?), junior primary homonym of *Sphex hirtipes* De Geer, 1778. Tentatively synonymized with *Harpactopus crudelis* by Kohl, 1890:351. – van der Vecht, 1961a:32 (type material lost, may be a synonym of *Sphex obscurus*); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection, Torino); Pagliano, 2008:524 (specimens in M. Spinola collection, Torino).

*Sphex aegyptius* Lepeletier de Saint Fargeau, 1845:356, sex not indicated (as *Aegyptia*, incorrect original capitalization and termination), junior primary homonym of *Sphex aegyptius* Linnaeus, 1758. Lectotype: ♀, Egypt: no specific locality (Torino), designated by Menke *in* Bohart and Menke, 1976:133. – Taschenberg, 1869:412 (redescription, as *aegyptica*); Kohl, 1885b:181 (in revision of Palearctic *Sphex*); Ed. André, 1888:148 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); Cameron, 1889c:106 (listed); Kohl, 1889a:25 (comparison with *Sphex subfuscatus*), 1890b:351 (in revision of world Sphecini); Magretti, 1892 (Somalia: Herrer el Saghir); de Saussure, 1892:424 (Madagascar and Mauritius, redescription); Kohl, 1893e:183 (Tanzania: Bagamoyo); Bingham, 1897:245 (redescription); Dalla Torre, 1897:413 (in catalog of world Hymenoptera); Kohl, 1906a:197 (Yemen: Aden); Pérez, 1907:495 (Oman: Dibba); Kohl, 1909:370 (Comoros); R. Turner, 1911b:370 (Seychelles Islands); Maidl, 1913:560 (Egypt: Helwan); Strand, 1916b:102 (German East Africa); Fahringer and Friese, 1921:160 (Turkey: Erzurum: Djihan valley in Amanus Mts. = Gavur Dağlari); Maidl, 1924:246 (Sudan: Bara, Gullfan); Berland, 1926c:200 (miscellaneous locality records); von Schulthess, 1927:299 (Iran: Bushehr); Guiglia, 1928:500 (Somalia); Schouteden, 1930:95 (Zaire); Guiglia, 1932:124 (Somalia: Brava; Equatorial Africa: Lado); Gussakovskij, 1933b:372 (Iran); C. Williams, 1930:56 and 1933:474 (as *aegyptiacus*, following swarm of locust *Schistocerca gregaria* Forsk. in Amani, Tanzania); Giordani Soika, 1939c:105 (Eritrea: Keren, as *aegyptium*); Pittioni, 1950:21 (Cyprus); Atanassov, 1955:205 (first record from Bulgaria: Pirin); Haskell, 1955:284 (accompanying swarms of *Schistocerca gregaria* in Kenya and Tanzania); Berland, 1956:1169 (in revision of African Sphecini); Bradley, 1957:40 (Lepeletier de Saint Fargeau's specimens in Torino); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River); Guiglia, 1968:164 (Yemen: Taiz, as *aegyptius* Kohl); Kazenas, 1969a:22 (Kazakhstan: Mangyshlak Peninsula, Golodnaya Step'); I. Robertson, 1969:480 (Tanzania: Ukiriguru, as *aegyptiacus*); Chhotani and Ray, 1975:27 (India: Rajasthan: Sambhar Lake); Georghiou, 1977:191 (Cyprus); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection; as *aegyptia*); Piek and Spanjer, 1986:189 (in list of Sphecidae with known prey); Pagliano, 2008:535 (specimens in M. Spinola collection, Torino, as *aegyptia*). – **As *Prononyx aegyptia***: F. Smith, 1856:266 (new combination, in catalog of Hymenoptera in British Museum). – **As *Chlorion aegyptium***: Arnold, 1928c:359 (new combination, revision), 1930:17 (in checklist of Afrotropical Sphecidae); Scott *in* Arnold, 1933a:370 (Ethiopia); Arnold, 1935b:1 and 8 (Mauritania: Nema); Guiglia, 1940e:293 (Italian Somalia: no specific locality).

*Harpactopus crudelis* F. Smith, 1856:264, ♀. Holotype or syntypes: ♀, India: Madras (BMNH). Synonymized with *Sphex aegyptius* Lepeletier de Saint Fargeau by Kohl, 1885b:181, and with *Sphex rufipennis* Fabricius by van der Vecht, 1961a:34. – F. Smith, 1871a:362 (in catalog of Oriental Aculeata); Walker, 1871:20 (Sinai Peninsula: Wadi Hebran; Africa: Red Sea coast: Akeek Island, Harkeko); Magretti, 1884a:249 (Ethiopia), 1884c:582 (Ethiopia: Metemma); Innes Bey, 1912:110 (specimens recorded by Walker, 1871, now destroyed by dermestids, came from unknown locality). – **As**

***Sphex crudelis***: de Beaumont, 1949a:127 (new combination, *Sphex crudelis*, and not *soror*, is the correct name for *aegyptius* Lepeletier de Saint Fargeau, nec Linnaeus), 1950d:7 (Egypt: Siwa oasis); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Leclercq, 1955h:25 (bibliographic references, faunal records from Africa); de Beaumont, 1960a:5 (Greece: Island of Rhodes), 1961e:2 (Iraq); Leclercq, 1961d:108 (Madagascar); de Beaumont, 1962c:221 (Arabia: Riyadh); Diniz, 1964b:237 (Guinea Bissau, redescription); Myartseva, 1964:73 (nesting habits in Turkmenistan); Iwata, 1965:106 (number of oocytes); Myartseva, 1965:82 (Turkmenistan: Akibay; Sakar-Chaginsk district; Murgab district); de Beaumont, 1966:211 (Egypt: Abukir), 1967a:273 (Turkey), 1968b:149 (member of *subfuscatus* species group); Guiglia, 1968:164 (Yemen); de Beaumont, 1970c:4 (Iran: Khorassan); Erlandsson, 1974:58 (Greece); Kazenas, 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Chlorion crudele***: Derwesh, 1965:70 (new combination, Iraq: no specific locality). – **As *Prionyx crudelis***: Myartseva, 1966:48 (new combination, preying on orthopterans), 49 (Turkmenistan: lower course of Murgab and Tedjen rivers; preying on adult acridids *Anacridium aegyptium aegyptium* (L.) and *Calliptamus italicus italicus* (L.)),1972a:84 (new combination, Turkmenistan); R. Bohart and Menke, 1976:133 (in checklist of world Sphecidae); Guichard, 1988a:121 (Arabian Peninsula); Al-Houty, 1989:162 (Kuwait: Kathma); Jha and Farooqi, 1994:11 (description and illustration of male genitalia); Roche and Zalat, 1994:113 (Egypt: Sinai Peninsula); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Ivanov and Ljubomirov, 2001:210 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001b:14 (in checklist of Sphecidae of Kazakhstan and Central Asia), 84 (nesting habits); Madl, 2001:1109 (Aldabra Island group); Seyoum and Pulawski, 2001:321 (potential control agent of acridid pests in Ethiopia); Kazenas, 2002a:28 (geographic distribution, collecting localities in Kazakhstan); Ohl and Linde, 2003:149 (number of ovarioles); Pulawski, 2003b:795 (in checklist of Malagasy Sphecidae); Gadallah and Assery, 2004a:221 (in catalog of Sphecidae of Saudi Arabia); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Tezcan, Yildirim, Anlaş, and Beyaz, 2006:58 (Turkey: Manisa: Turgutlu: Çıkrıkçı, on flowers of *Coridothymus capitatus*); Roche, 2007a:39 (in checklist of Egyptian Sphecidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008b:1409 (Tanzania: 35 km N Dodoma); Ljubomirov and Yildirim, 2008:26 (in catalog of Sphecidae of Turkey); Bitsch, 2010:105 (in supplement to vol. II of Faune de France, 1997: taxonomic history, morphological characteristics, geographic distribution, recently recorded from Bulgaria); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian type); Sakenin, Samin, and Bagriacik, 2010:17 (Iran: Khuzestan: Khorramshahr); Murai and Amr, 2011:120 (recorded from Syria by de Beaumont and Bytinski-Salz, 1955); Schmid-Egger, 2011b:603 (recorded from United Arab Emirates by Guichard, 1988a); Danilov, 2012a:163, 164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:62 (bibliographic references, geographic distribution); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

*Sphex grandis* Radoszkowski, 1876b:132, ♂. Holotype or syntypes: ♂, Ethiopia: no specific locality (Kraków). Synonymized with *Sphex aegyptius* by Ed. André, 1888:*9.

? *Sphex aegyptius* var. *turcomanicus* Radoszkowski, 1893a:58, sex not indicated. Syntypes: Turkmenistan: Serax (Kraków). Synonymized with ...

As *Sphex soror*: Honoré, 1944a:69 (in revision of Egyptian Sphecini), present correction.

### 9. *damascenus* (de Beaumont)

*Sphex damascenus* de Beaumont, 1968b:154, ♀, ♂. Holotype: ♀, Syria: Mezze near Damascus (Lausanne or A. Mochi coll., now Torino). – **As *Prionyx damascenus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Murai and Amr, 2011:120 (recorded from Syria by 'de Beaumont, 1968b).

### 10. *elegantulus* (R. Turner)

*Sphex elegantulus* R. Turner, 1912g:369, ♀. Holotype or syntypes: ♀, China: Lo-Fou Mts.: no specific locality (BMNH). – **As *Prionyx elegantulus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Hua, 2006:276 (in list of Chinese insects, geographic distribution).

### 11. *erythrogaster* (Rohwer)

*Callosphex* [sic] *erythrogaster* Rohwer, 1913:450, ♀ (as *erythrogastra*, incorrect original termination). Holotype: ♀, Peru: Cuzco (USNM). – **As *Prionyx erythrogaster***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru, as *erythrogastra*).

### 12. *fervens* (Linnaeus)

*Sphex fervens* Linnaeus, 1758:569, sex not indicated. Holotype: ♀, India, actually West Indies: no specific locality (Museum Ludovicae Ulricae, Uppsala). – Linnaeus, 1764:406 (in museum of Queen Ludovica Ulrica, redescription); Fabricius, 1775:347 (redescription); Christ, 1781:294 (redescription); Fabricius, 1781:444 (redescription), 1787:275 (redescription); Gmelin, 1790:2726 (redescription); Fabricius, 1793:200 (redescription), 1796:155 (in Index to his Entomologia Systematica, 1793); Jurine, 1807:129 (listed); Erichson, 1849:589 (British Guyana); Kohl, 1890b:334 (in revision of world Sphecini, as unrecognizable species, Conil's description of *Sphex fervens* copied); Dalla Torre, 1897:422 (in catalog of world Hymenoptera, *Enodia fervens* of Conil listed as separate species); Schrottky, 1903b:123 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay, referring to *Sphex fervens* of Conil, 1880); W. Schulz, 1912:56 (study of type); van der Vecht, 1959b:130 (identification of the species by W. Schulz, 1912, was correct); Day, 1979:62 (taxonomic history); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Day and Fitton, 1978:193 (curation of Linnean type material); Pagliano, 2008:533 (specimens in M. Spinola collection, Torino). – **As *Pepsis fervens***: Dahlbom, 1845:XXI (specimens in collection Fabricius are *Enodia fervens*). – **As *Enodia fervens***: Dahlbom, 1845:XXI (new combination), 439 (in key); Fairmaire, 1858:264 (Gabon, clearly in error); A. Costa, 1864b:112 (15 specimens from Senegal in Museo Zoologico di Napoli, clearly in error); Conil, 1880:241 (nesting habits and redescription, clearly a misdetermination), 1881:454 (same information). – **As *Parasphex fervens***: F. Smith, 1856:267 (new combination, in catalog of Hymenoptera in British Museum, 1871a:362 (in catalog of Oriental Aculeata); Walker, 1871:20 (Sinai Peninsula: Tor; Djibouti: Tajura; Africa: Red Sea coast: Harkeko, clearly in error); Magretti, 1884a:249 (Sudan, clearly in error), 1884c:582 (Sudan: Kassala, clearly in error, as *fervens* Fabricius); Innes Bey, 1912:111 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected at Tor, Sinai Peninsula, obviously a misidentification); Roche, 2007a:139 (recorded from Egypt, but not occurring there). – **As *Prionony x fervens***: F. Parker, 1960:206, 207 (new combination, in key to North American *Prionony x*). – **As *Prionyx fervens***: R. Bohart and Menke, 1963:158 (new combination, in revision of Nearctic Sphecini), 1976:133 (in checklist of world Sphecidae); Krombein, 1979b:1585 (in catalog of North American Hymenoptera); Nascimento and Overal, 1980:8 (Argentina, Brazil); Yústiz, 1987:13 (Venezuela: Central Lara Depression); F. Fernández, 1990:24 (Colombia: Meta: Parque Nacional Natural La Macarena); Hanson and Menke, 1995:637 (known from Costa Rica); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae); Buys, 2006b:311 (nesting habits, behavior of larva); Dollfuss, 2008b:1409 (Argentina: La Rioja province; Mexico: Hidalgo: Metztitlán 70 km of Pachuca); Buys, 2009e:277 (Brazil: Rio de Janeiro: Macaé, Rio de Janeiro), 2011b:2 (Brazil: Rio de Janeiro: Arraial do Cabo, Cabo Frio); Buys and Rodrigues, 2014:40 (Brazil: State of Espírito Santo: Linhares, Serra).

*Pepsis johannis* Fabricius, 1804:208, sex not indicated (as *Johannis*, incorrect original capitalization). Holotype: ♀, South American Islands: no specific locality (ZMUC). Synonymized with *Sphex striatus* by F. Smith, 1756:260, 266 (tentatively), synonymy confirmed by Burmeister, 1872:239, and with *Prionony x fervens* by van der Vecht, 1961a:34. – **As *Sphex johannis***: Dalla Torre, 1897:427 (new combination, in catalog of world Hymenoptera); Schrottky, 1902a:315 (Brazil); Schrottky, 1903b:123 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Autran, 1907:207 (corrected *Sphex fervens* of Conil, 1881, to *Sphex johannis*).

*Sphex doumerci* Lepeletier de Saint Fargeau, 1845:357, ♀ (as *Doumerci,* incorrect original capitalization). Holotype: ♀, Syntypes: Brazil and Cayenne (originally Audinet-Serville coll., now M. Spinola coll., Torino). Synonymized with … – Kohl, 1890:356, footnote (original description copied, as tentative synonym of *Sphex striatus*); Dalla Torre, 1897:421

(in catalog of world Hymenoptera); Bradley, 1957:40 (Lepeletier de Saint Fargeau's specimens in Torino); Casolari and Casolari Moreno, 1980:103 (specimen in M. Spinola collection, Torino); Pagliano, 2008:533 (holotype in M. Spinola collection, Torino). – **As *Priononyx doumerci***: F. Smith, 1856:266 (new combination, in catalog of Hymenoptera in British Museum).

*Priononyx striatus* F. Smith, 1856:266, ♀ (as *striata*, incorrect original termination). Syntypes: ♀, Brazil: Pará: Pará, now Belém; and Amazonas: Villa Nova, now Parintins (BMNH). Synonymized with *Sphex fervens* by W. Schultz, 1912:56. – Taschenberg, 1869:408 (redescription); Burmeister, 1872:239 (Argentina: Paraná, Mendoza); Schrottky, 1909b:244 (Argentina: Catamarca), 1913a:225 (Argentina, Paraguay); R. Bohart, 1958b:92, 93 (in key to North American *Prionyx*, as *striata*); Evans, 1958a:184 (nesting behavior). – **As *Sphex striatus***: Kohl, 1890b:356 (new combination, in revision of world Sphecini); Dalla Torre, 1897:442 (in catalog of world Hymenoptera); Ducke, 1901:241 (Brazil: Pará: Belém); W. Schulz, 1906:193 (Argentina: Tucumán: Tapia; variation); Brèthes, 1908:144 (revision); Ducke, 1908b:82 (Brazil: Ceará State); Lüderwaldt, 1910:177 (nesting habits); Strand, 1910a:133 (Paraguay); Jörgensen, 1912:285 (Argentina: Mendoza Province); Poulton, 1918:xxxvii (Brazil, prey); Berland, 1926c:202 (miscellaneous locality records); Liebermann, 1931:24 (in revision of Argentinean Sphecini); Murray *in* Muesebeck et al., 1951:973 (in catalog of North American Hymenoptera). – **As *Prionyx striatus***: Snow, 1906:7 (Arizona); Piek and Spanjer, 1986:188 (new combination, in list of Sphecidae with known prey). – **As *Chlorion striatum***: Fernald, 1906:335 (new combination, in revision of Sphecini of North America and West Indies, first record from USA), 1907:264 (Argentina), 1931a:440 (synonymy); Fernald, 1942:30 (Guyana: Kartabo); Willink, 1948a:319 (in key), 1951:194 (in revision of Argentinean Sphecini); Krombein, 1958f:191 (in supplement to catalog of North American Hymenoptera: California).

*Sphex laerma* Cameron, 1897b:370, sex not indicated. Holotype or syntypes: Mexico: Guerrero: Río Papagaio (BMNH). Synonymized with *Chlorion striatum* by Fernald, 1906:335 (tentatively) and 1931a:440 (definitely).

## 13. *foxi* Bohart and Menke

*Sphex ferrugineus* W. Fox, 1892f:170, ♀, junior primary homonym of *Sphex ferrugineus* Lepeletier de Saint Fargeau, 1845. Holotype: ♀, USA: Southern California: no specific locality (USNM). – Kohl, 1895:48 (original description copied); Dalla Torre, 1897:422 (in catalog of world Hymenoptera); Murray *in* Muesebeck et al., 1951:973 (in catalog of North American Hymenoptera). – **As *Chlorion ferrugineum***: Fernald, 1906:331 (new combination, in revision of Sphecini of North America and West Indies, description of male). – **As *Priononyx ferrugineus***: Ashmead, 1899d:353 (new combination, in checklist of North American Sphecidae, as *ferruginosus*); F. Parker, 1960:206 (in key to North American *Prionyx*, as *ferruginea*). – **As *Parasphex ferrugineus***: Snow, 1906:7 (new combination, Arizona).

*Prionyx foxi* Bohart and Menke, 1963:52. Substitute name for *Sphex ferrugineus* W. Fox. – R. Bohart and Menke, 1963:152 (in revision of Nearctic Sphecini), 1976:133 (in checklist of world Sphecidae); Krombein, 1979b:1586 (in catalog of North American Hymenoptera); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae).

## 14. *fragilis* (Nurse)

*Sphex fragilis* Nurse, 1903b:10, ♀, ♂. Syntypes: India: Gujarat: Deesa; Pakistan: Quetta (BMNH). – Ramakrishna Aiyar, 1916:554 (in catalog of Indian aculeates described after Bingham, 1897). – **As *Prionyx fragilis***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae).

## 15. *funebris* (Berland)

*Sphex funebris* Berland, 1926c:202, ♀. Holotype: ♀, Kenya: Bura (MNHN); paratypes: Ethiopia, South Africa. – Leclercq, 1955h:26 (bibliographic references, faunal records); de Beaumont, 1967b:502 (Namibia). – **As *Chlorion funebris***: Arnold, 1928c:358 (new combination, revision), 1930:17 (in checklist of Afrotropical Sphecidae); Scott *in* Arnold, 1933a:370 (described from Ethiopia). – **As *Prionyx funebris***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Seyoum and Pulawski, 2001:321 (potential control agent of acridid pests in Ethiopia).

### 16. *globosus* (F. Smith)

*Sphex globosus* F. Smith, 1856:251, ♀, ♂ (as *globosa*, incorrect original termination). Syntypes: Australia: Van Diemen's Land, now Tasmania: no specific locality (BMNH). – Kohl, 1890b:368 (in revision of world Sphecini); Froggatt, 1892:210 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:424 (in catalog of world Hymenoptera); R. Turner, 1910a:343 (in key to Australian Sphecini); Berland, 1926c:206 (Tasmania). – **As *Chlorion globosus***: R. Turner, 1915b:551 (new combination, Tasmania, continental Australia); Chandler, 1928:177 (Australia: Victoria: Red Cliffs; nesting behavior). – **As *Prionyx globosus***: R. Bohart and Menke, 1963:152 (new combination, single member of *globosus* group); Riek, 1970:940 (in Insect Fauna of Australia); R. Bohart and Menke, 1976:133 (in checklist of world Sphecidae); Evans, Hook, and Matthews, 1982:223 (nesting behavior); Callan, 1984:38 (Australia: sleeping aggregation); Cardale, 1985:227 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (prey: Acrididae); Naumann, 1993:181 (Australia: Queensland: Heathlands area in Cape York), 1998:182 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Pagliano, 2003:a504 (Australia); Dollfuss, 2008b:1409 (Australia: Coopers Creek).

### 17. *guichardi* (de Beaumont)

*Sphex guichardi* de Beaumont, 1967a:273, ♀. Holotype: ♀, Turkey: Kayseri: Sultahani (BMNH). – de Beaumont, 1968b:150 (taxonomy). – **As *Prionyx guichardi***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Ljubomirov and Yildirim, 2008:26 (in catalog of Sphecidae of Turkey); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

### 18. *haberhaueri* (Radoszkowski)

*Sphex haberhaueri* Radoszkowski, 1871:199, ♀ (as *Haberhaueri*, incorrect original capitalization). Holotype or syntypes: ♀, Iran: Golestan: Astrabad, now Gorgan (Kraków or ZMHU). – Kohl, 1885b:183 (in revision of Palearctic *Sphex*); Ed. André, 1888:127 (in revision of Sphecidae of Europe and Algeria); Kohl, 1889a:24 (critique of André's characteristic), 1890b:331 (in revision of world Sphecini); F. Morawitz, 1894:339 (Turkmenistan: Atrek); Dalla Torre, 1897:424 (in catalog of world Hymenoptera); Berland, 1926b:168 (1 ♀ with no locality data in coll. Pérez, MNHN); Gussakovskij, 1933b:273 (Iran); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Kazenas, 1969a:21 (Kazakhstan: Charyn River); de Beaumont, 1970a:391 (Afghanistan), 1970c:4 (Iran: Baluchistan); Kazenas, 1972b:11 (Kazakhstan: Charyn River in Alma Ata Oblast'); Esmaili and Rastegar, 1974:45 (Iran); Kazenas, 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:184 (in key to Sphecidae of European part of former USSR). – **As *Prionyx haberhaueri***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Kazenas, 1998b:109 (in Sphecid Fauna of Kazakhstan); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:9 (southeast Kazakhstan: 6 km S Podgornyi); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:28 (geographic distribution, collecting localities in Kazakhstan), 2004b:98 (Kazakhstan: western Tien Shan Mts.), 2008a:98 (Southeast Kazakhstan: River Ili valley, lower course of River Charyn, and foothills of Dzunghar Alatau: Kyzyl Agach and Ush-Tube), 2008c:255 (Kazakhstan: village Koktum S Lake Alakol'); Danilov, 2009:54 (Russia: Western Siberia: Kulundinskaya Steppe), Danilov, 2010b:44 (distribution of Tethyan type); Kazenas, 2010:168 (Kazakhstan: Sogety Range near village Kokpek); Danilov, 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:63 (bibliographic references, geographic distribution); Kazenas, 2013a:26 (color photograph of adults, short information on geographic distribution and nesting habits).

*Enodia vittata* Kohl, 1884a:385, ♂. Syntypes: on Caspian Sea: no specific locality (NHMW). Synonymized with *Prionyx haberhaueri* by Danilov, 2012b:63. – **As *Sphex vittatus***: Kohl, 1885b:184 (new combination, in revision of Palearctic *Sphex*); Ed. André, 1888:142 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); Kohl, 1890b:331 (in revision of world Sphecini); Dalla Torre, 1897:447 (in catalog of world Hymenoptera); de Beaumont and Bytinski-Salz, 1955:41 (Israel); de Beaumont, 1961b:272 (Afghanistan), 1967a:273 (Turkey); Kazenas, 1969a:21 (Kazakhstan: Sharyn River, foothills of Dzhungarian Alatau, 1972b:110 (Kazakhstan), 1978b:41 (in key to Sphecidae of

Kazakhstan and Central Asia); Pulawski, 1978:184 (in key to Sphecidae of European part of former USSR). – **As *Prionyx vittatus***: R. Bohart and Menke, 1976:134 (new combination, in checklist of world Sphecidae); Dollfuss, 1989:12 (type material in NHMW); Ebrahimi, 2008:95 (first record from Iran: Hamedan: Psadabad); Ljubomirov and Yildirim, 2008:32 (in catalog of Sphecidae of Turkey); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

## 19. *herrerai* (Brèthes)

*Sphex herrerai* Brèthes, 1926:46, sex not indicated (as *Herrerai*, incorrect original capitalization). Holotype or syntypes: Peru: Cuzco (Buenos Aires). – **As *Prionyx herrerai***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru).

? *Sphex villarubiai* Giner Marí, 1944:349, ♀, ♂. Syntypes: Peru: no specific locality (Mus. Barcelona). Tentatively synonymized with *Prionyx herrerai* by Bohart and Menke, 1976:133.

## 20. *indus* (Linnaeus)

*Sphex indus* Linnaeus, 1758:569 (as *inda*, incorrect original termination). Holotype: ♀, India: no specific locality (Museum Ludovicae Ulricae, Uppsala). – Day, 1979:65 (notes on holotype). – **As *Prionyx indus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Dollfuss, 2008b:1409 (South Africa: Vioolsdrift, Zimbabwe: Kwekwe; correction to Arnold's 1928 key).

*Sphex indostanus* Linnaeus, 1764:942 (as *indostana*, incorrect original termination). Unjustified emendation of *Sphex indus*. – Linnaeus, 1764:407 (in museum of Queen Ludovicae Ulricae, redescription); Gmelin, 1790:2726 (redescription); Christ, 1791:295 and 307 (redescription); Dalla Torre, 1897:427 (in catalog of world Hymenoptera); Day and Fitton, 1978:193 (recuration of Linnean type material: no specimens).

*Harpactopus tyrannus* F. Smith, 1856:264, ♀. Holotype: ♀, South Africa: Natal: Port Natal (BMNH). Synonymized with *Sphex indus* by ... – Cameron, 1910b:139 (South Africa: Transvaal).– **As *Sphex tyrannus***: Radoszkowski, 1881:210 (new combination, Angola); Kohl, 1890b:349 (in revision of world Sphecini); Dalla Torre, 1897:445 (in catalog of world Hymenoptera); Bingham, 1902:216 (Malawi); Cameron, 1910b:139 (South Africa: Transvaal); Brauns, 1911a:117 (South Africa); Leclercq, 1955h:27 (bibliographic references, faunal records from Africa, variation in wing venation), 1961b:47 (Zaire); Diniz, 1964c:100 (in key to Angolan *Sphex*), 102 (Angola: Lunda: Andrada); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection; as *tyrannus*); Pagliano, 2008:525 (specimens in M. Spinola collection, Torino, are a *Sphex* sp.). – **As *Chlorion tyrannus***: R. Turner, 1918b:361 (new combination, synonymy); Arnold, 1928c:357 (revision), 1930:17 (in checklist of Afrotropical Sphecidae), 1935a:503 (South Africa: Kalahari). – **As *Chlorion aegyptum*** [*sic*] ***tyrannum***: Arnold, 1947:145 (new status).

*Sphex vagus* Radoszkowski, 1881:209, ♂, junior primary homonym of *Sphex vagus* Linnaeus, 1768. Holotype or syntypes: ♂, Angola: no specific locality (Kraków). Synonymized with *Chlorion tyrannus* by R. Turner, 1918b:361. – Dalla Torre, 1897:446 (in catalog of world Hymenoptera).

*Sphex englebegi* Brauns, 1899:392, ♀, ♂ (as *Englebegi*, incorrect original capitalization). Syntypes: South Africa: Cape Province: Tamatsetse, Zwartkop; Orange: Bloemfontein (NHMW, AMG, TMP). Synonymized with *Chlorion tyrannum* by Arnold, 1928c:357. – Brauns, 1911a:118 (prey, following acridid swarms); Strand, 1916b:102 (German East Africa, now Tanzania: Kigonsera); Berland, 1926c:200 (South Africa and Tanzania: locality records).

## 21. *insignis* (Kohl)

*Sphex insignis* Kohl, 1885b:189, ♀. Holotype or syntypes: ♀, Syria: no specific locality (NHMW). – Ed. André, 1888:132 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); Kohl, 1890b:343 (in revision of world Sphecini); Dalla Torre, 1897:427 (in catalog of world Hymenoptera); Dollfuss, 1989:12 (type material in NHMW). – **As *Prionyx insignis***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Murai and Amr, 2011:120 (recorded from Syria by Kohl, 1885).

### 22. *judaeus* (de Beaumont)

*Sphex judaeus* de Beaumont, 1968b:150, ♀, ♂. Holotype: ♀, Jordan: Jericho (Lausanne). – de Beaumont, 1968b:149 (member of *subfuscatus* species group). – **As *Prionyx judaeus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Roche, 2007a:40 (in checklist of Egyptian Sphecidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

### 23. *kirbii* (Vander Linden)

*Ammophila? kirbii* Vander Linden, 1827:360, ♀, ♂. Syntypes: France and Spain: no specific localities (lost). – **As *Sphex kirbii***: Scobiola-Palade, 1987:65 (new combination, Romania: Dobrogea), 1989:87 (Romania: delta of Danube); Kazenas, 1978b:44 (in key to Sphecidae of Kazakhstan and Central Asia, as *kirbyi*); Pulawski, 1978:183 (in key to Sphecidae of European part of former USSR). – **As *Prionyx kirbii***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae, as *kirbyi*), 627 (*kirbii* is correct spelling); Guichard, 1978:270 (Greece); Valetta, 1979:215 (Malta; as *kirbi*); Pagliano, 1980:110 (Italy: Liguria, Valle d'Aosta); Gayubo, 1981a:136 (N Spain: Sierra de Béjar); Gess, 1981:17 (South Africa: 18 km WNW Grahamstown; in non-friable soils nesting in old or abandoned nests of *Parachilus insignis*), 19 (digging own nests in friable soils), 54 (facultative nesting in preexisting cavities); Gayubo, 1982f:245 (Spain: Cádiz Province); Dollfuss, 1983b:2 (occurrence in Austria doubtful); Gayubo, 1983c:231 (Spain: Salamanca Province); Mingo and Gayubo, 1983:154 (Spain); Schmidt and Westrich, 1983:121 (Greece); Gayubo, 1984c:356 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:9 (Spain: Valencia); Pagliano, 1984:367 (Italy); Chevin and Chevin, 1985:38 (France: Aude, as *kirbyi*); Brockmann, 1985b:312 (nest closure summary); Eiroa and Novoa, 1985:23 (Spain: Pontevedra: Barra beach near Cangas); Gayubo, 1985c:166 (Spain: Avilal: Guisando; Valladolid: Traspinedo); Józan, 1985b:55 (Hungary S Lake Balaton; as *kirbyi*), 76 (floral records), 83 (ecological and zoogeographic characteristics); Pagliano, 1985:8 (Italy); Gayubo, 1986b:36 (Spain: Andalucía), 1986c:30 (Spain: Zamora Province), 1986f:997 (prey, strepsipteran parasite); Gayubo and Heras, 1986:28 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:27 (Spain: Burgos, Soria); Gayubo and Tormos, 1986a:8 (Spain: Castellón de la Plana), 1986b:4 (Spain: Valencia); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Józan, 1986:367 (Hungary: Kiskunság National Park, as *kirbyi*); Steiner, 1986:97 (references to papers on nesting habits, as *kirbyi*); Asís and Jiménez, 1987:24 (Spain: Provincia de Castellón); Gayubo, 1987:107 (Spain: Provincia de Ciudad Real); Tormos and Jiménez, 1987a:122 (Spain: Valencia; as *kirbyi*), 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Karsai, 1988:99 (Hungary: Kiskunság National Park); Gayubo, Asís, and Tormos, 1990a:10 (Spain); Dollfuss, 1990:122 (Central African Republic); Pagliano, 1990:58 (in catalogue of Italian Sphecidae); Dollfuss, 1991:29 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:394 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Hamon, Fonfria, and Tussac, 1991:128 (in key to French Sphecini), 133 (in France extending north to Alsace and Loire-Atlantique); Leclercq, 1991a:274 (correction to Leclercq's, 1979 catalog of French and Benelux Sphecidae: *kirbii* is correct spelling); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus cephalotes* F.W. and *Notostaurus albicornis* (Ev.)); Negrisolo, 1991:316 (Italy: Gorizia and Udine Provinces); Schembri, 1991:176 (recorded from Malta by Valetta, 1979); Gayubo, Borsato, and Osella, 1992:276 (France: Corse; Spain, Greece); Józan, 1992b:171 (Hungary: Boronka-melléki Protected Area, as *kirbyi*); Gayubo, Tormos, and Asís, 1993b:307 (parasitized by *Paraxenos sphecidarum* Dufour); Luchetti, 1993:104 (Italy: Sardegna: Maddalena archipelago); Mochi and Luchetti, 1993:104 (Italy; France: Corse); Torregrosa, Gayubo, Tormos, and Asís, 1993:11 (Spain: Alicante Province); Gayubo and Borsato, 1994:200 (Italy: Toscana); Roche and Zalat, 1994:113 (Egypt: Sinai Peninsula, as *kirbyi*); Tormos, Asís, and Gayubo, 1994:187, 194 (Spain: Albacete Province, nest and prey); Józan, 1995:104 (Hungary: projected Duna-Dráva National Park, as *kirbyi*); Negrisolo, 1995a:19 (visiting flowers of *Limonium bellidifolium* (Gouan) Dumort), 22 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:2 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:83 (Italy: Ferrara Province); Pagliano and Scaramozzino, 1995:730 (Italy: Island of Lampedusa); Scharrer, 1995:22 (Morocco: Ifrane and Tanger); Vernier, 1995:176 (in key); S. Gess, 1996:283 (floral records); Gusenleitner, 1996a:5 (first unquestionable record from Austria: Burgenland); Kuhlmann, 1996:220 (Portugal:

Serra de Estrela); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Wu and Zhou, 1996a:45 (in revision in Economic Insect Fauna of China, as *kirbyi*); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:59 (in Sphecid Fauna of Western Europe); Stoyanov and Ljubomirov, 1997:25 (Bulgaria: Rila Mountains); Dollfuss, Gusenleitner, and Bregant, 1998:509 (Austria: summary of collecting records from Burgenland); Gusenleitner, 1998:498 (Austria: Burgenland: Nickelsdorf); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Józan, 1998:310 (Hungary: Duna-Dráva National Park); Kazenas, 1998b:111 (in Sphecid Fauna of Kazakhstan, as *kirbyi*); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve, as *kirbyi*); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:354 (Spain: Valladolid: Viana de Cega); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Esenbekova and Kazenas, 2000:9 (southeast Kazakhstan: 10 km NW Chemolgan, near Kapchagay, 35-45 km NW Kapchagay, 45 km NW Suzak); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:104 (Greece); Józan, 2000:104 (Hungary: Bakony Mountains, as *kirbyi*); Ljubomirov, 2000:7 (Bulgaria, specimens in N. Nedelkov collection); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Basset, 2001:79 (France: Département de Gironde); Ivanov and Ljubomirov, 2001:210 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józan, 2001:277 (Hungary: Somogy County, as *kirbyi*); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 84 (review of nesting habits); Seyoum and Pulawski, 2001:321 (potential control agent of acridid pests in Ethiopia; Ethiopia: Harerge: 37 km SE Jijiga at 9°11'N 43°05'E, 44 km ENE Jijiga at 9°29'N 43°10'E, Sidamo: Moyale at 3°33'N 39°03'E, 4 km E Yabelo at 4°53'N 38°08'E); Shkuratov, 2001:16 (prey: *Calliptamus* italicus L.); Kazenas, 2002a:28 (geographic distribution, collecting localities in Kazakhstan, as *kirbyi*); Shkuratov, 2002a:383 (Russia: common in Rostov Oblast'), 2002b:138 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:141 (Spain: Barcelona, Tarragona); Generani, Pagliano, Scaramozzino, and Strumia, 2003:64 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Nieves-Aldrey et al., 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Józan, 2003: 226 (Hungary: Látrányi Puszta Nature Conservation Area, as *kirbyi*); Schmid-Egger, 2003:757 (Italy: Sicilia: Ragusa); Gayubo et al. 2004:130 (Spain: Madrid: Estación Biogeológica de El Ventorillo in Sierra de Guadarrama); Gayubo**,** Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:98 (Kazakhstan: western Tien Shan Mts., as *kirbyi*), 2004d:26 (Kazakhstan: northern Caspian region, as *kirbyi*); Shkuratov, 2004a:73 (Russia: Rostov Oblast'); Straka, Bogusch, Tyrner, and Vepřek, 2004:146 (Czech Republic: Vojenské Cvičiště Nature Reserve); Cruz-Sánchez, Gayubo, González, and Torres, 2005:219 (Spain: Salamanca: San Martín del Castañar); Gayubo and Özbek, 2005:8 (Turkey: Antalya: Arapsuyu, Manavgat; Erzurum: University campus); Gülmez and Tüzün, 2005:47 (Turkey: Ankara Province); Jacobs, 2005a:437 (Bulgaria); Pagliano and Negrisolo, 2005:53 (in Sphecid Fauna of Italy); Shorenko, 2005a:162 (Ukraine: Crimea); Blösch, 2006:63 (specimens spend nights attached to plant stems with their heads down); Gadoum and Barbier, 2006:42 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français); Hua, 2006:276 (in list of Chinese insects, geographic distribution); Ljubomirov, 2006:536 (Bulgaria: previous records from Rhodope Mountains summarized); Magdalou, 2006a:6, 9 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane), 2006b:109 (France: Pyrénées-Orientales: Mas Larrieu Nature Reserve near Argelès-sur-Mer); Polidori, Tormos, Asís, Mendiola, and Andrietti, 2006:405 (kleptoparasite on *Stizus continuus* in mixed colonies, description of mature larva); Standfuss and Standfuss, 2006c:307 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Jacobs, 2007:42 (in key to Sphecidae of Germany, not yet found in Germany); Baños-Picón, Gayubo, Asís, and González, 2007:255, 258 (Spain: Zamora: Cabañas de Aliste); Roche, 2007a:41 (in checklist of Egyptian Sphecidae, redescription, as *kirbii kirbii*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Vepřek and Straka, 2007:199 (in catalog of Sphecidae of Czech Republic and Slovakia: known from Moravia and Slovakia only), 211 (recently recorded from Moravia and Slovakia by Straka et al., 2004); Yildirim and Ljubomirov, 2007:116 (Turkey: Erzurum: Oltu; Tortu; İçel: Aydıncık); Danilov, 2008:348 (Russia: Altayskiy Kray: Barnaul area, as *kirbyi*); Dollfuss, 2008b:1409 (locality records from 30 African and European countries); Gayubo, González, Tormos, and Asís, 2008:136 (Spain: Salamanca: Parque Natural de Las

Batuecas – Sierra de Francia); Kazenas, 2008c:255 (Kazakhstan: village Koktum S Lake Alakol', as *kirbyi*); Ljubomirov and Yildirim, 2008:27 (in catalog of Sphecidae of Turkey); Zettel, Wiesbauer, and Zimmermann, 2008:134 (Austria: Burgenland: several localities; Niederösterreich: several localities; Wien,); Danilov, 2009:54 (Russia: Western Siberia: Kulundinskaya Steppe); Gayubo, González, Tormos, and Asís, 2009:362 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Józan, 2009:165 (Croatia: Bibinje, as *kirbyi*); Bitsch, 2010:105 (in supplement to vol. II of Faune de France, 1997: recent biological and distributional records reported); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian type); Shorenko and Konovalov, 2010:12 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:87 (Western Slovakia: Borská Nížina), 100 (Western Slovakia: recorded from Borská Nížina); Baghirov, 2011b:140 (Russia: Altayskiy Kray: Barnaul); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:497 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Field, Ohl, and Kennedy, 2011:734 (in molecular cladistic analysis of Ammophilini); Gogala, 2011:6 (Slovenia); Murai and Amr, 2011:120 (recorded from Syria by Coulon, 1925 and Dollfuss, 2008b); Schmid-Egger, 2011b:603 (United Arab Emirates: Wadi Wurayah), 604 (color photograph of male); Danilov, 2012a:164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:63; Japoshvili and Ljubomirov, 2012:96: Turkey: Isparta: Gölcük Nature Park 8 km SW city of Isparta, as *kiirbii kirbii*); Prisniy, 2012:46 (Russia: Belgorod Oblast'); Protsenko, Fateryga, Ivanov, and Puzanov, 2012:58 (Ukraine: Crimea); Yildirim, 2012:74 (Turkey: Erzurum: Oltu); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Kazenas, 2013a:18, 19 (color photographs of adult wasps, short information on geographic distribution and nesting habits, as *kirbyi*); Shlyakhtenok, 2013:130 (in annotated catalog of aculeate wasps of Belarus'); Baldock, 2014:35; Baldock, 2014:354 (Spain: Island of Mallorca) (Spain: Island of Mallorca); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces, as *kirbii kirbii*); Zettel, Ockermüller, and Wiesbauer, 2014:162 (Austria: Wien-Lobau).

*Sphex albisectus* Lepeletier de Saint Fargeau and Serville, 1828:462, ♀, ♂. Lectotype: ♀, Italy: Piemonte: no specific locality (MNHN), designated by Menke *in* Bohart and Menke, 1976:133. Synonymized with *Parasphex kirbii* by F. Smith, 1856:267 (but used as valid name). – Ghiliani, 1842:24 (listed from Italy: Sicilia, as *albiseta*); Lepeletier de Saint Fargeau, 1845:358 (in revision of world Hymenoptera); Lucas, 1849:272 (Algeria: Oran); Fabre, 1856a:149 (nesting habits); Girard, 1879:964 (color, distribution, and habits); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Kohl 1885b:185 (in revision of Palearctic *Sphex*); Gasperini, 1887:18 (recorded from Dalmatia, now Croatia, by Kohl, 1885b); Ed. André, 1888:130 (in revision of Sphecidae of Europe and Algeria), 10* (bibliographic references); Kohl, 1888b:730 (Austria: Tirol, now Italy: Alto Adige); Radoszkowski, 1888a:329 (genitalia, as *albisecta*); Gasperini, 1889:70 (Dalmatia: Lesina, now Croatia: Hvar); Cameron, 1889c:106 (listed); Kohl and Handlirsch, 1889:275 (Turkmenistan: Chuli); Kohl, 1890b:335 (in revision of world Sphecini); F. Morawitz, 1891a:202 (Russia: Astrakhan Government); Kohl, 1894:342 (Congo: Gabun, Mozambique: Delagoa Bay, now Maputo Bay, Tanzania: Island of Zanzibar, East Africa (country unknown): Chama); Sickmann, 1894:216 (China: Hopei Province: Tientsin); De Stefani Perez, 1895:226 (in catalog of Sicilian Hymenoptera); Laboulbène, 1875:179 (reference to Fabre's observation on prey); Medina, 1894a:260 (Spain: Sevilla and Pozuelo de Calatrava); Schletterer, 1894:34 (Istria Peninsula, now part of Croatia, Slovenia, and Italy); Dalla Torre, 1897:414 (in catalog of world Hymenoptera); Mocsáry, 1897:79 (Kingdom of Hungary, some localities are in today's Croatia and Romania); Ferton, 1901a:144 (fly parasite), 1902:512 (nesting habits); Adlerz, 1904:139 (known prey: acridids); Antiga and Bofill, 1904:5 (Spain: Cataluña Province); E. Saunders, 1904c:636 (Spain); W. Schulz, 1904b:93 (Spain: Granada; Lebanon: Beirut); Mantero, 1905:69 (Italy: Toscana: Isola del Giglio); W. Schulz, 1905b:9 (West Africa: Muculla), 34 (Algeria); Vángel, 1905:166 (Hungary); Dusmet and Mercet, 1906:507, 515 (in key to Spanish Sphecini); Graeffe, 1906:456 (Tunisia: Hammam el Lif); Magretti, 1906:12 (Eritrea, as *albisecta*); W Schulz, 1906:193 (correct authorship); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:244 (in key to Hymenoptera of Central Europe); Cameron, 1908a:263 (Tanzania: Kilimanjaro and Meru); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Cameron, 1910b:138 (South Africa: Transvaal: Kranspoort); Brauns, 1911a:118 (South Africa); Graeffe, 1911:49 (Italy: Trieste area); Morice, 1911:75 (Algeria: Biskra, Bône); Mantero, 1911:72 (Italy: Sardegna: Isola dell'Asinara); W. Schulz, 1911b:164 (Gribodo's 1884 determination

confirmed); Maidl, 1913:560 (Egypt: Birket Karoun); Smits van Burgst, 1913a:319 and 1913b:6 (Tunisia: no specific locality); Dusmet y Alonso, 1915:86 (Spain: Aragón); Mantero, 1915:325 (Libya); Maidl, 1922:67 (Croatia); Ferton, 1923:86 (preying on acridid, like *Tachysphex panzeri*); Berland, 1924:89 (France: Var: Callian, stridulation during nest excavation), 1925b:45 (nesting habits), 1925d:37 (in Sphecid Fauna of France); Coulon, 1925:116 (France, Syria, Morocco: Tanger); Roth, 1925:383 (in revision of North African Sphecini); Zanon, 1925:90 (Libya: Fueihat 15 km S Benghazi); Berland, 1926a:45 (prey, homing), 1926b:168 (miscellaneous locality records); von Schulthess, 1926b:209 (Tunisia, Libya); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Tarragona); Berland, 1928b:175 (add Roth, 1925 to bibliography in Berland, 1925d); Grandi, 1928a:12 (nesting habits); Guiglia, 1929:395 (Libya: Cirenaica: Cirene); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub); Bischoff, 1930:216 (Tajikistan: Pamir); Schmiedeknecht, 1930:705 (in keys to Hymenoptera of North and Central Europe); Schouteden, 1930:95 (Zaire); Berland, 1932a:22 (France: Var Department; utilizing old charcoal preparation sites for nesting); Giordani Soika, 1932a:20 (Italy: Lido di Venezia); Bischoff, 1933:5 (Morocco); Nadig, 1933:103 (Morocco); Bernard, 1934b:249 (prey: *Stauroderus vagans* Eversmann); Giner Marí, 1934:130 (Spain); Grandi, 1934:63 (nesting habits), 130 (Italy: Emilia-Romagna: Cervia, and Lazio: Acilia); Guiglia, 1934b:294 (Libya: bibliography and summary of locality records); Maidl, 1934:64 (Greece: Aegean Islands: Milos and Seriphos); Bernard, 1935:61 (France: Var: Fréjus area; prey: *Stauroderus vagans* Eversmann); Vergne, 1935:117 (France: Auvergne: Les Martres-d'Artières); Zavadil, 1937a:73 (eastern Slovakia); Zavadil, Šustera, and Bat'a, 1937:212 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938a:80 (Hungary: Pótharaszt puszta); Yasumatsu, 1938c:83 (China: Manchuria; in revision of East Asian Sphecini); Móczár, 1939:5 (Hungary: Jászberény); Deleurance, 1941:278 (France: Camargue; prey: *Dociostaurus genei*); Yasumatsu, 1942c:106 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Giner Marí, 1943a:81 (in Sphecid Fauna of Spain); Guiglia, 1943c:76 (Ethiopia: Gamo Gofa: Sagan–Omo region, as *albisectum*); Timon-David, 1943:29 (France: Bouches-du-Rhône: plage de Fos); Guiglia, 1944b:7 (Italy); Honoré, 1944a:63 (in revision of Egyptian Sphecini); Giner Marí, 1945b:359 (eastern Morocco: Muley Rechid); Deleurance, 1946b:62 (list of prey), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Chaudoir, 1947:142 (France: Gard: Roquemaure); Dulac, 1947:53 (France: Saône-et-Loire Department: Creusot area); Soyer, 1947:117 (details of nest closure); Zavadil *in* Zavadil and Šnoflák, 1948:167 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:9 (Portugal); Berland and Bernard, 1949:2 (in revision of French *Sphex* s. l.), 7 (review of biological data); de Beaumont, 1950f:396 (Algeria); Guiglia, 1950:248 (Ethiopia: Gamo Gofa: Caschei, as *albisectum*); Scobiola, 1950:21 (Romania); de Beaumont, 1951e:267 (Morocco); Cleu, 1953:50 (France: Ardèche River basin); Móczár, 1953:309 (Hungary); Nouvel and Ribaut, 1953:177 (France: Haute-Garonne: Saint-Béat); Grandi, 1954:157 (nest and prey: *Chortippus bicolor* Charp.), 236 (Italy); Hertzog, 1954:99 (France: Bouches-du-Rhône: Camargue); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Leclercq, 1955h:31 (bibliographic references, faunal records from Africa, nomenclatural history, variation); Steiner, 1955:133 (France: Dordogne); Vergne, 1955:4 (France: Auvergne); Vogrin, 1955:31 (Yugoslavia); Berland, 1956:1168 (in revision of African Sphecini); Bytinski-Salz, 1956:224 (Turkey: Bursa, Elmalı, İzmir, Karapınar, Kemer); Ceballos, 1956:362 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:181 (Libya); Dulac, 1956:9 (France: Isère: Grenoble, Saône-et-Loire: St. Laurent-d'Andenay E Creusot); Hertzog, 1956:157 (prey: acridids *Omocestus ventralis* (Zetterstedt), *Euchortippus pulvinatus* (Fischer Waldheim), *Aiolopus thalassinus* (Fabricius), *Oedipoda coerulescens* (Linnaeus), prey transport, nest closure, nest structure); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:8, 10 (in key to Hungarian Sphecidae); de Beaumont, 1957b:130 (n. Iran); Guiglia, 1957:144 (Italy: Isole Pelagie: Lampedusa); Balthasar, 1958:339 (Slovakia: Čenkov); Nouvel and Ribaut, 1958:8 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:164 (Bulgaria: Aitos, Sozopol, Varna); Benz, 1959 (nesting habits); de Beaumont, 1959a:10 (Italy); Diniz, 1959:27 (Portugal: nine localities); Scobiola-Palade, 1959:497 (Romania: Constanţa Region: Agigea); Suárez, 1959:53 (Spain: Almería Province); de Beaumont, 1960a:5 (Greece: Island of Rhodes), 1960b:227 (Libya); Guiglia, 1960:360 (Italy: Isole Pelagie: Lampedusa); Scobiola-Palade, 1960b:232 (Romania: several localities, male genitalia illustrated); Wenger, 1960:421 (nesting habits); Grandi, 1961:146 (nesting habits); Leclercq, 1961b:47 (Zaire); Atanassov, 1962:125 (Bulgaria: Petrich area); de Beaumont, 1962b:19 (Spain); Lehrer and Scutaru, 1963:287 (Romania: Iaşi); Scobiola, 1963:825 (Romania: Periprava); Tsuneki, 1963b:48 (nesting habits); Ceballos, 1964:87 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:28 (in Sphecid Fauna of Switzerland); Diniz, 1964c:100 (in key to Angolan *Sphex*); de

Beaumont, 1965a:13 (Greece); Balthasar, Hrubant, and Hrubant, 1967:175 (Bulgaria: Slanchev Bryag near Nessebar); Carayon, 1967:744, 748 (France: Vaucluse Department: nocturnal rest site); de Beaumont, 1967a:273 (Turkey); Scobiola-Palade, 1968b:141 (Romania: Island of Letea in delta of Danube), 1968c:382 (Romania: Budeşti, Copăceni); Benedek, 1969a:83 (Hungary; marshy meadow); Kazenas, 1969a:21 (Kazakhstan: Ili River, foothills of Dzhungarian Alaltau, Arkharly Range, Golodnaya Step, Uil River, Gur'yev, now Atyraū); Tsuneki, 1971m:2 (China: Peking: Tiendang); Balthasar, 1972:424 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:113 (Kazakhstan); Myartseva, 1972a:83 (Turkmenistan); Scobiola-Palade, 1972a:148 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:175 (France: Gironde, Landes, Lot-et-Garonne, Périgord Noir; HauteGaronne: Saint-Béat); Erlandsson, 1974:58 (France, Italy, Spain); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. and *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan), 112 (feeding on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan); Simon Thomas, 1976:3 (France: Lot-et-Garonne: Forêt de Campet); Marion, 1978:86 (France); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Benz, 1985:1228 (nesting habits summary); Piek and Spanjer, 1986:189 (in list of Sphecidae with known prey, as *albisecta*); Bonelli, 1988:87 (prey and nest); Pádr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Pagliano, 2008:532 (specimens in M. Spinola collection, Torino). – **As *Sphex albicinctus*** [sic]: Scobiola-Palade, 1985:95 (new combination, Romania: delta of Danube).– **As *Enodia albisecta***: Dahlbom, 1843:28 (new combination, in revision of Sphecidae and Pompilidae), 1845:438 (in key); A. Costa, 1858b:12 (in revision of Sphecidae of Kingdom of Naples), 1867b:71 and 1867c:15 (in revision of Italian Sphecidae); Palma, 1867:38 (Italy: Sicilia settentrionale); Aichinger, 1870:322 (Austria: Tirol); Martinez y Saez, 1874:31 (specimens from Spain: Madrid area, donated to Leon Dufour, as *albisectus* Bonelli); Radoszkowski, 1881:210 (Angola); A. Costa, 1882b:22 (Italy: Sardegna), 1883:57 (Italy: Sardegna: island of Asinara and Terranova), 1884b:323 (Italy: Sardegna: Cagliari); Radoszkowski, 1887b:91 (in list of Transcaspian Hymenoptera), 1892:586 (description of male genitalia); Roth, 1924:123 (Algeria: Nemours, now Ghazaouet); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino). – **As *Parasphex albisecta***: F. Smith, 1856:267 (new combination, in catalog of Hymenoptera in British Museum); Kirchner, 1867:217 (in catalog of European Hymenoptera); Dours, 1874:146 (in catalog of Hymenoptera of France); Mocsáry, 1874:120 (Siebenbürgen, now Romania: Transylvania: no specific locality); Marquet, 1875:207 (France: Haute-Garonne: Toulouse; Hérault: Cette, now Sète); Frivaldszky, 1876:354 (Hungary: Temes Komitat: Grebenácz, now in Timiş District in Romania); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Kohl, 1880:182 (Italy: Trentino–Alto Adige); Marquet, 1881:178 (southern France); Sajó, 1882:5 (Hungary); Kohl, 1883e:674 (Switzerland); Gribodo, 1884c:302 (Ethiopia: Let Marefia 16 km N Ankober); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella). – **As *Chlorion albisectum***: Arnold, 1928c:350 (new combination, revision), 1930:17 (in checklist of Afrotropical Sphecidae); Bischoff, 1931:9 (Spain). – **As *Tachysphex*** [sic] ***albisectus***: Ferton, 1905:70 (position of egg on prey; generic name a lapsus). – **As *Prionyx albisectus***: Diniz, 1965:3 (new combination, Portugal: twenty four localities); Leclercq, l969:1050 (Congo Brazzaville); Radović, 1985:64 (sting apparatus analyzed).

As *Sphex vetusta*: Pagliano, 2008:532 (specimens in M. Spinola collection, Torino).

### ssp. *marginatus* (F. Smith)

*Parasphex marginatus* F. Smith, 1856:267, ♀, ♂ (as *marginata*, incorrect original termination). Syntypes: Gambia: no specific locality (BMNH). – **As *Sphex marginatus***: W Fox, 1896e:552 (new combination, Ethiopia: Bale Province: Sheikh Husein, now Shek Husen); Kohl, 1890b:337 (in revision of world Sphecini); Dalla Torre, 1897:430 (in catalog of world Hymenoptera); Kohl, 1909:370 (Tanzania: Pemba Island); Strand, 1916b:104 (German East Africa); G. Carpenter, 1930b:293 (nest closure). – **As *Chlorion albisectum* race *marginatum***: Arnold, 1928c:351 (new status, revision, West Africa, Africa from Zimbabwe to Cape Province), 1930:17 (in checklist of Afrotropical Sphecidae); Guiglia, 1939d:74 (Ethiopia: Sidamo: Neghelli, now Negele, as var. *marginatum*), 1940e:293 (Ethiopia: Harer: Gotqa, as var. *marginatum*). – **As *Sphex albisectus marginatus***: Leclercq, 1955h:33 (new status, in key to subspecies of *Sphex albisectus* (locality records from various African countries), 1955i:406 (Burundi), 1962a:393 (Tanzania: Uluguru Mountains); Diniz, 1964c:102 (Angola: Lunda: Dundo); de Beaumont, 1976b:502 (South Africa: Cape Province). – **As *Prionyx kirbii marginatus***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Rodgers and Home-

wood, 1982:233 (Tanzania: Usambara Mountains); Guichard, 1988a:121 (Arabian Peninsula); Gadallah and Assery, 2004a:221 (in catalog of Sphecidae of Saudi Arabia); Schmid-Egger, 2011b:603 (is just a desert color form); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia)..

*Sphex sjoestedti* Cameron, 1908a:263, ♂ (as *Sjöstedti*, incorrect original capitalization and diacritic mark). Holotype or syntypes: ♂ Tanzania: Mount Meru lowlands (NRS). Synonymized with *Chlorion albisectum marginatum* by Arnold, 1928c:351. – **As *Sphex albisectus* var. *sjöstedti***: Leclercq, 1961b:47 (new status, Zaire). – **As *Sphex marginatus sjöstedti***: Diniz, 1964c:103 (new status, Angola: Lunda: Dundo, Matala). **– As *Sphex albisectus marginatus sjöstedti:*** Leclercq, 1955h:33 (new status, in key to subspecies of *Sphex albisectus*), 35 (locality records from Zaire and South Africa).

*Sphex curvilineatus* Cameron, 1912b:397, ♂. Holotype or syntypes: ♂, Zaire: Lukombe (MRAC). Synonymized with *Chlorion albisectum marginatum* by Arnold, 1928c:351. – Schouteden, 1930:95 (Zaire).

*Sphex albisectus* var. *alluaudi* Berland, 1926b:168, ♀, ♂. Lectotype: ♀, Ivory Coast: Assinie (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:133. Synonymized with … by … – Diniz, 1964c:103 (Angola: Lunda: Dundo). – **As *Chlorion albisectum* var. *Alluaudi***: Arnold, 1928c:352 (new combination, new status, original description translated into English), 1930:17 (in checklist of Afrotropical Sphecidae); Leclercq, 1961b:47 (Zaire).– **As *Sphex albisectus marginatus alluaudi***: Leclercq, 1955h:34 (new status, in key to subspecies of *Sphex albisectus*), 35 (Zaire: locality records).

*Sphex albisectus* var. *chudeaui* Berland, 1926b:168, ♀. Holotype: ♀, Senegal: Balé (MNHN). – **As *Chlorion albisectum* var. *Chudeaui***: Arnold, 1928c:352 (new combination, new status, original description translated into English), 1930:17 (in checklist of Afrotropical Sphecidae, as *chudeauxi*). – **As *Sphex albisectus marginatus chudeaui***: Leclercq, 1955h:33 (new status, in key to subspecies of *Sphex albisectus*).

*Sphex albisectus* var. *congoensis* Berland, 1926b:169, ♀. Lectotype: ♀, Gabon: Libreville (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:133. Synonymized with ... – **As *Chlorion albisectum* var. *congoensis***: Arnold, 1928c:352 (new combination, original description translated into English), 1930:17 (in checklist of Afrotropical Sphecidae).

### 24. *kurdistanicus* (Balthasar)

*Sphex kurdistanicus* Balthasar, 1954b:281, ♀, ♂. Holotype: ♀, Iraq: Kurdistan: Erbil (originally V. Balthasar coll., now NMPC). – **As *Prionyx kurdistanicus***: Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae).

### 25. *lividocinctus* (A. Costa)

*Enodia lividocincta* A. Costa, 1861:39, ♀, ♂. Syntypes: Italy: Reggio di Calabria: Brancaleone; and Terra d'Otranto (Napoli) – A. Costa, 1863:65 (Italy: Calabria Ulteriore: Aspromonte), 1867b:71 and 1867c:15 (in revision of Italian Sphecidae); Palma, 1867:38 (Italy: Sicilia settentrionale); A. Costa, 1886b:21 (Italy: Sardegna); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Pagliano, 2008:532 (specimens in M. Spinola collection, Torino). – **As *Parasphex lividocincta***: Kirchner, 1867:217 (new combination, in catalog of European Hymenoptera). – **As *Sphex lividocinctus***: Kohl, 1885b:190 (new combination, in revision of Palearctic *Sphex*); Kohl and Handlirsch, 1889:275 (Turkmenistan); Kohl, 1890b:339 (in revision of world Sphecini); A. Costa, 1893b:3 (Tunisia); Dalla Torre, 1897:429 (in catalog of world Hymenoptera); Antiga and Bofill, 1904:5 (Spain: Cataluña Province); Dusmet and Mercet, 1906:507, 514 (in key to Spanish Sphecini); Ferton, 1908:560 (France: Corse: Bonifacio; nest); Dusmet y Alonso, 1915:87 (Spain: Aragón); Berland, 1925d:38 (in Sphecid Fauna of France); Roth, 1925:384 (in revision of North African Sphecini); Nadig, 1933:103 (Morocco); Guiglia, 1934b:294 (Libya: bibliography and summary of locality records); Maidl, 1934:64 (Greece: Aegean Islands: Mytilene, determination tentative); Nadig, 1934:33 (Italy: Sardegna: Aritzo); Gussakovskij, 1935:412 (Tajikistan); Guiglia, 1938b:9 (Italy: Sardegna); Bernard, 1939:167 (France: Var: Fréjus); Giner Marí, 1943a:82 (in Sphecid Fauna of Spain); Honoré, 1944a:67 (in revision of Egyptian Sphecini); Chaudoir, 1947:142 (France: Gard: Roquemaure); de Beaumont, 1947b:382 (Cyprus); Guiglia, 1948c:200 (Italy: Sardegna: Villasalto); de Andrade, 1949:9 (Portugal); Berland and Bernard, 1949:2 (in revision of French *Sphex* s.l.);

Pittioni, 1950:20 (Cyprus); de Beaumont, 1951e:268 (Morocco); Cleu, 1953:50 (France: Ardèche River basin); de Beaumont, 1954e:86 (Italy); Harant and Leclercq, 1955:250 (France: Hérault: Maguelonne); Leclercq, 1955h:37 (bibliographic references, faunal records from Africa); Ceballos, 1956:363 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:181 (Libya); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); de Beaumont, 1957b:130 (n. Iran); Nouvel and Ribaut, 1958:8 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:164 (Bulgaria: Sandanski); de Beaumont, 1959a:10 (Italy); Diniz, 1959:27 (Portugal: S. João do Estoril, Soure); Suárez, 1959:53 (Spain: Almería Province); de Beaumont, 1960a:5 (Greece: Island of Rhodes), 1960b:227 (Libya); Ceballos, 1964:87 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:13 (Greece); Carayon, 1967:744, 748 (France: Vaucluse Department: nocturnal rest site); de Beaumont, 1967a:272 (Turkey), 1969:81 (Turkey); Kazenas, 1969a:21 (Kazakhstan: Ili River, foothills of Dzhungarian Alatau, Kyzylagash, Golodnaya Step'); Islamov, 1970:63 (Uzbekistan: Chirchik Basin); Balthasar, 1972:425 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:113 (Kazakhstan); Erlandsson, 1974:58 (Greece); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:44 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:183 (in key to Sphecidae of European part of former USSR). – **As *Prionyx lividocinctus***: Diniz, 1965:4 (new combination, Portugal: Estoril; Myartseva, 1972a:84 (Turkmenistan); R. Bohart and Menke, 1976:133 (in checklist of world Sphecidae); Pagliano, 1980:110 (Italy: Lazio); Gayubo, 1982f:245 (Spain: Cádiz Province: Puerto de Santa Maria); Radović Krunić, and Brajković, 1982:28 (Yugoslavia); Gayubo, 1983c:231 (Spain: Salamanca Province: Cerralbo); Mingo and Gayubo, 1983:154 (Spain); Schmidt and Westrich, 1983:121 (Greece); Gayubo, 1984c:357 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:9 (Spain: Valencia); Pagliano, 1984:367 (Italy); Chevin and Chevin, 1985:38 (France: Aude); Pagliano, 1985:8 (Italy); Radović, 1985:64 (sting apparatus analyzed); Gayubo, 1986b:36 (Spain: Andalucía); Islamov, 1986:516 (Uzbekistan: Surkhandarya and Tashkent Oblasts); Gayubo, 1987:107 (Spain: Ciudad Real Province); Pagliano, 1990:58 (in catalog of Italian Sphecidae); Hamon, Fonfria, and Tussac, 1991:128 (in key to French Sphecini), 133 (in France along Mediterranean shore); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Dociostaurus tartarus* (Stshelk.)); Schembri, 1991:176 (first record from Malta); Gayubo, Borsato, and Osella, 1992:277 (Greece); Ebrahimi, 1993:96 (Iran); Gayubo and Borsato, 1994:200 (Italy: Toscana, Sardegna), 201 (map of distribution in Italy); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:2 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:61 (in Sphecid Fauna of Western Europe); Kazenas, 1998b:113 (in Sphecid Fauna of Kazakhstan); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:9 (southeast Kazakhstan: near lake Biylikul', 45 km NW Suzak); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:28 (geographic distribution, collecting localities in Kazakhstan); Gayubo**,** Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts.), 2004d:26 (Kazakhstan: northern Caspian region); Gayubo and Özbek, 2005:8 (Turkey: Antalaya: Belkýz; Ýçel: Silifke); Gülmez and Tüzün, 2005:47 (Turkey: Ankara Province); Pagliano and Negrisolo, 2005:54 (in Sphecid Fauna of Italy); Blösch, 2006:63 (specimens spend nights attached to plant stems with their heads down); Standfuss and Standfuss, 2006c:307 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Roche, 2007a:42 (in checklist of Egyptian Sphecidae, redescription, as *lividocinctus lividocinctus*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008b:1412 (locality records from Bulgaria, Greece, Italy, Kazakhstan, Kyrgyzstan, Morocco, Turkey, and Turkmenistan); Kazenas, 2008c:255 (Kazakhstan: village Koktum S Lake Alakol'); Ljubomirov and Yildirim, 2008:27 (in catalog of Sphecidae of Turkey); Danilov, 2009:54 (Russia: Western Siberia: Kulundinskaya Steppe); Pagliano, 2009:175 (Italy: Molise: Mafalda); Bitsch, 2010:105 (in supplement to vol. II of Faune de France, 1997: France: first records from the Départements of Alpes-de-Haute-Provence: Ganagobie monastère, Sainte-Croix-de-Verdon, and Landes: Saint Geours-de-Marenne); Danilov, 2010b:44 (distribution of Tethyan type), 2012a:164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:63 (bibliographic references, geographic distribution); Kazenas, 2013a:19, 20 (color photograph of female, short information on geographic distribution and nesting habits); Baldock, 2014:354 (Spain: Island of Mallorca); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces, as *lividocinctus lividocinctus*).

*Prionony**x isselii* Gribodo, 1880:401, ♀ (as *Isselii*, incorrect original capitalization). Holotype: ♀, Tunisia: Galite Island (Genova). Synonymized with *Sphex lividocinctus* by Kohl, 1885b:190 and 1885c:165, synonymy confirmed by de Beaumont, 1950e:262.

*Enodia obliquestriata* Mocsáry, 1883:37, ♀ (as *oblique-striata*, incorrect original hyphenation). Holotype or syntypes: ♀, Lebanon: Beirut (TMB). Synonymized with *Sphex lividocinctus* by Kohl, 1885b:190.

*Enodia graeca* Mocsáry, 1883:35, ♂ (as *Graeca*, incorrect original capitalization). Holotype or syntypes: ♂, Greece: Corfu Island (TMB). Synonymized with *Sphex lividocinctus* by Kohl, 1890b:339. – **As *Sphex graecus***: Kohl, 1885b:189 (new combination, in revision of Palearctic *Sphex*); Ed. André, 1888:134 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references).

As *Sphex micans*: Ed. André, 1888:133 (in revision of Sphecidae of Europe and Algeria), corrected to *Sphex lividocinctus* by Kohl, 1889a:24.

### ssp. *apakensis* (Tsuneki)

*Sphex lividocinctus apakensis* Tsuneki, 1971m:2, ♀. Holotype: ♀, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – Nuhn and Menke, 1994:25 (holotype transferred to USNM). – **As *Prionyx lividocinctus apakensis***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae); Hua, 2006:276 (in list of Chinese insects, geographic distribution).

### ssp. *oasis* (Tsuneki)

*Sphex lividocinctus oasis* Tsuneki, 1971k:143, ♀, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Tsagan Bogd ul (TMB). – **As *Prionyx lividocinctus oasis***: R. Bohart and Menke, 1976:133 (new combination, in checklist of world Sphecidae).

## 26. *macula* (Fabricius)

*Pepsis macula* Fabricius, 1804:210, sex not indicated. Holotype: ♂, Saudi Arabia: no specific locality (MNHN, coll. Bosc, now possibly lost: van der Vecht, 1961a:34). – **As *Sphex macula***: Kohl *in* Dalla Torre, 1897:430 (new combination, in catalog of world Hymenoptera); W. Schulz, 1911b:164 (probable syntype material in Jurine collection, MHNG); Berland, 1926c:201 (redescription of type); de Beaumont, 1962c:221 (Arabia: Riyadh), 1968b:149 (member of *macula* species group), 1970c:4 (Iran: Baluchistan). – **As *Prionony**x macula***: de Beaumont, 1961e:2 (new combination, may be a senior synonym *Prionyx eatoni* and *lugens*). – **As *Prionyx macula***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera); Guichard, 1988a:120 (Arabian Peninsula); Roche and Zalat, 1994:113 (Egypt: Sinai Peninsula); Kazenas, 1998b:114 (in Sphecid Fauna of Kazakhstan), 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:29 (geographic distribution, collecting localities in Kazakhstan); Gadallah and Assery, 2004a:221 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:44 (in checklist of Egyptian Sphecidae, redescription, as *macula macula*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *macula macula*); Danilov, 2010b:44 (distribution of Tethyan type); Al-Houty, 2011:89 (Kuwait: no specific locality); Danilov, 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:63 (bibliographic references, geographic distribution); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia).

*Sphex eatoni* E. Saunders, 1910:518, ♀, ♂. Syntypes: Algeria: Biskra (OXUM). Synonymized with *Sphex macula* by de Beaumont, 1962c:221. – R. Turner, 1912c:413 (British East Africa, now Kenya: Makindu); Roth, 1925:387 (in revision of North African Sphecini); Honoré, 1944a:70 (in revision of Egyptian Sphecini); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Leclercq, 1955h:26 (bibliographic references); Grandi, 1959b:287 (Libya: Tripolitania: Jefren); de Beaumont, 1961e:2 (Iraq); Ebrahimi, 1993:94 (Iran).

As *Sphex lugens*: Grandi, 1935a:111 (Libya), corrected to *Sphex eatoni* by Grandi, 1959b287.

### ssp. *lugens* (Kohl)

*Sphex lugens* Kohl, 1889a:25, ♀, ♂. Syntypes: Armenia: Arax River Valley: no specific locality (NHMW). – Kohl, 1890b:348 (in revision of world Sphecini); Dalla Torre, 1897:430 (in catalog of world Hymenoptera); W. Schulz, 1911b:165 (as new synonym of *Sphex macula*); Gussakovskij, 1933b:278 (Iran); nec Grandi, 1935a:111 (= *Prionyx macula*); de Beaumont, 1960c:170 (Afghanistan; diagnostic characters, taxonomic problems), 1968b:150 (member of *macula* species group). – **As *Sphex macula lugens***: de Beaumont, 1962c:221 (new status); Dollfuss, 1989:12 (type material in NHMW). – **As *Prionyx macula lugens***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia).

### 27. *melanotus* (F. Morawitz)

*Sphex melanotus* F. Morawitz, 1890:575, ♀, ♂. Lectotype: Transcaspia: no specific locality (ZIN), designated by Danilov, 2012b:64. – Kohl, 1890b:346 (in revision of world Sphecini); Dalla Torre, 1897:432 (in catalog of world Hymenoptera); Berland, 1926c:200 (Turkestan, Altai); de Beaumont, 1968b:149 (member of *macula* species group). – **As *Prionyx melanotus***: Myartseva, 1972a:84 (new combination, Turkmenistan); R. Bohart and Menke, 1976:133 (in catalog of world Hymenoptera); Dollfuss, 1989:12 (type material in NHMW); Danilov, 2012a:163, 164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:64 (bibliographic references, geographic distribution).

### 28. *neoxenus* (Kohl)

? *Sphex melaenus* Spinola, 1851a:398, ♀, ♂ (as *melaena*, incorrect original termination). Syntypes: Chile: central provinces: no specific locality (Torino). – F. Smith, 1856:260 (in catalog of Hymenoptera in British Museum); Kohl, 1890b:448 (original description copied); Dalla Torre, 1897:432 (in catalog of world Hymenoptera); Bohart and Menke, 1976:133 (as tentative senior synonym of *Prionyx neoxenus*). – **As *Priononyx melaenus***: Reed, 1894:626 (new combination, revision). – **As *Chlorion melaenum***: Willink, 1951:203 (new combination, original description translated into Spanish).

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*Sphex neoxenus* Kohl, 1890b:363, ♀. Holotype: ♀, Canada: British Columbia: Vancouver Island (NHMW, but actually South America) – Fernald, 1906:418 (probably a South American species); Brèthes, 1908:146 (revision; Argentina). – Jörgensen, 1912:286 (Argentina: Mendoza Province). – **As *Priononyx neoxenus***: Schrottky, 1913a:225 (new combination, Argentina). – **As *Chlorion neoxenum***: Willink, 1948a:319 (new combination, in key), 1951:177 (in revision of Argentinean Sphecini). – **As *Prionyx neoxenus***: Pérez d'Angello, 1974:145 (new combination, Chile; color variation); R. Bohart and Menke, 1976:133 (in catalog of world Hymenoptera); Sielfeld, 1981b:72 (in checklist of Chilean Sphecidae); Pérez d'Angello, 1989:263 (Chile: Magellan Region); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Dollfuss, 2008b:1413 (locality records from Chile); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality).

*Sphex ommissus* Kohl, 1890b:364, ♂. Syntypes: ♂, Chile: Valparaiso (NHMW). Synonymized with *Chlorion neoxenum* by Fernald, 1931a:441. – Dalla Torre, 1897:435 (in catalog of world Hymenoptera, as *omissus*); Strand, 1910b:15 (Peru, actually Bolivia: Guaqui), 1916b:100 (description of ♀); Brèthes, 1918a:124 (Peru: Arequipa); Ruiz Pereira, 1924:102 (Chile: Cerro San Cristóbal); C. Reed, 1928:317 (resembling in coloration *Pompilus diaphanicus* Spinola and the Diptera *Laphria rufiventris* Blanch. and *Acylaticus pictus* Phil.); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes"), as *ommissus*; Ruiz Pereira, 1934:167 (Chile: Pahuano; as *ommisus*); Ruiz Pereira, 1937:164 (Chile: Coquimbo Province, as *ommisus*); Dollfuss, 1989:12 (type material in NHMW).

*Sphex neoxenus* var. *melanogaster* Brèthes, 1910a:261, ♀. Holotype: Argentina: Mendoza: Blanco Encalada (depository unknown). Synonymized with *Chlorion neoxenum* by Willink, 1951:177 and 179. – Jörgensen, 1912:286 (Argentina: Mendoza Province); Schrottky, 1913a:225 (Argentina: Mendoza); Liebermann, 1931:22 (in revision of Argentinian Sphecini); Genise, 1990:27 (depository of type material unknown).

*Sphex gayi* Berland, 1926c:203, ♀, ♂. Lectotype: ♂, Chile: no specific locality (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:133. Synonymized with *Chlorion neoxenum* by Willink, 1951:177 and 180.

*Sphex nigricapillus* Berland, 1926c:205, ♀, ♂. Lectotype: ♂, Peru: Arequipa (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:133. Synonymized with ...

### 29. *nigropectinatus* (Taschenberg)

*Enodia nigropectinata* Taschenberg, 1869:409, ♀ (as *nigro-pectinata*, incorrect original hyphenation). Syntypes: ♀, Sudan: Khartoum (Halle). – **As *Sphex nigropectinatus***: Kohl, 1885b:183 (new combination, in revision of Palearctic *Sphex*); Ed. André, 1888:129 (in revision of Sphecidae of Europe and Algeria), 10* (bibliographic references); Kohl, 1890b:329 (in revision of world Sphecini.); Dalla Torre, 1897:434 (in catalog of world Hymenoptera); Bingham, 1898a:105 (Yemen: Aden); Morice, 1911:76 (Algeria: Biskra); Roth, 1925:381 (in revision of North African Sphecini); Berland, 1926b:168 (miscellaneous locality records from Africa; prey: migratory locust); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub, as *nigripectinatus*); Guiglia, 1932d:472 (Libya: 85 km S Gialo); Gussakovskij, 1933b:273 (Iran); Guiglia, 1934b:295 (Libya: bibliography and summary of locality records); Roth, 1934a:394 (Algeria: In-Salah); Giordani Soika, 1935:234 (Libya: Fezzan: Gat); Gussakovskij, 1935:413 (Tajikistan); Guiglia, 1936:4 (Libya: Gialo and Tazerbo in Cufra oasis), 1942b:230 (Libya); Honoré. 1944a:62 (in revision of Egyptian Sphecini); Giner Marí, 1947:19 (Western Sahara); Berland, 1950a:126 (Mauritania: Ford Gouraud, now Fdérik); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Leclercq, 1955h:30 (bibliographic references, faunal records from Africa); Berland, 1956:1166 (in revision of African Sphecini); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River), 1965:83 (Turkmenistan: Akibay); Kazenas, 1969a:21 (Kazakhstan: southeast Kyzylkum Desert, Golodnaya Step', Ili River), 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Prionyx nigropectinatus***: Myartseva, 1972a:84 (new combination, Turkmenistan); R. Bohart and Menke, 1976:133 (in catalog of world Hymenoptera); Guichard, 1980:224 (Oman), 1988a:121 (South Yemen); Ebrahimi, 1993:98 (Iran); Roche and Zalat, 1994:113 (Egypt: Sinai Peninsula); Kazenas, 1998b:116 (in Sphecid Fauna of Kazakhstan), 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 85 (known prey), 2002a:29 (geographic distribution, collecting localities in Kazakhstan); Roche, 2007a:45 (in checklist of Egyptian Sphecidae), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian type), 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:64 (bibliographic references, geographic distribution).

? *Sphex dives* Lepeletier de Saint Fargeau, 1845:359, sex not indicated. Holotype: ♀, origin unknown (originally J. Serville coll., now ?). Tentatively synonymized with ... – F. Smith, 1856:243 (in catalog of Hymenoptera in British Museum); Dalla Torre, 1897:421 (in catalog of world Hymenoptera).

? *Harpactopus nivosus* F. Smith, 1856:265, ♀. Holotype or syntypes: ♀, northern India: no specific locality (BMNH). Tentatively synonymized with … by … – F. Smith, 1871a:362 (in catalog of Oriental Aculeata). – **As *Sphex nivosus***: Cameron, 1889c:106 (new combination, listed, as *nivosa*); Bingham, 1897:244 (redescription); Dalla Torre, 1897:434 (in catalog of world Hymenoptera). – **As *Prionyx nivosus***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera, as questionable synonym of *Prionyx nigropectinatus*).

### 30. *niveatus* (Dufour)

*Sphex niveatus* Dufour, 1854a:377, ♀, ♂ (as *niveata*, incorrect original termination). Lectotype: ♀, Algeria: Pontéba, now Oumm ed Drou (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:133. – Kohl, 1885b:182 (in revision of Palearctic *Sphex*); Ed. André, 1888:128 (in revision of Sphecidae of Europe and Algeria), 10* (bibliographic references); Kohl and Handlirsch, 1889:275 (Turkmenistan); Kohl, 1890b:328 (in revision of world Sphecini); Dalla Torre, 1897:434 (in catalog of world Hymenoptera); Bingham, 1902:216 (South Africa, Malawi); Kohl, 1906a: (Yemen: Aden); Morice, 1911:75 (Algeria: Biskra; prey: *Sphingonotus* sp., a grasshopper); Maidl, 1924:246 (Sudan: Tuti Island near Khartum); Roth, 1925:380 (in revision of North African Sphecini); Berland, 1926b:167 (Algeria, Djibouti: Obock; color variation); Guiglia, 1932d:473 (Libya: 85 km S Gialo); Bischoff, 1933:5 (Morocco); Gussakovskij, 1933b:273 (Iran); Nadig, 1933:103 (Morocco); Guiglia, 1934b:295 (Libya: bibliography and summary of locality records), 1937:184 (Libya: Cyrenaica: Zauiet Msus), 1940a:288 (Libya: Mizda), 1942b:230 (Libya); Honoré, 1944a:60 (in revision of Egyptian Sphecini); Giner Marí, 1945b:359 (e. Morocco: Ixmoart), 1945e:220 (Western Sahara), 1947:19 (Western Sahara); Berland, 1950a:126 (Mauritania: Ford Gouraud, now Fdérik), 1950b:294 (Niger: Aïr area); de Beaumont, 1950f:396 (Algeria), 1951e:267 (Morocco), 1952c:188 (Algeria: Hoggar); de Beaumont and Bytinski-Salz, 1955:41 (Is-

rael); Leclercq, 1955h:29 (bibliographic references, faunal records from Africa); de Beaumont, 1956a:181 (Libya), 1960b:227 (Libya); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River); Pulawski, 1964:65 (Egypt: Kom Osheim); Myartseva, 1965:83 (Turkmenistan: Akibay; Bayram-Ali district); de Beaumont, 1966:211 (Egypt: Abukir), 1967a:273 (Turkey); Kazenas, 1969a:21 (Kazakhstan: Ili River between Ili and Ayak-Kalkan), 1972b:111 (Kazakhstan); Myartseva, 1972a:84 (Turkmenistan); Kazenas, 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Calosphex niveatus*:** Grandi, 1959b:287 (new combination, Algeria: Biskra). – **As *Prionyx niveatus***: Myartseva, 1966:48 (new combination, preying on orthopterans); R. Bohart and Menke, 1976:133 (in catalog of world Hymenoptera); Guichard, 1980:224 (Oman); Roche, 1981:1 (in checklist of Sphecidae of United Arab Emirates); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Steiner, 1986:97 (references to papers on nesting habits); Guichard, 1988a:121 (Arabian Peninsula); Al-Houty, 1989:162 (Kuwait: Sulabiya, Wadi Al-Batin); Guichard, 1991a:338 (Jordan); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus cephalotes* F.W. and *Dociostaurus tartarus* (Stshelk.)); Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve); Gayubo, Tormos, and Asís, 1993a:201 (first record from Spain: Almería: Cabo de Gata); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:62 (in Sphecid Fauna of Western Europe); Kazenas, 1998b:117 (in Sphecid Fauna of Kazakhstan); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:9 (southeast Kazakhstan: five localities); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 85 (review of known biology), 2002a:29 (geographic distribution, collecting localities in Kazakhstan); Gadallah and Assery, 2004a:222 (in catalog of Sphecidae of Saudi Arabia); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts.), 2004d:26 (Kazakhstan: northern Caspian region); Nazarova, 2004:104 (Tajikistan: Badakhshan Region: Visav village in Bartash River valley in Rushan District); Gülmez and Tüzün, 2005:47 (Turkey: Ankara Province); Roche, 2007a:45 (in checklist of Egyptian Sphecidae, redescription, as *niveatus niveatus*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008b:1413 (locality records from Egypt, Jordan, Kazakhstan, Mongolia, Morocco, Tunisia, and Turkmenistan); Ljubomirov and Yildirim, 2008:29 (in catalog of Sphecidae of Turkey); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian type); Schmid-Egger, 2011b:603 (United Arab Emirates: Um al-Quwain), 604 (color photograph of male); Danilov, 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia).; Kazenas, 2013a:20, 21(color photograph of female, short information on geographic distribution and nesting habits); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces, as *niveatus niveatus*); Schmid-Egger, 2014:623 (United Arab Emirates).

*Enodia albopictinata* [sic] Taschenberg, 1869:410, ♀ (as *albo-pictinata*, incorrect original hyphenation). Holotype or syntypes: ♀, Sudan: Khartoum (Halle). Synonymized with *Sphex niveatus* by Kohl, 1885b:182.

*Podium maracandicum* Radoszkowski, 1877:7, ♂. Lectotype: ♂, Uzbekistan: Samarkand (ZMMU), designated by Danilov, 2012b:64. Synonymized with *Sphex nigropectinatus* by Kohl, 1885b:183, and 1885c:165, and with *Prionyx niveatus* by Danilov, 2012b:64. – **As *Sphex maracandica***: Radoszkowski, 1888a:328 (new combination, genitalia).

*Sphex suavis* F. Morawitz, 1993b:405, ♀, ♂. Lectotype: ♀, Tajikistan: Iskander-kul in Zeravshan River valley (ZIN), designated by Danilov, 2012b:64. Tentatively synonymized with ..., synonymy confirmed by Danilov, 2012b: – Kohl, 1895:46 (original description copied); Dalla Torre, 1897:442 (in catalog of world Hymenoptera).

*Sphex afghaniensis* de Beaumont, 1970a:391, ♀. Holotype: ♀, Afghanistan: Kabul (Brno Mus.). Synonymized with *Prionyx niveatus* by Danilov, 2012b:64. – **As *Prionyx afghaniensis***: R. Bohart and Menke, 1976:131 (new combination, in catalog of world Hymenoptera).

### ssp. *ettingol* (Tsuneki)

*Sphex niveatus ettingol* Tsuneki, 1971k:143, ♀, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Tsagan Bogd ul (TMB). – **As *Prionyx niveatus ettingol***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera).

## 31. *notinitidus* (Willink)

*Chlorion notinitidum* Willink, 1951:184, ♀, ♂. Holotype: ♀, Argentina: no specific locality (MACN). – **As *Prionyx notinitidus***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera); Sielfeld, 1981b:72

(in checklist of Chilean Sphecidae, as *notonitidus*); Pérez d'Angello, 1989:264 (Chile: Magellan Region); Amarante, 2002:72 (in catalog of Neotropical Sphecidae); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality, as *notonitidus*).

### 32. *nudatus* (Kohl)

*Sphex nudatus* Kohl, 1885:187, ♀, ♂. Syntypes: Ukraine: Yekaterinoslav, now Dnepropetrovsk, Russia: Sarepta, now, Krasnoarmeysk; Caucasus: no specific locality; Turkey: Brussa, now Bursa; Dalmatia, now coastal Croatia and Montenegro; Egypt: no specific locality (NHMW). – Gasperini, 1887:18 (recorded from Dalmatia, now Croatia, by Kohl, 1885b); F. Morawitz, 1889a:129 (China: Ordos Region); Kohl, 1890.342 (incorrectly synonymized *Sphex nudatus* with *Sphex mocsaryi*); E. Saunders, 1904c:636 (Spain); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Fahringer, 1922:177 (Turkey); Kuznetzov-Ugamskij, 1927:249 (Kazakhstan: Aulie-Ata, now Djambul); Honoré, 1944a:68 (in revision of Egyptian Sphecini); de Beaumont, 1957b:130 (n. Iran; valid name; diagnostic characters); Suárez, 1959:53 (Spain: Provincia de Almería); de Beaumont, 1957b:130 (Iran; interpretation of species; taxonomy), 1962b:19 (Spain); Ceballos, 1964:87 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1967a:272 (Turkey); Kazenas, 1969a:21 (Kazakhstan: Alma Ata, Ili River, Kegen' River, Sharyn River); de Beaumont, 1970a:393 (Afghanistan); Kazenas, 1972b:112 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, and *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 112 (feeding on flowers of *Apocynum lancifolium* Russ., Apocynaceae, in Kazakhstan), 1978b:44 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:184 (in key to Sphecidae of European part of former USSR); Kuznetzova, 1990:17 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve). – **As *Sphex mocsaryi* var. *nudatus***: F. Morawitz, 1891a:202 (new status, Russia: Astrakhan Government); Dalla Torre, 1897:432 (in catalog of world Hymenoptera); Ceballos, 1956:364 (in catalog of Hymenoptera of Spain). – **As *Enodia nudata***: Radoszkowski, 1892:586 (new combination, male genitalia). – **As *Prionyx nudatus***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera); Mingo and Gayubo, 1983:155 (Spain; redescription); Gayubo and Tormos, 1984:9 (Spain: Valencia); Gayubo, 1986b:36 (Spain: Andalucía); Gayubo and Sanza, 1986:28 (Spain: Burgos, Soria); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Ebrahimi, 1993:97 (Iran); Torregrosa, Gayubo, Tormos, and Asís, 1993:11 (Spain: Alicante Province); Tormos, Asís, and Gayubo, 1994:187, 195 (Spain: Albacete Province); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve), 1996:53 (Ukraine: Kanev Nature Reserve); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Kazenas, 1998b:119 (in Sphecid Fauna of Kazakhstan); Anan'eva and Kochetkov, 1999:6 (Russia: Ryazan Oblast': no specific locality); Esenbekova and Kazenas, 2000:10 (southeast Kazakhstan: near Alma Ata, 10 km NW Chemolgan, 4 km SE and 22 km W Furmanovka, 45 km NW Suzak); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia) (nest structure); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:29 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002a:383 (Russia: common in Rostov Oblast'); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts.), 2004d:26 (Kazakhstan: northern Caspian region); Shkuratov, 2004a:73 (Russia: Rostov Oblast'); Gayubo and Özbek, 2005:8 (Turkey: many localities); Gülmez and Tüzün, 2005:47 (Turkey: Ankara Province); Shorenko, 2005a:162 (Ukraine: Crimea), 2005b:97 (Ukraine: Crimea: Karadagh Nature Reserve); Yildirim and Ljubomirov, 2005:1787 (Turkey: Erzurum: Pasinler; Kars: Sarıkamış); Baghirov, 2007:93 (Russia: southwestern Siberia); Kazenas, 2007a:89 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Roche, 2007a:42 (in checklist of Egyptian Sphecidae), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Danilov, 2008:348 (Russia: Altayskiy Kray: Barnaul area); Dollfuss, 2008b:1413 (locality records from Kazakhstan, Kyrgyzstan, Morocco, Russia, Turkey, and Ukraine); Gayubo, González, Tormos, and Asís, 2008:136 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:111 (Kazakhstan: foothills of Zailiskiy Alatau: frequently found on loess cliffs), 2008c:255 (Kazakhstan: village Koktum S Lake Alakol'); Ljubomirov and Yildirim, 2008:29 (in catalog of Sphecidae of Turkey); Nemkov, 2008b:17 (in catalog of Sphecidae of Asiatic Russia); Danilov,

2009:54 (Russia: Western Siberia: Kulundinskaya Steppe); González, Gayubo, Asís, and Tormosış, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Nemkov, 2009b:46 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Danilov, 2010b:45 (distribution of Tethyan type); Mokrousov, 2010:60 (Russia: Nizhniy Novgorod Oblast': no specific localities); Rudoiskatel', 2010:147 (Russia: southern Ural Mountains); Shorenko and Konovalov, 2010:12 (Ukraine); Mokrousov, Berezin, and Egorov, 2011:65 (Russia: Chuvash Republic); Danilov, 2012a:164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:65 (bibliographic references, geographic distribution); Prisniy, 2012:46 (Russia: Belgorod Oblast'); Protsenko, Fateryga, Ivanov, and Puzanov, 2012:58 (Ukraine: Crimea); Yildirim, 2012:74 (Turkey: Iğdır: Melekli, Tuzluca; Kars: Sarıkamış: Karakurt); Kazenas, 2013a:21, 22 (color photographs of females, short information on geographic distribution and nesting habits); Baldock, 2014:354 (Spain: Island of Mallorca); Ruchin and Antropov, 2014:34 (Russia: Republic of Mordovia); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

As *Sphex mocsaryi*: Kohl, 1890b:342 (in revision of world Sphecini), corrected to *Sphex nudatus* by de Beaumont, 1957b:130; Roth, 1925:385 (in revision of North African Sphecini); Giner Marí, 1943a:83 (in Sphecid Fauna of Spain), present correction based on geographic distribution

*Sphex mocsaryi*. var. *denudatus* Kohl: A. Costa, 1893b:3 (Tunisia, nomen nudum?).

### 33. *parkeri* Bohart and Menke

*Prionyx parkeri* Bohart and Menke, 1963:154, ♀, ♂. Holotype: ♂, USA: California: Kern County: Mill Potrero (UCD). – Krombein, 1964c:18 (nest and prey); Lavigne and Pfadt, 1966:14 (prey and nest digging), 31 (Wyoming; preying on grasshopper *Aulocara elliotti*); Evans, 1975a:263 (slow colonizer of new habitats); R. Bohart and Menke, 1976:133 (in catalog of world Hymenoptera); Ch. Porter, 1978:172 (Texas); Krombein, 1979b:1586 (in catalog of North American Hymenoptera); Steiner, 1981:305 (grasshopper prey is paralyzed by four stinging, exactly as in *Liris*¸ but stinging starts with suboesophagal nervous ganglion), 1982a:2 (grasshopper prey anti-predatory behavior), 1983a:130 (puncturing dorsolateral neck region of grashopper prey, subsequent drinking of body fluid), 1984a:152 (gryllid prey never resumes normal activities after being stung, in contrast to *Larra*); Cornett, 1986:224 (California: Palm Springs; on flowers of *Washingtonia filifera* (Wendl)); Menke, 1986c:36 (Arizona: Gila County: Carrizo); Piek and Spanjer, 1986:188 (in list of Sphecidae with known prey); Steiner, 1986:97 (references to papers on nesting habits); Frommer, 1988:95 (California: Riverside County: Deep Canyon); Ahlstrom, 1995:107 (in checklist of insects of North Carolina); Hanson and Menke, 1995:637 (known from Costa Rica); 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, 2002:72 (in catalog of Neotropical Sphecidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:670 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:149 (number of ovarioles); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 33 (first record from Canada: Ontario: Guelph, Oakville, Pinery Provincial Park); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007:48 (Mexico: Tamaulipas); Dollfuss, 2008b:1414 (Mexico: Hidalgo: Metztitlán 70 km of Pachuca; Guerrero: Acahuizotla 35 km S Chilpanzingo).

As *Prionyx pubidorsus*: Evans, 1958a:183 (nesting behavior) and Linsley, 1962:156 (sleeping aggregations), corrected to *Prionyx parkeri* by R. Bohart and Menke, 1963:156.

### 34. *persicus* (Mocsáry)

*Sphex persicus* Mocsáry, 1883:33, ♂ (as *Persicus*, incorrect original capitalization). Lectotype: ♂, Iran: no specific locality (TMB), designated by Danilov, 2012:65. – Kohl, 1885b:181 (in revision of Palearctic *Sphex*); Ed. André, 1888:146 (in revision of Sphecidae of Europe and Algeria), 8* (bibliographic references); Kohl, 1889a:24 (as new synonym of *Sphex sirdariensis*). – **As *Prionyx persicus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia); Danilov, 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:65 (bibliographic references, geographic distribution).

*Sphex hispidus* F. Morawitz, 1890:576, ♀. Lectotype: Turkmenistan: Artchman (ZIL), designated by Danilov, 2012b:65. Tentatively synonymized with *Sphex persicus* by de Beaumont, 1957b:130, synonymy confirmed by Danilov, 2012b:65. – Kohl, 1890b:352 (original description copied); Dalla Torre, 1897:425 (in catalog of world Hymenoptera); F. Morawitz, 1897a:151 (description of ♂); Gussakovskij, 1933b:278 (Iran); de Beaumont, 1957b:130 (Iran: Mughan), 1968b:150 (member of *macula* species group; probably synonym of *Sphex persicus*). – **As *Prionyx hispidus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

### 35. *popovi* Guichard

*Prionyx popovi* Guichard, 1988a:122, ♀, ♂. Holotype: ♀, Mali: Gao (BMNH). Paratypes: Qatar.

### 36. *pseudostriatus* (Giner Marí)

*Sphex pseudostriatus* Giner Marí, 1944:346, ♂. Holotype: ♂, Peru: no specific locality (Mus. Barcelona). – **As *Prionyx pseudostriatus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera, possibly a synonym of *Prionyx fervens*); Amarante, 2002:72 (in catalog of Neotropical Sphecidae), 2005a:14 (correction to his 2002 catalog); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru).

*Sphex vaqueroi* Giner Marí, 1944:347, ♀, ♂. Syntypes: Peru: no specific locality (Mus. Barcelona). Synonymized with *Prionyx pseudostriatus* by Menke *in* R. Bohart and Menke, 1976:134.

### 37. *pumilio* (Taschenberg)

*Pseudosphex pumilio* Taschenberg, 1869:420, ♀. Holotype or syntypes: ♀, Argentina: Mendoza (Halle). – Burmeister, 1872:240 (Argentina: Mendoza). – **As *Sphex pumilio***: Kohl, 1890b:369 (new combination, in revision of world Sphecini); Dalla Torre, 1897:438 (in catalog of world Hymenoptera); Schrottky, 1903b:123 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Berland, 1926c:204 (Argentina and Brazil: locality records); Liebermann, 1931:81 (in revision of Argentinean Sphecini). – **As *Chlorion pumilio***: Fernald, 1907:266 (new combination, Argentina, variation, as *pumilo*). – **As *Neosphex pumilio***: Schrottky, 1913a:225 (new combination, Argentina); Willink, 1951:95 (in revision of Argentinean Sphecini). – **As *Prionyx pumilio***: R. Bohart and Menke, 1963:151 (new combination, member of *pumilio* group), 1976:134 (in catalog of world Hymenoptera); Nascimento and Overal, 1980:8 (Chile); Sielfeld, 1981b:72 (in checklist of Chilean Sphecidae); Amarante, 2002:73 (in catalog of Neotropical Sphecidae); Dollfuss, 2008b:1414 (locality records from Chile); Vázques, Aschero, and Stevani, 2008:9 (Argentina: Central Monte desert); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality).

*Sphex dolichoderus* Kohl, 1890b:370, ♀. Syntypes: ♀, Chile: no specific locality (NHMW). Synonymized with *Chlorion pumilio* by Fernald, 1907:266. – Dalla Torre, 1897:421 (in catalog of world Hymenoptera); R. Bohart and Menke, 1976:134 (as tentative synonym of *Prionyx pumilio*).

*Neosphex albospiniferus* Reed, 1894:627, ♀, ♂. Syntypes: Chile: Valparaiso (depository?). – R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera as tentative synonym of *Prionyx pumilio*); Menke and Bohart, 1979:115 (as *albospinifer*, unjustified emendation); Amarante, 2005a:14 (correction to his 2002 catalog). – **As *Sphex albospinifer***: Kohl in Dalla Torre, 1897:414 (new combination, in catalog of world Hymenoptera).

### 38. *radoszkowskyi* (Kohl)

*Sphex radoszkowskyi* Kohl, 1888a:151, ♀ (as *Radoszkowskyi*, incorrect original capitalization). Syntypes: Uzbekistan Khiva (ZMHU). – Kohl, 1890b:345 (in revision of world Sphecini, as *radoszkowskii*); Dalla Torre, 1897:438 (in catalog of world Hymenoptera); de Beaumont, 1968b:149 (member of *macula* species group, as *radoszkowskii*); Kazenas, 1969a:22 (Kazakhstan: Ili River), 1972b:113 (Kazakhstan: Ayak-Kalkan on Ili River in Alma Ata Oblast'), 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Prionyx radoszkowskyi***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve), 1998b:122 (in Sphecid Fauna of Kazakhstan); Esenbekova and Kazenas, 2000:10 (southeast Kazakhstan: near Dubun' landing-stage on Ili River); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:30 (geographic distribution, collecting localities in Kazakhstan), 2004d:27 (Kazakhstan: northern Caspian region),

2008a:98 (Southeast Kazakhstan: Ili River valley); Danilov, 2010b:45 (distribution of Tethyan type), 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:65 (bibliographic references, geographic distribution).

### 39. *reymondi* (Roth)

*Sphex reymondi* Roth, 1954:31, ♀, ♂. Holotype: ♀, Algeria: Oran Department: Ougarta (MNHN). – de Beaumont, 1968b:149 (member of *subfuscatus* species group). – **As *Prionyx reymondi***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

### 40. *saevus* (F. Smith)

*Harpactopus saevus* F. Smith, 1856:265, ♀, ♂. Syntypes: Australia: Western Australia: Swan River; and Queensland: Cape Upstart (BMNH). – de Saussure, 1867:42 (Australia: Sydney; redescription); Froggatt, 1892:211 (in catalog of Australian Hymenoptera). – **As *Sphex saevus***: Kohl, 1890b:366 (new combination, in revision of world Sphecini); Dalla Torre, 1897:440 (in catalog of world Hymenoptera); R. Turner, 1910a:343 (in key to Australian Sphecini); Berland, 1926c:206 (1 ♂ from Australia in MNHN); von Schulthess, 1935:304 (Indonesia: Flores: Endeh). – **As *Prionyx saevus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Evans, Hook, and Matthews, 1982:223 (nesting habits); Baker and Pigott, 1983:67 (nesting habits); Cardale, 1985:228 (in catalog of Australian Sphecidae); Naumann, 1998:183 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Pagliano, 2003a:505 (Australia: Northern Territory: Katherine); Dollfuss, 2008b:1414 (Australia: Coopers Creek).

### ssp. *harpax* (Kohl)

*Sphex harpax* Kohl, 1898a:333, ♂. Holotype: ♂, Indonesia: Timor (TMB). – **As *Priononyx harpax***: van der Vecht, 1957c:352 (new combination, description of ♀, redescription of ♂, Lesser Sunda Islands: locality records). – **As *Prionyx saevus harpax***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

### 41. *semistriatus* (Schrottky)

*Priononyx semistriatus* Schrottky, 1920:185, ♀. Holotype or syntypes: ♀, Paraguay: Puerto Bertoni (depository?). – **As *Chlorion semistriatum***: Willink, 1948a:317 (new combination, probably a synonym of *Chlorion thomae* or *striatulum*), 1951:199 (in revision of Argentinean Sphecini); not listed by Bohart and Menke, 1976; Amarante, 2002:73 (in catalog of Neotropical Sphecidae)

### 42. *senegalensis* (Arnold)

*Sphex senegalensis* Arnold, 1951:144, ♂. Holotype: ♂, Senegal: Kaolack (BMNH). – Leclercq, 1955h:37 (bibliographic reference). – **As *Prionyx senegalensis***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

### 43. *senilis* (Morice)

*Sphex senilis* Morice, 1911:75, ♀, ♂. Syntypes: Algeria: Biskra (OXUM). – Roth, 1925:381 (in revision of North African Sphecini); de Beaumont, 1962c:221 (Arabia: Riyadh), 1968b:152 (taxonomy). – **As *Prionyx senilis***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Guichard, 1988a:121 (Saudi Arabia); Gadallah and Assery, 2004a:222 (in catalog of Sphecidae of Saudi Arabia, as *senelis*); Roche, 2007a:46 (in checklist of Egyptian Sphecidae), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008b:1415 (Jordan: Rawayshid, Mongolia: five localities; recognition characters); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia)..

As *Parasphex marginatus* var. *leucosoma*: Schulz, 1905b:34 (Algeria: Biskra), corrected to *Sphex senilis* by de Beaumont, 1968b:153.

*Sphex niveatus* var. *biskrensis* Roth, 1925:381. Proposed conditionally as substitute name for *Sphex senilis*, should the latter be found a synonym of *Prionyx niveatus*.

### 44. *sennae* (Mantero)

*Sphex sennae* Mantero, 1902:200, ♀ (as *Sennae*, incorrect original capitalization). Holotype: ♀, Argentina: Patagonia: Río Santa Cruz (MSNG). – **As *Prionony x sennae***: Holmberg, 1903:504 (new combination, listed); Schrottky, 1913a:225 (Argentina: Santa Cruz). – **As *Chlorion sennae***: Willink, 1948a:317 (new combination, probably a synonym of *Chlorion thomae* or *striatulum*), 1951:291 (original description translated into Spanish). – **As *Prionyx sennae***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Amarante, 2002:73 (in catalog of Neotropical Sphecidae).

### 45. *simillimus* (Fernald)

*Chlorion simillimum* Fernald, 1907:264, ♀, ♂. Syntypes: Argentina: Cordoba: Cordoba (MCZ). – Fernald, 1931a:441 (as synonym of *Chlorion neoxenum*); Willink, 1951:181 (in revision of Argentinian Sphecini). – **As *Prionony x simillimus***: Schrottky, 1913a:225 (new combination, as synonym of *Prionyx neoxenus*). – **As *Sphex simillimun*** [sic]: Liebermann, 1931:23 (new combination, in revision of Argentinian Sphecini). – **As *Prionyx simillimus***: Menke, 1962a:63 (new combination, correction to original description); R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera); Amarante, 2002:73 (in catalog of Neotropical Sphecidae), 2005a:14 (correction to his 2002 catalog).

*Sphex tucumanensis* Strand, 1910a:133, ♂. Holotype or syntypes: ♂, Argentina: Tucumán: no specific locality (ZMHU). Synonymized with ... *simillimus* by ... – Berland, 1926c:203 (Argentina: locality records); Liebermann, 1931:79 (in revision of Argentinean Sphecini); Willink, 1951:1 (possibly a synonym of *Chlorion neoxenum*) .

### 46. *sirdariensis* (Radoszkowski)

*Sphex sirdariensis* Radoszkowski, 1877:9, ♂. Lectotype: ♂, Uzbekistan: on Syr-Darya River (ZMMU), designated by Danilov, 2012b:65. – Kohl, 1885b:206 (original description copied); Radoszkowski, 1886a:25 (Turkmenistan); Ed. André, 1888:145 (in revision of Sphecidae of Europe and Algeria), 8* (bibliographic references); Radoszkowski, 1888a:328 (description of male genitalia); Kohl, 1890b:347 (in revision of world Sphecini); Dalla Torre, 1897:440 (in catalog of world Hymenoptera); de Beaumont, 1968b:150 (taxonomy). – **As *Sphex occitanicus* var. *syrdariensis*:** Gussakovskij, 1934a:2 (new status, possibly in error). – **As *Prionyx sirdariensis***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve), 1998b:123 (in Sphecid Fauna of Kazakhstan, unknown to author) , 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:30 (geographic distribution, collecting localities in Kazakhstan); Danilov, 2010b:45 (distribution of Tethyan type), 2012a:164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries).

### 47. *songaricus* (Eversmann)

*Sphex songaricus* Eversmann, 1849:368, ♀. Holotype or syntypes: ♀, "in campis Kirgisorum orientalibus", now Kazakhstan: no specific locality (ZIN). – Kohl, 1885b:206 (original description copied); Ed. André, 1888:126 (in revision of Sphecidae of Europe and Algeria, as *sougaricus*), 7* (bibliographic references, as *sougaricus*); Kohl and Handlirsch, 1889:275 (Turkmenistan); Kohl, 1890b:340 (in revision of world Sphecini); Radoszkowski, 1893a:58 (Turkmenistan); Dalla Torre, 1897:440 (in catalog of world Hymenoptera); Gussakovskij, 1933b:273 (Iran), 1935:413 (Tajikistan); de Beaumont and Bytinski-Salz, 1955:41 (Israel); de Beaumont, 1961e:2 (Iraq); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River), 1964a:75 (nesting habits in Turkmenistan), 1965:84 (Turkmenistan: Akibay); de Beaumont, 1967a:273 (Turkey), 1969:81 (Turkey), 1970a:393 (Afghanistan). – **As *Prionyx songaricus***: Myartseva, 1966:48 (new combination, preying on orthopterans), 1972a:84 (Turkmenistan); R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera); Ebrahimi, 1993:98 (Iran); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Kazenas, 1998b:123 (in Sphecid Fauna of Kazakhstan); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:10 (southeast Kazakhstan: 35-45 km NW Kapchagay); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:30 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Dollfuss, 2008b:1415 (locality records from Kazakhstan, Syria, Turkmenistan, Turkey, and Uzbekistan); Ljubomirov and Yildirim, 2008:30 (in catalog

of Sphecidae of Turkey); Danilov, 2010b:44 (distribution of Tethyan type); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:797 (Iran: East Azarbaijan: Jolfa); Murai and Amr, 2011:109, 120 (first record from Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E); Danilov, 2012a:164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:67 (bibliographic references, geographic distribution); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

*Sphex tenuicornis* F. Morawitz, 1890:580, ♀. Lectotype: ♀, Turkmenistan: Ashkhabad (ZIN), designated by Danilov, 2012:67. Synonymized with *Sphex songaricus* by Kohl, 1890b:340, synonymy confirmed in 1895:47. – Myartseva, 1963b:59 (Turkmenistan: lower Murgab River), 1965:84 (Turkmenistan: Akibay).

### 48. *stschurowskii* (Radoszkowski)

*Sphex stschurowskii* Radoszkowski, 1877:7, ♀ (as *Stschurowskii*, incorrect original capitalization). Lectotype: Kazakhstan or Uzbekistan: Kyzyl-Kum Desert: no specific locality (ZMMU), designated by Danilov, 2012b:67. – Kohl, 1885b:206 (original description copied); Radoszkowski, 1886a:25 (Turkmenistan); Ed. André, 1888:146 (in revision of Sphecidae of Europe and Algeria), 8* (bibliographic references); Kohl, 1890b:344 (in revision of world Sphecini), 1895:47 (Algeria); Dalla Torre, 1897:442 (in catalog of world Hymenoptera); Morice, 1897:302 (Egypt; description of ♂); Berland, 1926c:200 (specimen in MNHN); Gussakovskij, 1933b:372 (Iran); Honoré, 1944a:72 (in revision of Egyptian Sphecini); de Beaumont, 1960c:170 (Afghanistan; diagnostic characters), 1961e:2 (Iraq), 1968b:149 (member of *macula* species group), 1970c:4 (Iran: Baluchistan). – **As *Prionyx stschurowskii***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Ebrahimi, 1993:98 (Iran); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia); Dollfuss, 2008b:1415 (Iran: Morth 65 km S Tehran); Danilov, 2012a:163 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:67 (bibliographic references, geographic distribution).

### ssp. *hyalipennis* (Kohl)

*Sphex stschurowskii* var. *hyalipennis* Kohl, 1895:48, sex not indicated. Holotype or syntypes: Algeria: no specific locality (NHMW). – Dalla Torre, 1897:442 (in catalog of world Hymenoptera); Morice, 1911:74 (Algeria: Biskra); Roth, 1925:385 (in revision of North African Sphecini); Berland, 1926c:201 (Algeria, Egypt, Tunisia: locality records, geographic variation); Guiglia, 1937:185 (Libya: Cyrenaica: Rus Hamra), 1942b:229 (Libya); Giner Marí, 1947:19 (Western Sahara); Leclercq, 1955h:26 (bibliographic references, faunal records from Africa). – **As *Chlorion hyalipenne***: Derwesh, 1965:70 (new combination, Iraq: no specific locality).– **As *Sphex stschurowskii hyalipennis***: de Beaumont, 1951e:268 (new status, Morocco); de Beaumont and Bytinski-Salz, 1955:42 (Israel); de Beaumont, 1956a:181 (Libya), 1968b:149 (member of *macula* species group). – **As *Prionyx stschurowskii hyalipennis***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Guichard, 1988a:121 (Saudi Arabia); Gadallah and Assery, 2004a:222 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:47 (in checklist of Egyptian Sphecidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia).

### 49. *subatratus* (R. Bohart)

*Prionony x subatratus* R. Bohart, 1958b:90, ♀, ♂ (as *subatrata*, incorrect original termination). Holotype: ♂, USA: California: Inyo County: Deep Springs (CAS). – R. Bohart, 1958b:92, 93 (in key to North American *Prionyx*); F. Parker, 1960:206, 207 (in key to North American *Prionyx*, as *subatrata*). – **As *Prionyx subatratus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Krombein, 1979b:1586 (in catalog of North American Hymenoptera); Rust, Hanks and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); Amarante, 2002:73 (in catalog of Neotropical Sphecidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:670 (in checklist of Mexican Sphecidae); Dollfuss, 2008b:1415 (Arizona: S Willcox).

### 50. *subfuscatus* (Dahlbom)

*Sphex subfuscatus* Dahlbom, 1845:436, sex not indicated (as *subfuscata*, incorrect original termination). Holotype or syntypes: Ukraine: "Tauria" = Crimea (lost?). – Eversmann, 1849:369 (Russia: Orenburg Province, lower Volga; Ka-

zakhstan); F. Smith, 1856:242 (in catalog of Hymenoptera in British Museum); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Kohl, 1881:29 (redescription of type material), 1885b:179 (in revision of Palearctic species), 206 (Eversmann's description copied); Gasperini, 1887:18 (recorded from Dalmatia, now Croatia, by Kohl, 1885b); Ed. André, 1888:149 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); Kohl, 1889a:25 (comparison with *Sphex aegyptius*); Kohl and Handlirsch, 1889:275 (Turkmenistan: Chuli); F. Morawitz, 1889a:129 (China: Ordos Region); Kohl, 1890b:354 (in revision of world Sphecini); F. Morawitz, 1891a:202 (Russia: Astrakhan Government), 1893b:407 (Tajikistan: Pyandjikent, Varzaminor); De Stefani Perez, 1894:216 (Italy: Sicilia); Medina, 1894a:260 (Spain); Sickmann, 1894:216 (China: Hopei Province: Tientsin); De Stefani Perez, 1895:226 (in catalog of Sicilian Hymenoptera); Dalla Torre, 1897:442 (in catalog of world Hymenoptera); Mocsáry, 1897:79 (Kingdom of Hungary, some localities are in today's Croatia); Ferton, 1902:504 (nesting habits); Adlerz, 1904:138 (known prey: acridids); Antiga and Bofill, 1904:5 (Spain: Cataluña Province); E. Saunders, 1904c:605 (Spain: Mayorca), 636 (France: Cerbère; Spain); W. Schulz, 1904b:93 (Spain: Murcia, Cuenca; Transcaspia); Ferton, 1905:65 (prey selection), 98 (weight of prey and of female, homing); Mantero, 1905:68 (Italy: Toscana: Isola del Giglio); W. Schulz, 1905b:35 (Algeria: Chellala and Taguin in Alger Province); Dusmet and Mercet, 1906:504, 512 (in key to Spanish Sphecini); Schmiedeknecht, 1907:244 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:104 (in catalog of French Hymenoptera); Ferton, 1910:177 (homing); Mantero, 1911:72 (Italy: Sardegna: Isola dell'Asinara); Morice, 1911:74 (Algeria: Biskra); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); R. Turner, 1914b:250 (India: Tamil Nadu: Coimbatore); Dusmet y Alonso, 1915:86 (Spain: Aragón); Strand, 1915:90 (Russia: Sarepta, now Krasnoarmeysk), 1916b:108 (China: Tsingtau, now Qingdao); Ferton, 1921:350 (prey paralysis incomplete); Fahringer, 1922:178 (Turkey); Maidl, 1922:67 (Croatia); Ferton, 1923:107 (prey capture and paralyzing, malaxation, nest digging, oviposition, nest closure, description of larva), 155 (incomplete paralysis of prey), 296 and 307 (easily finds nest when carrying prey), 320 (captures *Oedipoda coerulescens* when preferred *Caloptenus italicus* is in short supply); Gribodo, 1924b:49 (Libya: Apollonia); Berland, 1925d:38 (in Sphecid Fauna of France); Roth, 1925:389 (in revision of North African Sphecini); Berland, 1926c:200 (miscellaneous locality records); Coulon, 1925:116 (France: Sète; Spain: Montario); von Schulthess, 1926b:209 (Libya); Schmiedeknecht, 1930:705 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:7 (Portugal: Soure); Guiglia, 1932:125 (Ethiopia: Harer area; NE Kenya); Bischoff, 1933:5 (Morocco); Masi, 1933:197 (Italy: Toscana: Isola di Capraia); Giner Marí, 1934:130 (Spain); Grandi, 1934:130 (Italy: Lazio: Acilia); Guiglia, 1934b:293 (Libya: bibliography and summary of locality records); Gussakovskij, 1934a:3 (China: Kansu Province); Nadig, 1934:34 (France: Corse: Calanches; Italy: Sardegna: Alghero, Aritzo, Macomer); Bernard, 1935:61 (France: Var: Fréjus area); Piel, 1935:296 (nesting habits); Yasumatsu, 1935a:8, 22 (China: Jehol Region), 1938:93 (in revision of East Asian Sphecini; Korea, Manchuria); Balthasar, 1941a:105 (Czech Republic: Bzenecko area); Guiglia, 1942a:59 (Greece: Island of Rhodes: Villanova); Yasumatsu, 1942c:105 (China: Beijing); Giner Marí, 1943a:82 (in Sphecid Fauna of Spain); Guiglia, 1943d:91 (Albania: Scutari), 1944b:7 (Italy); Honoré, 1944a:70 (in revision of Egyptian Sphecini); Deleurance, 1946b:62 (prey), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); de Beaumont, 1947b:383 (Cyprus); Zavadil *in* Zavadil and Šnoflák, 1948:167 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:10 (Portugal); Berland and Bernard, 1949:3 (in revision of French *Sphex* s.l.), 9 (review of biological data); Pittioni, 1950:20 (Cyprus); de Beaumont, 1951e:268 (Morocco); Cleu, 1953:50 (France: Ardèche River basin); de Beaumont, 1953h:195 (type material not in Lund); Nouvel and Ribaut, 1953:177 (France: Haute-Garonne: Saint-Béat); Grandi, 1954:236 (Italy); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Harant and Leclercq, 1955:250 (France: Hérault: Bionne, Fontcaude, Paillade); Leclercq, 1955h:25 (bibliographic references, faunal records from Africa); Vergne, 1955:4 (France: Auvergne); Berland, 1956:1170 (in revision of African Sphecini); Ceballos, 1956:364 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:337 (France: Département des Pyrénées-Orientales); Bajári, 1957a:8, 10 (in key to Hungarian Sphecidae); Nouvel and Ribaut, 1958:9 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1959a:10 (Italy); Diniz, 1959:27 (Portugal: five localities); Scobiola-Palade, 1959:496 (first record from Romania: Constanţa Region: Agigea, description and illustration of male genitalia); de Beaumont, 1960a:5 (Greece: Island of Rhodes); Noskiewicz and Puławski, 1960:41 (in key to Polish

Sphecidae); Scobiola, 1960b:232 (Romania: Medgidia Region: Valul lui Traian); Kocourek, 1963:295 (Czech Republic: Moravy: Lidéřovice; Slovakia: Šturovo); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); Myartseva, 1964a:74 (nesting habits in Turkmenistan); de Beaumont, 1965a:65 (Greece: Crete: Heraklion); Myartseva, 1965:84 (Turkmenistan: Akibay and Sakar-Chagin districts); Suárez, 1969:53 (Spain: Almería Province); Scobiola-Palade, 1960b:232 (Romania); de Beaumont, 1962b:19 (Spain); Scobiola-Palade, 1963:825 (Romania); Tsuneki, 1963b:52 (nesting habits); de Beaumont, 1965a:13 (Greece); Scobiola-Palade, 1966a:162 (Romania: Tulcea District: C.A. Rosetti, Periprva,); de Beaumont, 1967a:273 (Turkey); Tsuneki, 1967e:2 (China: Manchuria); de Beaumont, 1968b:149 (member of *subfuscatus* species group); Scobiola-Palade, 1968b:141 (Romania: Island of Letea in delta of Danube); Tsuneki, 1968l:50 (Korea: Quelpart Island); Kazenas, 1969a:22 (Kazakhstan: Ili River, Sharyn' River, Karatal River, Zailiyskiy Alatau); Tsuneki, 1971m:2 (China: Beijing: Tiendang); Balthasar, 1972:424 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:113 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:41 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:184 (in key to Sphecidae of European part of former USSR); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Scobiola-Palade, 1985:95 (Romania: delta of Danube); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Padr *in* Šedivy, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Blagoveshchenskaya, 1994:88, 89 (Russia: Ul'yanovsk Oblast', as *subfasciatus* and *subfuscanes*, respectively); Nagase, 2006b:2 (specimens collected by First Scientific Expedition to Manchoukou, 1933, now part of eastern China). – **As *Harpactopus subfuscatus***: Radoszkowski, 1892:586 (new combination, description of male genitalia), Vayssière, 1921:132 (nesting habits). – **As *Chlorion subfuscatum***: Bischoff, 1931:8 (new combination, Spain). – **As *Prionyx subfuscatus***: Diniz, 1965:4 (new combination, Portugal: Lisboa, Massorra, Sines, Vale de Gaio); Myartseva, 1966:48 (preying on orthopterans), 1972a:84 (Turkmenistan); R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera); Guichard, 1978:270 (first record from Greece: Kalambaka); Valetta, 1979:215 (Malta); Guichard, 1980:224 (Oman); Kazenas, 1980e:81 (Russia: Far East); Pagliano, 1980:110 (Italy: Liguria); Roche, 1981:1 (in checklist of Sphecidae of United Arab Emirates); Tsuneki, 1982b:14 (known from Korea); Mingo and Gayubo, 1983:153 (Spain); Gayubo and Tormos, 1984:10 (Spain: Valencia); Pagliano, 1984:366 (Italy); Brockmann, 1985b:312 (nest closure summary); Chevin and Chevin, 1985:38 (France: Aude); Pagliano, 1985:9 (Italy); Paik, 1985:197 (in list of Sphecidae of Korea); Radović, 1985:64 (sting apparatus analyzed); Gayubo and Tormos, 1986b:4 (Spain: Valencia); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Józan, 1986:367 (Hungary: Kiskunság National Park); Nemkov, 1986:92 (Russian: Siberia: Irkutsk Oblast'); Piek and Spanjer, 1986:188 (in list of Sphecidae with known prey); Steiner, 1986:97 (references to papers on nesting habits); Gayubo, 1987:107 (Spain: Provincia de Ciudad Real); Tormos and Jiménez, 1987a:122 (Spain: Valencia), 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Guichard, 1988a:121 (Arabian Peninsula); Gayubo, Asís, and Tormos, 1990a:10 (Spain); Pagliano, 1990:58 (in catalog of Italian Sphecidae); Dollfuss, 1991:29 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:394 (Italy: Lazio, Sicilia); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Hamon, Fonfria, and Tussac, 1991:128 and 129 (in key to French Sphecini), 133 (in France north to Rhône and Loire-Atlantique Departments); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus turanicus* Serg. Tarb. and *C. barbarus cephalotes* F.W.); Leclercq, 1991a:274 (omitted from Leclercq's, 1979, catalog of France and Benelux Sphecidae); Schembri, 1991:176 (Malta); Kazenas and Tobias, 1992:29 (sleeping aggregations); Mochi and Luchetti, 1993:104 (France: Corse); Gayubo and Borsato, 1994:202 (Italy: Sardegna); Roche and Zalat, 1994:114 (Egypt: Sinai Peninsula); Tormos, Asís, and Gayubo, 1994:187, 195 (Spain: Albacete Province); Kazenas *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:385 (in key to Sphecidae of Russian Far East); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:2 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:730 (Italy: Island of Lampedusa); Scharrer, 1995:22 (Croatia: Island of Krk); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Wu and Zhou, 1996a:45 (in revision in Economic Insect Fauna of China); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:63 (in Sphecid Fauna of Western Europe); Schmidt and Schmid-Egger, 1997:26 (the only German record is by Ruthe and Stein, 1857; apparently does not occur in Germany); Kazenas, 1998b:125 (in Sphecid Fauna of Kazakhstan);

Esenbekova and Kazenas, 2000:10 (southeast Kazakhstan: near Bakanas, 60 km E Chilik, near Kapchagay,45 km NW Suzak); Kazenas, 2001b:15 (in checklist of Sphecidae of Kazakhstan and Central Asia), 85 (nest and prey); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:142 (recorded from Germany but not occurring there); Kazenas, 2002a:30 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002a:383 (Russia: Rostov Oblast'), 2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Generani, Pagliano, Scaramozzino, and Strumia, 2003:64 (Italy: Arcipelago Toscano); Protsenko, 2003:68, 69 (first record from Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45°21N 29.00'E); Schmid-Egger, 2003:757 (Italy: Sicilia: Bronte, Linguaglossa); Gadallah and Assery, 2004a:217 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 222 (in catalog of Sphecidae of Saudi Arabia); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts.), 2004d:27 (Kazakhstan: northern Caspian region); Li and He, 2004:1127 (in hymenopterous fauna of Zhejiang Province, China); Shkuratov, 2004a:73 (Russia: Rostov Oblast'); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:358 (in catalog of Polish Sphecidae); Wiśniowski, 2004:38 and 58 (in checklist of Polish Sphecidae); Gayubo and Özbek, 2005:9 (Turkey: Antalya: Arapsuyu; Erzurum: Dumlu; Kars: Sarýkamýþ); Gülmez and Tüzün, 2005:48 (Turkey: Ankara Province); Pagliano and Negrisolo, 2005:54 (in Sphecid Fauna of Italy); Shorenko, 2005a:162 (Ukraine: Crimea), 2005b:97 (Ukraine: Crimea: Karadagh Nature Reserve); Hua, 2006:276 (in list of Chinese insects, geographic distribution); Magdalou, 2006b:109 (France: Pyrénées-Orientales: Mas Larrieu Nature Reserve near Argelès-sur-Mer); Standfuss and Standfuss, 2006c:307 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Jacobs, 2007:42 (in key to Sphecidae of Germany, not yet found in Germany); Kazenas, 2007a:89 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Roche, 2007a:36 (in checklist of Egyptian Sphecidae, redescription, as *subfuscatus subfuscatus*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *subfuscatus subfuscatus*); Vepřek and Straka, 2007:199 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Moravia and Slovakia only); Dollfuss, 2008b:1415 (locality records from Croatia, Greece, Italy, Kazakhstan, Kyrgyzstan, Mongolia, Russia, South Africa, Tajikistan, Turkmenistan, and Uzbekistan); Kazenas, 2008c:255 (Kazakhstan: village Koktum S Lake Alakol'); Ljubomirov and Yildirim, 2008:30 (in catalog of Sphecidae of Turkey); Nemkov, 2008b:17 (in catalog of Sphecidae of Asiatic Russia); Danilov, 2009:55 (Russia: Western Siberia: Kulundinskaya Steppe); Nemkov, 2009b:46 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:235 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); Pagliano, 2009:175 (Italy: Piemonte: San Benedetto Belbo); Bitsch, 2010:105 (in supplement to vol. II of Faune de France, 1997: France: first records from the Départements of Loiret: Olivet, and Lozère: Saint-Etienne-Vallée-Française); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian type); Rudoiskatel', 2010:147 (Russia: southern Ural Mountains); Sakenin, Samin, and Bagriacik, 2010:17 (Iran: Khuzestan: Abadan); Baghirov, 2011b:140 (Russia: Altayskiy Kray: Savvushka); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:497 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire), 501 (exclusive species of burned areas); Danilov, 2012a:163, 164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:67 (bibliographic references, geographic distribution); Nemkov, 2012c:434 (in catalog of Sphecidae of Russian Far East); Prisniy, 2012:46 (Russia: Belgorod Oblast', as *subfuskatus*); Protsenko, Fateryga, Ivanov, and Puzanov, 2012:58 (Ukraine: Crimea); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013a:23 (color photograph of female, short information on geographic distribution and nesting habits); Baldock, 2014:354 (Spain: Island of Mallorca); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces, as *subfuscatus subfuscatus*).

*Sphex soror* Dahlbom, 1845:436, sex not indicated. Holotype: ♀, Greece: Island of Rhodes (Stockholm, coll. Hedenborg). Synonymized with *Sphex aegyptius* by Kohl, 1885b:181, and with *Sphex subfuscatus* by de Beaumont, 1949a:127 (holotype and paratype mentioned). – F. Smith, 1856:243 (in catalog of Hymenoptera in British Museum); Sichel, 1861:751 (Italy: Sicilia); Sajó, 1882:5 (Hungary); nec Honoré, 1944a:69 (= *Prionyx crudelis*); Balthasar, 1954b:281 (Palestine: Tabgha at Tiberias Lake); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection, Torino); Pagliano, 2008:524, 525 (specimens in M. Spinola collection, Torino).

*Sphex nigritus* Lucas, 1849:271, sex not indicated (as *nigrita*, incorrect original termination), junior primary homonym of *Sphex nigritus* Fabricius, 1781 (now in *Java,* a genus of Pompilidae), and of *Sphex nigritus* Turton, 1802:484 (which is a lapsus or emendation of *Sphex nigrata* Gmelin, 1790:2723, a European evaniid). Holotype or syntypes: Algeria: La Calle area, now El Kala (MNHN). Synonymized with *Sphex subfuscatus* by Kohl, 1885b:179. – F. Smith, 1856:244 (in catalog of Hymenoptera in British Museum).

*Sphex desertorum* Eversmann, 1849:368, ♀, ♂. Syntypes: Russia: Astrakhan, Orenburg, and Saratov provinces; and Kazakhstan (ZIN). Synonymized with *Sphex subfuscatus* by Kohl, 1885b:179. – Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Radoszkowski, 1881:209 (Angola), 1886a:25 (Turkmenistan) and 26 (description of male genitalia).

*Enodia chrysoptera* Ruthe and Stein, 1857:312, ♀. Holotype: ♀, Germany: Berlin area (ZMHU). Synonymized with *Sphex subfuscatus* by Kohl, 1885b:179. – Schirmer, 1912:168 (Germany: found in Berlin area by Ruthe and Stein, 1857). – **As *Sphex chrysoptera***: Casolari and Casolari Moreno, 1980:102 (new combination, specimens in M. Spinola collection, Torino). – **As *Parasphex chrysoptera***: Kirchner, 1867:217 (new combination, in catalog of European Hymenoptera).

*Gastrosphaeria anthracina* A. Costa, 1858b:10. ♀,♂. Syntypes: Italy: various localities (NAPOLI). Synonymized with *Sphex subfuscatus* by Kohl, 1885b:179. – Kirchner, 1867:217 (in catalog of European Hymenoptera); Palma, 1867:38 (Italy: Sicilia settentrionale); Marquet, 1881:178 (southern France); De Stefani Perez, 1882:38 (Italy: Sicilia: Sciacca). – **As *Sphex anthracina***: A. Costa, 1867b:70 and 1867c:14 (new combination, in revision of Italian Sphecidae), 1882b:22 (Italy: Sardegna); Casolari and Casolari Moreno, 1980:102 (specimens in M. Spinola collection, Torino); Pagliano, 2008:524 (specimens in M. Spinola collection, Torino).

? *Sphex namkumiensis* Laidlaw, 1929:232, ♀. Holotype: ♀, India: Bihar: Namkum (Royal Scottish Mus., Edinborough). – van der Vecht, 1957b:22 (redescription of holotype, misspelled as *nankumiensis*); R. Bohart and Menke, 1976:134 (as tentative synonym of *Prionyx subfuscatus*, in catalog of world Hymenoptera).

### ssp. *albovillosulus* (Giordani Soika)

*Sphex subfuscatus albovillosulus* Giordani Soika, 1942:198, ♂. Syntypes: Somalia: Iscia Baidoa (depository?). – **As *Prionyx subfuscatus albovillosulus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

### ssp. *rhodesianum* (Arnold)

*Chlorion subfuscatum* race *rhodesianum* Arnold, 1936:28, ♀, ♂. Syntypes: Zimbabwe: Matetsi (SAM). – **As *Prionyx subfuscatus* ? ssp. *rhodesianus***: R. Bohart and Menke, 1976:134 (new combination, status tentative, in catalog of world Hymenoptera).

### ssp. *rukwaensis* (Arnold)

*Sphex rukwaensis* Arnold, 1959:325, ♂. Holotype: ♂, Tanzania: Ukia in Rukwa Valley (BMNH). – **As *Prionyx subfuscatus ? rukwaensis***: R. Bohart and Menke, 1976:134 (new combination, status tentative, in catalog of world Hymenoptera).

## 51. *sundewalli* (Dahlbom)

*Enodia sundewalli* Dahlbom, 1845:439, sex not indicated. Holotype or syntypes: South Africa: KwaZulu-Natal: Port Natal, now Durban (depository?) – Kohl, 1890b:453 (original description copied); Dalla Torre, 1897:443 (in catalog of world Hymenoptera, as *sundevalii*); W. Schulz, 1912:93 (type material neither in Lund nor in Berlin); Leclercq, 1955h:38 (species incertae sedis). – **As *Prionyx sundewalli***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

## 52. *thomae* (Fabricius)

*Sphex thomae* Fabricius, 1775:346, sex not indicated. Lectotype: ♂, U.S. Virgin Islands: St. Thomas Island (ZMUC), designated by van der Vecht, 1961a:35. – Fabricius, 1781:443 (redescription), 1787:274 (redescription); Gmelin, 1790:2725 (redescription); Christ, 1791:307 (redescription); Fabricius, 1793:199 (redescription), 1796:156 (in Index to his

Entomologia Systematica, 1793); Jurine, 1807:129 (listed); Cresson, 1963:320 (in catalog of North American Hymenoptera), 1868:379 (New Mexico); Cameron, 1889a:36 (summary of distribution records); Kohl, 1890b:358 (in revision of world Sphecini); W. Fox, 1891d:342 (Jamaica); Radoszkowski, 1893a:58 (Turkmenistan, obviously in error); W. Fox, 1895c:266 (Mexico: Baja California Sur); Dalla Torre, 1897:443 (in catalog of world Hymenoptera); W. Fox, 1897b:378 (Brazil); Ducke, 1901:241 (Brazil: Pará: Belém); Schrottky, 1903b:123 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Ducke, 1908b:82 (Brazil: Ceará State); Strand, 1910a:133 (Paraguay), 1911a:151 (Ecuador); Jörgensen, 1912:286 (Argentina: Mendoza Province); Bodkin, 1918:315 (British Guiana, nesting behavior); Campos, 1922:68 (Ecuador: Durán); Berland, 1926c:204 (miscellaneous locality records); G. Carpenter, 1930b:293 (nest closure); Liebermann, 1931:24 (in revision of Argentinean Sphecini); Bischoff and von Schulthess, 1937:168 (Argentina); Murray *in* Muesebeck et al., 1951:973 (in catalog of North American Hymenoptera); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Pagliano, 2008:531, 532 (specimens in M. Spinola collection, Torino). – **As *Pepsis thomae***: Fabricius, 1804:209 (new combination, redescription). – **As *Harpactopus thomae***: Ashmead, 1900:229 (new combination, Lesser Antilles: St. Vincent Island), 308 (in checklist of Caribbean Hymenoptera). – **As *Chlorion thomae***: Fernald, 1906:342 (new combination, in revision of Sphecini of North America and West Indies), 1907:264 (Argentina); H. Smith, 1908b:333 (in revision of Nebraskan Sphecidae); J. Smith, 1910:677 (in new list of insects of New Jersey); Mickel, 1918b:398 (in catalog of Nebraskan Sphecidae); Fernald, 1931a:441 (study of type series), 1943a:287 (recorded from Florida, but all specimens seen by author are *pubidorsum*); Willink, 1948a:314 (history of South American records, presence in Argentina confirmed) ), 318 (differences between *thomae* and *striatulus*), 320 (in key), 1951:186 (in revision of Argentinean Sphecini); Bianchi, 1954:287 (Hawaiian Islands: Oahu: Kailua); Krombein, 1958f:191 (in supplement to catalog of North American Hymenoptera: description of larva by Evans and Lin, 1956a, reported); Yoshimoto, 1960:335 (Hawaiian Islands). – **As *Priononyx thomae***: Dahlbom, 1843:28 (new combination, in revision of Sphecidae and Pompilidae), 1845:439 (in key); F. Smith, 1856:265 (in catalog of Hymenoptera in British Museum); A. Costa, 1864b:112 (two specimens from La Plata in Museo Zoologico di Napoli); Cresson, 1865a:137 (Cuba), 1865b:464 (specimens in ANSP collection); de Saussure, 1867:43 (variation); Cresson, 1868:379 (New Mexico); Taschenberg, 1869:409 (Brazil); Burmeister, 1872:239 (Argentina; Brazil: Neu-Freiburg); Cresson, 1873:213 (Texas), 1875:715 (Arizona, Nevada, New Mexico); F. Lynch Arribálzaga, 1878:328 (Argentina: Buenos Aires area); Patton, 1880a:384 (characteristics of the genus *Priononyx*); Dewitz, 1881:203 (Puerto Rico); Holmberg, 1884:226 (Uruguay); Cresson, 1887:276 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado); W. Fox, 1891c:342 (Jamaica); C. Robertson, 1892:107 (visiting flowers of *Pycnanthemum linifolium* Ph.), 1894:455 (visiting flowers of *Solidago missouriensis* Nutt.), 456 (visiting flowers of *S. canadensis* Linnaeus), 467 (visiting flowers of *Rudbeckia hirta* Linnaeus), 469 (visiting flowers of *Lepachys pinnata* Torr. and Gray), 472 (visiting flowers of *Coreopsis palmata* Nutt.), 1896:73 (visiting flowers of *Polygonum hydropiperoides* Michx.); Ashmead, 1899d:353 (in checklist of North American Sphecidae); J. Smith, 1900:523 (in list of insects of New Jersey); Hartman, 1905:62 (nesting habits); F. Williams, 1914b:227 (nesting habits); Holland, 1917:294 (Cuba: Isla de Pinos, now Isla de la Juventud: Nueva Gerona); Rau and Rau, 1918:175 (nest digging, prey: *Dissosteira carolina* (Linnaeus), prey transportation); G. Carpenter, 1930b:294 (nest closure); Rau, 1933:283 (Panama: Barro Colorado Island); Richards, 1937a:101 (Guyana); Strickland, 1947:128 (Canada: Alberta: Medicine Hat); Wolcott, 1951:840 (in review of insects of Puerto Rico); Evans and Lin, 1956a:142 (description of larva); R. Bohart, 1958b:92, 93 (in key to North American *Prionyx*); Evans, 1958a:181 (nesting behavior); F. Parker, 1960:206 (in key to North American *Prionyx*). – **As *Prionyx thomae***: R. Bohart and Menke, 1963:159 (new combination, in revision of Nearctic Sphecini); Lavigne and Pfadt, 1966:31 (Wyoming; preying on three grasshopper species); Alayo Dalmau, 1973:185 (in catalog of Cuban Hymenoptera), 1976:27 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera); Kumar, Lavigne, Lloyd, and Pfadt, 1976:51 (USA: Colorado: Pawnee National Grassland); Elliott, Kurczewski, Claflin, and Salbert, 1979:357 (Bahama Islands: San Salvador Island); Krombein, 1979b:1586 (in catalog of North American Hymenoptera); Nascimento and Overal, 1980:8 (Brazil); de Zayas, 1981:78 (Cuba); Grissell, 1981:16 (unusual nesting behavior: use of preexisting cavities); Sielfeld, 1981b:72 (in checklist of Chilean Sphecidae);

Brockmann, 1985b:312 (nest closure summary); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Parks, 1986:34 (California: Torrey Pines State Reserve); Piek and Spanjer, 1986:188 (in list of Sphecidae with known prey); Steiner, 1986:97 (references to papers on nesting habits); Ch. Porter, 1987:43 (Chile: Tarapacá Region); Yústiz, 1987:13 (Venezuela: Central Lara Depression); Spofford, Kurczewski, and Downes, 1989:258 (summary of previous records for nest parasite *Senotainia rubriventris* Macquart, a miltogrammine fly); Maes, 1989:92 (in catalog of Nicaraguan Sphecidae); Callan, 1990b:19 (in checklist of Trinidad Sphecidae); Snelling, 1992:14 (Virgin Islands: Mona Island); Amarante, 1993:19 (ne. Brazil); Snelling, 1993:18 (British Virgin Islands: Guana Island), 19 (same: Mona Island); Ahlstrom, 1995:107 (in checklist of insects of North Carolina); Hanson and Menke, 1995:637 (known from Costa Rica); Lecoq and Pierozzi, 1996:515 (preying on the acridid *Rhammatocerus schistocercoides* (Rehn, 1906) in Mato Grosso, Brazil); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Fernández, 2000:142 (Colombia); Amarante, 2002:73 (in catalog of Neotropical Sphecidae); Fernández, Saríol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:670 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:22 (in catalog of Aculeata of Trinidad, West Indies); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Snelling, 2005:291 (British Virgin Islands: Guana Island); Genaro, 2006:51 (in Catalog of Cuban Sphecidae and Crabronidae; other countries: North America, Mexico, Nicaragua, Panama, Isla de Juventud, Little Cayman, Bahamas, Jamaica, Hispaniola, Mona Island, Puerto Rico, Guana Island, St. Thomas, St. Vincent, Trinidad, Guyana, Venezuela, Colombia, Ecuador, Chile, Uruguay, Paraguay, Brazil, Argentina); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007:48 (Mexico: Tamaulipas); Dollfuss, 2008b:1416 (locality records from Ecuador, French Guyana, and Mexico); Buys, 2009c:311 (nesting behavior, male behavior, larval development), 2009e:277 (Brazil: Rio de Janeiro: Duque de Caxias, Macaé, Maricá, Itatiaia, Rio de Janeiro, Reserva Biologica de Poço das Antas, Seropédica); Rasmussen and Asenjo, 2009:16 (in checklist of Crabronidae of Peru); Buys, 2011b:2 (Brazil: Rio de Janeiro: Cabo Frio, Rio de Janeiro, Seropédica), 2011c:225 (description of mature larva); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality); Buys and Rodrigues, 2014:41 (Brazil: State of Espírito Santo: several localities).

*Pepsis crucis* Fabricius, 1804:209, sex not indicated. Lectotype: ♀, South American Islands: no specific locality (ZMUC), designated by R. Bohart and Menke, 1963:159. Synonymized with *Priononyx thomae* by Dahlbom, 1845:XXI. – **As *Sphex crucis***: Jurine, 1807:129 (listed); F. Smith, 1856:259 (in catalog of Hymenoptera in British Museum); Kohl, 1890b:441 (original description copied); Dalla Torre, 1897:420 (in catalog of world Hymenoptera); Ashmead, 1899d:353 (in checklist of North American Sphecidae); Casolari and Casolari Moreno, 1980:103 (specimen in M. Spinola collection, Torino); Pagliano, 2008:530 (specimen in M. Spinola collection, Torino).

*Sphex rusticus* Dahlbom, 1843:28 (as *rustica*, incorrect original termination). Published as synonym of *Priononyx thomae*.

*Enodia pubidorsum* A. Costa, 1862a:17 (as *pubidorsa*) and 1862b:69, ♂. Holotype: ♂, Brazil: no specific locality (Napoli). Synonymized with *Chlorion thomae* by Fernald, 1906:342 and R. Bohart and Menke, 1963:159 (as new synonym). – **As *Sphex pubidorsus***: Murray *in* Muesebeck et al., 1951:973 (new combination, in catalog of North American Hymenoptera); K. Cooper, 1953:33 (Massachusetts: Penikese Island). – **As *Chlorion pubidorsum***: Fernald, 1931a:441 (new combination, study of type), 1943a:287 (Florida); Brimley, 1938:444 (North Carolina: statewide); Dreisbach, 1944:268 (in key to Sphecinae of Michigan, as *rubidorsum*); Willink, 1948a:319 (in key); Krombein, 1950a:268 (North Carolina: Dare County), 1953a:295 (visiting foliage of *Pinus serotina*); Krombein, 1953a:296 (visiting foliage of *Quercus marilandica*), 298 (visiting flowers of *Cephalanthus occidentalis*), 332 (North Carolina), 1953b:123 (visiting foliage of *Quercus virginiana*), 124 (visiting flowers of *Pluchea* sp.), 133 (North Carolina: Kill Devil Hills); Krombein and Evans, 1954:233 (Florida), 1955:232 (Florida); Krombein, 1958f:191 (in supplement to catalog of North American Hymenoptera: *Priononyx canadensis* Provancher was published in 1887)L. Davis, 1978:216 (North Carolina: Kill Devil Hills, data from Krombein, 1953a). – **As *Priononyx pubidorsum***: Strickland, 1947:128 (new combination, Canada: Alberta: Cypress Hills, Lethbridge, Medicine Hat); R. Bohart, 1958b:92 (in key to North American *Prionyx*); nec Evans, 1958a:183 and Linsley, 1962:156 (= *Prionyx parkeri*); F. Parker, 1960:206, 207 (in key to North American *Prionyx*); Evans and Linsley, 1960:32 (regular member of sleeping aggregation at Southwest Research Station, Arizona).

*Priononyx thomae* var. *antillarum* de Saussure, 1867:43, ♀, ♂ (as *Antillarum*, incorrect original capitalization). Syntypes: Syntypes: Antillean Islands: no specific locality (depository?). Synonymized with ...

*Priononyx thomae* var. *mexicanus* de Saussure, 1867:43, ♀. Holotype: or syntypes: ♀, Mexico: Michoacán: no specific locality (NHMW). Synonymized with ...

*Sphex edwardsi* Cameron, 1903e:230, ♀, ♂ (as *Edwardsi*, incorrect original capitalization). Lectotype: ♂, Ecuador: Ambato (BMNH), designated by Menke *in* R. Bohart and Menke, 1976:134. Synonymized with ...

*Sphex platensis* Brèthes, 1908:146, ♀, ♂. Lectotype: ♂, Brazil: Santa Catarina: Nova Friburgo (MACN), designated by Menke *in* R. Bohart and Menke, 1976:134. Synonymized with *Chlorion thomae* by Willink, 1948a:315. – Jörgensen, 1912:286 (Argentina: Mendoza Province); Schrottky, 1920:187 (may be a synonym of *Priononyx thomae*); Liebermann, 1931:80 (in revision of Argentinean Sphecini); Genise, 1990:27 (type material in MACN). – **As *Priononyx platensis***: Schrottky, 1913a:225 (new combination, Argentina).

? *Sphex altibia* Strand, 1911a:152, ♂. Holotype: ♂, Ecuador: Riobamba (MNHN). Tentatively synonymized with *Prionyx thomae* by R. Bohart and Menke, 1976:134.

## 53. *trichargyrus* (Spinola)

*Sphex trichargyrus* Spinola, 1839:466, ♂ (as *trichargyra*, incorrect original termination). Lectotype: ♂, Egypt: no specific locality (M. Spinola collection, Torino), designated by de Beaumont, 1952e:45. – F. Smith, 1856:244 (in catalog of Hymenoptera in British Museum); Kohl, 1885b:185 (as junior synonym of *Sphex albisectus*); Honoré, 1944a:65 (in revision of Egyptian Sphecini, as *trichargyrius*); de Beaumont, 1951e:268 (Morocco; as *trichargyrius*); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Pagliano, 2008:530 (lectotype in M. Spinola collection, Torino). – **As *Prionyx trichargyrus***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Guichard, 1988a:121 (Arabian Peninsula); Gadallah and Assery, 2004a:217 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 222 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:43 (in checklist of Egyptian Sphecidae), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008b:1416 (Oman: Jebel Muwarrhan; Tunisia: oasis Douz; Yemen: Lawdat NE Aden); Murai and Amr, 2011:110, 120 (first record from Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E); Schmid-Egger, 2011b:603 (United Arab Emirates: Sharjah Desert Park); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia).

*Sphex leucosoma* Kohl, 1890b:338, ♀. Holotype or syntypes: ♀, Egypt: Cairo (NHMW). Synonymized with *Sphex trichargyrus* by Honoré, 1944:65, synonymy confirmed by de Beaumont, 1952e:45. – Dalla Torre, 1897:428 (in catalog of world Hymenoptera); Berland, 1926b:169 (Senegal: Dakar); Rungs, 1936:24 (Morocco: Todra oasis); Berland, 1956:1169 (in revision of African Sphecini); Dollfuss, 1989:12 (type material in NHMW) – Nec Schulz, 1905b:34 (as *Parasphex marginatus* var. *leucosoma* = *Prionyx senilis*). – **As *Chlorion leucosoma***: Arnold, 1928c:353 (new combination, revision), 1930:17 (in checklist of Afrotropical Sphecidae).

## 54. *viduatus* (Christ)

*Sphex viduatus* Christ, 1791:305, sex not indicated (as *viduata*, incorrect original termination). Holotype or syntypes: France: Provence Region: no specific locality (lost). – Kohl and Handlirsch, 1889:275 (Turkmenistan: Pul-i-Hatun); Kohl, 1890b:332 (in revision of world Sphecini); F. Morawitz, 1891a:202 (Russia: Astrakhan Government); Bingham, 1896a:440 (Sri Lanka: Colombo), 1897:252 (redescription); Dalla Torre, 1897:446 (in catalog of world Hymenoptera); Bingham, 1898a:105 (Yemen: Aden); Magretti, 1899:602 (Somalia: Lugh at 3°48'N 42°33'); E. Saunders, 1904c:604 (Spain: Mayorca); Dusmet and Mercet, 1906:508, 514 (in key to Spanish Sphecini); von Schulthess, 1909:441 (Libya: Dernah); Morice, 1911:74 (Algeria: Biskra); Ferton, 1912a:408 (Algeria, nest and prey); Strand, 1913a:82 (Taiwan); von Schulthess, 1914:286 (Cameroon); Strand, 1915:90 (Sri Lanka); Roth, 1925:381 (in revision of North African Sphecini); Berland, 1926b:169 (miscellaneous locality records); von Schulthess, 1926b:209 (Tunisia); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub); G. Carpenter, 1930b:290 (nest closure); Schouteden, 1930:95 (Zaire); Dusmet y Alonso, 1931:7 (Portugal: dos Medos); Guiglia, 1932a:127 (Somalia: Mogadishu), 1932d:472 (Libya: Cufra oasis);

Nadig, 1933:103 (Morocco); Guiglia, 1934b:295 (Libya: bibliography and summary of locality records, as *viduatas*); Yasumatsu, 1935b:36 (Japan: Ryukyu Archipelago: Island of Yonakuni), 1938:87 (revision; Manchuria, Ryukyus, Taiwan); Guiglia, 1939c:186 (Libya Fezzan: Gat, Tunin), 1942b:230 (Libya; as *viduatum*); Giner Marí, 1943a:81 (in Sphecid Fauna of Spain); Guiglia, 1943c:76 (Ethiopia: Gamo Gofa: Sagan – Omo region); Honoré, 1944a:62 (in revision of Egyptian Sphecini); Giner Marí, 1945b:362 (Western Sahara), 1945e:220 (Western Sahara); de Beaumont, 1947b:382 (Cyprus); Giner Marí, 1947:19 (Western Sahara); de Andrade, 1949:9 (Portugal: Pinhal dos Medos); Berland, 1950b:295 (Niger: Aïr area); de Beaumont, 1950d:6 (Egypt: Siwa oasis), 1950f:396 (Morocco); Guiglia, 1950:248 (Ethiopia: Gamo Gofa: Asile, as *viduatum*); Pittioni, 1950:20 (Cyprus); de Beaumont, 1951e:267 (Morocco), 1953a:173 (Mauritania); de Beaumont and Bytinski-Salz, 1955:41 (Israel); Leclercq, 1955h:36 (bibliographic references, faunal records from Africa); Ceballos, 1956:365 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:181 (Libya); Berland, 1956:1167 (in revision of African Sphecini); Compte Sart, 1959:131 (Spain: Mayorca); Diniz, 1959:27 (Portugal: Mata do Urso, Pinhal dos Medos); Grandi, 1959b:287 (Algeria: Bou Megueur, Goriana in Hodna district): Suárez, 1959:53 (Spain: Almería Province); de Beaumont, 1960a:5 (Greece: Island of Rhodes), 1960b:227 (Libya); de Beaumont, 1961b:272 (Afghanistan), 1961c:45 (Greece: Crete Island); Tsuneki, 1962a:6 (Ryukyus Islands: Amami Oshima Island); Ceballos, 1964:88 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:13 (Greece); Iwata, 1965:106 (number of oocytes); de Beaumont, 1967a:272 (Turkey); Tsuneki, 1967i:383 (Ryukyu Islands), 1967j:4 (Taiwan); Kazenas, 1969a:21 (Kazakhstan: Ili River between Ili and Ayak-Kalkan); Robertson, 1969:480 (Tanzania: Ukiriguru); Tsuneki and Iida, 1969:4 (nesting habits), 16 (description of larva); Tsuneki, 1971f:2 (Taiwan); Haneda, 1972a:5 (Taiwan); Kazenas, 1972b:112 (Kazakhstan); Tano, 1972:22 (Ryukyu Islands); Murota, 1973a:101 (Ryukyu Islands: Amami group); Murota, 1973b:116 (Taiwan); Kazenas, 1974b:110 (feeding on flowers of *Melilotus albus* Desr., Fabaceae, in Kazakhstan); Chhotani and Ray, 1975:27 (India: Rajasthan: Gudha); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:44 (in key to Sphecidae of Kazakhstan and Central Asia); Tüzün and Yüksel, 2010:4467 (Turkey: Niğde Province). – **As *Enodia viduata***: Roth, 1924:123 (new combination, Algeria: Nemours, now Ghazaouet). – **As *Chlorion viduatum***: Arnold, 1928c:349 (new combination, revision, distributed throughout Africa), 1930:17 (in checklist of Afrotropical Sphecidae); Guiglia, 1939c:186 (Libya), 1940e:292 (Somalia: Mogadishu); Arnold,1943:79 (Zaire). – **As *Prionyx viduatus***: Iwata, 1964b:355 (new combination, nesting behavior in Thailand); Myartseva, 1972a:85 (Turkmenistan; as *Prionix*); R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera); Valetta, 1979:215 (Malta); Guichard, 1980:224 (Oman); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Mingo and Gayubo, 1983:155 (Spain); Tsuneki, 1982g:55 (know from the Ryukyu archipelago); Brockmann, 1985b:312 (nest closure summary); Gayubo and Heras, 1986:29 (Spain: Provincia de Segovia and de Valladolid; floral records); Islamov, 1986:516 (Uzbekistan: Tashkent Oblast'); Clark, 1987:477 (Vietnam, prey: *Aiolophus thalassinus tamulus* (Fabricius), Acrididae); Gayubo, 1987:107 (Spain: Ciudad Real Province); Guichard, 1988a:121 (Arabian Peninsula); Gayubo, Asís, and Tormos, 1990a:10 (Spain); Pagliano, 1990:58 (in catalog of Italian Sphecidae); Gayubo, Borsato, and Osella, 1991:394 (first record from Italy: Sicilia: Lampedusa); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus cephalotes* F.W.); Schembri, 1991:176 (Malta); Sk. Yamane and Ikudome, 1990:100 (distribution in Ryukyu Islands, Japan); Gayubo, Borsato, and Osella, 1992:277 (Greece); Ebrahimi, 1993:97 (Iran); Hohmann, La Roche, Ortega, and Barquín, 1993:206 (first record from Canary Islands: La Gomera); Jha and Farooqi, 1994:13 (description and illustration of male genitalia); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:2 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:730 (Italy: Island of Lampedusa); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Wu and Zhou, 1996a:46 (in revision in Economic Insect Fauna of China); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:64 (in Sphecid Fauna of Western Europe); Lauterbach, 1997a:255 (Canary Islands: La Gomera Island); Kazenas, 1998b:127 (in Sphecid Fauna of Kazakhstan); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Porter, Stange, and Wang, 1999:5 (in checklist of Sphecidae of Taiwan); Yamane, Ikudome, and Terayama, 1999:477 (in Identification Guide to Sphecidae of Nansei = Ryukyu Islands, Japan); Shkuratov, 2000:55 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:16 (in checklist of Sphecidae of Kazakhstan and Central Asia), 86 (review of known biology);

Seyoum and Pulawski, 2001:322 (potential control agent of acridid pests in Ethiopia); Shkuratov, 2001:17 (prey: *Stenobothrus lineatus* Panzer); Kazenas, 2002a:31 (geographic distribution, collecting localities in Kazakhstan); Ohl and Linde, 2003:149 (number of ovarioles); Shkuratov, 2002a:383 (Russia: Rostov Oblast'); Pagliano, 2003b:130 (Italy: Islands of Lampedusa and Pantelleria); Gadallah and Assery, 2004a:217 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 222 (in catalog of Sphecidae of Saudi Arabia), 2004b:1396 (skeletal parts of sting apparatus); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts., as *viduatus viduatus*), 2004d:27 (Kazakhstan: northern Caspian region); Gülmez and Tüzün, 2005:48 (Turkey: Ankara Province); Pagliano and Negrisolo, 2005:55 (in Sphecid Fauna of Italy); Shorenko, 2005a:162 (Ukraine: Crimea); Hua, 2006:276 (in list of Chinese insects, geographic distribution); Terayama and Tano, 2006:7, 13, 17 (in key to Japanese Ampulicidae and Sphecidae); Kazenas, 2007a:89 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Roche, 2007a:43 (in checklist of Egyptian Sphecidae, redescription, as *viduatus viduatus*), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *viduatus viduatus*); Dollfuss, 2008b:1416 (locality records from 21 countries); Ljubomirov and Yildirim, 2008:32 (in catalog of Sphecidae of Turkey); Danilov, 2009:55 (Russia: Western Siberia: Kulundinskaya Steppe); Gayubo, González, Tormos, and Asís, 2009:362 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Bitsch, 2010:105 (in supplement to vol. II of Faune de France, 1997: records from Lampedusa and Pantelleria islands reported); Danilov, 2010b:44 (distribution of Palearctic-Ethiopian-Indomalayan type); Rudoiskatel', 2010:147 (Russia: southern Ural Mountains, as *viduatus viduatus*); Sakenin, Samin, and Bagriacik, 2010:17 (Iran: Sistan and Baluchistan: Nikshahr); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:497 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire), 501 (exclusive species of burned areas); Murai and Amr, 2011:120 (recorded from Syria by Dollfuss, 2008b); Schmid-Egger, 2011b:603 (United Arab Emirates: near Qurayyah); Danilov, 2012a:164 and 2012b:62 (in key to *Prionyx* of Russia and adjacent countries), 2012b:67 (bibliographic references, geographic distribution); Prisniy, 2012:46 (Russia: Belgorod Oblast'); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:362 (in new catalog of Sphecidae of Saudi Arabia, as *viduatus viduatus*); Kazenas, 2013a:24, 25 (color photographs of adult wasps, short information on geographic distribution and nesting habits); Baldock, 2014:354 (Spain: Island of Mallorca); Schmid-Egger, 2014:623 (United Arab Emirates); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces, as *viduatus viduatus*).

*Sphex pubescens* Fabricius, 1793:205, sex not indicated. Lectotype: ♂, Guinea: no specific locality (ZMUC), designated by van der Vecht, 1961a:33. Tentatively synonymized with *Prionyx viduatus* by Kohl, 1890b:332, synonymy confirmed by van der Vecht, 1961a:33. – Fabricius, 1796:156 (in Index to his Entomologia Systematica, 1793); Dufour, 1854a:375 (Algeria: Pontéba); Lepeletier de Saint Fargeau, 1845:359 (in revision of world Hymenoptera); F. Smith, 1856:246 (in catalog of Hymenoptera in British Museum), 267 (as synonym of *Parasphex fervens*); Fairmaire, 1858:264 (Gabon); Kohl, 1885b:188 (in revision of Palearctic *Sphex*); Ed. André, 1888:131 (in revision of Sphecidae of Europe and Algeria), 10* (bibliographic references); Cameron, 1889c:106 (listed); Medina, 1894a:260 (Spain: Pozuelo de Calatrava), 1896:104 (Spain: Cádiz); Ceballos, 1949:101 (Spain), 1956:364 (in catalog of Hymenoptera of Spain); Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino); Pagliano, 2008:530 (specimens in M. Spinola collection, Torino, are *Prionyx pruinosus* and *Prionyx viduatus*). – **As *Enodia pubescens***: Radoszkowski, 1892:586 (description of male genitalia).

*Enodia canescens* Dahlbom, 1843:28, ♀, ♂. Syntypes: Senegal and Guinea: no specific localities (LUND). Synonymized with *Enodia fervens* by Dahlbom, 1845:439.

*Sphex micans* Eversmann, 1849:368, ♀, ♂. Syntypes: Russia: lower Volga area (ZIN). Synonymized with *Enodia lividocincta* by Radoszkowski, 1887b:91, with *Sphex lividocincta* by Kohl, 1885b:190 (tentatively), 1889a:24, and with *Sphex viduatus* by Kohl, 1890b:332. – Radoszkowski, 1871:199 (Iran: Astrabad, now Gorgan); Kohl, 1885b:205 (original description copied); nec Ed. André, 1888:133 (= *Prionyx lividocinctus*)); André, 1888 9* (bibliographic references); Radoszkowski, 1887b:91 (in list of Transcaspian Hymenoptera); Pagliano, 2008:529 (specimens in M. Spinola collection, Torino, are *Sphex dorsalis*).

*Sphex leuconotus* F. Morawitz, 1890:579, ♀, junior primary homonym of *Sphex leuconotus* Brullé, 1833. Lectotype: ♀, Turkmenistan: Ashkhabad (ZIN), designated by Danilov, 2012b:68. Synonymized with *Prionyx viduatus* by Danilov, 2012b:68. – Kohl, 1890b:338 (original description copied); Dalla Torre, 1897:428 (in catalog of world Hymenoptera); Gussakovskij, 1933b:273 (Iran, as questionable synonym of *Sphex viduatus* Christ); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River). – **As *Prionyx leuconotus***: R. Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera).

*Sphex granti* W.F. Kirby, 1900: 23, ♀, ♂. Syntypes: Yemen: Abd-el-Kuri islands: no specific locality (BMNH). Synonymized with *Sphex pollens* by Kohl, 1906a:198, and with ...

*Sphex platynotus* Matsumura, 1912:177, 178, ♀. Holotype or syntypes: ♀, Japan: Okinawa: no specific locality (depository?). Synonymized with *Sphex viduatus* by Yasumatsu, 1935b:36 – Matsumura and Uchida, 1926:39 (Okinawa).

*Sphex perezi* Berland, 1926b:170, ♀, ♂. Lectotype: ♀, Senegal: no specific locality (MNHN), designated by Menke *in* R. Bohart and Menke, 1976:134. Synonymized with *Prionyx viduatus* by Guichard, 1988a:121. – Berland, 1956:1168 (in revision of African Sphecini); de Beaumont, 1958b:56 (Algeria: Tassili des Ajjer). – **As *Chlorion perezi***: Arnold, 1928c:352 (new combination, original description translated into English), 1930:17 (in checklist of Afrotropical Sphecidae). – **As *Prionyx perezi***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera).

? *Prionony x zanoni* Gribodo *in* Zanon, 1925:88, ♀, ♂. Syntypes: Libya: Fueihat 15 km S Benghazi (MSNG?). Synonymized with ... – Guiglia, 1934b:305 (Libya: bibliography and summary of locality records).

## ssp. *mocsaryi* (Kohl)

*Enodia argentata* Mocsáry, 1883:36, ♀, junior secondary homonym of *Sphex argentatus* Fabricius, 1787. Syntypes: ♀, southern Russia or Caucasus: no specific locality (TMB). – **As *Prionyx viduatus argentatus***: de Beaumont *in* R. Bohart and Menke, 1876:134 (new combination, new status); Tormos and Jiménez, 1987a:122 (Spain: Valencia), 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Chinin, 1991:111 (Russia: Samara Oblast'); Kazenas, 2001b:16 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:31 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:32 (Belarus': no specific locality); Shkuratov, 2004a:73 (Russia: Rostov Oblast'); Yildirim and Ljubomirov, 2005:1787 (Turkey: Erzincan: Kemah), 2007:116 (Turkey: Erzinan: Oltu; Isparta: Gökçay); Ljubomirov and Yildirim, 2008:31 (in catalog of Sphecidae of Turkey); Danilov, 2012a:164 and 2012b:62 (in key to *Prionyx* of Russia and adjacent countries), 2012b:68 (bibliographic references, geographic distribution); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km SW city of Isparta); Yildirim, 1912:74 (Turkey: Erzurum: Olur); Shlyakhtenok, 2013:131 (in annotated catalog of aculeate wasps of Belarus'); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

*Sphex mocsaryi* Kohl, 1885b:187, substitute name for *Enodia argentata*. – Kohl, 1885b:187 (in revision of Palearctic *Sphex*); Ed. André, 1888:131 (in revision of Sphecidae of Europe and Algeria), 9* (bibliographic references); nec Kohl, 1890b:342 (= *Prionyx nudatus*); F. Morawitz, 1894:339 (Turkmenistan: Krasnovodsk); Dalla Torre, 1897:432 (in catalog of world Hymenoptera); Dusmet and Mercet, 1906:508, 514 (in key to Spanish Sphecini); von Schulthess, 1909:441 (Libya: Dernah, Gherrqn); Coulon, 1925:116 (Spain: Montario); Guiglia, 1934b:295 (Libya: bibliography and summary of locality records); Gussakovskij, 1934a:2 (China: Inner Mongolia), 1935:413 (Tajikistan); Ceballos, 1949:101 (Spain); Leclercq, 1955h:38 (bibliographic references); Ceballos, 1956:364 (in catalog of Hymenoptera of Spain); de Beaumont, 1957b:130 (as synonym of *Sphex viduatus*); Noskiewicz and Puławski, 1960:41 (in key to Polish Sphecidae, not yet found in Poland); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River); Romanova, 1969:133 (Russia: North Caucasus); Kazenas, 1968a:806 (nesting habits in Kazakhstan: Mangyshlak Peninsula); Balthasar, 1972:424 (in Sphecid Fauna of Czechoslovakia: may be expected in the country. – **As *Sphex viduatus mocsaryi***: Kazenas, 1969a:21 (new status, Kazakhstan: Mangyshlak Peninsula, Golodnaya Step', Ili River), 1972b:112 (Kazakhstan), 1974b:110 (feeding on flowers of *Nitraria schoberi* L., Zygophyllaceae, and *Daucus carota* L., Apiaceae, in Kazakhstan), 1978b:44 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:184 (in key to Sphecidae of European part of former USSR); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Dociostaurus ingens* (Ingen.); Blagoveshchenskaya, 1994:89 (Russia: Ul'yanovsk Oblast'); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Shkuratov,

2002b:139 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Kazenas, 2004b:99 (Kazakhstan: western Tien Shan Mts.); Protsenko, Fateryga, Ivanov, and Puzanov, 2012:58 (Ukraine: Crimea).

*Sphex gobiensis* Tsuneki, 1971k:142, ♀. Holotype: ♀, Mongolia: Middle Gobi Aymag: Delgerhangay (TMB). Synonymized with *Prionyx viduatus argentatus* by Danilov, 2012b:68. – **As *Prionyx gobiensis***: Bohart and Menke, 1976:133 (new combination, in catalog of world Hymenoptera).

### ssp. *pollens* (Kohl)

*Sphex pollens* Kohl, 1885b:186, ♀. Syntypes: Greece: Athens (NHMW). – Ed. André, 1888:127 (in revision of Sphecidae of Europe and Algeria), 10* (bibliographic references); Kohl, 1890b:343 (in revision of world Sphecini); Dalla Torre, 1897:437 (in catalog of world Hymenoptera); Kohl, 1906a:198 (description of ♂); Mantero, 1915:325 (Libya); Fahringer, 1922:178 (Turkey); Bischoff, 1930:216 (Tajikistan: Pamir); Guiglia, 1934b:295 (Libya: bibliography and summary of locality records); Leclercq, 1956g:324 (Greece); Myartseva, 1964a:75 (nesting habits in Turkmenistan), 1965:82 (Turkmenistan: Akibay, Bayram-Ali; Murgab district; Mary district). – **As *Prionyx pollens***: Myartseva, 1966:48 (new combination, preying on orthopterans), 1972a:84 (Turkmenistan), 1972b:106 (parasite: *Senotainia albifrons* Rondani). – **As *Sphex viduatus pollens***: de Beaumont, 1965a:13 (new status, Greece). – **As *Prionyx viduatus pollens***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Dollfuss, 1989:12 (type material in NHMW); Ljubomirov and Yildirim, 2008:31 (in catalog of Sphecidae of Turkey); Yildirim, 2014:30 (Turkey: distribution by biogeographic provinces).

### 55. *xanthabdominalis* Li and Yang

*Prionyx xanthabdominalis* Li and Yang, 1995a:140, ♀, ♂. Holotype: ♀, China: Ningxia Province: Helanshan Mountain (Beijing Agricultural Univ.)

### 56. *zarudnyi* (Gussakovskij)

*Sphex zarudnyi* Gussakovskij, 1933b:372, ♀, ♂. Lectotype: ♀, Iran: Kerman: Bazman-Tagab (ZIN), designated by Danilov, 2012b:68. – de Beaumont, 1968b:149 (member of *subfuscatus* species group). – **As *Prionyx zarudnyi***: R. Bohart and Menke, 1976:134 (new combination, in catalog of world Hymenoptera); Danilov, 2012a:163, 164 and 2012b:61 (in key to *Prionyx* of Russia and adjacent countries), 2012b:68 (bibliographic references, geographic distribution).

### sp.

Lavigne and Pfadt, 1966:31 (Wyoming; preying on grasshoppers *Agenotettix deorum*, *Melanoplus gladstoni*, and *Trachyrhachys kiowa*); Kingsley, Bailowitz, and Smith, 1987:19 (Arizona: Organ Pipe Cactus National Monument: Quitobaquito Springs area); Naumann, 1993:182 (Australia: Queensland: Heathlands area in Cape York); Starr and Hook, 2003:22 (in catalog of Aculeata of Trinidad, West Indies, possibly *fervens*); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State); Roche, 2007a:46 (in checklist of Egyptian Sphecidae, description); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:797 (Iran: East Azerbaijan: county of Tabriz, probably *Prionyx kirbii*).

## NOMINA NUDA IN *PRIONYX*

*Enodia rufipes*: Casolari and Casolari Moreno, 1980:103 (specimens in M. Spinola collection, Torino).

*Pseudosphex noverca* Kaye, 1910:.... – R. Bohart and Menke, 1976:134 (in catalog of world Hymenoptera).