

Last updated: 2 July 2010

HARPACTUS

Arpactus Jurine, 1807:192, junior homonym of *Arpactus* Panzer, 1805, and of *Arpactus* Panzer, 1806. Type species: *Arpactus formosus* Jurine, 1807, designated by Shuckard, 1837:220.

Harpactus Shuckard, 1837:221. Emendation of *Arpactus* Jurine, 107. As noted by Pulawski (1985:59), Shuckard emended *Arpactus* on linguistic grounds, thus creating an available new name, with its own date and author (Articles 19 and 33.2). Since *Harpactus* is an emendation, it has the same type-species as *Arpactus* Jurine (Article 67.8).

Harpactes Dahlbom, 1843:147, junior homonym of *Harpactes* Swainson, 1837 (Aves), and of *Harpactes* Templeton, 1834 (Arachnida). Emendation of *Harpactus* Shuckard.

Dienoplus W. Fox, 1894a:548. Type species: *Dienoplus pictifrons* W. Fox, 1894, by monotypy.

Valid name for the genus: Pulawski, 1985.

Key: R. Bohart, 1980 (North America), Nemkov, 1996 (Russia and neighboring countries).

Review of biology: Kazenas, 2001b:220.

As subgenus *Harpactes*: Kohl, 1888b:727; Krieger, 1894; Mocsáry, 1897; Handlirsch, 1898b:487; O. Schneider, 1898:102; Kubes, 1907:96; Schmiedeknecht, 1907:222; Dittrich, 1911; Birula, 1912:540, 1914:386; Dubois, 1921c:203; Strohm, 1925:211; Carpentier, Crèvecoeur, and Maréchal, 1926:353; Bouwman, 1927:52; Gussakovskij, 1928a:16; Schmiedeknecht, 1930:684; Balles, 1934; Zavadil, Šustera, and Baťa, 1937:192; A. Wagner, 1938:121; Balthasar, 1943; de Beaumont, 1945:473, 1950f:400-402; Leininger, 1951:117; Gussakovskij, 1952:269; Guiglia, 1957:145, 1960:360; Zirngiebl, 1957:181.

As subgenus *Harpactus*: Morice, 1911:113, 114; R. Turner, 1912g:375; Kohl, 1913b:16; Berland, 1925d:90; Giordani Soika, 1932a:22; Grandi, 1934:129; Nadig, 1934; Grandi, 1935a:110; Crèvecoeur and Maréchal, 1936:253; Dulac, 1937:11; Maidl and Klima, 1939:73; Guiglia, 1941c:164; 1943a:71, 1944b:21-22, 1948c:201; Deleurance, 1946b:67; Balthasar, 1948:142; de Beaumont, 1951g:307-311, 1953g:109-110; Guiglia, 1953b:11; Balthasar, 1954b:272; Vogrin, 1955:35; Scobiola, 1960a:166-167; Fæster, 1965:193; Balthasar, Hrubant, and Hrubant, 1967:172-173; Grandi, 1954:231-232, 1957:385; Niedl and Deneš, 1967:83.

As subgenus *Arpactes*: de Beaumont, 1951h:32, 1954e:88; Ceballos, 1964:91.

As subgenus *Arpactus*: Cavro, 1950:35

As subgenus *Dienoplus*: R. Turner, 1917e:183; Steiner, 1955:145; de Beaumont, 1956a:188-189; Grandi, 1957:385; Pulawski, 1958a:167-168; de Beaumont, 1959a:22; de Beaumont and Bytinski-Salz, 1959:105-106; Suárez, 1959:56; de Beaumont, 1960a:13, 1960b:234-235, 1962b:23 and 34; Valkeila, 1962b:67; Ceballos, 1964:91; Pulawski, 1964:75; de Beaumont, 1965a:30-35, 1967a:316-318; Scobiola-Palade, 1967b:48; Benedek, 1968:72 (as *Dinelopus*); de Beaumont, 1968b:161, 1969:85-87; Nouvel, 1969:337; Suárez, 1969:29; Benedek, 1970:98; Oehlke, 1970:692-694; Schmidt, 1971b:29; Stritt, 1971a:104; Kazenas, 1972b:148, 151; Kofler, 1972:106; Oehlke, 1972:136; Diniz, 1973:46; Erlandsson, 1974:65; Scobiola-Palade, 1974:144; Simon Thomas and Veenendaal, 1974b:4; Simon Thomas and Wiering, 1976:109; Marion, 1978:87; Lefebvre, 1979:45, 46; Kuznetzova, 1990:19.

1. *adventicus* (de Beaumont)

Gorytes adventicus de Beaumont, 1967a:316, ♀, ♂. Holotype: ♀, Turkey: Nigde: Ciftehan (BMNH). – **As *Dienoplus adventicus***: R. Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus adventicus***: Ljubomirov and Yildirim, 2008:85 (new combination, in catalog of Crabronidae of Turkey)

2. *affinis* (Spinola)

Gorytes affinis Spinola, 1808:250, ♀, ♂. Lectotype: ♀, Italy: Liguria: near Novas (Torino), designated by de Beaumont, 1952e:41. – Vander Linden, 1829:95 (bibliographic references, Italy); Handlirsch, 1888b:420 (in revision of world Bembicinae); Kohl, 1893a:27 (Austria: Niederösterreich); Krieger, 1894:8 (Germany: Kingdom of Saxony according to Kiesenwetter, 1849); Dalla Torre, 1897:536 (in catalog of world Sphecidae); Mocsáry, 1897:82 (Kingdom of Hungary, some localities are in today's Romania); de Cobelli, 1903:113 (Italy: Province of Trentino: Rovereto, Torcegno, Trento); W. Schulz, 1904b:96 (Croatia; Czechoslovakia: Trencin, as Trencsin; Hungary: Buda; Turkey: Bursa); Schmiedeknecht, 1907:223 (in key to Hymenoptera of Central Europe); Zilahi Kiss, 1915:80 (Hungary: Zilah); Fahringer, 1922:180 (Turkey); Berland, 1924:89 (France: Var: Callian; prey: *Allygus atomarius*), 1925d:91 (in Sphecid Fauna of France); Schmiedeknecht, 1930:685 (in keys to Hymenoptera of North and Central Europe); Grandi, 1934:129 (Italy: Emilia-Romagna: vicinity of Bologna); Zavadil, Šusterka, and Bat'a, 1937:193 (in catalog of Sphecidae of Czechoslovakia); Maidl and Klima, 1939:73 (in catalog of world Astatinae and Bembicinae); Guiglia, 1941c:164 (Italy: Calabria: Grande Sila); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Guiglia, 1944b:21 (Italy); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Šnoflak in Zavadil and Šnoflak, 1948:77 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1951g:308 (Italy), 1952e:41 (study of type); Cleu, 1953:50 (France: Ardèche River basin); Guiglia, 1953b:11 (Italy: Lucania-Calabria: Camigliatello, Santicelli); de Beaumont, 1954e:88 (Italy); Vogrin, 1955:35 (Yugoslavia); Bajári, 1957a:102 (in key to Hungarian Sphecidae); Noskiewicz and Puławski, 1960:99 (in key to Polish Sphecidae, not yet found in Poland); Bonelli, 1966a:8 (nesting habits), 1966c:216 (Italy: Trentino–Alto Adige: Montagna); de Beaumont, 1965a:34 (Greece), 1967a:316 (Turkey); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Băneasa, Comarova), 1967b:48 (Romania), 1968c:384 (Romania: Budești, Cernica); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Balthasar, 1972:323 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Benedek, 1979:230 (Hungary: Bakony Mountains); Pádr in Šedivý, 1989a:166 (in checklist of Czechoslovakian Sphecidae); Kuznetzova, 1990:19 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:70 (Czech Republic: Praha area). – **As *Arpactus affinis***: Herich-Schaeffer, 1840:290 (new combination, Germany: Regensburg area); Kirchner, 1867:219 (in catalog of European Hymenoptera); Dours, 1874:142 (in catalog of Hymenoptera of France); De-Stefani, 1895:228 (in catalog of Sicilian Hymenoptera); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection). – **As *Harpactes affinis***: Dahlbom, 1843:150 (new combination, in revision of Sphecidae and Pompilidae), 1845:475 (in key to European *Harpactes*); Eversmann, 1849:388 (Russia: southern Ural Mts.); Taschenberg, 1858:88 (in key to Sphecidae of Germany); A. Costa, 1859:45 (in revision of Sphecidae of Kingdom of Naples, Italy); Taschenberg, 1866:196 (in key to *Harpactes* of Germany), 197 (known from France and Italy); A. Costa, 1867c:73 (in revision of Italian Sphecidae), 1869b:89 (in revision of Italian Sphecidae); Kohl, 1880:173 (Italy: Trentino-Alto Adige: near Bolzano); Gasperini, 1887:17 (Dalmatia: Lesina Island, now Croatia: Hvar Island); Baldini, 1894:68 (Italy: Modena area); Pulawski, 1954:107 (redescription); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'). – **As *Dienoplus affinis***: Evans, 1966d:71 (new combination, summary of known prey); R. Bohart and Menke, 1976:496 (listed); Guichard, 1978:271 (Greece); Pagliano, 1980:115 (Italy: Piemonte); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 77 (endangered in Burgenland, Austria), 78 (endangered in Oberösterreich, Austria), 1983b:22 (in catalog of Sphecidae of Austria); Józán, 1985a:181 (Hungary), 1985b:60 (Hungary S Lake Balaton), 81 (floral records), 84 (ecological and zoogeographic characteristics), 1989:102 (Hungary: Tihany Natural Reserve), 1992b:175 (Hungary: Boronka-melléki Protected Area), 1992c:290 (Hungary: Zselic Hills). – **As *Harpactus affinis***: F. Smith, 1856:372 (new combination, in catalog of Hymenoptera in British Museum); de Gaulle, 1908:120 (in catalog of French Hymenoptera); Dollfuss, 1988:18 (Austria: Bisamberg); Pagliano, 1990:72 (in catalog of Italian Sphecidae); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:194 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991: (Italy: Emilia:

Ronzana); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); Gayubo and Borsato, 1994:216 (Italy: Veneto); Gusenleitner, 1995:163 (Austria: Steiermark); Kazenas and Esenbekova, 1995:80 (Kazakhstan; bibliographic reference to leafhopper prey); Ljubomirov, 1995:11 (Bulgaria); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Nemkov, 1996:1207 (in key to *Harpactus* of Russia and neighboring countries); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:210 (in Sphecidae Fauna of Western Europe); Pagliano and Alma, 1997:179 (known prey listed); Dollfuss, Gusenleitner, and Bregant, 1998:523 (Austria: summary of collecting records from Burgenland); Gusenleitner, 1998:499 (Austria: Steiermark: Therme Loipersdorf); Ljubomirov, 1999b:57 (Bulgaria: Mt. Vitosha near Sofia); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:109 (Greece); Ivanov and Ljubomirov, 2001:213 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 221 (prey: a cicadellid *Graphocraerus ventralis*); Zettel, Gross, and Mazzucco, 2001:80 (Austria: Wien); Deván, 2002a:200 (Slovakia: Kobela Nature Reserve near Nové Mesto); Kazenas, 2002a:117 (geographic distribution, collecting localities in Kazakhstan); Schmid-Egger, 2003:753 (Italy: Sicilia: Armerina); Gayubo and Özbek, 2005:16 (Turkey: Erzincan: Üzümlü; Erzurum: Tortum); Jacobs, 2005a:446 (Bulgaria: Arkutino near Burgas); Pagliano and Negrisolo, 2005:155 (in Sphecidae Fauna of Italy); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Evans and O'Neil, 2007:51 (prey record by Kazenas, 2001b, reported); Jacobs, 2007:170, 172 (in key to Crabronidae of Germany, not yet found in Germany); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:348 (Russia: Altayskiy Kray: Barnaul area); Ljubomirov and Yildirim, 2008:86 (in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:262 (Bulgaria: Maleshevska Planina); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: recent records from Austria, Bulgaria, and Czech Republic reported).

Arpactus carceli Lepeletier de Saint Fargeau, 1832:78, ♂ (as *Carceli*, incorrect original capitalization). Holotype: ♂, France: Dauphiné: no specific locality (depository unknown). Synonymized with *Gorytes affinis* by Handlirsch, 1888b:420. – Wesmael, 1839:79 (listed); Lepeletier de Saint Fargeau, 1845:83 (in revision of world Hymenoptera); Kirchner, 1867:218 (in catalog of European Hymenoptera); Dours, 1874:142 (in catalog of Hymenoptera of France); Frivaldszky, 1876:352 (Hungary: Temes Komitat: Grebenáč, now in Timiș District, Romania); Acloque, 1897:84 (in Sphecidae Fauna of France and Algeria); Chyzer, 1902:33 (Hungary). – **As *Harpactes carceli***: Funk, 1864:156 (new combination, Germany: Bayern: Bamberg); Kohl, 1883e:669 (Switzerland). – **As *Harpactus carceli***: Kirschbaum, 1853:44 (new combination, Germany: Herzogtum Nassau: Mainz-Mombach); F. Smith, 1856:372 (new combination, in catalog of Hymenoptera in British Museum); Sajó, 1882:5 (Hungary). – **Nec *Harpactes carceli*** of the following authors (= *Harpactus elegans*): Dahlbom, 1843:151, 1845:475; Kiesenwetter, 1845:89; Schenck, 1857:175; Ruthe and Stein, 1857:314; Taschenberg, 1858:88, 1866:196, 197; Schenck, 1860:148.

Arpactus tricolor Lepeletier de Saint Fargeau, 1832:79, sex not indicated (as *Tricolor*, incorrect original capitalization). Published in synonymy of *Arpactus carceli*. Holotype or syntypes: sex not indicated, France or Switzerland: no specific locality, ex Faure-Biguet coll. (depository unknown).

3. *alvaroi* Gayubo

Harpactus alvaroi Gayubo, 1992b:180, ♀, ♂. Holotype: ♂, Spain: Salamanca Province: Béjar (S.F. Gayubo coll.). – Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:211 (in Sphecidae Fauna of Western Europe); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Cruz-Sánchez, Gayubo, González, and Torres, 2005:219 (Spain: Salamanca: San Martín del Castañar); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia),

2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: recent records from Spain reported; France: Hérault: Montarnaud; Var: Gonfaron).

4. *annulatus* Eversmann

Harpactus annulatus Eversmann, 1849:388, sex not indicated. Lectotype: ♂, Russia: Orenburg province: no specific locality (ZIN), designated by Nemkov, 1996:1211. – nec Pagliano, 1990:72, 1992:41, and Negrisoló in Minelli, Ruffo, and La Posta, 1995b:4 (= *Harpactus pulchellus*); Nemkov, 1996:1205 (in key to *Harpactus* of Russia and adjacent countries); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:211 (in Sphecidae Fauna of Western Europe); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:117 (geographic distribution, collecting localities in Kazakhstan); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: specimens recorded from Italy are actually *Harpactus pulchellus*). – **As *Gorytes annulatus***: Handlirsch, 1888b:440 (new combination, original description copied); Dalla Torre, 1897:537 (in catalog of world Sphecidae); Mairl and Klima, 1939:74 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus annulatus***: R. Bohart and Menke, 1976:496 (new combination, listed); nec Pagliano, 1980:115 (= *Harpactus pulchellus*).

Dienoplus varipes Tsuneki, 1971k:192, ♂. Holotype: ♂, Mongolia: South Gobi Aymag: 100 km W Ovot Huural, a frontier post (TMB). Synonymized with *Harpactus annulatus* by Nemkov, 1996:1211. – R. Bohart and Menke, 1976:496 (listed).

As *Harpactus transcaspicus*: Kazenas, 1978:74 (in key to Sphecidae of Kazakhstan and Central Asia), corrected to *Harpactus annulatus* by Nemkov, 1996:1211.

5. *arenarum* (de Beaumont)

Gorytes arenarum de Beaumont, 1953g:110, ♀, ♂. Holotype: ♀, Morocco: Tiznit, Sidi Moussa (LAUSANNE). – **As *Dienoplus arenarum***: R. Bohart and Menke, 1976:496 (new combination, listed).

6. *aureus* (de Beaumont)

Gorytes aureus de Beaumont in de Beaumont and Bytinski-Salz, 1959:105, ♀. Holotype: ♀, Israel: Bat Yam (RMNH). – **As *Dienoplus aureus***: R. Bohart and Menke, 1976:496 (new combination, listed).

7. *betpakdalensis* Kazenas

Harpactus betpakdalensis Kazenas, 1988:148, ♀, ♂. Holotype: ♀, Kazakhstan: Betpakdala Desert 60 km NW Furmanovka (ZIN). – Nemkov, 1996:1205 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:117 (geographic distribution, collecting localities in Kazakhstan).

8. *castor* (Handlirsch)

Gorytes castor Handlirsch, 1898b:487, ♂ (as *Castor*, incorrect original capitalization). Syntypes: ♂, Algeria: Oran Province, and Egypt: Turah (NHMW). – Mairl and Klima, 1939:74 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus castor***: R. Bohart and Menke, 1976:496 (new combination, listed); Pulawski, 1979d:480 (in key to *niger* group of *Harpactus*).

9. *citipes* (Krombein)

Dienoplus citipes Krombein, 1954b:20, ♀, ♂. Holotype: ♂, USA: Florida: Orange County: Orlando (USNM). – Krombein and Evans, 1954:234 (Florida), 1955:233 (Florida); R. Bohart and Menke, 1976:496 (listed); Krombein, 1979b:1692 (in catalog of North American Hymenoptera); R. Bohart, 1980:64 (in key to North American *Dienoplus*).

10. clypeatus (R. Bohart)

Dienoplus clypeatus R. Bohart, 1980:66, ♂, ♀. Holotype: California: Napa County: Samuel Springs, now bottom of Lake Beryessa (UCD). Paratypes: Idaho, Wahington. – R. Bohart, 1980:64 (in key to North American *Dienoplus*). – **As *Harpactus clypeatus***: Rust, Menke, and Miller, 1985:47 (California: Channel Islands).

11. coccineus (Balthasar)

Gorytes coccineus Balthasar, 1954b:272, ♂. Holotype: ♂, Israel: Jerusalem (V. Balthasar coll.). – de Beaumont and Bytinski-Salz, 1959:106 (Israel). – **As *Dienoplus coccineus***: R. Bohart and Menke, 1976:496 (new combination); Pulawski, 1979d:480 (in key to *niger* group of *Harpactus*). – **As *Harpactus coccineus***: Ljubomirov and Yildirim, 2008:86 (new combination, in catalog of Crabronidae of Turkey)

12. creticus (de Beaumont)

Gorytes creticus de Beaumont, 1965a:30, ♂. Holotype: ♂, Greece: Crete Island: Heraklion (coll. M. Schwarz). – Guichard, 1978:270 (Greece: Island of Crete: Kournas). – **As *Dienoplus creticus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus creticus***: Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: new combination, not included in the volume).

13. croaticus Vogrin

Harpactus croaticus Vogrin, 1954:14, ♀. Syntypes: ♀, Croatia: Krapina (originally Phytopatological Institute, Zagreb, now Croatian Natural History Museum). – **As *Gorytes croaticus***: Vogrin, 1955:35 (new combination, Croatia: Crapina). – **As *Dienoplus croaticus***: R. Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus croaticus***: Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: new combination, not included in the volume).

14. cyrenaicus (de Beaumont)

Gorytes cyrenaicus de Beaumont, 1956a:188, ♂. Holotype: ♂, Libya: Cyrenaica: Derna (BMNH). – **As *Dienoplus cyrenaicus***: Bohart and Menke, 1976:496 (new combination, listed).

15. decipiens (Arnold)

Arpactus decipiens Arnold, 1936:11, ♀, ♂. Syntypes: South Africa: Western Cape Province: Cape Town (SAM). – **As *Gorytes decipiens***: Maidl and Klima, 1939:83 (new combination, in catalog of world Astatinae and Bembicinae). – **As *Dienoplus decipiens***: R. Bohart and Menke, 1976:496 (new combination, listed).

16. delicatulus (Morice)

Gorytes delicatulus Morice, 1911:114, ♂. Syntypes: ♂, Algeria: Biskra (OXUM). – Maidl and Klima, 1939:49 (in catalog of world Astatinae and Bembicinae); de Beaumont, 1956a:189 (Libya; diagnostic characters). – **As *Dienoplus delicatulus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

17. dimorphus (Pulawski)

Dienoplus dimorphus Pulawski, 1979d:475, ♀, ♂. Holotype: Turkey: Urfa: Urfâ (USNM). – Pulawski, 1979d:480 (in key to *niger* group of *Harpactus*). – **As *Harpactus dimorphus***: Ljubomirov and Yildirim, 2008:87 (new combination, in catalog of Crabronidae of Turkey)

18. elegans (Lepelletier de Saint Fargeau)

Arpactus elegans Lepelletier de Saint Fargeau, 1832:79, ♂. Syntypes: ♂: France: Lyon area (depository unknown). – Wesmael, 1839:79 (listed); Lepelletier de Saint Fargeau, 1845:84 (in revision of world Hymenoptera); Kirchner, 1867:219 (in catalog of European Hymenoptera); Dours, 1874:142 (in catalog of Hymenoptera of France); Radoszkowski, 1892:583 (male genitalia); Acloque, 1897:84 (in Sphecidae Fauna of France and Algeria). – **As *Harpactus elegans***: A. Costa, 1859:43 (new combination, in revision of Sphecidae of Kingdom of Naples, Italy),

1867c:74 (in revision of Italian Sphecidae), 1869b:90 (in revision of Italian Sphecidae), 1883:57 (Italy: Sardegna: Oschiri); Kohl, 1883e:669 (Switzerland); A. Costa, 1884b:33 (Italy: Sardegna: Belvi); Graeffe, 1911:47 (Italy: Trieste area); Schirmer, 1912:167 (Germany: in Berlin area not observed since Ruth and Stein, 1857); Stöckhert, 1919:40 (Germany: Franken); A. Wagner, 1920:33 (Germany: Lower Elbe region, not found but can be expected); Enslin, 1922c:246 (Germany: Bayern: Fürth); Puławski, 1954:108 (redescription); de Beaumont, 1953i:5 (study of specimens in A. Costa collection); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'). – **As Gorytes elegans**: Handlirsch, 1888b:417 (new combination, in revision of world Bembicinae); Kohl, 1888b:728 (Austria: Tirol, now Italy: Alto Adige), 1893:27 (Austria: Niederösterreich); Handlirsch, 1895:903 (reference to Radoszkowski, 1891); Dalla Torre, 1897:541 (in catalog of world Sphecidae); Mocsáry, 1897:82 (Kingdom of Hungary, some localities are in today's Romania and Slovakia); Ferton, 1901:106 (France: Aisne: Château-Thierry, and Corse: Bonifacio, list of prey); Antiga and Bofill, 1904:15 (Spain: Cataluña Province); W. Schulz, 1904b:96 (Hungary: Pest); Ferton, 1905: (list of prey, position of egg on prey); Kubes, 1905:84 (Czech Republic: Kolín); Mantero, 1905:70 (Italy: Toscana: Isola del Giglio); Mercet, 1906a:129 (in key to Spanish *Gorytes*); Schmiedeknecht, 1907:223 (in key to Hymenoptera of Central Europe); Ferton, 1908:558 (habitat and nest structure, prey); Dittrich, 1911b:23 (Germany: Niederschlesien: Breslau, Mirkau, now Poland: Dolny Śląsk: Mirków, Wrocław); Mantero, 1911:73 (Italy: Sardegna: Isola dell'Asinara); Dubois, 1921c:203 (in key to Belgian Sphecidae); Maidl, 1922:71 (Albania, Croatia); Berland, 1925d:90 (in Sphecid Fauna of France); von Schulthess, 1926b:216 (Algeria: Oran); Schmiedeknecht, 1930:685 (in keys to Hymenoptera of North and Central Europe); Giordani Soika, 1932a:22 (Italy: Lido di Venezia); Vergne, 1935:118 (France: Auvergne: Les Martres-d'Artières); Zavadil, Šusterka, and Baťa, 1937:193 (in catalog of Sphecidae of Czechoslovakia); Maidl and Klima, 1939:74 (in catalog of world Astatinae and Bembicinae); Dovnar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia), 1943:41 (Czech Republic: Moravia: Zlin area); Giner Mari, 1943a:175 (in Sphecid Fauna of Spain); Guiglia, 1943b:71 (Albania: Kopliku); Móczár, 1943b:85 (Hungary: Sashegy mountain near Budapest, Szeged); Giordani Soika, 1944:9 (Italy: Sicilia: Taormina); Guiglia, 1944b:21 (Italy); Šnoflak *in* Zavadil and Šnoflak, 1948:76 (in key to Sphecidae of Czechoslovakia); Noskiewicz and Chudoba, 1949:422 (Poland: Dolny Śląsk: Sułów, Wrocław); de Beaumont, 1951g:307 (Italy); Leininger, 1951:117 (Germany: Baden-Württemberg: Sandhausen); Caruel, 1953:101 (France: Marne Department); de Beaumont, 1954e:88 (Italy); Grandi, 1954:231 (Italy); Puławski, 1954:108 (redescription); Steiner, 1955:145 (France: Dordogne); Vergne, 1955:4 (France: Auvergne); Vogrin, 1955:35 (Yugoslavia); Ceballos, 1956:382 (in catalog of Hymenoptera of Spain); Stadler and Glässel, 1956:111 (Germany: Bayern: Romberg Nature Reserve); Bajári, 1957a:103 (in key to Hungarian Sphecidae); Zirngiebl, 1957:181 (Germany: Rheinland-Pfalz: Birkenheide); Nouvel and Ribaut, 1958:11 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Compte Sart, 1959:134 (Spain: Mayorca); Noskiewicz, 1959:208 (Poland: Rembertów); de Beaumont, 1959a:22 (Italy); Noskiewicz and Puławski, 1960:99 (in key to Polish Sphecidae); Scobiola, 1960a:166 (first record from Romania: Constanța Region: Techirghiol, Ploești Region: Ploești); Atanassov, 1962:123 (Bulgaria: Petrich area); de Beaumont, 1962b:23 (Spain); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:50 (in Sphecid Fauna of Switzerland), 1965a:30 (Greece); Gauss, 1966a:66 (Germany: Baden: Heidelberg); Balthasar, Hrubant, and Hrubant, 1967:172 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:316 (Turkey); Gauss, 1967:552 (Germany: Baden-Württemberg); J. Heinrich, 1967:72 (Germany: Bayern: Kahl, Karlstadt); Scobiola-Palade, 1967a:161 (Romania), 1967b:48 (Romania); Benedek, 1968:72 (Hungary, visiting flowers of *Angelica silvestris* L); Scobiola-Palade, 1968c:384 (Romania: Budești); de Beaumont, 1969:85 (Turkey); Benedek, 1969a:83 (Hungary; marshy meadow), 1970:98 (Hungary: Tapolca); Oehlke, 1970:692 (in key to Sphecidae of Democratic Germany); Bonelli, 1971:71 (nesting habits); Schmidt, 1971b:29 (Germany: Mainz area); Balthasar, 1972:323 (in Sphecid Fauna of Czechoslovakia); Scobiola-Palade, 1972a:150 (Romania: delta of Danube: Caraorman), 1972b:253 (Romania); Diniz, 1973:46 (Portugal: Coimbra); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:87 (France:

Nièvre Department); Pulawski, 1978:201 (in key to Sphecidae of European part of former USSR); Benedek, 1979:230 (Hungary: Bakony Mountains); Skibińska, 1982:123 (Poland: Warszawa area); Józán, 1983:100 (Hungary); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Pádr *in* Šedivy, 1989a:167 (in checklist of Czechoslovakian Sphecidae). – **As *Dienoplus elegans***: Wolf, 1959b:30 (new combination, Germany: Nassau); Evans, 1966d:71 (summary of known prey); R. Bohart and Menke, 1976:496 (listed); Schmidt, 1977/78 (Germany), 1979b:341 (Germany); Pagliano, 1980:115 (Italy: Liguria); Gayubo, 1982b:38 (Spain: Ávila and Salamanca provinces), 1882e:106 (Spain: Cádiz Province); Dollfuss, 1983a:77 (endangered in Niederösterreich, Austria), 1983b:22 (in catalog of Sphecidae of Austria); Gayubo, 1983e:233 (Spain: Salamanca Province); Gayubo and Tormos, 1984:20 (Spain: Valencia); Józán, 1985b:61 (Hungary S Lake Balaton), 81 (floral records), 84 (ecological and zoogeographic characteristics); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg); Gayubo, 1986d:119 (Spain: Zamora Province); Gayubo and Sanza, 1986:74 (Spain: Burgos); Józán, 1986:373 (Hungary: Kiskunság National Park); Karsai, 1988:101 (Hungary: Kiskunság National Park); Józán, 1992b:175 (Hungary: Boronka-melléki Protected Area), 1992c:290 (Hungary: Zselic Hills), 1995:105 (Hungary: projected Duna-Dráva National Park); Pawlikowski and Kruszyński, 1996:86 (Poland: Toruń Basin). – **As *Harpactus elegans***: F. Smith, 1856:372 (new combination, in catalog of Hymenoptera in British Museum); A. Costa, 1864c:124 (Italy: Campania: Benevento area); de Gaulle, 1908:120 (in catalog of French Hymenoptera); Schneid, 1941:1041 (Germany: Bayern: Bamberg area); Schmidt and Westrich, 1987:360 (Germany: Mainz area); Asís and Jiménez, 1988:274 (Spain: Castellón Province); Dollfuss, 1988:30 (Austria: Niederösterreich: Oberweiden); Asís, Gayubo and Tormos, 1990a:219 (description of mature larva); Gayubo, Asís, and Tormos, 1990b:77 (Spain: Valladolid Province); Jacobs and Oehlke, 1990:122 and 209 (not collected in Democratic Germany after 1960); Pagliano, 1990:72 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:551 (Austria: Kärnten); Chinin, 1991:111 (Russia: Samara Oblast'); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:194 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:413 (Italy); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Torregrasa, Gayubo, Tormos, and Asís, 1993:20 (Spain: Alicante Province); Dollfuss, 1994:98 (endangered in Austria); Tormos, Asís, and Gayubo, 1994:189, 219 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Kazenas and Esenbekova, 1995:80 (Kazakhstan; bibliographic reference to leafhopper prey); Ljubomirov, 1995:11 (Bulgaria); Negrisola *in* Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Scharrer, 1995:29 (Germany: Bayern: Aschaffenburg, Kahl); Schmid-Egger, Risch, and Niehuis, 1995:188 (summary of records from Germany: Rheinland-Pfalz State); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: probably endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Nemkov, 1996:1208 (in key to *Harpactus* of Russia and neighboring countries); Witt, 1996:106 (Germany: Brandenburg), 108 (locality records); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:212 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Pagliano and Alma, 1997:179 (list of known prey); Schnee, 1997:99 (Germany: Sachsen); Schmidt and Schmid-Egger, 1997:15 (in checklist of German Sphecidae); Stoyanov and Ljubomirov, 1997:27 (Bulgaria: Rila Mountains); Blösch, 1998:167 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Dollfuss, Gusenleitner, and Bregant, 1998:523 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); K. Weber, 1998:141 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Wickl, 1999a:104 (Germany: Bayern: Oberpfalz area); Blösch, 2000:373 (in Sphecid Fauna of Germany); Dressler, 2000:32 (Germany: Hessen: Darmstadt area); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:109 (Greece); Ljubomirov, 2000:12 (Bulgaria, specimens in N. Nedelkov collection); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N

41°45'E); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 221 (review of known biology); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:139 (distribution in Germany by provinces); Szczepko and Kowalczyk, 2001:189 (Poland: Kampinos National Park near Warszawa); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:155 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Drewes, 2003:138 (Croatia: Baška on Krk Island); Generani, Pagliano, Scaramozzino, and Strumia, 2003:64 (Italy: Arcipelago Toscano); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: strongly endangered); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Szczepko and Kowalczyk, 2004:127 (Poland: Kampinos National Park near Warszawa); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Cruz-Sánchez, Gayubo, González, and Torres, 2005:219 (Spain: Salamanca: San Martín del Castañar); Gayubo and Özbek, 2005:16 (Turkey: eight localities); Jacobs, 2005a:446 (Bulgaria: Arkutino near Burgas, Krasново near Hissarya, Michurin); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisoló, 2005:156 (in Sphecid Fauna of Italy); Reder, 2005:950 (Germany: Rheinland-Pfalz: Worms); Shorenko, 2005a:167 (Ukraine: Crimea); Magdalou, 2006b:109 (France: Pyrénées-Orientales: Mas Larrieu Nature Reserve near Argelès-sur-Mer); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Jacobs, 2007:170, 172 (in key to Crabronidae of Germany); Saure, 2007:82 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:118 (Turkey: Kars: Sarıkamış: Karakurt, as *elegans elegans*); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008a:104 (Southeastern Kazakhstan: near Alma Ata); Ljubomirov and Yildirim, 2008:87 (in catalog of Crabronidae of Turkey); Shcherbakov, 2008:211 (Russia: Moscow Oblast: near Ramenskoye); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: rare).

Harpactus vedicus Nesterov, 1994a:35, ♀, ♂. Holotype: ♀, Armenia: Khozrov Nature Reserve (ZOO. INST. UKRAIN. ACAD. SCI. KIEV). Paratypes: Azerbaijan: Nakhichevan. Synonymized with *Harpactus elegans* by Nemkov, 1997:19

As *Harpactes carceli* (corrected to *Gorytes elegans* by Handlirsch, 1888b:417): Dahlbom, 1843:151 (new combination, revision), 1845:475 (in key to European *Harpactes*); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Hoflössnitz near Dresden); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:175 (in revision of fossorial wasps of Nassau Region, Germany); Taschenberg, 1858:88 (in key to Sphecidae of Germany); Schenck, 1860:148 (Germany: Nassau Region); Taschenberg, 1866:196 (in key to *Harpactes* of Germany), 197 (in revision of Hymenoptera of Germany); Schenck, 1867a:355 (Germany: Nassau Region).

ssp. *siculus* (de Beaumont)

Gorytes elegans siculus de Beaumont, 1968b:161, ♀, ♂. Holotype: ♂, Italy: Sicilia: Castelbuono (LAUSANNE). – As *Dienoplus elegans siculus*: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – As *Harpactus elegans siculus*: Pagliano, 1990:72 (new combination, in catalog of Italian Sphecidae); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Schmid-Egger, 2003:753 (Italy: Sicilia: Armerina, Linguaglosa, Madonie); Pagliano and Negrisoló, 2005:157 (in Sphecid Fauna of Italy).

19. *escalerae* (R. Turner)

Gorytes escalerae R. Turner, 1912g:375, ♀. Holotype or syntypes: ♀, Morocco: Mogador (BMNH). – As *Gorytes escalerae*: Maidl and Klima, 1939:49 (in catalog of world Astatinae and Bembicinae); de Beaumont, 1953g:110

(Morocco: Agadir; diagnostic characters). – *As Dienoplus escalerae*: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

20. *exiguus* (Handlirsch)

Gorytes exiguus Handlirsch, 1888b:423, ♀, ♂. Syntypes: Germany: Karlsruhe, Nürnberg; France: Hautes-Pyrénées: Abriés; Switzerland: Bern, Burgdorf, Stalden (NHMW). – Puton, 1896:234 (Switzerland: Valais; prey: a cicadellid *Acocephalus striatus*); Dalla Torre, 1897:541 (in catalog of world Sphecidae); Schmiedeknecht, 1907:223 (in key to Hymenoptera of Central Europe); Berland, 1925d:91 (in Sphecidae Fauna of France); Schmiedeknecht, 1930:685 (in keys to Hymenoptera of North and Central Europe); Balles, 1934:20 (Germany: Baden-Württemberg: Mannheim-Rheinau); Maidl and Klima, 1939:75 (in catalog of world Astatinae and Bembicinae); Zavadil, 1939:121 (Czechoslovakia: Podkarpatská Rus: Kuzy, now Ukraine); de Beaumont, 1945:473 (Switzerland: Martigny); Šnoflak in Zavadil and Šnoflak, 1948:76 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Leininger, 1951:117 (Germany: Baden-Württemberg: Rastatt); Bajári, 1957a:102 (in key to Hungarian Sphecidae, not yet found in Hungary); Noskiewicz and Puławski, 1960:99 (in key to Polish Sphecidae); Scobiola, 1960a:167 (first record from Romania: Medgidia Region: Valul lui Traian); de Beaumont, 1964c:50 (in Sphecidae Fauna of Switzerland); Gauss, 1967:552 (Germany: Baden-Württemberg: Nördliches Rheinvorland, Vorbergzone); Stritt, 1969:131 (Germany: Baden-Württemberg: Karlsruhe); Oehlke, 1970:692 (unknown from Democratic Germany); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:325 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); Diniz, 1973:46 (Portugal: Coimbra, Figueira da Foz); Marion, 1978:87 (France: Nièvre Department); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Delarze, 1992:67 (Switzerland: Valais: Les Follatères). – *As Harpactes exiguus*: Stöckert, 1919:40 (new combination, Germany: Bayern: Fürth); Enslin, 1922c:246 (Germany: Bayern: Fürth); Pulawski, 1954:103 (first record from Poland: Błędów, Nowy Sącz, Ukraine: Kuzy in Carpathian Ukraine, redescription, prey: *Aphrodes bicinctus* Schrank). – *As Dienoplus exiguus*: Wolf, 1959b:30 (new combination, known from Germany, but not from Nassau); R. Bohart and Menke, 1976:496 (listed); Schmidt, 1979b:342 (Germany); Dollfuss, 1983b:22 (in catalog of Sphecidae of Austria: Oberösterreich: St. Georgen); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg); Brechtel, 1986:58 (Germany: Rheinland-Pfalz: Tongruben Jockgrim); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park). – *As Harpactus exiguus*: de Gaulle, 1908:120 (new combination, in catalog of French Hymenoptera); Dollfuss, 1987:23 (Austria: Niederösterreich: St. Christofen); Jacobs and Oehlke, 1990:209 (unknown from Democratic Germany); Pagliano, 1990:72 (first record from Italy); Schwammberger and Priesner, 1990:551 (Austria: Kärnten); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:194 (in key to Sphecidae of North and Central Europe); Barbier, 1992:51 (first record from Belgium, review of collecting localities); Pagliano, 1992:40 (in key to Italian Bembicinae); Dollfuss, 1994:99 (endangered in Austria); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Schmid-Egger, Risch, and Niehuis, 1995:188 (summary of records from Germany: Rheinland-Pfalz State); Nemkov, 1996:1207 (in key to *Harpactus* of Russia and neighboring countries); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:213 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Pagliano and Alma, 1997:179 (known prey listed); Schmidt and Schmid-Egger, 1997:15 (in checklist of German Sphecidae); K. Weber, 1998:141 (Germany: Bayern: Bruckertshof in Bamberg area); Pauly, 1999:111 (in catalog of Belgian aculeates); Blösch, 2000:374 (in Sphecidae Fauna of Germany); Ohl et al., 2001:139 (distribution in Germany by provinces); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: extinct or no longer collected); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae);

Pagliano and Negrisolò, 2005:158 (in Sphecidae Fauna of Italy); Reder, 2005:950 (Germany: Rheinland-Pfalz: Worms); Jacobs, 2007:170, 171 (in key to Crabronidae of Germany); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: very rare).

21. *fertoni* (Handlirsch)

Gorytes fertoni Handlirsch in Kohl and Handlirsch, 1910:266, ♂, ♀. Syntypes: France: Corse: Bonifacio (NHMW). – Ferton, 1908:558 (prey), 1910:151 (nesting habits), 1910:158 (prey); Berland, 1925d:92 (in Sphecidae Fauna of France); Maidl and Klima, 1939:76 (in catalog of world Astatinae and Bembicinae); Grandi, 1957:385 (Italy: Sardegna). – **As *Dienoplus fertoni***: Evans, 1966d:71 (new combination, summary of known prey); R. Bohart and Menke, 1976:496 (new combination). – **As *Harpactus fertoni***: Pagliano, 1990:72 (new combination, in catalog of Italian Sphecidae); nec Pagliano, 1992:40, 41 (= *Harpactus tauricus*); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:215 (in Sphecidae Fauna of Western Europe); Pagliano and Alma, 1997:179 (known prey listed); Pagliano and Negrisolò, 2005:158 (in Sphecidae Fauna of Italy); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: in Italy known only from Sardinia).

22. *formosus* (Jurine)

Arpactus formosus Jurine, 1807:194 and pl. 10, Fig. 20, ♀. Holotype or syntypes: ♀, Europe: no specific locality, possibly Switzerland (MHNG). – Lepeletier de Saint Fargeau, 1832:75 (revision, study of individual illustrated by Jurine); Wesmael, 1839:79 (listed); Herrich-Schaeffer, 1840:290 (Germany: Bayern: Regensburg area); Lepeletier de Saint Fargeau, 1845:80 (in revision of world Hymenoptera); Kirchner, 1867:219 (in catalog of European Hymenoptera); P. Ivanov, 1872:152 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:142 (in catalog of Hymenoptera of France); Yaroshevskiy, 1881:125 (Ukraine: Khar'kiv Oblast': Kupyansk); Frei-Gessner, Kohl, and Kriechbaumer, 1882:393 (as new synonym of *Harpactes laevis*); De Stefani Perez, 1895:228 (in catalog of Sicilian Hymenoptera); Acloque, 1897:84 (in Sphecidae Fauna of France and Algeria); Casolari and Casolari Moreno, 1980:121 (specimens in M. Spinola collection). – **As *Harpactes formosus***: Dahlbom, 1843:149 (new combination, in revision of Sphecidae and Pompilidae); Ruthe and Stein, 1857:313 (Germany: Berlin area); A. Costa, 1858:19 (Italy: Campania: Monti Partenii in Benevento Region), 1859:48 (in revision of Sphecidae of Kingdom of Naples, Italy); Taschenberg, 1866:196 (in key to *Harpactes* of Germany), 197 (in revision of German Hymenoptera: Halle); A. Costa, 1867c:72 (in revision of Italian Sphecidae); Wierzejski, 1868:117 (Ukraine: Podole Region: Pieniaki); A. Costa, 1869b:88 (in revision of Italian Sphecidae); Wierzejski, 1874:259 (1864 record is doubtful); Kohl, 1880:173 (Italy: Trentino–Alto Adige); Kohl, 1883e:668 (Switzerland); A. Costa, 1884b:33 (Italy: Sardegna: Meana). – **As *Gorytes formosus***: Vander Linden, 1829:93 (new combination, bibliographic references, probably a variety of *Gorytes laevis*); Handlirsch, 1888b:430 (as synonym of *Gorytes laevis*); de Beaumont, 1945:474 (Switzerland; diagnostic characters), 1950f:402 (Algeria: Tagramaret), 1951g:310 (Italy; taxonomy) de Beaumont, 1953g:109 (Morocco), 1954e:88 (Italy); Grandi, 1954:232 (Italy); Guiglia, 1957:145 (Italy: Isole Pelagie); Nouvel and Ribaut, 1958:11 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); de Beaumont and Bytinski-Salz, 1959:106 (Israel); Suárez, 1959:56 (Spain: Almería Province); de Beaumont, 1960a:13 (Greece: Rhodes Island), 1960b:234 (Libya; taxonomic problems); Guiglia, 1960:360 (Italy: Isole Pelagie: Lampedusa); Noskiewicz and Puławski, 1960:97 (in key to Polish Sphecidae); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:51 (in Sphecidae Fauna of Switzerland), 1965a:35 (Greece); Bonelli, 1966c:216 (Italy: Trentino–Alto Adige: Val Grande in Cavalese); de Beaumont, 1969:89 (Turkey); Schmidt, 1971b:29 (Germany: Mainz area); Diniz, 1973:46 (Portugal: eleven localities); Oehlke, 1970:693 (in key to Sphecidae of Democratic Germany); Simon Thomas and Veenendaal, 1974b:4 (France: Landes: Escourse); Puławski, 1978:200 (in key to Sphecidae of European part of former USSR); Tyrner, 1987:282 (Czechoslovakia: Bohemia); Pádr in Šedivý, 1989a:167 (in checklist of Czechoslovakian Sphecidae); Delarze, 1992:67 (Switzerland: Valais: Les Follatères). – **As *Dienoplus formosus***: R. Bohart and Menke, 1976:496 (new combination, listed); Schmidt,

1979b:343 (Germany); Guichard, 1980:228 (Oman); Gayubo, 1982b:39 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:106 (Spain: Cádiz Province); Dollfuss, 1983b:22 (in catalog of Sphecidae of Austria: Niederösterreich: Oberweiden); Gayubo, 1983a:124 (prey: prey: Cercopidae), 1983e:233 (Spain: Salamanca Province); Gayubo and Tormos, 1984:20 (Spain: Valencia); Westrich and Schmidt, 1985b:110 (Germany: endangered in Baden-Württemberg); Gayubo, 1986a:64 (Spain: Ciudad Real Province), 1986d:119 (Spain: Zamora Province); Gayubo and Sanza, 1986:74 (Spain: Burgos). – **As *Harpactus formosus***: F. Smith, 1856:371 (new combination, in catalog of Hymenoptera in British Museum); Radoszkowski, 1877:40 (Uzbekistan: on Syr-Darya); de Gaulle, 1908:120 (in catalog of French Hymenoptera); Gayubo, 1984c:378 (Portugal: El Algarve Province); Nouvel and Ribaut, 1953:178 (France: Aude: Leucate, Haute-Garonne: Grépiac, Saint-Béat, Pyrénées-Orientales: Banyuls); Gayubo and Heras, 1986:60 (Spain: Valladolid Province); Schmidt and Westrich, 1987:360 (Germany: Mainz area); Asís and Jiménez, 1988:274 (Spain: Castellón Province); Dollfuss, 1988:30 (Austria: Niederösterreich: Oberweiden); Al-Houty, 1989:160 (Kuwait: Al-Wafra, Reqqa); Gayubo, Asís, and Tormos, 1990b:78 (Spain: Cáceres Province); Jacobs and Oehlke, 1990:122 and 209 (not collected in Democratic Germany after 1960); Pagliano, 1990:72 (in catalog of Italian Sphecidae); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1992:287 (Greece: Euboea); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); Torregrosa, Gayubo, Tormos, and Asís, 1993:20 (Spain: Alicante Province); Dollfuss, 1994:98 (endangered in Austria); Tormos, Asís, and Gayubo, 1994:189, 219 (Spain: Albacete Province); nec Ljubomirov, 1995:11 (= *Harpactus morawitzi*); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:729 (Italy: Island of Lampedusa); Schmid-Egger, Risch, and Niehuis, 1995:188 (summary of records from Germany: Rheinland-Pfalz State); Nemkov, 1996:1207 (in key to *Harpactus* of Russia and neighboring countries, as *formosus formosus*); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: last collected in 1959); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:216 (in Sphecidae Fauna of Western Europe); Blösch, 1997:14 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Celary, 1997:60 (in checklist of Animals of Poland); Pagliano and Alma, 1997:179 (known prey listed); Schmidt and Schmid-Egger, 1997:15 (in checklist of German Sphecidae); Blösch, 1998:167 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); González, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); González, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Ljubomirov, 1999b:57 (Bulgaria: Mt. Vitosha near Sofia); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:374 (in Sphecidae Fauna of Germany); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:139 (distribution in Germany by provinces); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Drewes, 2003:138 (Germany: Bayern: Erlangen); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: no longer endangered); Gayubo et al. 2004:130 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Kazenas, 2004b:109 (Kazakhstan: western Tien Shan); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Gayubo and Özbek, 2005:17 (Turkey: five localities); Lukáš and Liška, 2005:550 (first record from Slovakia: Košecké Podhradie); Pagliano and Negrisolo, 2005:158 (in Sphecidae Fauna of Italy); Magdalou, 2006a:8, 11 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Evans and O'Neil, 2007:51 (prey records by Pagliano and Alma, 1997, reported); Jacobs, 2007:169, 171

(in key to Crabronidae of Germany); Saure, 2007:82 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Bohemia and Slovakia only), 234 (Bohemia: Praha-Jinonice; recorded from Bohemia by Tyrner, 1987, and from Slovakia by Liška, 2004); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:87 (in catalog of Crabronidae of Turkey); Shcherbakov, 2008:211 (Russia: Chita Oblast': 10 km SE Zapokrovskiy); Guéorguiev and Ljubomirov, 2009:262 (Bulgaria: Maleshevska Planina); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberras de Castronuño – Vega del Duero); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: recent records from Bulgaria, Poland, and Slovakia reported); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: extremely rare).

ssp. *ferrugatus* (Gussakovskij)

Gorytes ferrugatus Gussakovskij, 1928a:16, ♀. Holotype or syntypes: ♀, Uzbekistan: Khiva (ZIN, now lost: Nemkov, 1996:1211). – Maidl and Klima, 1939:76 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus ferrugatus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus formosus ferrugatus***: Nemkov, 1996:1206 (in key to *Harpactus* of Russia and adjacent countries), 1211 (new combination, new status, potential neotype).

23. *funereus* (Giner Mari)

Gorytes funereus Giner Mari, 1945b:377, ♀. Holotype: ♀, Morocco: Western Sahara: Um at Sfaia (MNCN). – Giner Mari, 1945b:362 (Morocco: Western Sahara: Um at Sfaia), 1947:26 (Morocco: Western Sahara); de Beaumont, 1953g:110 (Morocco; diagnostic characters). – **As *Dienoplus funereus***: R. Bohart and Menke, 1976:496 (new combination, listed).

24. *guichardi* (de Beaumont)

Gorytes guichardi de Beaumont, 1968a:257, ♀, ♂. Holotype: ♀, Canary Islands: Fuertaventura: Corralejos (BMNH). – Not listed by Bohart and Menke, 1976; Báez and Ortega, 1978:192 (Canary Islands). – **As *Dienoplus guichardi***: Hohmann, La Roche, Ortega, and Barquín, 1993:254 (new combination, detailed records from Canary Islands).

25. *gyponae* Williams

Harpactus gyponae Williams, 1914b:223, ♀. Syntypes: Kansas: Grant County: no specific locality (KANSAS UNIV.). – Krombein in Muesebeck et al., 1951:993 (in catalog of North American Hymenoptera, in Gorytini of uncertain generic position); LaBerge, 1956:526 (holotype in Snow Entomological Museum). – **As *Gorytes gyponae***: Maidl and Klima, 1939:58 (new combination, in catalog of world Astatinae and Bembicinae). – **As *Dienoplus gyponae***: Krombein, 1954b:20 (new combination, comparison with *Harpactus citipes*); Evans, 1966d:70 (summary of known behavior); R. Bohart and Menke, 1976:496 (listed); R. Bohart, 1980:64 (in key to North American *Dienoplus*); Krombein, 1979b:1692 (in catalog of North American Hymenoptera).

26. *hissaricus* (Gussakovskij)

Gorytes hissaricus Gussakovskij, 1952:269, ♂. Lectotype: ♂, foothills near Stalinabad, now Dushanbe (ZIN), designated by Nemkov, 1996:1212. – **As *Dienoplus hissaricus***: R. Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus hissaricus***: Kazenas, 1989b:776 (new combination, description of ♀); Nemkov, 1996:1208 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 221 (prey: *Erysiaca* sp.).

27. *histrion* (de Saussure)

Harpactus histrion de Saussure, 1892:530, ♀. Syntypes: ♀, Madagascar: Bezanozano: Anosibé (MHNG). – **As *Gorytes histrion***: Handlirsch, 1895:907 (new combination, redescription); Dalla Torre, 1897:542 (in catalog of world Sphecidae); Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae); Arnold, 1945:57 (Madagascar;

redescription); Leclercq, 1960a:100 (Madagascar). – **As *Dienoplus histrio***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed); Leclercq, 1990b:119 (Madagascar; variation). – **As *Harpactus histrio***: Pulawski, 2003b:796 (new combination, in checklist of Malagasy Sphecidae).

28. *houskai* Balthasar

Gorytes houskai Balthasar, 1954b:270, ♀ (as *houškai*, incorrect original diacritic mark). Holotype: ♀, Israel: Jerusalem (originally V. Balthasar coll., now PŘÍRODOVĚDECKÉ MUZEUM, ENTOMOLOGICKÉ ODDĚLENÍ). – de Beaumont and Bytinski-Salz, 1959:106 (Israel; description of ♂, member of subgenus *Dienoplus*). – **As *Oryctus houskai***: R. Bohart and Menke, 1976:508 (new combination, listed). – **As *Harpactus houskai***: Nemkov, 1992:941, footnote (new combination).

29. *impudens* (Nurse)

Gorytes impudens Nurse, 1903b:15, ♂. Holotype: ♂, India: Rajasthan: Mount Abu (BMNH). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); Maidl and Klima, 1939:88 (in catalog of world Astatinae and Bembicinae, in subgenus *Hoplisoides*). – **As *Dienoplus impudens***: R. Bohart and Menke, 1976:508 (new combination, listed).

30. *immaculatus* (Pulawski)

Dienoplus immaculatus Pulawski, 1979d:478, ♀, ♂. Holotype: ♂, Turkey: Mersin Province: Mut: Sertavul (USNM). – **As *Harpactus immaculatus***: Standfuss and Standfuss, 2006c:305 (new combination, first record from Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Ljubomirov and Yildirim, 2008:88 (in catalog of Crabronidae of Turkey); – **As *Harpactus creticus***: Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: new combination, not included in the volume, recent record from Greece reported).

31. *kazakhstanicus* Nemkov

Harpactus niger Kazenas, 1992a:644, ♂, junior secondary homonym of *Harpactus niger* (A. Costa, 1858). Holotype: ♂, Kazakhstan: Semipalatinsk Oblast', now Semey Oblast': 12 km N station Zharma (ZIN). – Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia).

Harpactus kazakhstanicus Nemkov, 1996:1212. Substitute name for *Harpactus niger* Kazenas, 1992. – Nemkov, 1996:1211 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan)

32. *kazenasi* Nemkov

Harpactus kazenasi Nemkov, 1994:64, ♀, ♂. Holotype: ♀, Kazakhstan: Karatau Range 5 km NW Karatau Mountain (ZIN). – Nemkov, 1996:1210, 1211 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan).

33. *kohli* Nemkov

Harpactus kohli Nemkov, 1994:66, ♀. Holotype: ♀, China: Bugas on Khami (ZIN). – Nemkov, 1996:1210 (in key to *Harpactus* of Russia and neighboring countries).

34. *laevis* (Latreille)

Mutilla laevis Latreille, 1792:11, sex not indicated. Holotype or syntypes: SW France: Angoulême region: no specific locality (lost). – **As *Evania laevis***: Fabricius, 1798:241 (new combination, Germany, description of ♂). – **As *Arpactus laevis***: Lepeletier de Saint Fargeau, 1832:74 (new combination, revision); Shuckard, 1837a:221 (redescription, origin of specimen unknown); Herrich-Schaeffer, 1840:290 (Germany: Bayern: Regensburg area); Lepeletier de Saint Fargeau, 1845:79 (in revision of world Hymenoptera); Kirchner, 1867:219 (in catalog of European Hymenoptera); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Dours, 1874:141 (in catalog of Hymenoptera of France, as *levis*); Frivaldszky, 1876:354 (Hungary: Ulma, now Romania: Caraș-Severin or Timiș District); Yaroshevskiy, 1881:125 (Ukraine: Khar'kiv Oblast': Kupyansk); Radoszkowski, 1892:584 (male genitalia).

lia); De Stefani Perez, 1895:228 (in catalog of Sicilian Hymenoptera); Acloque, 1897:84 (in Sphecid Fauna of France and Algeria); Chyzer, 1902:33 (Hungary); Bradley, 1957:49 (Lepeletier's specimens in Turin); Casolari and Casolari Moreno, 1980:121 (specimens in M. Spinola collection). – **As *Gorytes laevis***: Vander Linden, 1829:93 (new combination, bibliographic references, Belgium: Bruxelles); Ghiliani, 1842:25 (listed from Italy: Sicilia); F. Smith, 1856:370 (in catalog of Hymenoptera in British Museum); Palma, 1867:40 (Italy: Sicilia settentrionale); Handlirsch, 1888b:430 (in revision of world Bembicinae); Gasperini, 1889:70 (Dalmatia: Lesina, now Croatia: Hvar); Kohl, 1893a:27 (Austria: Niederösterreich); Krieger, 1894:8 (Germany: Kingdom of Saxony); Dalla Torre, 1897:544 (in catalog of world Sphecidae, as *laevis*); Mocsáry, 1897:82 (Kingdom of Hungary, some localities are in today's Croatia and Romania); nec Handlirsch, 1898b:487 (= *Harpactus laevis aegyptiacus*); Fertton, 1901a:106 (list of prey); de Cobelli, 1903:113 (Italy: Trentino: Rovereto); Antiga and Boffill, 1904:15 (Spain: Cataluña Province); E. Saunders, 1904c:607 (Spain: Mayorca); W. Schulz, 1904b:96 (France: Corsica; Italy: Calabria); Mercet, 1906a:129 (in key to Spanish *Gorytes*); Kubes, 1907:96 (Czech Republic: Kolín); Schmiedeknecht, 1907:222 (in key to Hymenoptera of Central Europe); Fertton, 1910:158 (prey); nec Morice, 1911:113 (= *pyrrhobasis* Morice); Birula, 1912:540 (Ukraine: Zhytomyr Oblast': Radomyshl'); Kohl, 1913b:16 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Dusmet, 1915:88 (Spain: Aragón); Mantero, 1915:325 (Libya; as *laevis* var.); O. Meyer, 1919:153 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1921c:203 (in key to Belgian Sphecidae); Maidl, 1922:71 (Croatia); Berland, 1925d:91 (in Sphecid Fauna of France); Friese, 1926:160 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Lauterborn, 1926:7 (Germany: Baden-Württemberg: Kaiserstuhl); von Schulthess, 1926b:216 (Tunisia); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Schmiedeknecht, 1930:684 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:9 (Spain); Dusmet y Alonso, 1931:8 (Portugal: Mata de Leiria); Grandi, 1931:58 (Italy: Emilia-Romagna: Cervia); Giner Marí, 1934:132 (Spain); Guiglia, 1934b:300 (Libya: bibliography and summary of locality records); Nadig, 1934:32 (Italy: Sardegna: Cagliari); Bernard, 1935:64 (France: Var: Fréjus area); Grandi, 1935a:110 (Italy); Dulac, 1937:11 (France: Saône-et-Loire: Saint-Laurent d'Andenay, Saint-Pierre de Varennes); Zavadil, Šustera, and Bat'a, 1937:192 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Maidl and Klima, 1939:76 (in catalog of world Astatinae and Bembicinae); Móczár, 1939:5 (Hungary: Jászberény); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Yasumatsu, 1942c:110 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:175 (in Sphecid Fauna of Spain); Guiglia, 1944b:22 (Italy); de Beaumont, 1945:473 (Switzerland, diagnostic characters); Deleurance, 1946b:63 (prey: cicadellids), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Balthasar, 1948:142 (Slovakia: Kovačov, Parkan); Guiglia, 1948c:201 (Italy: Sardegna: Villasalto); Šnoflak *in* Zavadil and Šnoflak, 1948:75 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:18 (Portugal); Cavro, 1950:35 (France: Département du Nord); de Beaumont, 1951g:310 (Italy: taxonomy), 1951h:32 (Switzerland: Neuchâtel area); Leininger, 1951:117 (Germany: Baden-Württemberg: Grötzingen, Kaiserstuhl); Caruel, 1952a:62 (France: Marne Department); de Beaumont, 1954e:88 (Italy); Aerts, 1955:62 (Germany: Rheinland); Steiner, 1955:145 (France: Dordogne); Vergne, 1955:4 (France: Auvergne); Vogrin, 1955:35 (Yugoslavia); Ceballos, 1956:382 (in catalog of Hymenoptera of Spain); Bajári, 1957a:100 (in key to Hungarian Sphecidae); Grandi, 1957:385 (Italy); Zirniglebl, 1957:182 (Germany: Rheinland-Pfalz: Gönningheim); Nouvel and Ribaut, 1958:12 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Puławski, 1958a:167 (Bulgaria: Aitos, Kniazhevo near Sofia, mouth of Ropotamo River, Sozopol); Diniz, 1959:29 (Portugal: six localities); Grandi, 1959b:286 (Italy: Trento: Brusago); Noskiewicz and Puławski, 1960:97 (in key to Polish Sphecidae); Scobiola, 1960a:166 (first record from Romania: several localities); de Beaumont, 1964c:51 (in Sphecid Fauna of Switzerland), 1965a:34 (Greece); Balthasar, Hrubant, and Hrubant, 1967:172 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:318 (Turkey); Gauss, 1967:552 (Germany: Baden-Württemberg); J. Heinrich, 1967:72 (Germany: Bayern: between Aschaffenburg and Karlstadt); Niedl and Deneš, 1967:83 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Hagieni), 1967b:48 (Romania);

Benedek, 1968:72 (Hungary, floral records); Scobiola-Palade, 1968c:384 (Romania: Nanov); Zangheri, 1969:1701 (Italy: in catalog of flora and fauna of Romagna Region); Oehlke, 1970:693 (in key to Sphecidae of Democratic Germany); Balthasar, 1972:322 (in Sphecidae Fauna of Czechoslovakia); Kazenas, 1972b:148 (Kazakhstan); Diniz, 1973:46 (Portugal: Caparica, Carcavelos, Lagoa de Albufeira, Pinhal Novo, Seixal); Scobiola-Palade, 1974:144 (Romania: Sărăturile sandbank in Danube delta); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Benedek, 1979:230 (Hungary: Bakony Mountains); Skibińska, 1982:123 (Poland: Warszawa area); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Józán, 1981:305 (Hungary: Hortobágy National Park); Pádr *in* Šedivý, 1989a:167 (in checklist of Czechoslovakian Sphecidae); Pádr, 1990:70 (Czech Republic: Praha area); Delarze, 1992:68 (Switzerland: Valais: Les Follatères). – **As *Harpactes laevis***: Dahlbom, 1843:148 (new combination, in revision of Sphecidae and Pompilidae), 1845:XVIII (*Ceropales ruficollis* in collection Fabricius is a *Harpactes*); Tischbein, 1850:8 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Schenck, 1857:175 (in revision of fossorial wasps of Nassau Region, Germany); Funk, 1859:59 (Germany: Bayern: Bamberg); Schenck, 1860:148 (Germany: Nassau Region); Giraud, 1863a:14 (France: Hautes-Alpes: Vallouise near Briançon); Taschenberg, 1866:196 (in key to *Harpactes* of Germany), 197 (in revision of Hymenoptera of Germany); A. Costa, 1867c:71 (in revision of Italian Sphecidae); Schenck, 1867a:355 (Germany: Nassau Region); A. Costa, 1869b:87 (in revision of Italian Sphecidae); Aichinger, 1870:318 (Austria: Tirol); Wierzejski, 1874:259 (Ukraine: Podole Region: Dzwynograd, Pieniaki, Sinków); Becker, 1880:152 (Russia: Sarepta, now Krasnoarmeysk S Volgograd); Friese, 1883:202 (Germany: Sachsen-Anhalt: Kösen, Weissenfels); A. Costa, 1884b:33 (Italy: Sardegna: Fordongianus); Baldini, 1894:68 (Italy: Modena area); Meunier, 1896:272 (Belgium: Bruxelles area); Medina, 1899:115 (Spain: Sevilla); Graeffe, 1911:47 (Italy: Trieste area); Schirmer, 1912:166 (Germany: Berlin area); A. Wagner, 1920:34 (Germany: Mark Brandenburg); Enslin, 1922c:246 (Germany: Bayern: Erlangen); Blüthgen, 1925:166 (Germany: Saale River valley: Blütengrund, Eulau, Rudelsburg); Głowacki, 1953:519 (Poland: Podkova Leśna near Warszawa); Day, 1991:xv (summary of European Endangered Hymenoptera Lists). – **As *Dieno-plus laevis***: Wolf, 1959b:30 (new combination, Germany: Nassau); Tsuneki, 1963a:2, 5 (in key to Gorytini of Japan and Korea), 9 (not occurring in Japan), 1965c:30 (in key to Bembicinae of Japan and Korea); Evans, 1966d:70 (summary of known behavior); Tsuneki, 1967e:3 (China: Manchuria: Harbin), 1969:15 (nesting habits), 1971m:11 (*Harpactus Morawitzi* Radoszkowski, 1884 and *caucasicus* Radoszkowski, 1884 are synonyms of *Dieno-plus laevis*), 1971m:11 (China: Peking: Tiendang); R. Bohart and Menke, 1976:496 (listed); Guichard, 1978:271 (Greece); Schmidt, 1979b:344 (Germany); Kazenas, 1980e:84 (Russia: Far East); Pagliano, 1980:115 (Italy: Piemonte); Dollfuss and Ressler, 1981:317, 324 (Austria: Niederösterreich: Scheibbs District); Gayubo, 1982b:40 (Spain: Ávila and Salamanca provinces); Dollfuss, 1983b:22 (in catalog of Sphecidae of Austria); Gayubo, 1983e:233 (Spain: Salamanca Province); Józán, 1985b:61 (Hungary S Lake Balaton), 81 (floral records), 84 (ecological and zoogeographic characteristics); Westrich and Schmidt, 1985a:117 (Germany: Baden-Württemberg), 1985b:111 (Germany: endangered in Baden-Württemberg); Brechtel, 1986:58 (Germany: Südpfalz); Gayubo, 1986d:119 (Spain: Zamora Province); Gayubo and Sanza, 1986:75 (Spain: Burgos); Józán, 1986:373 (Hungary: Kiskunság National Park); Nemkov, 1986:107 (Russia: Siberia: Irkutsk Oblast'); Karsai, 1988:101 (Hungary: Kiskunság National Park); Józán, 1989:102 (Hungary: Tihany Natural Reserve), 1995:105 (Hungary: projected Duna-Dráva National Park); Papp and Józán, 1995:145 (Hungary: Síkfökút oak forest). – **As *Harpactus laevis***: F. Smith, 1856:370 (new combination, in catalog of Hymenoptera in British Museum); Marquet, 1875:208 (France: Hérault: Montpellier); Schenck, 1861:143 (Germany: Hessen: Weilburg); A. Costa, 1864b:98 (specimen from Parma, Italy, in Museo Zoologico di Napoli), 104 (specimen from Torino, Italy, in Museo Zoologico di Napoli); Marquet, 1881:181 (France: Haute-Garonne: Toulouse); Radoszkowski, 1887b:92 (in list of Transcaspian Hymenoptera); Flamary, 1898:38 (France: Saône-et-Loire: Mâcon area); Coulon, 1925:119 (list of prey); Hémon, 1926:199 (France: Finistère: Fouesnant); Maneval, 1928:30 (nest and prey); Iwata, 1937b: 404 (nesting habits); Schneid, 1941:1041 (Germany: Bayern: Bamberg area); Bat'a, 1952:167

(Czech Republic); Nouvel and Ribaut, 1953:178 (France: Central Pyrénées: upper valley of Garonne River, Hautes-Pyrénées: Cauterets); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Dollfuss, 1988:18, 30 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Jacobs, 1989:26 (Germany: Mecklenburg-Vorpommern); Jacobs and Oehlke, 1990:122 (not collected in Democratic Germany after 1960), 210 (new records from Democratic Germany); Pagliano, 1990:72 (in catalog of Italian Sphecidae); Rohe, 1990:1049 (Germany: Rheinland-Pfalz: Lenneberg forest); Schwammberger and Priesner, 1990:551 (Austria: Kärnten); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:414 (Italy); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Negrisoló and Pagliano, 1993:91 (Italy: Sardegna); Torregrosa, Gayubo, Tormos, and Asís, 1993:20 (Spain: Alicante Province); Dollfuss, 1994:102 (endangered in Austria); Schmid-Egger, 1994a:688 and 694 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Kazenas and Esenbekova, 1995:80 (Kazakhstan; bibliographic reference to leafhopper prey); Ljubomirov, 1995:11 (Bulgaria); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:460 (in key to Sphecidae of Russian Far East); Scharrer, 1995:29 (Austria: Niederösterreich: Donauauen, Oberweiden, Stammersdorf; Croatia: Island of Krk); Schmid-Egger, Risch, and Niehuis, 1995:188 (summary of records from Germany: Rheinland-Pfalz State); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:217 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Pagliano and Alma, 1997:179 (known prey listed); Schmidt and Schmid-Egger, 1997:16 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:523 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); K. Weber, 1998:141 (Germany: Bayern: Bamberg area); Majzlan, Rychlik, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Mandery, 1999:105 (Germany: Bayern: Coburg area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:375 (in Sphecid Fauna of Germany); Dressler, 2000:32 (Germany: Hessen: Darmstadt area); González, Gayubo, and Tormos, 2000:21 (Andorra: Santa Coloma); Jacobs, 2000:8 (Germany: Land Mecklenburg-Vorpommern: extinct); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:56 (Russia: Rostov Oblast: Vëshenskaya village area at 49°37'N 41°45'E); Zettel, 2000:31 (Austria: Hundsheimer Kogel, Seewinkel); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 221 (review of known biology); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:139 (distribution in Germany by provinces); Schmid-Egger, 2001:17 (France: Alsace: Bollenbergs); Zettel, Gross, and Mazzucco, 2001:80 (Austria: Wien); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:753 (Italy: Sicilia: Madonie, Milo, Nebrodi, Randazzo); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: strongly endangered); Beron, 2004:840 (Bulgaria, eastern Rhodope Mts.: Arda Hut, citation of Ljubomirov, 1995:111); Gayubo et al. 2004:130 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Kazenas, 2004b:109 (Kazakhstan: western Tien Shan); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Tischendorf and Frommer, 2004:69 (Germany: Hessen: near Lorch); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Ebrahimi, 2005:128 (in key to selected Iranian Sphecidae); Jacobs, 2005a:446 (Bulgaria: Zvechen near Hissarya); Pagliano and Negrisoló, 2005:159 (in Sphecid Fauna of Italy); Reder, 2005:950 (Germany: Rheinland-Pfalz: seven localities); Shoreenko, 2005a:167 (Ukraine: Crimea); Standfuss and Standfuss, 2006c:305 (Greece:

Thessalia: Magnissia Peninsula at 39°N 23°E); Evans and O'Neil, 2007:51 (summary of information on nesting habits); Jacobs, 2007:169, 171 (in key to Crabronidae of Germany); Saure, 2007:82 (in checklist of Aculeata of Brandenburg Land, Germany); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Nemkov, 2008b:24 (in catalog of Crabronidae of Asiatic Russia); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen), 35 (Germany: Hessen: Bad Vilbel, Weilburg, Wettenberg-Gleiberg near Gießen, the latter probably northernmost record in West Germany); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Guéorguiev and Ljubomirov, 2009:262 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:133 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); D. Schneider, 2009:11 (Germany: first record from Nordrhein-Westfalen: Bonn); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:801 (Iran: East Azarbaijan: Marand: Yam); Ghazi-Soltani, Khaghaninia, and Shahim, 2010:638 (Iran: East Azerbaijan: Horand Forests); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: rare).

Sphex cruentus Fabricius, 1798:244, sex not indicated (as *cruenta*, incorrect original termination). Holotype or syntypes: France: no specific locality (depository unknown: van der Vecht, 1961a:48). Synonymized with .. – Coquebert, 1799:23 (original description copied), pl. V Fig. 10 (illustration of Fabrician type); Fabricius, 1799:46 (in Index to his Supplementum, 1798). – **As *Pompilus cruentus***: Fabricius, 1804:192 (new combination, redescription). – **As *Mellinus cruentus***: Latreille, [1805]:518 (new combination, redescription, as *cruentatus*). – **As *Arpactus cruentus***: Jurine, 1807:194 (new combination, listed). – **As *Gorytes cruentus***: de Beaumont, 1945:474 (new combination, Switzerland; diagnostic characters).

Evania ruficollis Fabricius, 1798:241, sex not indicated. Holotype: ♂, Germany: Halae Saxonum, now Sachsen-Anhalt: Halle (ZMK). Synonymized with *Harpactes laevis* by Dahlbom, 1845:XVIII. – Fabricius, 1799:22 (in Index to his Supplementum, 1798); van der Vecht, 1961a:48 (study of type). – **As *Ceropales ruficollis***: Fabricius, 1804:186 (new combination, redescription).

Harpactus caucasicus Radoszkowski, 1884b:28, ♀ (as *Caucasicus*, incorrect original capitalization). Holotype or syntypes: ♀, Caucasus: no specific locality (KRAKÓW). Synonymized with *Gorytes laevis* by Handlirsch, 1888b:431. – Radoszkowski, 1892:583 (male genitalia).

Dienoplus laevis dzhingis Tsuneki, 1971k:189, ♂, ♀. Holotype: ♂, Mongolia: Chövsgöl Aymag: Somon Burenchaan (TMB). Synonymized with *Harpactus laevis* by Nemkov, 1996:1212. – Tsuneki, 1971m:11 (China: Inner Mongolia: Apaka).

As *Harpactes concinnus*: Dahlbom, 1845:475 (in key to European *Harpactes*), corrected to *Gorytes laevis* by Handlirsch, 1888b:430; Tischbein, 1852:141 (Germany).

ssp. *aegyptiacus* (Schulz)

Gorytes laevis aegyptiacus Schulz, 1904b:96, ♂. Holotype: ♂, Egypt: no specific locality (coll. W. Schulz, Strasbourg?). – Maidl and Klima, 1939:78 (in catalog of world Astatinae and Bembicinae); de Beaumont, 1956a:188 (Libya), 1958b:58 (Algeria: Tassili des Ajjer); Pulawski, 1964:75 (Egypt: Abu Rawash, Ghiza, Maadi, Kom Osheim). – **As *Dienoplus laevis aegyptiacus***: R. Bohart and Menke, 1976:496 (new combination, listed); Simon Thomas, 1995c:184 (Senegal, Yemen).

As *Gorytes laevis*: Handlirsch, 1898b:487 (Egypt: Cairo), present correction to *Harpactus laevis aegyptiacus*.

ssp. *alicantinus* (Mercet)

Gorytes laevis var. *alicantinus* Mercet, 1906a:129, ♀, ♂ (as *Alicantina*, incorrect original capitalization and termination). Syntypes: Spain: Alicante (MNCN). – Giner Marí, 1934:132 (Spain: Malvarrosa); Dusmet y Alonso, 1935:51 (Spain: Madrid: Aranjuez); Maidl and Klima, 1939:78 (in catalog of world Astatinae and Bembicinae); Giner Marí, 1943a:175 (in Sphecidae Fauna of Spain); Ceballos, 1956:382 (in catalog of Hymenoptera of Spain). – **As *Dienoplus laevis alicantinus***: R. Bohart and Menke, 1976:496 (new combination, new status, listed).

ssp. saharae (Giner Marí) (preoccupied)

Gorytes laevis raza *saharae* Giner Marí, 1945b:376, ♀, ♂, junior primary homonym of *Gorytes saharae* Handlirsch, 1895 (now in *Ammatomus*). Syntypes: Morocco: Western Sahara: Aserifa, Um at Sfaia (MNCN). – Giner Marí, 1945b:362 (Morocco: Western Sahara: Aserifa, Um at Sfaia), 1947:26 (Western Sahara). – **As *Dienoplus laevis saharae***: R. Bohart and Menke, 1976:496 (new combination, listed).

35. lateritius (Handlirsch)

Gorytes lateritius Handlirsch, 1888b:442, ♂. Holotype: ♂, Mexico: Guanajuato: Guanajuato (IRSN). – Cameron, 1890a:77 (listed); Dalla Torre, 1897:542 (in catalog of world Sphecidae); Maidl and Klima, 1939:84 (in catalog of world Astatinae and Bembicinae). – **As *Harpactus lateritius***: Ashmead, 1899d:328 (new combination, in checklist of North American Crabronidae); Amarante, 2002:14 (new combination, in catalog of Neotropical Crabronidae). – **As *Dienoplus lateritius***: R. Bohart and Menke, 1976:496 (new combination, listed); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

36. lepidus (Arnold)

Gorytes lepidus Arnold, 1944:22, ♀. Holotype: ♀, Lesotho: Mamathes (SAM). – **As *Dienoplus lepidus***: R. Bohart and Menke, 1976:496 (new combination, listed).

37. leucurus (A. Costa)

Harpactes leucurus A. Costa, 1884b:33 and 53, ♀. Holotype: ♀, Italy: Sardegna: Tonara (NAPOLI). – **As *Gorytes leucurus***: Handlirsch, 1888b:440 (new combination, original description copied), 1895:903 (type examined, redescription); Dalla Torre, 1897:544 (in catalog of world Sphecidae); Fertton, 1901:106 (Corse: Bonifacio; prey: *Solenoccephalus obsoletus* Germar), footnote (*leucurus* is a variety of *laevis*), 1908:558 (habitat and nest structure); Maidl and Klima, 1939:79 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus leucurus***: Evans, 1966d:71 (new combination, summary of known prey); R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus leucurus***: Pagliano, 1990:72 (new combination, in catalog of Italian Sphecidae); Pagliano, 1992:40 (in key to Italian Bembicinae); Luchetti, 1993:105 (Italy: Sardegna: Maddalena archipelago); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:218 (in Sphecid Fauna of Western Europe); Pagliano and Alma, 1997:179 (known prey listed); Pagliano and Negrisolò, 2005:159 (in Sphecid Fauna of Italy).

Harpactes leucurus A. Costa, 1884b:243, ♀. Objective synonym of *Harpactes leucurus* A. Costa, 1884a.

38. lunatus (Dahlbom)

Larra lunata Dahlbom, 1832:52, ♀. Syntypes: ♀, Sweden: Östergötland: Wadstena-Löt; Skåne: Esperöd, Käflinge (LUND). – **As *Harpactes lunatus***: Dahlbom, 1843:147 (new combination, in revision of Sphecidae and Pompilidae), 1845:475 (in key to European *Harpactes*); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Leipzig); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:313 (Germany: Berlin area); Taschenberg, 1858:88 (in key to Sphecidae of Germany); Schenck, 1861:160 (redescription, Germany: Halle, Leipzig); Brischke, 1862:101 (Germany: Preussen Province, now Poland: Pomorze Region); Funk, 1864:156 (Germany: Bayern: Bamberg); Taschenberg, 1866:196 (in revision of Hymenoptera of Germany); Schenck, 1867a:355 (known from Germany); Wierzejski, 1868:117 (Ukraine: Janów), 1874:259 (Ukraine: Janów); Beuthin, 1876:231 (Germany: Hamburg area); Brischke, 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region); Borries, 1897:64 (Denmark: Sandegne); J. Nielsen, 1903:111 (nesting habits); Graeffe, 1911:46 (Italy: Trieste area); Schirmer, 1912:166 (Germany: Berlin area); Lundblad, 1913:212 (Sweden); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Stöckhert, 1919:40 (Germany: Franken); A. Wagner, 1920:33 (Germany: Lower Elbe region); de Beaumont, 1953h:196 (specimens from Dahlbom's collection); Heldmann, 1953:112 (Germany: Hessen: Eberstädter Düne near Darmstadt); Fahlander, 1954:252 (Sweden: Gästrikland Region); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 199 (specimens collected on cherry trees). – **As *Arpactus lu-***

natus: Wesmael, 1852:108 (new combination, Belgium: Bruxelles); Kirchner, 1867:219 (in catalog of European Hymenoptera); Dours, 1874:142 (in catalog of Hymenoptera of France). – **As *Arpactes lunatus***: von Heyden, 1905:81 (new combination, Germany: Hessen: Frankfurt). – **As *Gorytes lunatus***: Girard, 1879:949 (new combination, example of genus *Harpactus*); Handlirsch, 1888b:434 (in revision of world Bembicinae); Kohl, 1893a:27 (Austria: Niederösterreich); F. Morawitz, 1893a:112 (Russia: Karelian Isthmus); Sickmann, 1893:88 (Germany: Niedersachsen: Iburg, prey); Krieger, 1894:8 (Germany: Kingdom of Saxony); Dalla Torre, 1897:542 (in catalog of world Sphecidae); O. Schneider, 1898:102 (Germany: Borkum Island); Adlerz, 1904:55 (nesting habits); Aurivillius, 1904:270 (in revision of Swedish Sphecidae); W. Schulz, 1904b:97 (Germany: Borkum); Schmiedeknecht, 1907:222 (in key to Hymenoptera of Central Europe); Šusterka, 1909:34 (Czech Republic: vicinity of Praha); Dittrich, 1911b:23 (Germany: Niederschlesien: Breslau, Mirkau, now Poland: Dolny Śląsk: Mirków, Wrocław); Kohl, 1912:62 (Austria: Südtirol: Ratzes, now in Italy: Trentino–Alto Adige Province); Alfken, 1914:279 (NW Germany); Birula, 1914:386 (Belarus: Ambrosovich near Vitebsk); O. Meyer, 1919:153 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1921c:203, 204 (in key to Belgian Sphecidae); Berland, 1925d:92 (in Sphecidae Fauna of France); Bischoff, 1925:300 (Latvia: Wezkukkul); Friese, 1926:160 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Bouwman, 1927:55 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:684 (in keys to Hymenoptera of North and Central Europe); E. Nielsen, 1933:300 (nesting habits); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Crèvecoeur and Maréchal, 1936:253 (in catalog of Belgian Hymenoptera); Goebel, 1937:42 (Poland: Poznań District: Strzeszyn); Zavadil, Šusterka, and Bat'a, 1937:193 (in catalog of Sphecidae of Czechoslovakia); A. Wagner, 1938:121 (northwestern Germany); Maidl and Klima, 1939:79 (in catalog of world Astatinae and Bembicinae); Benno, 1943:67 (Netherlands: Montferland); Giordani Soika, 1944:9 (Italy: Sicilia: Taormina); Šnoflak *in* Zavadil and Šnoflak, 1948:76 (in key to Sphecidae of Czechoslovakia); Leininger, 1951:117 (Germany: Baden-Württemberg: Asefingen, Karlsruhe, Sandhausen); Bajári, 1957a:101 (in key to Hungarian Sphecidae, not yet found in Hungary); Zirngiebl, 1957:181 (Germany: Rheinland-Pfalz: Birkenheide: Landau); de Beaumont, 1958c:203 (Swiss National Park); Noskiewicz and Puławski, 1960:98 (in key to Polish Sphecidae); Valkeila, 1962b:67 (southwestern Finland); de Beaumont, 1964c:51 (in Sphecidae Fauna of Switzerland); Fæster, 1965:193 (Denmark: Hansted Nature Reserve); Bonelli, 1966c:216 (Italy: Trentino–Alto Adige: Razes); Gauss, 1967:552 (Germany: Baden-Württemberg: Kaiserstuhl); J. Heinrich, 1967:72 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:83 (Czech Republic: Třeboň area); Stritt, 1968:110 (Germany: Baden-Württemberg); Benedek, 1969:83 (Hungary; marshy meadow; as *lunulatus*); Stritt, 1969:131 (Germany: Baden-Württemberg: Karlsruhe); Benedek, 1970:98 (Hungary: Tapolca); Haeseler, 1970:73 (Germany: Schleswig-Holstein: Schierensee near Kiel, Schleswig); Oehlke, 1970:693 (in key to Sphecidae of Democratic Germany); Dathe, 1971:234, 237 (Germany: Berlin Zoological Garden; phenology); Schmidt, 1971b:29 (Germany: Mainz area); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:324 (in Sphecidae Fauna of Czechoslovakia); Haeseler, 1972:155 (Germany: Schleswig-Holstein; anthropogenic habitats); Oehlke, 1972:136 (Germany: Hiddensee Island); Käpylä, 1974:64 (Finland; diurnal activity); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Lefeber, 1976:151 (Netherlands: Hulshorst); Simon Thomas and Wiering, 1976:109 (Netherlands); Kolesnikov, 1977:317 (Russia: Bryansk Oblast'); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Puławski, 1978:200 (in key to Sphecidae of European part of former USSR); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 45 (Netherlands: distribution map); Pádr *in* Šedivý, 1989a:167 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:95 (Belarus: Berezinskiy Nature Reserve); Pádr, 1990:71 (Czech Republic: Praha area). – **As *Dienoplus lunatus***: Benno, 1958b:11 (new combination, in review of Dutch Sphecidae); Wolf, 1959b:30 (Germany: Nassau); Hoop, 1961:65 (Germany: Schleswig-Holstein: Kronshagen, Levensau); Evans, 1966d:71 (summary of known prey); Benno, 1967:34 (in checklist of Sphecidae of Netherlands); Lefeber, 1969a:79 (Netherlands: Schinveld; Belgium: Genk, Lanaken), 1971a:17 (Netherlands: Horn, Meinweg; Belgium: As, Opgrimbe,

Mechelse Hei); Wolf, 1971:374 (Italy: Trentino–Alto Adige: Alpi Siusi); Lomholdt, 1975c:201 (in Sphecidae Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:496 (listed); Leclercq, 1978b:map 1180 (distribution in Belgium); Petit, 1978:86 (Belgium: Vance); Schmidt, 1977/78:86 (Germany); Haeseler, 1978c:194 (Germany: Friesian Islands: Borkum Island); Lefeber, 1978:137 (Netherlands: Brunssum, Valkenisse, Zuidsløe; Belgium: Winterslag); Schmidt, 1979a:54 (Germany: Ost-Holstein), 1979b:344 (Germany); Petit, 1980:44 (Belgium: Saeftinge); Haeseler, 1981:50 (Germany: Friesian Island: Amrum Island); Woydak, 1981:40 (Germany: Westfalen: Hamm); Axelsson, 1982:79 (Sweden); Dollfuss, 1983a:76 (endangered in Austria), 77 (endangered in Burgenland, Austria), 1983b:22 (in catalog of Sphecidae of Austria); Riemann, 1983:84 (Germany: Bremen-Daverden area); Haack, Tschardtke, and Vidal, 1984:127 (Germany: Hamburg area); Jazon and Svensson, 1984 (Sweden: Öland Island); Haeseler, 1985c:571 (Germany: Friesian Islands); Nilsson, 1985:43 (Sweden); Nemkov, 1986:107 (Russia: Siberia: Irkutsk Oblast); Riemann, 1987a:340 (Germany: Niedersachsen: Bremen area), 1987b:36 (Germany: Niedersachsen: Voßberge Nature Reserve), 1988:223 (Germany: Bremen area); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Kowalczyk, 1991a:90, 97 (Poland: Łódź); Kuhlmann et al., 1991:89 (Germany: Senne Region); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź); Doronin, 1996:18 (Latvia: Kalngale, Riga, nest parasitized by *Trichrysis cyanea* Linnaeus., a chrysidid); Pawlikowski and Kruszyński, 1996:86 (Poland: Toruń Basin). – **As *Harpactus lunatus***: F. Smith, 1856:371 (new combination, in catalog of Hymenoptera in British Museum); Thomson, 1870:247 (in revision of Swedish wasps), 1874:236 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:370 (Germany: Halle); Radoszkowski, 1877:40 (Kazakhstan: Bairakum); Schøyen, 1881:11 (addition to catalog of Norwegian Hymenoptera by Siebke, 1880.); Alfken, 1893:120 (Germany: Friesian Islands: Juist Island); Strand, 1898b:94 (Norway); de Gaulle, 1908:120 (in catalog of French Hymenoptera); Bondroit, 1932:32 (Belgium: Solbosch); Maneval, 1932:93 (nesting habits); Bondroit, 1934:59 (Belgium: Ostende); Jansson, 1934:290 (Sweden); Schneid, 1941:1041 (Germany: Bayern: Bamberg area); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Nilsson, 1986:87 (Sweden); Vikberg, 1986:78 (Finland); Dollfuss, 1987:24 (Austria); Schmidt and Westrich, 1987:360 (Germany: Mainz area); Dollfuss, 1988:30 (Austria: Niederösterreich: Oberweiden); Jacobs, 1989:26 (Germany: Mecklenburg-Vorpommern); Jacobs and Oehlke, 1990:210 (new locality records from Democratic Germany); Pagliano, 1990:73 (in catalog of Italian Sphecidae); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:414 (Italy: Piemonte: Moncenisio); Nilsson, 1992:54 (Sweden); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); N. Schneider, 1992:178 (Luxembourg); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Kuhlmann, 1993:75 (Germany: known from Westfalen); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Die Spey Nature Reserve); Wiśniowski, 1993a:98 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Dollfuss, 1994:102 (endangered in Austria); Theunert, 1994c:41 (summary of records from Niedersachsen and Bremen, Germany); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Kazenas and Esenbekova, 1995:80 (Kazakhstan; bibliographic reference to leafhopper prey); Negrisola *in* Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:460 (in key to Sphecidae of Russian Far East); Schmid-Egger, Risch, and Niehuis, 1995:189 (summary of records from Germany: Rheinland-Pfalz State); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Nemkov, 1996:1210 (in key to *Harpactus* of Russia and neighboring countries); Witt, 1996:106 (Germany: Brandenburg), 108 (locality records); Woydak, 1996:93 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:219 (in Sphecidae Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Lauterbach, 1997c:81 (Germany: Nordrhein-Westfalen: Bielefeld); Schmidt and Schmid-Egger, 1997:16 (in checklist of German Sphecidae); Dollfuss, Gusenleitner, and Bregant, 1998:523 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Flügel, 1998:60 (Germany: Brandenburg: Unteres

Odertal National Park); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Steller Heide); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); van der Smissen, 1998:60 (Germany: Niedersachsen, Schleswig-Holstein); K. Weber, 1998:141 (Germany: Bayern: Bamberg area); Gusenleitner, 1999:595 (Austria: Kärnten: Glocknerkehre); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (endangered in Nordrhein-Westfalen State of Germany); Ljubomirov, 1999b:57 (Bulgaria: Mt. Vitoshka near Sofia); Pauly, 1999:111 (in catalog of Belgian aculeates); Petit, 1999:111 (Netherlands: Nieuw-Namen); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); Blösch, 2000:378 (in Sphecidae Fauna of Germany); Jacobs, 2000:8, 16 (Germany: Land Mecklenburg-Vorpommern: rare); Haeseler, 2001:266 (Germany: Niedersachsen: Brookdeich near Oldenburg); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 221 (review of known biology); Ohl et al., 2001:139 (distribution in Germany by provinces); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Zettel, Gross, and Mazzucco, 2001:80 (Austria: Wien, not collected since 1868); Kazenas, 2002a:118 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:155 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Drewes, 2003:138 (Germany: Rheinland-Pfalz: Mainzer Sand); Haeseler, 2003:339 (Germany: Niedersachsen: Harriersand Island near Bremen); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); von der Heide and Metscher, 2003:102 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: strongly endangered); Abenius, 2004:40 (Sweden: Norrbottens: Luleå area); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Kazenas, 2004b:109 (Kazakhstan: western Tien Shan); Kuhlmann, 2004:230 (Germany is responsible for preservation of this species on its territory); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisolò, 2005:160 (in Sphecidae Fauna of Italy); Reder, 2005:950 (Germany: Rheinland-Pfalz: Eisenberg); Riemann and Hohmann, 2005:558 (Germany: Niedersachsen: city of Bremen and adjacent area); Theunert, 2005a:17 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Jacobs, 2007:169, 171 (in key to Crabronidae of Germany); Saure, 2007:82 (in checklist of Aculeata of Brandenburg Land, Germany); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia); Haeseler, 2008:308 (Germany: Friesian Islands); Nemkov, 2008b:24 (in catalog of Crabronidae of Asiatic Russia); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); Nemkov, 2009b:133 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:178 (Italy: Sardegna: Alghero); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: recent records from Bulgaria and Italy reported); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: relatively common).

Gorytes laevis var. β : Vander Linden, 1829:93 (Belgium).

Arpactus belgicus Wesmael, 1839:79 (as *Belgicus* incorrect original capitalization). Substitute name for *Gorytes laevis* var. β of Vander Linden. Synonymized with *Arpactus lunatus* by Wesmael, 1852:108.

39. *mendicus* (Handlirsch)

Gorytes mendicus Handlirsch, 1893b:278, ♀. Holotype: ♀, Canada: British Columbia: Yale (NHMW). – Handlirsch, 1895:908 (redescription); W. Fox, 1896a:531 (in revision of North American *Gorytes*); Dalla Torre, 1897:546 (in catalog of world Sphecidae); Bradley, 1920:120 (California); Maidl and Klima, 1939:84 (in catalog of world Asatatinae and Bembicinae). – As *Dienoplus mendicus*: Krombein in Muesebeck et al., 1951:988 (new combination,

in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:496 (listed); R. Bohart, 1980:64 (in key to North American *Dienoplus*); Krombein, 1979b:1692 (in catalog of North American Hymenoptera). – **As *Harpactus mendicus***: Ashmead, 1899d:328 (new combination, in checklist of North American Crabronidae); Dollfuss, 1989:9 (type in NHMW).

40. *montanus* Kazenas

Harpactus montanus Kazenas, 1992a:642, ♀, ♂. Holotype: ♀, Kazakhstan: Zailiyskiy Alatau: 25 km S village Turgen (ZIN). – Nemkov, 1996:1211 (in key to *Harpactus* of Russia and neighboring countries), 1212 (Tajikistan: Anzob Pass); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:135 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:119 (geographic distribution, collecting localities in Kazakhstan), 2004b:109 (Kazakhstan: western Tien Shan).

Harpactus abnormis Kazenas, 1992a: 643, ♂. Holotype: ♂, Uzbekistan: Talas Alatau: Aksu-Djabagly Reserve 10 km SE Novonikolayevka (ZIN). Synonymized with *Harpactus montanus* by Nemkov, 1996:1212. – Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:117 (geographic distribution, collecting localities in Kazakhstan).

41. *morawitzi* Radoszkowski

Harpactus morawitzi Radoszkowski, 1884b:28, ♀ (as *Morawitzi*, incorrect original capitalization). Lectotype: ♀, Caucasus: no specific locality (ZMHU), designated by Ljubomirov in Ljubomirov and Yildirim, 2008:88. – Nemkov, 1996:1206 (in key to *Harpactus* of Russia and neighboring countries); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:460 (in key to Sphecidae of Russian Far East); Ljubomirov and Yildirim, 2008:88 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:24 (in catalog of Crabronidae of Asiatic Russia); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Nemkov, 2009b:133 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia). – **As *Gorytes morawitzi***: Handlirsch, 1888b:440 (new combination; original description translated into German), 1895:904 (as new synonym of *Gorytes laevis*); Gussakovskij, 1928:16 (probably a valid species); Maidl and Klima, 1939:80 (in catalog of world Astatinae and Bembicinae, as valid species); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:200 (in key to Sphecidae of European USSR); Shkuratov, 2000:56 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:119 (geographic distribution, collecting localities in Kazakhstan). – **As *Dienoplus morawitzi***: R. Bohart and Menke, 1976:496 (as new synonym of *Dienoplus laevis*). – **As *Harpactes morawitzi***: Minoranskiy and Shkuratov, 1996:81 (new combination, Russia: Rostov Oblast'); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: not included in the volume, recently recorded from Bulgaria and Spain).

Gorytes moravicus Šnoflak, 1943b:83, ♀, ♂. Lectotype: Czech Republic: Bzenec (originally J. Šnoflak coll., now Moravian Museum, Brno, Czech Republic), designated by Ljubomirov in Ljubomirov and Yildirim, 2008:88. Synonymized with *Harpactus morawitzi* by Ljubomirov in Ljubomirov and Yildirim, 2008:88. – Šnoflak in Zavadil and Šnoflak, 1948:75, 76 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1951g:311 (Italy; taxonomy), 1954e:88 (Italy); Grandi, 1954:232 (Italy); Bajári, 1957a:100 (in key to Hungarian Sphecidae), 1957b:140 (first record from Hungary); Pulawski, 1958a:168 (Bulgaria: Aitos, Kniazhevo near Sofia, Nesebar, mouth of Ropotamo River, Sozopol, Varna); Noskiewicz and Pulawski, 1960:97 (in key to Polish Sphecidae, not yet found in Poland); de Beaumont, 1962b:23 (first record from Spain), 34 (discussion); Ceballos, 1964:92 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:35 (Greece); Balthasar, Hrubant, and Hrubant, 1967:173 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:318 (Turkey), 1969:89 (Turkey); Nouvel, 1969:337 (France: Montpellier); Suárez, 1969:29 (Spain: Almería Province); Balthasar, 1972:322 (in Sphecidae Fauna of Czechoslovakia); Erlandsson, 1974:65 (Italy); Kolesnikov, 1977:317 (Russia: Bryansk Oblast', as *moravicus*); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Pádr in Šedivý, 1989a:167 (in checklist of Czechoslovakian Sphecidae). – **As *Dienoplus moravicus***: R. Bohart and Menke,

1976:496 (new combination, listed); Dollfuss, 1983a:77 (endangered in Niederösterreich, Austria), 78 (endangered in Burgenland, Austria), 1983b:22 (in catalog of Sphecidae of Austria); Józán, 1985b:61 (Hungary S Lake Balaton), 84 (ecological and zoogeographic characteristics), 1986:373 (Hungary: Kiskunság National Park); Karsai, 1988:101 (Hungary: Kiskunság National Park); Kowalczyk, 1988d:557 (Poland: Rubcowo in Augustów Forest); Józán, 1991:604 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991b:120 (Poland: Augustów Forest); Pagliano and Pesarini, 1995:91 (Italy: Ferrara Province). – **As *Harpactus moravicus***: Pagliano, 1990:73 (new combination, in catalog of Italian Sphecidae); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); Dollfuss, 1994:101 (endangered in Austria); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Negrisol, 1995a:22 (Italy: Veneto); Negrisol *in* Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:219 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Dollfuss, Gusenleitner, and Bregant, 1998:523 (Austria: summary of collecting records from Burgenland); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gusenleitner, 2002:1124 (Austria: Oberösterreich: Oberweiden; Burgenland: Neusiedl); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Pagliano and Negrisol, 2005:160 (in Sphecid Fauna of Italy); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Moravia and Slovakia only); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); recent records from Italy, Poland, and Spain reported.

As *Harpactus formosus*: Ljubomirov, 1995:11 (Bulgaria: eastern Rhodope Mts.: Arda Hut), corrected to *Harpactus morawitzi* by Beron, 2004:840.

42. *mundus* (de Beaumont)

Gorytes mundus de Beaumont, 1950f:400, ♀, ♂. Holotype: ♀, Algeria: Aflou (BMNH). – de Beaumont, 1953f:109 (Morocco). – **As *Dienoplus mundus***: R. Bohart *in* Bohart and Menke, 1976:496 (new combination, listed).

43. *niger* (A. Costa)

Harpactes niger A. Costa, 1858:19 and 27, ♂. Holotype: ♂, Italy: Campania: Monti Partenii in Benevento Region (NAPOLI). – A. Costa, 1859:41 (in revision of Sphecidae of Kingdom of Naples, Italy), 1867c:75, and 1869b:91 (in revision of Italian Sphecidae); Kirchner, 1867:219 (in catalog of European Hymenoptera); Graeffe, 1911:47 (Italy: Trieste area); de Beaumont, 1953i:7 (study of holotype, redescription). – **As *Gorytes niger***: Handlirsch, 1888b:437 (new combination, in revision of world Bembicinae); Dalla Torre, 1897:548 (in catalog of world Sphecidae); Morice, 1901b:362 (Greece: Olympia); Schmiedeknecht, 1907:222 (in key to Hymenoptera of Central Europe), 1930:684 (in keys to Hymenoptera of North and Central Europe); Maidl and Klima, 1939:80 (in catalog of world Astatinae and Bembicinae); Šnoflak *in* Zavadil and Šnoflak, 1948:75 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Vogrin, 1955:35 (Croatia: Krapina); de Beaumont, 1965a:34 (Greece; variation); Balthasar, 1972:326 (in Sphecid Fauna of Czechoslovakia: may be expected in the country). – **As *Dienoplus niger***: R. Bohart and Menke, 1976:496 (new combination, listed); Guichard, 1978:271 (Greece); Pulawski, 1979d:480 (in key to *niger* group of *Harpactus*); Dollfuss, 1983b:22 (occurrence in Austria: Kärnten is questionable). – **As *Harpactus niger***: Dollfuss, 1991:195 (new combination, in key to Sphecidae of North and Central Europe); Negrisol *in* Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:220 (new combination, in Sphecid Fauna of Western Europe); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitosha near Sofia); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Jacobs, 2005a:447 (Bulgaria: Starosel near Hissarya); Pagliano and Negrisol, 2005:164 (in Sphecid Fauna of Italy); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Mei,

2008:176 (Italy: Abruzzo: Monti Simbruini); Pagliano, 2009:178 (Italy: Abruzzo: near L'Aquila); Bitsch, 2010:114 (in supplement to vol. II of Faune de France, 1997: recent records from Bulgaria and Italy reported).

44. *obscurus* (de Beaumont)

Gorytes (Dienoplus) sp. No. 1 – de Beaumont, 1967a:318 (Turkey). Synonymized with *Gorytes obscurus* by de Beaumont, 1969:87.

Gorytes obscurus de Beaumont, 1969:87, ♀, ♂. Holotype: ♀, Turkey: Konya: Sille (LAUSANNE). – **As *Dienoplus obscurus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus obscurus***: Ljubomirov and Yildirim, 2008:88 (new combination, in catalog of Crabronidae of Turkey)

45. *octonotatus* Kazenas

Harpactus octonotatus Kazenas, 1992a:643, ♂. Holotype: ♂, Kazakhstan: Kirghiz Alatau: 25 km SW Lugovoy (ZIN). – Nemkov, 1996:1210 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:119 (geographic distribution, collecting localities in Kazakhstan), 2004b:109 (Kazakhstan: western Tien Shan).

46. *ornatus* F. Smith

Harpactus ornatus F. Smith, 1856:371, ♀. Holotype or syntypes: ♀, northern India: no specific locality (BMNH). – **As *Gorytes ornatus***: Handlirsch, 1888b:443 (new combination, in revision of world Bembicinae), 1895:906 (additional bibliography); Bingham, 1897:272 (redescription); Dalla Torre, 1897:549 (in catalog of world Sphecidae); Dutt in R. Turner, 1917e:204 (India; redescription); Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus ornatus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

47. *osdroene* (de Beaumont)

Gorytes osdroene de Beaumont, 1969:85, ♀, ♂. Holotype: ♀, Turkey: Urfa Province: Birecik (LAUSANNE). – **As *Dienoplus osdroene***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus osdroene***: Ljubomirov and Yildirim, 2008:90 (; Ljubomirov and Yildirim, 2008:90 (in catalog of Crabronidae of Turkey) in catalog of Crabronidae of Turkey)

48. *picticornis* Vogrin

Harpactus picticornis Vogrin, 1954:13, ♀. Holotype: ♀, Croatia: Zagorie: no specific locality (originally Phytopatological Institut, Zagreb, now Croatian Natural History Museum). – **As *Gorytes picticornis***: Vogrin, 1955:35 (new combination, Croatia: Krapina). – **As *Dienoplus picticornis***: R. Bohart and Menke, 1976:496 (new combination, listed). – **As *Garpactus picticornis***: Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: not included in the volume).

49. *pictifrons* (W. Fox)

Dienoplus pictifrons W. Fox, 1894a:549, ♀, ♂. Lectotype: ♀, USA: Washington: no specific locality (ANSP), designated by Cresson, 1928:48 (as *Gorytes pictifrons*). – Krombein in Muesebeck et al., 1951:988 (in catalog of North American Hymenoptera); Evans, 1970:494 (Wyoming: Jackson Hole); Horning and Barr, 1970:105 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:496 (listed); R. Bohart, 1980:64 (in key to North American *Dienoplus*); Parks, 1986:35 (California: Torrey Pines State Reserve); Krombein, 1979b:1692 (in catalog of North American Hymenoptera). – **As *Gorytes pictifrons***: Handlirsch, 1895:908 (as new synonym of *Gorytes mendicus*); W. Fox, 1896a:531 (in revision of North American *Gorytes*). – **As *Harpactus pictifrons***: Rust, Menke, and Miller, 1985:47 (new combination, California: Channel Islands); Evans and O'Neil, 2007:51 (summary of information on nesting habits).

Harpactus howardi Ashmead, 1899a:9, ♀. Holotype: ♀, USA: California: Los Angeles County: Claremont (USNM). Synonymized with *Dirnoplus pictifrons* by Krombein in Muesebeck et al., 1951:988. – **As *Harpactus howardii*** [sic]: Ashmead, 1899d:328 (in checklist of North American Crabronidae). – **As *Gorytes howardi***: Maidl and

Klima, 1939:59 (new combination, in catalog of world Astatinae and Bembicinae). – *As Dienoplus howardi*: Rohwer, 1917a:248 (new combination, California: Placer County: Summit).

50. *pollux* (Handlirsch)

Gorytes pollux Handlirsch, 1898b:487, ♀, ♂ (as *Pollux*, incorrect original capitalization). Syntypes: Algeria: Oran Province, and Egypt: Turah (NHMW). – Maidl and Klima, 1939:54 (in catalog of world Astatinae and Bembicinae). – *As Dienoplus pollux*: R. Bohart and Menke, 1976:496 (new combination, listed); Pulawski, 1979d:479 (in key to *niger* group of *Harpactus*).

51. *priscus* Ljubomirov

Harpactus priscus Ljubomirov, 2001a:905, ♂. Holotype: ♂, Bulgaria: Iskar Valley: 1 km NW village Passarell (MHNG). – Guéorguiev and Ljubomirov, 2009:262 (Bulgaria: Maleshevska Planina); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: not included in the volume).

52. *pulchellus* (A. Costa)

Harpactes pulchellus A. Costa, 1859:47, ♂. Holotype: ♂, Italy: Napoli area (NAPOLI). – A. Costa, 1867c:75 and 1869b:91 (in revision of Italian Sphecidae); Maidl and Klima, 1939:80 (in catalog of world Astatinae and Bembicinae); Šnoflak in Zavadil and Šnoflak, 1948:76 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Beaumont, 1953i:6 (unnecessary designation of lectotype; diagnostic characters; taxonomic problems). – *As Hoplisus pulchellus*: Dours, 1874:150 (new combination, in catalog of Hymenoptera of France); Kohl, 1883e:668 (Switzerland). – *As Arpactus pulchellus*: Kirchner, 1867:219 (new combination, in catalog of European Hymenoptera); Radoszkowski, 1892:585 (male genitalia). – *As Gorytes pulchellus*: Handlirsch, 1888b:429 (new combination, in revision of world Bembicinae); Gasperini, 1889:70 (Dalmatia); Dalla Torre, 1897:550 (in catalog of world Sphecidae); Romanova, 1969:134 (Russia: North Caucasus) Balthasar, 1972:326 (in Sphecid Fauna of Czechoslovakia: may be expected in the country). – *As Dienoplus pulchellus*: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed); Pagliano, 1980:115 (Italy: Lazio). – *As Harpactus pulchellus*: Pagliano, 1990:73 (new combination, in catalog of Italian Sphecidae), 1992:40, 41 (in key to Italian Bembicinae); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:222 (in Sphecid Fauna of Western Europe); Pagliano and Negrisolò, 2005:161 (in Sphecid Fauna of Italy).

As *Harpactus annulatus* (corrected to *Harpactus pulchellus* by Pagliano and Negrisolò, 2005:161): Pagliano, 1990:72 (in catalog of Italian Sphecidae); Pagliano, 1992:41 (in key to Italian Bembicinae); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna).

As *Dienoplus annulatus*: Pagliano, 1980:115 (Italy: Abruzzo), corrected to *Harpactus pulchellus* by Pagliano and Negrisolò, 2005:161

53. *pueblicus* (R. Bohart)

Dienoplus pueblicus R. Bohart, 1980:67, ♂, ♀. Holotype: ♂, Mexico: Puebla: 3 mi N Petlalcingo (UCD). – R. Bohart, 1980:65 (in key to North American *Dienoplus*). – *As Harpactus pueblicus*: Amarante, 2002:14 (new combination, in catalog of Neotropical Crabronidae).

54. *pyrrhobasis* (Morice)

Gorytes laevis var. *pyrrhobasis* Morice, 1911:114, ♀, ♂. Syntypes: Algeria: Biskra (OXUM). – *As Gorytes pyrrhobasis*: de Beaumont, 1953g:109 (new status, affinities; Morocco). – *As Dienoplus pyrrhobasis*: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

55. *quadrisignatus* (Palma)

Harpactes quadrisignatus Palma, 1867:40, ♂. Holotype: ♂, Italy: Sicilia settentrionale: no specific locality (NAPOLI). – A. Costa, 1867c:74 and 1869b:90 (in revision of Italian Sphecidae); de Beaumont, 1951g:309 (dis-

cussion of status), 1953i:5 (study of holotype, redescription). – **As *Gorytes quadrisignatus***: Handlirsch, 1888b:441 (new combination, original description copied), 1895:906 (redescription); Dalla Torre, 1897:552 (in catalog of world Sphecidae); Maidl and Klima, 1939:81 (in catalog of world Astatinae and Bembicinae); Nouvel and Ribaut, 1958:11 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Diniz, 1973:46 (Portugal: Rezende). – **As *Dienoplus quadrisignatus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus quadrisignatus***: Pagliano, 1990:73 (new combination, in catalog of Italian Sphecidae); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:222 (in Sphecid Fauna of Western Europe); Schmid-Egger, 2003:753 (Italy: Sicilia: Armerina, Madonie); Pagliano and Negrisolo, 2005:162 (in Sphecid Fauna of Italy).

ssp. *ifranensis* (Nadig)

Gorytes ifranensis Nadig, 1933:94, ♀. Holotype: ♀, Morocco: Ifrane (originally in coll. Nadig, now Zurich). – Maidl and Klima, 1939:76 (in catalog of world Astatinae and Bembicinae); de Beaumont, 1950f:402 (Algeria: Laghouat; Morocco: Marrakech), 1951g:308 (Italy; as *Gorytes ifranensis* ssp.); de Beaumont, 1953g:109 (Morocco); Grandi, 1954:232 (Italy; as *ifranensis* subsp.?). – **As *Gorytes quadrisignatus ifranensis***: de Beaumont, 1953g:5 (new status), 1953i:5 (subspecific status confirmed). – **As *Dienoplus quadrisignatus ifranensis***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

ssp. *lugubris* (de Beaumont)

Gorytes quadrisignatus lugubris de Beaumont, 1960b:235, ♀. Holotype: ♀, Libya: Cyrenaica (BMNH). – **As *Dienoplus quadrisignatus lugubris***: Bohart and Menke, 1976:496 (new combination, listed).

56. *quinquefasciatus* Kazenas

Harpactus quinquefasciatus Kazenas, 1989a:152, ♂. Holotype: ♂, Kazakhstan: Dzhambul Oblast': 70 km NW Furmanovka (ZIN). – Nemkov, 1996:1209 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:119 (geographic distribution, collecting localities in Kazakhstan).

57. *rufithorax* (Brauns)

Gorytes rufithorax Brauns, 1911b:130, ♀, ♂. Syntypes: South Africa: Eastern Cape Province: Willowmore (TMP). – Maidl and Klima, 1939:106 (in catalog of world Astatinae and Bembicinae, in subgenus *Lestiphorus*). – **As *Harpactus rufithorax***: Arnold, 1929a:244 (new combination, revision, Zimbabwe), 1930:19 (in checklist of Afro-tropical Sphecidae). – **As *Dienoplus rufithorax***: R. Bohart and Menke, 1976:496 (new combination, listed).

58. *rugosus* Nemkov

Harpactus rugosus Nemkov, 1994:67, ♀, ♂. Holotype: ♀, Kazakhstan: 22 km W Furmanovka (ZIN). Paratypes: Turkmenistan. – Nemkov, 1996:1209 (in key to *Harpactus* of Russia and neighboring countries), 2002a:119 (geographic distribution, collecting localities in Kazakhstan).

59. *rugulosus* (R. Bohart)

Dienoplus rugulosus R. Bohart, 1980:67, ♂, ♀. Holotype: ♂, USA: California: Yolo County: Davis (UCD). Paratypes: Nevada to Idaho and Washington. – R. Bohart, 1980:64 (in key to North American *Dienoplus*).

60. *russulus* (R. Bohart)

Dienoplus russulus R. Bohart, 1980:68, ♂, ♀. Holotype: ♂, USA: California: Riverside County: 18 mi W Blythe (UCD). Paratypes: Colorado, Nevada, New Mexico, and Mexico: Chihuahua. – R. Bohart, 1980:65 (in key to North American *Dienoplus*).

61. schwarzi (de Beaumont)

Gorytes schwarzi de Beaumont, 1965a:32, ♀, ♂. Holotype: ♂, Greece: Crete Island: Heraklion (coll. M. Schwarz). – Guichard, 1978:270 (Greece). – **As *Dienoplus schwarzi***: R. Bohart *in* Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus schwarzi***: Bitsch, 2010:113 (new combination, in supplement to vol. II of Faune de France, 1997: not included in the volume)

62. sinopsis (R. Bohart)

Dienoplus sinopsis R. Bohart, 1980:69, ♂, ♀. Holotype: ♂, California: Monterey County: Soledad (UCD). – R. Bohart, 1980:65 (in key to North American *Dienoplus*).

63. tauricus Radoszkowski

Harpactus tauricus Radoszkowski, 1884:27, ♀ (as *Tauricus*, incorrect original capitalization). Holotype or syntypes: Crimea: no specific locality (KRAKÓW). – Pagliano, 1990:73 (in catalog of Italian Sphecidae); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Nemkov, 1996:1209 (in key to *Harpactus* of Russia and neighboring countries), 1212 (Russia: Volgograd Oblast'; Ukraine: Crimea; Kazakhstan, Turkmenistan, Tajikistan; n. Iran); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:223 (in Sphecid Fauna of Western Europe); Ivanov and Ljubomirov, 2001:213 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:119 (geographic distribution, collecting localities in Kazakhstan); Pagliano and Negrisolo, 2005:162 (in Sphecid Fauna of Italy); Shorenko, 2005a:167 (Ukraine: Crimea), 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Standfuss and Standfuss, 2006c:305 (first record from Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Guéorguiev and Ljubomirov, 2009:262 (Bulgaria: Maleshevska Planina). – **As *Gorytes tauricus***: Handlirsch, 1888b:438 (new combination, in revision of world Bembicinae); Gasperini, 1889:70 (Dalmatia: Spalato, now Croatia: Split); Handlirsch, 1895:905 (type examined); Dalla Torre, 1897:555 (in catalog of world Sphecidae); Maidl and Klima, 1939:81 (in catalog of world Astatinae and Bembicinae); Šnoflak *in* Zavadil and Šnoflak, 1948:75 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Beaumont, 1951g:310 (Italy); Grandi, 1954:232 (Italy); Bajári, 1957a:101 (in key to Hungarian Sphecidae, not yet found in Hungary), 1957b:141 (first record from Hungary); Grandi, 1957:385 (Italy: Apulia: Gargano); Scobiola, 1960a:167 (first record from Romania: Constanța Region: Techirghiol; Covurlui Region: Jariștea); Balthasar and Hrubant, 1961:15 (first record from Slovakia: Mužla); Benedek, 1968:73 (Hungary: flower visiting), 1969a:83 (marshy meadow), 1979:230 (Hungary: Bakony Mountains: Balatonfüred); Scobiola-Palade, 1985:96 (Romania: Atanassov, 1962:124 (Bulgaria: Petrich area); Kocourek, 1963:295 (Czechoslovakia: Slovakia: Čajkov na Levice); Balthasar, 1972:327 (in Sphecid Fauna of Czechoslovakia); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Pádr *in* Šedivy, 1989a:167 (in checklist of Czechoslovakian Sphecidae); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Bitsch, 2010:114 (in supplement to vol. II of Faune de France, 1997: recent records from Bulgaria and Greece reported). – **As *Dienoplus tauricus***: R. Bohart *in* Bohart and Menke, 1976:496 (new combination, listed); Józán, 1985b:61 (recorded from Simontornya by Bajári, 1957), 71 (map of distribution in Hungary), 84 (ecological and zoogeographic characteristics).

Gorytes sareptanus Handlirsch, 1888b:435, ♂ (as *Sareptanus*, incorrect original capitalization). Holotype: ♂, Russia: Russia: Sarepta, now Krasnoarmeysk (NHMW). Synonymized with *Harpactus tauricus* by Nemkov, 1996:1212. – Dalla Torre, 1897:554 (in catalog of world Sphecidae); Maidl and Klima, 1939:81 (in catalog of world Astatinae and Bembicinae); Šnoflak *in* Zavadil and Šnoflak, 1948:75 (in key to Sphecidae of Czechoslovakia); Bajári, 1957a:101 (in key to Hungarian Sphecidae, not yet found in Hungary); Balthasar, 1972:327 (in Sphecid Fauna of Czechoslovakia); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Tyrner, 1987:282 (Czechoslovakia: Slovakia); Pádr *in* Šedivy, 1989a:167 (in checklist of Czechoslovakian Sphecidae). – **As *Dienoplus sareptanus***: R. Bohart *in* Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus sareptanus***:

Dollfuss, 1989:10 (new combination, type material in NHMW), 1991:195 (in key to Sphecidae of North and Central Europe); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Moravia and Slovakia only), 234 (Moravia: Poštorná, previously recorded from Moravia by Zavadil and Šnoflak, 1948); Bitsch, 2010:113 (in supplement to vol. II of Faune de France, 1997: not included in the volume, recent records from Greece, Hungary, Slovakia).

Harpactus turcmenicus Radoszkowski, 1893:70, ♀. Holotype or syntypes: ♀, Turkmenistan: Merv, now Mary (KRAKÓW). Synonymized with *Harpactus tauricus* by Nemkov, 1996:1212. – Kazenas, 2001b:46 (in checklist of Sphecidae of Kazakhstan and Central Asia). – **As *Gorytes turcmenicus***: Handlirsch, 1895:905 (new combination, in revision of world Bembicini); Dalla Torre, 1897:556 (in catalog of world Sphecidae); Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus turcmenicus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed).

As *Harpactus fertoni*: Pagliano, 1992:40, 41 (in key to Italian Bembicinae), corrected to *Harpactus tauricus* by the author on the reprint received.

64. *tjanshanicus* Kazenas

Harpactus tjanshanicus Kazenas, 1992a:640, ♀, ♂. Holotype: ♀, Uzbekistan: Chatkal Range in Tien-Shan: Aksagaty 20 km N Parkent (ZIN). – Nemkov, 1996:1211 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:119 (geographic distribution, collecting localities in Kazakhstan), 2004b:109 (Kazakhstan: western Tien Shan).

65. *transbaicalicus* Nemkov

Harpactus transbaicalicus Nemkov, 1994:68, ♀, ♂. Holotype: ♀, Russia: Buryatiya: 25 km W Kiakhta (ZIN). – Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:461 (in key to Sphecidae of Russian Far East); Nemkov, 1996:1210 (in key to *Harpactus* of Russia and neighboring countries), 2008b:24 (in catalog of Crabronidae of Asian part of Russia), 2009a:66 (is an endemic of Buryatiya), 2009b:134 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia).

66. *transcaspicus* (Kokujev)

Gorytes transcaspicus Kokujev, 1909:248, ♂. Holotype: ♂, Turkmenistan: railroad station Pereval 12 km W Akhcha-Kuyma (ZIN). – Maidl and Klima, 1939:81 (in catalog of world Astatinae and Bembicinae); nec Kazenas, 1978b:74 (= *Harpactus annulatus*) – **As *Dienoplus transcaspicus***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus transcaspicus***: Kazenas and Esenbekova, 1995:80 (new combination; Kazakhstan; bibliographic reference to leafhopper prey); Nemkov, 1996:1210 (in key to *Harpactus* of Russia and neighboring countries), 1212 (Kazakhstan: Djulek= Chiili); Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia), 222 (prey: *Eremophlepsius sexnotatus* Kusn.), 2002a:119 (geographic distribution, collecting localities in Kazakhstan).

67. *transcaucasicus* Nemkov

Harpactus transcaucasicus Nemkov, 1994:69, ♀, ♂. Holotype: ♀, Azerbaijan: Nakhichevan Oblast': 35 km N Nakhichevan (ZIN). – Nemkov, 1996:1208 (in key to *Harpactus* of Russia and neighboring countries).

68. *transiens* A. Costa

Harpactus transiens A. Costa, 1887: 2, ♀, ♂. Lectotype: ♂, Italy: Sicilia: Lago di Lentini (NAPOLI), designated by Ljubomirov in Ljubomirov and Yildirim, 2008:90. – Handlirsch, 1895:903 (as junior synonym of *Gorytes consanguineus*); Ljubomirov and Yildirim, 2008:90 (new combination, valid name, in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina). – **As *Arpactus transiens***: De Stefani Perez, 1895:228 (new combination, in catalog of Sicilian Hymenoptera).

Harpactus transiens A. Costa, 1888:242. Objective synonym of *Harpactus transiens* A. Costa, 1887.

Gorytes consanguineus Handlirsch, 1888b:422, ♀, ♂. Lectotype: ♂, Croatia: Spalato, now Split (NHMW), designated by Ljubomirov *in* Ljubomirov and Yildirim, 2008:90. Synonymized with *Harpactus transiens* by Ljubomirov *in* Ljubomirov and Yildirim, 2008:90. – Gasperini, 1889:70 (Dalmatia: Lesina Island, now Croatia: Hvar Island); Schletterer, 1894:32 (Croatia: Istria Peninsula); Dalla Torre, 1897:540 (in catalog of world Sphecidae); Mocsáry, 1897:82 (Kingdom of Hungary, localities are in today's Croatia); W. Schulz, 1904b:96 (Croatia: Zara, now Zadar); Maidl, 1922:71 (Albania, Croatia); Grandi, 1934:129 (Italy: Lazio: Acilia); Maidl and Klima, 1939:74 (in catalog of world Astatinae and Bembicinae); Šnoflak *in* Zavادل and Šnoflak, 1948:76 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); de Beaumont, 1951g:308 (Italy), 1954e:88 (Italy); Grandi, 1954:231 (Italy); Vogrin, 1955:34 (Yugoslavia); Bajári, 1957a:103 (in key to Hungarian Sphecidae); de Beaumont, 1959a:22 (Italy), 1965a:34 (Greece); Balthasar, Hrubant, and Hrubant, 1967:173 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967a:317 (Turkey); Balthasar, 1972:325 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Pulawski, 1978:201 (in key to Sphecidae of European part of former USSR). – **As *Dienoplus consanguineus***: R. Bohart *in* Bohart and Menke, 1976:496 (new combination, listed); Pagliano, 1980:115 (Italy: Lazio). – **As *Harpactus consanguineus***: Dollfuss, 1989:9 (new combination, type material in NHMW); Pagliano, 1990:72 (in catalog of Italian Sphecidae); Dollfuss, 1991:194 (in key to Sphecidae of North and Central Europe); Pagliano, 1992:41 (in key to Italian Bembicinae); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:4 (in catalog of Italian fauna); Nemkov, 1996:1208 (in key to *Harpactus* of Russia and neighboring countries); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:211 (in Sphecid Fauna of Western Europe), 2002a:117 (geographic distribution); Kazenas, 2002a:117 (geographic distribution, recorded from Kazakhstan by Nemkov, 1996:1208); Schmid-Egger, 2003:753 (Italy: Sicilia: Armerina); Gayubo and Özbek, 2005:16 (Turkey: Erzincan: Agricultural Research Station); Jacobs, 2005a:446 (Bulgaria: Begovica in Pirin Mts., Dragoman, Zvechen near Hissarya); Pagliano and Negrisoló, 2005:156 (in Sphecid Fauna of Italy); Standfuss and Standfuss, 2006c:305 (Greece: Thessalia: Magnissia Peninsula at 39°N 23°E); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only), 233 (Slovakia: Devinská Kobyla, record from Slovakia by Majzlan and Deván, 2004, was misidentification); Pagliano, 2009:178 (Italy: Toscana: San Rossore).

Harpactus chosrovicus Nesterov, 1994a:39, ♀, ♂. Holotype: ♀, Armenia: Khozrov Nature Reserve (Zool. Inst. Ukrain. Acad. Sci. Kiev). Synonymized with *Harpactus consanguineus* by Nemkov, 1997:19

69. *tumidus* (Panzer)

Pompilus tumidus Panzer, 1801:.. – **As *Mellinus tumidus***: Panzer, 1806:...(new combination, ...) – **As *Arpactus tumidus***: Jurine, 1807:194 (new combination, listed); Lepeletier de Saint Fargeau, 1832:77 (revision); Shuckard, 1837a:222 (in revision of British Aculeata); Wesmael, 1839:79 (listed); Herrich-Schaeffer, 1840:290 (Germany: Bayern: Regensburg area); Lepeletier de Saint Fargeau, 1845:82 (in revision of world Hymenoptera); Wesmael, 1852:108 (Belgium: Bruxelles); Kirchner, 1867:219 (in catalog of European Hymenoptera); Dours, 1874:142 (in catalog of Hymenoptera of France); Acloque, 1897:84 (in Sphecid Fauna of France and Algeria); R. Perkins, 1924a:228 (Great Britain: Devon); Stelfox, 1924:16 (Ireland: Wicklow County: Avondale), 1927:306 (Ireland: Wicklow County: Avondale); Butterfield and Fordham, 1931:155 (Great Britain: Yorkshire); Stelfox, 1933:51 (Ireland: Wexford County); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection). – **As *Larra tumida***: Dahlbom, 1832:51 (new combination, redescription). – **As *Arpactes tumidus***: von Heyden, 1905:81 (new combination, Germany: Hessen: Frankfurt); Haines, 1922:13 (Great Britain: Dorset: Charmouth, Chesil Beach, Lulworth). – **As *Gorytes tumidus***: Vander Linden, 1829:95 (new combination, bibliographic references, Belgium: Bruxelles, Germany); Girard, 1879:949 (example of genus *Harpactus*); Handlirsch, 1888b:425 (in revision of world Bembicinae); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige: St. Isidor near Bolzano), 1893:27 (Austria: Niederösterreich); F. Morawitz, 1893a:112 (Russia: Karelian Isthmus); Sickmann, 1893:88 (Germany: Niedersachsen: Iburg); Krieger, 1894:8 (Germany: Kingdom of Saxony); Dalla Torre, 1897:555 (in catalog of world Sphecidae); Handlirsch, 1898b:487 (Algeria); R. Bradley, 1900:13 (Great Britain:

Birmingham); W. Evans, 1900:265 (Great Britain: Scotland: Queensferry); Nevinson, 1901:72 (Great Britain: Wales: Criccieth); Rothney, 1901:150 (Great Britain: Cornwall: Tintagel); R. Bradley, 1902:267 (Great Britain: North Wales); Nevinson, 1902:12 (Britain: Cornwall: Newquay); E. Saunders, 1902b:143 (British Channel Islands: Jersey Island); Adlerz, 1904:55 (nesting habits); Aurivillius, 1904:270 (in revision of Swedish Sphecidae); Martineau, 1904:46 (England: Budleigh Salterton); Mercet, 1906a:128 (in key to Spanish *Gorytes*); Luff, 1907:39 (Great Britain: Island of Guernsey); Schmiedeknecht, 1907:223 (in key to Hymenoptera of Central Europe); Ditrach, 1911b:23 (Germany: Niederschlesien: Breslau-Carlowitz, Mirkau, now Poland: Dolny Śląsk: Mirków, Wrocław-Karlowice); Torcka, 1913:34 (Germany: Provinz Posen, now Poland: Poznań Region); Alfken, 1914:279 (NW Germany); Hallett, 1916:221 (Great Britain: South Wales: Porthcawl); O. Meyer, 1919:153 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1921c:203, 204 (in key to Belgian Sphecidae); Leininger, 1924:121 (Germany: Baden-Württemberg: Waldkirch); Berland, 1925d:91 (in Sphecid Fauna of France); Strohm, 1925:211 (Germany: Baden-Württemberg: Burkheim); Carpentier, Crèvecoeur and Maréchal, 1926:353 (Belgium: Holsbeek); Friese, 1926:160 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Bouwman, 1927:55 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:685 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:9 (Spain); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Crèvecoeur and Maréchal, 1936:253 (in catalog of Belgian Hymenoptera); Struve, 1937:149 (Germany: Island of Borkum); Zavadil, Šustera, and Bat'a, 1937:194 (in catalog of Sphecidae of Czechoslovakia); A. Wagner, 1938:121 (northwestern Germany); Maidl and Klima, 1939:81 (in catalog of world Astatinae and Bembicinae); Benno, 1943:67 (Netherlands: Montferland); Giner Mari, 1943a:174 (in Sphecid Fauna of Spain); Carl and de Beaumont, 1947:68 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Šnoflak *in* Zavadil and Šnoflak, 1948:77 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:18 (Portugal); de Beaumont, 1951g:309 (Italy), 1951h:32 (Switzerland: Neuchâtel area); Leininger, 1951:117 (Germany: Baden-Württemberg: Kaiserstuhl, Karlsruhe); Grandi, 1954:232 (Italy); Aerts, 1955:62 (Germany: Rheinland); Vogrin, 1955:35 (Yugoslavia); Ceballos, 1956:384 (in catalog of Hymenoptera of Spain); Leclercq, 1956g:325 (Greece); Bajári, 1957a:102 (in key to Hungarian Sphecidae, not yet found in Hungary); Zirngiebl, 1957:182 (Germany: Rheinland-Pfalz: Birkenheide); de Beaumont, 1958c:203 (Swiss National Park); Diniz, 1959:30 (Portugal: Massorra); Noskiewicz and Puławski, 1960:98 (in key to Polish Sphecidae); Valkeila, 1962b:67 (southwestern Finland); Babiý, 1964:117 (Austria: Land Salzburg); de Beaumont, 1964c:50 (in Sphecid Fauna of Switzerland), 1965a:34 (Greece; citation of Leclercq, 1956); Gauss, 1967:552 (Germany: Baden-Württemberg); J. Heinrich, 1967:72 (Germany: Bayern: Kahl); Niedl and Deneš, 1967:83 (Czech Republic: Třeboň area); Stritt, 1969:131 (Germany: Baden-Württemberg: Karlsruhe); Oehlke, 1970:694 (in key to Sphecidae of Democratic Germany); Schmidt, 1971b:29 (Germany: Mainz area); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:324 (in Sphecid Fauna of Czechoslovakia); Haeseler, 1972:155 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:151 (Kazakhstan); Kofler, 1972:106 (Austria: eastern Tirol); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Eck, 1976:90 (Democratic Germany; subgenus *Dienoplus*); Lefeber, 1976:151 (Netherlands: Posbank; Belgium: Winterslag); Guichard, 1977:254 (Great Britain: Surrey); Kazenas, 1978b:74 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:200 (in key to Sphecidae of European part of former USSR); Benedek, 1979:230 (first record from Hungary: Bakony Mountains); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 46 (Netherlands: distribution map); Richards, 1979:401 (British Channel Islands), 1980:81 (in key to Sphecidae of British Isles); Nelson, 1981:145 (Great Britain: Isle of Man); Janzon, 1983:171 (Sweden: Öland); Archer, 1988b:26 (Great Britain: Yorkshire: Strensall Common); Kowalczyk, 1988b:65 (Poland: environs of Łódź); Archer, 1989a:131 (Great Britain: York: found before coniferization), 1989b:232 (Great Britain: Suffolk); Pádr *in* Šedivý, 1989a:167 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:95 (Belarus: Berezinskiy Nature Reserve); Archer, 1990c:18 (Great Britain: Leicestershire); Pádr, 1990:71 (Czech Republic: Praha area); Pádr and Lukáš, 1994:893 (Slovakia: High Tatra

Mountains); Archer, 1995a:23 (Great Britain: Yorkshire: frequency); Harvey and Plant, 1996:81 (Great Britain: summary of records from Essex); Archer, 2001b:14 (Great Britain: Watsonian Yorkshire); Archer and Edwards, 2002:103 (Great Britain: West Sussex: Ambersham and Iping commons). – **As *Harpactes timidus***: Dahlbom, 1843:149 (new combination, in revision of Sphecidae and Pompilidae), 1845:475 (in key of European *Harpactes*); Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony: Oberlausitz area); Wissmann, 1849:12 (Germany: Kingdom of Hannover: Münden); Tischbein, 1852:141 (Germany); Kirschbaum, 1853:44 (Germany: Herzogtum Nassau: Mainz-Mombach and Weilburg, as *timidus*); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:314 (Germany: Berlin area); Schenck, 1857:175 (in revision of fossorial wasps of Nassau Region, Germany); A. Costa, 1858:19 (Italy: Campania: Monti Partenii in Benevento Region); Taschenberg, 1858:88 (in key to Sphecidae of Germany); Assmus, 1859:611 (Russia: Moscow Oblast'); A. Costa, 1859:42 (in revision of Sphecidae of Kingdom of Naples, Italy); Funk, 1859:59 (Germany: Bayern: Bamberg); Schenck, 1860:148 (Germany: Nassau Region); Giraud, 1863a:14 (France: Hautes-Alpes: Vallouise near Briançon); Brischke, 1864:209 (Germany: Pommern Province, now Poland: Pomorze Region); Taschenberg, 1866:196 (in revision of Hymenoptera of Germany); A. Costa, 1867c:73 (in revision of Italian Sphecidae); Schenck, 1867a:355 (Germany: Nassau Region); Dietrich, 1868:364 (Switzerland: Zurich Canton); A. Costa, 1869b:89 (in revision of Italian Sphecidae); Aichinger, 1870:319 (Austria: Tirol), nesting in sands, preying on cicadellids); Kohl, 1880:173 (Austria: Tirol, and Italy: Trentino-Alto Adige), 1883e:668 (Switzerland); Brischke, 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region); Wüstnei, 1891a:27 (Germany: Schleswig-Holstein: Augustenburg); Borries, 1897:57 (review of nesting habits); Lüderwaldt, 1897b:28 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); Graeffe, 1911:47 (Italy: Trieste area); Schirmer, 1912:166 (Germany: Berlin area); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); A. Wagner, 1920:33 (Germany: Lower Elbe region); Hoop, 1941b:70 (Germany: Schleswig-Holstein: Süderhastedt); Fahlander, 1954:252 (Sweden: Gästrikland Region); Pulawski, 1954:101 (redescription). – **As *Dienoplus timidus***: Benno, 1958b:11 (new combination, in review of Dutch Sphecidae); Wolf, 1959b:30 (Germany: Nassau); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt), 1963b:7 (Germany: Schleswig-Holstein: Eggstedt, Reher Kratt); B. Klug, 1965:138 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Evans, 1966d:70 (summary of known behavior); Lefeber, 1969a:79 (Netherlands: s'Graveland), 1971a:17 (Belgium: Mechelse Hei); Wolf, 1971:374 (Italy: Trentino–Alto Adige: Alpi Siusi); Lomholdt, 1975c:200 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:496 (listed); Schmidt, 1977:96 (Germany: Schwarzwald); Haeseler, 1978c:194 (Germany: Friesian Islands: Borkum); Leclercq, 1978b:map 1182 (distribution in Belgium); Lefeber, 1978:137 (Netherlands: Hulshorst, Nunspeet); Schwammberger, 1978:417 (Germany: Württemberg); Schmidt, 1979b:345 (Germany); Dollfuss and Ressler, 1981:317, 324 (Austria: Niederösterreich: Scheibbs District); Gayubo, 1982b:40 (Spain: Salamanca: Valldehijaderos); Leclercq, 1982e:100 (Norway: Hedmark: Osen); Dollfuss, 1983b:22 (in catalog of Sphecidae of Austria); Lefeber, 1983a:85 (Netherlands: Waddendistrict: Texel Island, record deleted in reprint); Riemann, 1983:84 (Germany: Bremen-Daverden area); Haack, Tschamtkke, and Vidal, 1984:127 (Germany: Hamburg area); Haeseler, 1985c:571 (Germany: Friesian Islands); Lefeber, 1985:87 (Netherlands: southern Limburg); Nilsson, 1985:43 (Sweden); Gayubo and Sanza, 1986:75 (Spain: Segovia); Nemkov, 1986:107 (Russia: Siberia: Irkutsk Oblast'); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960); Kowalczyk, 1991a:90, 93, 97 (Poland: Łódź); Sorg and Cölln, 1992:132 (Germany: Rheinland-Pfalz: Gönnersdorf); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź). – **As *Harpactus timidus***: F. Smith, 1856:371 (new combination, in catalog of Hymenoptera in British Museum); Bold, 1870:147 (Great Britain: Northumberland and Durham); Thomson, 1870:246 (in revision of Swedish wasps), 1874:238 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:370 (Austria: no specific locality); Siebke, 1880:66 (Norway); Strand, 1898b:94 (Norway); de Gaulle, 1908:120 (in catalog of French Hymenoptera); Enslin, 1922c:246 (Germany: Bayern: Erlangen); Hémon, 1926:199 (France: Finistère: Fouesnant); Jones, 1928b:14 (Great Britain: Hampshire: Milford-on-Sea); Hamm and Richards, 1930:101 (summary of nesting habits), 123 (prey: *Acocephalus nervosus* Schrank); Bondroit, 1932:32 (Belgium: Solbosch);

Maneval, 1932:93 (nesting habits); Bondroit, 1934:59 (Belgium: Watermael); Jansson, 1934:290 (Sweden); Guichard, 1939a:43 (Britain: southern Cornwall: Polperro); de Graham, 1941:99 (Great Britain: Lincolnshire); Schneid, 1941:1042 (Germany: Bayern: Bamberg area); J. Perkins, 1942:199 (Sweden: Skåne: Löderup); Boyd, 1943:163 (Britain: eastern Dorset); Spooner, 1943:74 (Great Britain: Exmouth, Thetford); T. Fletcher, 1945:54 (Great Britain: Gloucestershire: Rodborough, Wotton); Bristowe, 1948:27 (nesting behavior); Guichard and Yarow, 1948:93 (Britain: London: Hampstead Heath); Chambers, 1949:232 (Britain: Bedfordshire); Szulczewski, 1950:108 (Poland: Wielkopolski National Park 15 km S Poznań); Richards, 1952:142 (Great Britain: Anglesea); Nouvel and Ribaut, 1953:178 (France: Haute-Garonne: Fos, Saint-Béat); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Wolf, 1968:11 (Germany: Nordrhein-Westfalen: Siegen, inhabitant of forest edge); Guichard, 1972:244 (England: London: Bushey Park); Vikberg, 1986:78 (Finland); Dollfuss, 1987:24 (Austria); Schmidt and Westrich, 1987:360 (Germany: Mainz area); Jacobs, 1989:26 (Germany: Mecklenburg-Vorpommern); Jacobs and Oehlke, 1990:210 (new records from Democratic Germany); Pagliano, 1990:73 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:551 (Austria: Kärnten); Day, 1991:xv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:195 (in key to Sphecidae of North and Central Europe); Nilsson, 1991:83 (Sweden: Lake Mälaren); Nemkov, 1992b:249 (Russia: Far East: Blagoveshchensk); Nilsson, 1992:54 (Sweden); Pagliano, 1992:40, 41 (in key to Italian Bembicinae); N. Schneider, 1992:178 (Luxembourg); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Kuhlmann, 1993:75 (Germany: known from Westfalen); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Theunert, 1994c:41 (summary of records from Niedersachsen and Bremen, Germany); Kazenas and Esenbekova, 1995:80 (Kazakhstan; bibliographic reference to leafhopper prey); Ljubomirov, 1995:11 (Bulgaria); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:5 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:460 (in key to Sphecidae of Russian Far East); Schmid-Egger, Risch, and Niehuis, 1995:189 (summary of records from Germany: Rheinland-Pfalz State); Arens, 1996:442 (Germany: Bayern: Bayreuth area); Jakubzik, 1996:252 (Germany: Köln); Jakubzik and Cölln, 1996b:399 (Germany: Rheinland-Pfalz); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); Nemkov, 1996:1206, 1907 (in key to *Harpactus* of Russia and neighboring countries, as *tumidus tumidus*); Woydak, 1996:94 (Germany: Westfalen: summary of distribution and nesting habits); Bitsch, Barbier, Gayubo, Schmidt, and Ohl, 1997:210 (in Sphecid Fauna of Western Europe); Celary, 1997:60 (in checklist of Animals of Poland); Jakubzik and Cölln, 1997:146 (Germany: Rheinland-Pfalz); Lauterbach, 1997c:81 (Germany: Nordrhein-Westfalen: Bielefeld); Pagliano and Alma, 1997:175 (prey: *Aphrodes* sp.), 179 (known prey listed); Schmidt and Schmid-Egger, 1997:16 (in checklist of German Sphecidae); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km WSW Hamburg); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); van der Smissen, 1998:60 (Germany: Niedersachsen, Schleswig-Holstein); K. Weber, 1998:141 (Germany: Bayern: Bamberg area); Erhardt, 1999:75 (Germany: Niedersachsen: Ammerland area); Gayubo, García, Torres, and González, 1999:91 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (endangered in Nordrhein-Westfalen State of Germany); Mandery, 1999:105 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:224 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:111 (in catalog of Belgian aculeates); M. Schwarz, 1999:88 (Austria: Oberösterreich: city of Linz area); Blösch, 2000:378 (in Sphecid Fauna of Germany); Dressler, 2000:32 (Germany: Hessen: Darmstadt area); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); Gusenleitner, 2000:955 (Austria: first record from Burgenland); Jacobs, 2000:8, 16 (Germany: Land Mecklenburg-Vorpommern: endangered); Kuhlmann, 2000:64 (Germany: Hessen: Diemel River valley); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); Wiśniowski, 2000:162 (Poland: Bieszczady Mts.); Zettel, 2000:31 (Austria: Liebenau); Dorow, 2001:136 (Germany: Hessen: Schönbuche Forest Reserve); Kazenas, 2001b:45 (in

checklist of Sphecidae of Kazakhstan and Central Asia), 222 (review of known biology); Kazenas and Esenbekova, 2001:135 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:53 (Bulgaria: Mount Vitoshka near Sofia); Ohl et al., 2001:139 (distribution in Germany by provinces); Archer, 2002b:129 (Great Britain: Watsonian Yorkshire: distribution map); Kazenas, 2002a:120 (geographic distribution, collecting localities in Kazakhstan); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:35 (Belarus: no specific locality); Ziska, 2002:8 (Germany: Berlin-Köpenick: Krumme Lake); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Haeseler, 2003:339 (Germany: Niedersachsen: Harriersand Island near Bremen); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); von der Heide and Metscher, 2003:102 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: endangered); Archer, 2004:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve); Dorow, 2004a:127 (Germany: Hessen: Schönbuche Nature Reserve); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Gayubo et al. 2004:130 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:32 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:51 and 62 (in checklist of Polish Sphecidae); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Kofler, 2005:184 (Austria: Tirol: Lienz District: Norsasch and road to Plon in Nikolsdorf Common, Kreithof in Tristach Common); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Nemkov, 2005a:159 (Russia: Sakhalin Island); Pagliano and Negrisola, 2005:162 (in Sphecid Fauna of Italy); Reder, 2005:950 (Germany: Rheinland-Pfalz: Mörstadt, Westhofen); Riemann and Hohmann, 2005:558 (Germany: Niedersachsen: city of Bremen and adjacent area); Theunert, 2005a:17 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Archer, 2006a:21 (Great Britain: Lincolnshire: Rauceby Warren National Park); Zsolt, 2006:284 (Hungary: Bars, Felsőmocsolád, Lápafő, Szorosad); Dorow, 2007:264 (Germany: Hessen: Niddahänge Forest Reserve); Evans and O'Neil, 2007:51 (summary of information on nesting habits); Guldmond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:169, 171 (in key to Crabronidae of Germany); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Saure, 2007:82 (in checklist of Aculeata of Brandenburg Land, Germany); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:208 (in catalog of Sphecidae of Czech Republic and Slovakia); Archer, 2008a:144 (Great Britain: Cumbria: Sandscale Haws, and Bamburgh Dunes); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Haeseler, 2008:308 (Germany: Friesian Islands); Nemkov, 2008b:24 (in catalog of Crabronidae of Asian part of Russia); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:134 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:238 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); Pagliano, 2009:178 (Italy: Lazio: Rocca Priora Bruero); Bitsch, 2010:114 (in supplement to vol. II of Faune de France, 1997: reference to prey observation by Pagliano and Alma, 1997, reported); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: relatively common).

Dienoplus tumidus japonensis Tsuneki, 1963a:8, ♀, ♂. Holotype: ♀, Japan: Fukui Prefecture: Hossaka (originally K. Tsuneki coll., now Hyogo Mus.). Synonymized with *Harpactus tumidus tumidus* by Nemkov, 1996:1212. – Tsuneki, 1963a:2, 5 (in key to Gorytini of Japan and Korea), 1965c:30 (in key to Bembicinae of Japan and Korea); T. Iida, 1968:21 (Japan); Tano, 1968:36 (Japan); R. Bohart and Menke, 1976:496 (listed); Kazenas, 1980e:84 (Rus-

sia: Far East); Tano, 1994a:8 (holotype in K. Tsuneki coll.); Hashimoto and Nakanishi, 1997:24 (holotype transferred to Hyogo Mus.); Nozaka and Kurokawa, 2003:56 (Japan: town of Awara: lake side of Kitagata).

Harpactus transiliensis Kazenas, 1989a:149, ♀, ♂. Holotype: ♀, Kazakhstan: 10 km NE Alma Ata (ZIN). Synonymized with *Harpactus tumidus tumidus* by Nemkov, 1996:1212. – Kazenas, 2002a:119 (geographic distribution, collecting localities in Kazakhstan).

ssp. *dimidiatus* Kazenas

Harpactus dimidiatus Kazenas, 1989b:777, ♂. Holotype: ♂, Turkmenistan: Farab (ZIN). – Kazenas, 2001b:45 (in checklist of Sphecidae of Kazakhstan and Central Asia). – **As *Harpactus tumidus dimidiatus***: Nemkov, 1996:1206 (in key to *Harpactus* of Russia and neighboring countries), 1212 (new status).

70. *vicarius* (Handlirsch)

Gorytes vicarius Handlirsch, 1895:907, ♂. Holotype: ♂, South Africa: Cape Province: no specific locality (said to be in ZMHU, currently in NHMW). – Dalla Torre, 1897:556 (in catalog of world Sphecidae); Brauns, 1899:421 (re-description; South Africa: Port Elizabeth); Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae). – **As *Arpactus vicarius***: Arnold, 1929a:243 (new combination, in revision of southern African Sphecidae), 1930:19 (in checklist of Afrotropical Sphecidae). – **As *Dienoplus vicarius***: R. Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus vicarius***: Dollfuss, 1989:10 (new combination, type material in NHMW).

ssp. *karooensis* (Brauns)

Gorytes vicarius var. *karooensis* Brauns, 1911b:130. Holotype: ♀, South Africa: Cape Province: Willowmore (TMP). – Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae). – **As *Arpactus vicarius* var. *karooensis***: Arnold, 1929a:244 (new combination, in revision of southern African Sphecidae, Zimbabwe: Sanyati Valley), 1930:19 (in checklist of Afrotropical Sphecidae, as *karroensis*). – **As *Dienoplus vicarius karroensis***: R. Bohart and Menke, 1976:496 (new combination, listed); Gess, 1981:20 (South Africa: 18 km WNW Grahamstown; nesting in friable soils).

71. *vividus* (R. Turner)

Arpactus vividus R. Turner, 1917e:183, ♂. Holotype: ♂, Pakistan: Punjab: Lahore (BMNH). – Maidl and Klima, 1939:55 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus vividus***: R. Bohart and Menke, 1976:496 (new combination, listed).

72. *walteri* (Handlirsch)

Gorytes walteri Handlirsch, 1888b:427, ♀ (as *Walteri*, incorrect original capitalization). Holotype: ♀, Turkmenistan: Sary-Yasy on Murgab River (NHMW). – Kohl and Handlirsch, 1889:279 (Turkmenistan, redescription); Dalla Torre, 1897:556 (in catalog of world Sphecidae); Maidl and Klima, 1939:83 (in catalog of world Astatinae and Bembicinae). – **As *Dienoplus walteri***: R. Bohart in Bohart and Menke, 1976:496 (new combination, listed). – **As *Harpactus walteri***: Kazenas, 1989b:775 (new combination, description of ♂); Nemkov, 1996:1209, 1210 (in key to *Harpactus* of Russia and neighboring countries); Kazenas, 2001b:46 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:120 (geographic distribution, collecting localities in Kazakhstan), 2004b:109 (Kazakhstan: western Tien Shan).

Harpactus tshardarensis Kazenas, 1989a:151, ♀, ♂. Holotype: ♂, Kazakhstan: 10 km SW Chardary in Kyzylkum Desert (ZIN). Synonymized with *Harpactus walteri* by Nemkov, 1996:1213.

sp.

Bischoff, 1933:4 (Morocco); de Beaumont, 1967a:318 (Turkey), 1967b:508 (South Africa), 1969:85 (Turkey; sp. aff. *elegans*); Guichard, 1980:229 (Oman); Al-Houty, 1989:159 (Kuwait: Erifjan, Failaqq Island); Schembri, 1991:178 (Malta); Gonzáles, Gayubo, and Torres, 1999:356 (Spain: Valladolid: Viana de Cega); Gayubo, González, and Torres, 2000:187 (Spain: Salamanca Province); González, Gayubo, Asís, Tormos, and García, 2003:61

(Spain: Soria: Chavaler); Kazenas, 2004b:109 (Kazakhstan: western Tien Shan, sp. aff. *tauricus*); Baños-Picón, Gayubo, Asís, and González, 2007:255 (Spain: Zamora: Cabañas de Aliste); Gayubo, González, Tormos, and Asís, 2008:137 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:91 (in catalog of Crabronidae of Turkey); Gayubo, González, Tormos, and Asís, 2009:365 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero, three species).

NOMINA NUDA IN *HARPACTUS*

Arpactus dimidiatus: Herrich-Schaeffer, 1840:290 (Germany: Bayern: Regensburg area).

Harpactus variabilis Kazenas: Kazenas, 2001b:46 (in checklist of Sphecidae of Kazakhstan and Central Asia).

SPECIES DESCRIBED IN *HARPACTUS* AND TRANSFERRED TO OTHER GENERA

chilensis de Saussure, 1867 = *Clitemnestra*

cockerelli Ashmead, 1899 = *Trichogorytes*

insularis Cresson, 1865 = *Hoplisoides*

scitulus Cresson, 1865 = *Hoplisoides ater* (Gmelin, 1790)