

Last updated: 9 January 2026

DIODONTUS

Diodontus Curtis, 1834:text for plate 496. Type species: *Pemphredon tristis* Vander Linden, 1829, designated by International Commission on Zoological Nomenclature, 1968a:10, Opinion 844.

Xylocelia Rohwer, 1915:243. Type species: *Diodontus occidentalis* W. Fox, 1892, by original designation.

Neodiodontus Tsuneki, 1972a:210, as subgenus of *Diodontus*. Type species: *Diodontus kohli* Tsuneki, 1972, by original designation and monotypy.

Corenius Tsuneki, 1974:369, as subgenus of *Diodontus*. Type species: *Diodontus chosenensis* Tsuneki, 1974, by original designation and monotypy.

Corenius Tsuneki, 1991:201, junior homonym of *Corenius* Tsuneki, 1974 (as new subgenus). Not available: nomen nudum and type not designated (Article 13b).

Revisions: Eighme, 1989 (North American species), critically reviewed by Buck and Bennett, 2025:288; Budrys, 1996 (morphometry of Palearctic species).

Key: Tsuneki, 1072a:207 (Central Asia); Leclercq, 1974b:292 (Western Europe); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016 (Central and Eastern European species).

Review of biology: Kazenas, 2001b:123.

1. *adamsi* Titus

Diodontus adamsi Titus, 1909:319, ♀. Holotype or syntypes: ♀, USA: Michigan: Lake Superior: Isle Royale (lost). Neotype: ♀, USA: Michigan: Marquette County: Huron Mountain Club (Univ. Michigan), designated by Eighme, 1989:17. – Carter, 1925:133 (Canada: Alberta: Waterton); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:17 (in revision of North American *Diodontus*; Michigan); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 38 (as first record from Canada: Alberta, British Columbia, Ontario, Saskatchewan, Yukon Territory: list of localities); Ratzlaff, 2016:26 (Canada: British Columbia: from Buck, 2004); Buck and Bennett, 2025:217 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Alaska: no specific locality, Canada: Alberta, British Columbia, Ontario, Saskatchewan, Yukon Territory, first records from New Brunswick and Quebec: no specific locality). – As *Xylocelia adamsi*: Mickel, 1916b:351 (new generic assignment, in review of North American *Xylocelia*); Strickland, 1947:129 (Canada: Alberta: Waterton); Krombein *in* Muesebeck, Krombein and Townes, 1951:963 (in catalog of North American Hymenoptera).

2. *afér* Morice

Diodontus afér Morice, 1911:69, ♀. Holotype: ♀, Algeria: Alger (Oxford). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39 (morphometry).

3. *americanus* Packard

Diodontus americanus Packard, 1867:393, ♀. Holotype: ♀, USA: Maine: Brunswick (MCZ). – Cresson, 1887:284 (in catalog of North American Hymenoptera); Kohl, 1890a:57 (in review of *Diodontus*); W. Fox, 1892h:316 (original description copied); Dalla Torre, 1897:364 (in catalog of world Hymenoptera); G. Peckham and E. Peckham, 1898:99 (nesting habits); Ashmead, 1899d:223 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); nec Harrington, 1902:220 (= *Diodontus bidentatus*); E. Nielsen, 1933:319 (summary of nesting habits); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Piek and Spanjer, 1986:184 (in list of Sphecidae with known prey); Steiner, 1986:99 (references to papers on nesting habits); Eighme, 1989:22 (in revision of North American *Diodontus*; Maine); Buck and Bennett, 2025:218 (in checklist

- of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Alaska: no specific locality, Canada: Alberta, British Columbia, New Brunswick, Ontario, Quebec, Yukon Territory, first records from Manitoba, Northwest Territories, Nova Scotia, and Saskatchewan: no specific locality). – **As *Xylocelia americana***: Mickel, 1916b:348 (new generic assignment, in review of North American *Xylocelia*, as *americanus*); Krombein *in* Muesebeck, Krombein and Townes, 1951:963 (in catalog of North American Hymenoptera); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey).
- Diodontus rugosus* W. Fox, 1892h:315, ♂. Lectotype: ♀ [sic], USA: Montana: no specific locality (ANSP), designated by Cresson, 1928:52; and ♂, USA: Montana: no specific locality (ANSP), designated by Eighme, 1989:27. Synonymized with *Diodontus americanus* by Buck and Bennett, 2025:289. – Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Ashmead, 1899d:223 (in checklist of North American Crabronidae); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:27 (in revision of North American *Diodontus*; Wisconsin to California, north to Alaska); Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos - Mount Kobau area at 119°40'W 49°05'N); Finnamore, 1997:885 (Canada: Yukon, as *rugulosus*); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Ratzlaff, 2016:27 (Canada: British Columbia: from Eighme, 1989 and Scudder, 1994). – **As *Xylocelia rugosa***: Mickel, 1916:346 (new generic assignment, in review of North American *Xylocelia*, as *rugosus*), 1918b:429 (in catalog of Nebraskan Sphecidae, as *rugosus*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:964 (in catalog of North American Hymenoptera).
- Diodontus gillettei* W. Fox, 1892h:316, ♀ (as *Gillettei*, incorrect original capitalization). Holotype: ♀, USA: Colorado: Fort Collins (ANSP). Synonymized with *Diodontus americanus* by Buck and Bennett, 2025:289. – Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Ashmead, 1899d:223 (in checklist of North American Crabronidae); Cresson, 1928:52 (holotype in ANSP); Evans, 1970:487 (Wyoming: Jackson Hole); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:26 (in revision of North American *Diodontus*; Colorado, Idaho, Iowa, New Mexico, Utah, and Wyoming). – **As *Xylocelia gillettei***: Mickel, 1916b:350 (new generic assignment, in review of North American *Xylocelia*), 1918b:429 (in catalog of Nebraskan Sphecidae); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).
- Diodontus florissantensis* Rohwer, 1909a:107, ♀, ♂. Lectotype: ♂, USA: Colorado: Florissant (USNM), designated by Eighme, 1989:27. Synonymized with *Diodontus rugosus* by Eighme, 1979:27, and with *Diodontus americanus* by Buck and Bennett, 2025:289. – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera). – **As *Xylocelia florissantensis***: Strickland, 1947:129 (new generic assignment, Canada: Alberta: Vermilion); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).
- Diodontus bidentatus* Rohwer, 1911:560, ♂. Holotype: ♂, Canada: New Brunswick: Nerepis (USNM). Synonymized with *Diodontus americanus* by Buck and Bennett, 2025:289. – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:21 (in revision of North American *Diodontus*; Alaska, Colorado, Idaho, Michigan, Montana, North Dakota, Pennsylvania); Finnamore, 1994:210 (Canada: Alberta: Wagner Natural Area 8 km west of Edmonton); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 38 (first records from Ontario and Quebec: list of localities); Ratzlaff, 2016:27 (Canada: first record from British Columbia: Central Interior, Southern Interior, and Southern Interior Mountains), 37 (British Columbia: locality records), 2018:112 (Canada: first record from Yukon: Duke River at Burwash Landing, Emerald Island on Kluane Lake at 1.0209°N, 138.4893°W). – **As *Xylocelia bidentata***: Mickel, 1916b:352 (new generic assignment, in review of North American *Xylocelia*, as *bidentatus*); Krombein, 1939:141 (New York State); Strickland, 1947:129 (Canada: Alberta: Drumheller, Edmonton, as *bidentatus*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).
- As *Diodontus americanus*: Harrington, 1902:220 (Canada: Ontario: Ottawa), corrected to *Diodontus bidentatus* by Buck, 2004:75.

Xylocelia siouxensis Mickel, 1916b:350, ♀. Holotype: ♀, USA: Nebraska: Monroe County: Sioux Canyon (UNL). Synonymized with *Diodontus americanus* by Buck and Bennett, 2025:289. – Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta); Strickland, 1947:129 (Canada: Alberta: Lethbridge, Medicine Hat); Krombein *in* Muesebeck, Krombein, and Townes, 1951:964 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL). – **As *Diodontus siouxensis***: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:27 (in revision of North American *Diodontus*; New Hampshire to Colorado, north to North Dakota and Idaho).

Xylocelia striata Mickel, 1916b:350, ♀ (as *striatus*, incorrect original termination). Holotype: ♀, USA: North Dakota: Dickinson (UNL). Synonymized with *Diodontus americanus* by Buck and Bennett, 2025:289. – Stevens, 1917:423 (North Dakota); Krombein *in* Muesebeck, Krombein, and Townes, 1951:964 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL). – **As *Diodontus striatus***: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:28 (in revision of North American *Diodontus*; Colorado, Idaho, Nevada, New Mexico, North Dakota, Utah, and Washington); Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos - Mount Kobau area at 119°40'W 49°05'N); Ratzlaff, 2016:27 (Canada: British Columbia: from Eighme, 1989 and Scudder, 1994).

4. *argentifrons* Kazenas

Diodontus argentifrons Kazenas, 1975b:423, ♂. Holotype: ♂, Kazakhstan: 11 km south of Panfilov (V.L. Kazenas coll., or ZIN?). – Kazenas, 1975b:426 (in key to *Diodontus* of Kazakhstan and Central Asia), 1978b:157 (in key to Sphecidae of Kazakhstan and Central Asia); Budrys, 1996:42, 43 (morphometry); Esenbekova and Kazenas, 2000:16 (southeast Kazakhstan: no specific locality); Kazenas, 2000e:77 (in Sphecid Fauna of Kazakhstan), 2001:20 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:45 (geographic distribution, collecting localities in Kazakhstan), 2008a:99 (southeastern Kazakhstan: 11 km south of Zharkent in Ili River valley and 20 km north of Mynaral west of Lake Balkhash).

5. *argentinae* Rohwer

Diodontus argentinae Rohwer, 1909a:104, ♂. Holotype or syntypes: ♂, USA: Colorado: Cripple Creek (USNM). – Evans, 1970:486 (Wyoming: Jackson Hole, nesting habits); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:18 (in revision of North American *Diodontus*; District of Columbia to British Columbia and California); Ratzlaff, 2016:27 (Canada: British Columbia: from Eighme, 1989), 2018:112 (Canada: first record from Yukon: Dawson, Kluane National Park, Pelly Crossing); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia, Yukon Territory, first record from Alberta: no specific locality). – **As *Xylocelia argentinae***: Mickel, 1916b:348 (new generic assignment, in review of North American *Xylocelia*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

6. *argillicola* Budrys, Orlovskytė, and Budrienė

Diodontus argillicola Budrys, Orlovskytė, and Budrienė, 2024:11, ♀, ♂. Holotype: ♀, Lithuania: Ūdininkai at 54°13'N 23°24'E (Nature Research Centre, Vilnius, Lithuania).

7. *arnoldi* Leclercq

As *Diodontus atratulus*: Arnold, 1923c:53 (in revision of southern African Sphecidae), corrected to *Diodontus arnoldi* by Leclercq, 1959a:59.

Diodontus arnoldi Leclercq, 1959a:59, ♀, ♂. Holotype: ♂, Zimbabwe: Sawmills (Inst. Roy. Sci. Nat. Belgique). – Leclercq, 1959a:57, 58 (in key to Afrotropical *Diodontus*); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

8. *asiaticus* Tsuneki

Diodontus asiaticus Tsuneki, 1972a:188, ♀. Holotype: ♀, Mongolia: South Gobi Aymag: Noyon nuruu (TMB). – Tsuneki, 1972a:207 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae);

Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:396, 398 (in key to Sphecidae of Russian Far East); Budrys, 1996:38, 39, 42, 43 (morphometry).

9. *atratus* Taschenberg

Diodontus atratus Taschenberg, 1875:388, ♀. Holotype or syntypes: ♀, South Africa: Cape Province: no specific locality (Halle). – Kohl, 1890a:57 (redescription); Dalla Torre, 1897:364 (in catalog of world Hymenoptera); Brauns, 1911a:240 (South Africa); Magretti, 1906:15 (Eritrea); nec Arnold, 1923c:53 (= *Diodontus arnoldi*); Arnold, 1930:9 (in checklist of Afrotropical Sphecidae); Leclercq, 1959a:57 (in key to Afrotropical *Diodontus*), 59 (locality records from South Africa), 1974b:207 (South Africa: Cape Town); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:101 (South Africa: visiting flowers of *Cotula* sp., Asteraceae); Madl, 2023:255 (in catalog of Crabronidae of Eritrea, identification needs confirmation).

Diodontus nitidus Arnold, 1923c:54, ♀, ♂. South Africa: Cape Province: Willowmore (TMP). Synonymized with *Diodontus atratus* by Leclercq, 1959a:59. – Arnold, 1930:9 (in checklist of Afrotropical Sphecidae).

10. *boharti* Eighme

Diodontus boharti Eighme, 1983:50, ♂, ♀. Holotype: ♂, California: Siskiyou County: Bear Basin (CAS). – Eighme, 1989:22 (in revision of North American *Diodontus*; California, Oregon, and Washington); Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos - Mount Kobau area at 119°40'W 49°05'N); Ratzlaff, 2016:27 (Canada: British Columbia: from Blades and Maier, 1992); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

11. *brevilabris* de Beaumont

Diodontus brevilabris de Beaumont, 1967a:345, ♀, ♂. Holotype: ♀, Turkey: Amasya (BMNH). – Leclercq, 1974b:207 (Lebanon: Cedars); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39, 42, 43 (morphometry), 1998:82 (Russia: Belgorod Oblast': Borisovka at 50°36'N 36°04'E, diagnostic characters, distribution: southeastern Europe, southwestern Asia); Straka, 2000:182 (first record from Czech Republic: Praha); Ljubomirov, 2001b:47 (Bulgaria: Mount Vitosha near Sofia); Straka, 2005a:400 (endangered in Czech Republic); Józán, 2006b:171, 179 (Hungary: Zselic hills); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia), 213 (recorded from Bohemia by Straka, 2000, and from Moravia and Slovakia by Vepřek, 2001); Ljubomirov and Yildirim, 2008:173 (in catalog of Crabronidae of Turkey); Mokrousov, 2010a:63 (Russia: Nizhniy Novgorod Oblast': no specific locality), 2010b:100 (Russia: Nizhniy Novgorod Oblast': no specific localities); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, 2011:406 (Russia: Nizhniy Novgorod Oblast'; Kyrgyzstan: Osh Oblast' at 40°31'20"N 73°37'10"E); Bitsch, 2014:406 (paper by Budrys, 1998 reported); Yildirim, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:142 (in checklist of Hymenoptera of Turkey); Shorenko, 2015:330 (in list of Sphecidae *sensu lato* of Crimea); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:166 (in key to Central and Eastern European *Diodontus*); Mokrousov and Popov, 2016:586 (Russia: Abkhazia, Krasnodarskiy Krai); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:30 (Turkey: Antalya: Düzcamlı, and Kars: Sarıkamış, Karakurt); Budrys and Orlovskytė, 2017: 121 (first record from Lithuania: Kaunas: Žaliakalnis at 54°54'N 23°54'E); Mokrousov, 2017c:5 (Russia: Belgorod, Nizhniy Novgorod, Rostov, and Vladimir oblast's, Chuvash Republic, Dagestan Republic, Krasnodarskiy Krai; Ukraine: Zakarpatskaya Oblast'), 2017e:247 (in catalog of Pemphredoninae of Russia); Shorenko, 2017:78 (in Crimea collected in June), 2018:128 (Crimea, including localities, habitats, and number of specimens); Budrys, Budrienė, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group); Rezaei, Fallahzadeh, Dousti, and Saghaei, 2020a:197 (first record from Iran: Fars: Dalin); Shorenko, 2020:49 (Crimea: Karadag Nature Reserve); Kaplan and Yildirim, 2021:82 (in catalog of Crabronidae of Turkey); Dollfuss, Bitsch, and K. Schmidt in Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:56 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

12. brunneicornis Viereck

Diodontus brunneicornis Viereck, 1906:212, ♂. Holotype: ♂, USA: Kansas: Sedgwick County: no specific locality (Kansas Univ.). – LaBerge, 1956:526 (holotype in Snow Entomological Museum); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:26 (in revision of North American *Diodontus*; Kansas). – **As *Xylocelia brunneicornis***: Mickel, 1916b:346 (new generic assignment, in review of North American *Xylocelia*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

13. budrysi Kazenas

Diodontus budrysi Kazenas, 2000e:78, ♂. Holotype: ♂, Kazakhstan: 304 km south of Almaty (depository?).

14. changaiensis Tsuneki

Diodontus changaiensis Tsuneki, 1972a:189, ♂. Holotype: ♂, Mongolia: Arhangay Aymag: mount Hangay (TMB). – Tsuneki, 1972a:208 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:398 (in key to Sphecidae of Russian Far East); Budrys, 1996:38, 39, 42, 43 (morphometry); Mokrousov, 2017c:6 (Russia: Altai Republic: 15 km northwest of Tashanta at 49°47.459'N 89°01.075'E), 2017e:247 (in catalog of Pemphredoninae of Russia).

15. chosenensis Tsuneki

Diodontus chosenensis Tsuneki, 1974a:370, ♀. Holotype: ♀, Korea: Ryang-gang Province: Hyesan (TMB). – Tsuneki, 1974:369 (type of subgenus *Corenius*); R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae); Tsuneki, 1982b:14 (known from Korea); Paik, 1985:198 (in list of Sphecidae of Korea); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:398 (in key to Sphecidae of Russian Far East); J. Kim and Yang, 2010:148 (in checklist of Korean Pemphredoninae); J.-K. Kim, 2014:441 (in catalog of Sphecidae *sensu lato* of Korean Peninsula).

Diodontus chosenensis Tsuneki, 1991:201, as new species. Nomen nudum.

16. clarus Pulawski

Diodontus clarus Pulawski, 1964:143, ♀, ♂. Holotype: ♀, Egypt: Abu Rawash near Cairo (originally W.J. Pulawski coll., now CAS). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Roche and Zalut, 1994:114 (Egypt: Sinai Peninsula: El Arish); Budrys, 1996:38, 39, 42, 43 (morphometry); Roche, 2007a:57 (in checklist of Egyptian Crabronidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

17. cockerelli Rohwer

Diodontus cockerelli Rohwer, 1909:105, ♂. Holotype or syntypes: ♂, USA: Colorado: Florissant (USNM). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:23 (in revision of North American *Diodontus*; Colorado). – **As *Xylocelia cockerelli***: Mickel, 1916b:352 (new generic assignment, in review of North American *Xylocelia*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

18. collaris Tsuneki

Diodontus collaris Tsuneki, 1972a:198, ♀. Holotype: ♀, Mongolia: Central Aymag: 10 km north of north of Ulan-Baator (TMB). – Tsuneki, 1972a:208 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Nemkov, 1986:94 (Russia: Siberia: Irkutsk Oblast'); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:399 (in key to Sphecidae of Russian Far East); Budrys, 1996:38, 39, 42, 43 (morphometry); Kazenas, 2000e:81 (in Sphecid Fauna of Kazakhstan, first record from Kazakhstan: 27 km east of Katon-Karagay), 2002a:45 (Kazakhstan: 27 km east of Katon-Karagay); Nemkov, 2008b:18 and 2009b:62 (in catalog of Sphecidae and Crabronidae of Asiatic Russia); Akulov and Proshchalykin, 2013:112 (Russia: Siberia: Krasnoyarsk Krai: Krasnoyarsk); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Jacobs and Liebig, 2018:139 (Russia: Buryat Republic: East Sayan: 30 km northwest

of Mondy; Irkutsk Oblast': Sarma); Ma, Q. Li, Wang, Jiang, and Lu, 2018:838 (first record from China: Shanxi: Qinling Mountains); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1060, 1061 (in key to *Diodontus* of China).

19. *crassicornis* Gribodo

Diodontus crassicornis Gribodo, 1894b:23, ♂. Holotype or syntypes: ♂, "Algeria: Constantine, Teniet-el-Haad", but actually Tunisia: Tunis area (MSNG), see de Beaumont, 1950e:264. – Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 127 (original description copied); Zavattari, 1913a:4 (omitted from Dalla Torre's catalog, 1897); de Beaumont, 1950e:264 (study of holotype or syntype); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39, 42, 43 (morphometry); Roche, 2007a:57 (in checklist of Egyptian Crabronidae, first record from Egypt: no specific locality), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Penati and Mariotti, 2015:12 (reference to unpublished manuscript by G. Gribodo), 39 (in list of Hymenoptera described by G. Gribodo); Budrys, Budrienė, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group); Rezaei, Fallahzadeh, Dousti, and Saghaei, 2020a:197 (first record from Iran: Fars: Dasht-e Arzhan, Kavar); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:56 (in revision of Sphecidae *sensu lato* of Europe).

Diodontus brachycerus Kohl, 1898b:91, ♀, ♂. Syntypes: Algeria: Oran (NHMW). Synonymized with *Diodontus crassicornis* by de Beaumont, 1950e:264 ("almost certainly a synonym"). – Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 128, 131 (in key to Palearctic *Diodontus*); Graeffe, 1906:456 (Tunisia: Tunis area); Bischoff, 1933:4 (Gibraltar, Morocco); Ceballos, 1956:356 (in catalog of Hymenoptera of Spain); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Mingo and Gayubo, 1984:105 (Spain: Gibraltar, citation of Bischoff, 1933); Dollfuss, 1989:9 (type material in NHMW).

ssp. oasicola Tsuneki

Diodontus brachycerus oasicola Tsuneki, 1972a:196, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: Ehingol (TMB). – Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

20. *crassicornus* Viereck

Diodontus crassicornus Viereck, 1904c:243, ♂. Holotype: ♂, USA: Oregon: Corvallis (ANSP). – Cresson, 1928:51 (holotype in ANSP, as *crassicornis*); R. Bohart and Menke, 1976:243 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:24 (in revision of North American *Diodontus*; Alabama to California, north to Idaho and Wyoming); Ratzlaff, 2016:27 (first record from Canada: British Columbia: Southern Interior), 37 (British Columbia: Penticon); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality). – **As *Xylocelia crassicornis***: Mickel, 1916b:347 (new generic assignment, in review of North American *Xylocelia*, misspelling or emendation of *crassicornus*); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (misspelling or emendation of *crassicornus*, in catalog of North American Hymenoptera).

21. *denticollis* Tsuneki

Diodontus denticollis Tsuneki, 1972a:201, ♂. Holotype: ♂, Mongolia: Hovd Aymag: Somon Bulgan (TMB). – Tsuneki, 1972a:210 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39, 42, 43 (morphometry); Kazenas, 2000e:83 (in Sphecid Fauna of Kazakhstan, first record from Kazakhstan: 15 km south of and 15 km southeast of Aksuat), 2002a:45 (Kazakhstan: 15 km south of and 15 km southeast of Aksuat).

22. *dziuroo* Tsuneki

Diodontus dziuroo Tsuneki, 1972a:199, ♀. Holotype: ♀, Mongolia: Hövsgöl Aymag: Somon Burenhaan (TMB). – Tsuneki, 1972a:207 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:399 (in key to Sphecidae of Russian Far East); Budrys, 1996:38,

39, 42, 43 (morphometry); Kazenas, 2002a:46 (geographic distribution, first record from Kazakhstan); Nemkov, 2008b:18 and 2009b:62 (in catalog of Crabronidae of Asiatic Russia), 2009c:235 (Russia: Primorskiy Kray: Lazovsky Nature Reserve), 2012c:436 (in catalog of Crabronidae of Russian Far East); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Jacobs and Liebig, 2018:139 (Russia: Irkutsk Oblast': Bol'shoye Goloustnoye).

Diodontus pygmaeus Tsuneki, 1972a:206, ♂. Holotype: ♂, Mongolia: Tshoibalsan Aymag: 50 km SE Tshoibalsan (TMB). Synonymized with *Diodontus dziuroo* by Budrys in Nemkov, Kazenas, Budrys, and Antropov, 1995:399. – Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

23. *flavitorsis* W. Fox

Diodontus flavitorsis W. Fox, 1892h:316, ♂. Holotype: ♂, USA: Colorado: no specific locality (ANSP). – Dalla Torre, 1897:364 (in catalog of world Hymenoptera); Ashmead, 1899d:223 (in checklist of North American Crabronidae); Cresson, 1928:51 (holotype in ANSP); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Eighme, 1989:18 (in revision of North American *Diodontus*; District of Columbia to California, north to Washington); Finnamore, 1997:885 (Canada: Yukon); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 39 (first record from Ontario: Ottawa, Harrow; recognition characters); Ratzlaff, 2016:27 (Canada: first record from British Columbia: Central Interior, Southern Interior, and Southern Interior Mountains), 37 (British Columbia: locality records); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first record from Canada: Alberta, Manitoba, Northwest Territories, Saskatchewan: no specific locality). – As *Xylocelia flavitorsis*: Mickel, 1916b:347 (new generic assignment, in review of North American *Xylocelia*, as *flavitorsus*); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

Xylocelia beulahensis Rohwer, 1917b:174, ♀. Holotype: ♀, USA: New Mexico: Beulah (USNM). Synonymized with *Diodontus flavitorsus* by Eighme, 1989:18. – Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera). – As *Diodontus beulahensis*: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera).

24. *fletcheri* R. Turner

Diodontus fletcheri R. Turner, 1917e:175, ♀. Syntypes: ♀: India: Ootacamund (BMNH). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

25. *fraternus* Rohwer

Diodontus fraternus Rohwer, 1909a:106, ♂. Holotype or syntypes: ♂, USA: Colorado: Florissant (USNM). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:26 (in revision of North American *Diodontus*; Iowa to California, north to Idaho); Ratzlaff, 2016:27 (first record from Canada: British Columbia: Southern Interior), 37 (British Columbia: Oliver, Penticton); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first record from Canada: Alberta, British Columbia, Saskatchewan: no specific locality). – As *Xylocelia fraterna*: Mickel, 1916b:347 (new generic assignment, in review of North American *Xylocelia*, as *fraternus*); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

26. *freyi* Bischoff

Diodontus freyi Bischoff, 1937b:2, ♂. Holotype: ♂, Canary Islands: Gran Canaria: Los Lagunetas (Helsinki). – de Beaumont, 1968a:272 (Canary Islands: Gran Canaria, Tenerife); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Wolf, 1980:72 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:208 (detailed locality records from Canary Islands); Budrys, 1996:38, 39, 42, 43 (morphometry); Budrys, Budriené, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group).

27. *friesei* Kohl

Diodontus friesei Kohl, 1901a:121, ♀, ♂ (as *Friesei*, incorrect original capitalization). Syntypes: Egypt, Tunisia (NHMW).

Synonymized with *Diodontus hyalipennis* by Budrys in Nemkov, Kazenas, Budrys, and Antropov, 1995:399, but treated as valid by Budrys, 1996:38, 39, 42, 43, and by Budrys, Budrienè, Orlovskytè, and Soon, 2019:576. – Kohl, 1901a:129, 132 (in key to Palearctic *Diodontus*); E. Saunders, 1904c:606 (Spain: Mayorca); Luff, 1907:39 (Great Britain: Island of Guernsey); Morice, 1911:68 (Algeria, Tunisia); R. Perkins, 1919a:9 (addition to E. Saunders, 1902 catalog); von Schulthess, 1926b:207 (Morocco, Tunisia); Guiglia, 1934b:305 (Libya: bibliography and summary of locality records); nec Hallett, 1939:16 (= *Diodontus insidiosus*); nec Richards, 1937b:105 (= *Diodontus insidiosus*); de Beaumont, 1947b:397 (Cyprus), 1950f:410 (Algeria); Pittioni, 1950:27 (Cyprus); de Beaumont, 1952c:199 (Algeria: Hoggar), 1954e:94 (Italy determination tentative); Ceballos, 1956:356 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:211 (Libya); Pulawski, 1958a:187 (Bulgaria: Kniazhevo near Sofia); de Beaumont, 1959a:33 (Italy); Suárez, 1959:59 (Spain: Almería Province; determination tentative); de Beaumont, 1960b:249 (Libya: Benghazi), 1962b:27 (Spain); Grandi, 1962:96 (Italy); Ceballos, 1964:86 (in supplement to catalog of Spanish Sphecidae); Pulawski, 1964:143 (Egypt: Abydos, Abu Rawash, Aswan, Cairo, Dahshur, Edfu, Ghiza, Kom Ombo, Luxor, Maadi; Sudan: Wadi Halfa); de Beaumont, 1965a:58 (Greece); Erlandsson, 1974:79 (Spain; as *friesei*); Leclercq, 1974b:204 (distribution, taxonomic problems, locality records including India: Coimbatore); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Georghiou, 1977:190 (Cyprus); Guichard, 1980:225 (Oman); Gayubo, 1981a:143 (first record from Spain: Sierra de Béjar: Palomares de Béjar), 1984a:168 (Spain: previously recorded from Salamanca Province), 1984c:358 (Portugal: Algarve Province); Mingo and Gayubo, 1984:105 (Spain); Al-Houty, 1989:158 (Kuwait: Abdelli, Al-Wafra, Khwasat, Omariya, Reqqa); Dollfuss, 1989:9 (type material in NHMW); Pagliano, 1990:113 (in catalogue of Italian Sphecidae); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:11 (in catalog of Italian fauna); Budrys, 1996:38, 39, 42, 43 (as valid species, morphometry); Al-Houty, 1997:160 (Kuwait: no specific locality); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); Generani, Pagliano, Scaramozzino, and Strumia, 2003:66 (Italy: Arcipelago Toscano); Pagliano and Negrisolò, 2005:449 (in Sphecid Fauna of Italy); Baños-Picón, Asís, Gayubo, and Tormos, 2009:313 (Spain: frequency of specimens collected with hand nets and Malaise traps); Pagliano, 2009:187 (Italy: Liguria: Villanova d'Albenga; Piemonte: San Benedetto Belbo; Toscana: San Piero; France: Corse: L'Asco); Bitsch, 2014:406 (record from Corsica by Pagliano, 2009 reported); Budrys, Budrienè, Orlovskytè, and Soon, 2019:577 (in key to Mediterranean species of *Diodontus minutus* species group); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae *sensu lato* of Portugal).

As *Diodontus hyalipennis* (following the synonymy by Budrys in Nemkov, Kazenas, Budrys, and Antropov, 1995:399): Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:399 (in key to Sphecidae of Russian Far East); Budrys, 1996:38, 39 (morphometry); Esenbekova and Kazenas, 2000:17 (southeastern Kazakhstan: 2-8 km south, 23 km west, and 6 km southwest of Alma Ata, 30 km south-southwest of Koktal on Ili River, 3-5 km south of Talgar, 1-3 km northwest of Zhabagly); Kazenas, 2000e:90 (in Sphecid Fauna of Kazakhstan), 2001:20 (in checklist of Sphecidae of Kazakhstan and Central Asia), 124 (nesting habits); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2002a:46 (geographic distribution, collecting localities in Kazakhstan), 2004b:101 (Kazakhstan: western Tien Shan), 2004d:29 (Kazakhstan: northern Caspian region); Roche, 2007a:58 (in checklist of Egyptian Crabronidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Kazenas, 2008b:111 (Kazakhstan: foothills of Zailiskiy Alatau: usually found on loess cliffs); Nemkov, 2008b:18 and 2009b:62 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Baghirov, 2011b:151 (Russia: recorded from Altayskiy Kray by Danilov, 2008); Kazenas, 2013b:493 (southeast Kazakhstan: 30 km south-southwest of Koktal on Ili River); Atbaei, Fallahzadeh, and Ljubomirov, 2015:10 (first record from Iran: Fars Province); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:73 (Iran: known from Fars Province); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Ben Khedher, Yildirim, and Braham, 2020a:107 (Tunisia: Kebili and Zaghwan provinces).

28. *gegen* Tsuneki

Diodontus gegen Tsuneki, 1972a:203, ♂. Holotype: ♂, Mongolia: Suhebaator Aymag: 44 km southwest of Buruun-urt (TMB). – Tsuneki, 1972a:210 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:400 (in key to Sphecidae of Russian Far East); Budrys, 1996:42, 43 (morphometry); Nemkov, 2008b:18 and 2009b:62 (in catalog of Sphecidae and Crabronidae of Asiatic Russia); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Jacobs and Liebig, 2018:139 (Russia: Irkutsk Oblast': Bol'shoye Goloustnoye).

29. *geniculatus* Cameron

Diodontus geniculatus Cameron, 1898b:26, ♀. Holotype or syntypes: India: Uttar Pradesh: Mussoorie (OXUM). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, almost certainly not identical to Cameron's species); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

30. *guichardi* Budrys

Diodontus guichardi Budrys in Budrys, Budrienè, Orlovskytè, and Soon, 2019:571, ♀, ♂. Holotype: ♀, Morocco: Sidi-Moussa d'Aglou 10 km west of Tiznit at 29°43'N 9°50'W (BMNH). – Budrys, Budrienè, Orlovskytè, and Soon, 2019:577, 578 (in key to Mediterranean species of *Diodontus minutus* species group).

31. *handlirschii* Kohl

Diodontus handlirschii Kohl, 1888b:725, ♀, ♂ (as *Handlirschii*, incorrect original capitalization). Syntypes: Italy: Trentino: Trafoi (NHMW). – Kohl, 1890a:58 (redescription); Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Kohl, 1901a: 120 (in checklist of Palearctic *Diodontus*), 130, 132 (in key to Palearctic *Diodontus*); Schmiedeknecht, 1907:211, 212 (in key to Hymenoptera of Central Europe); Kohl, 1912a:61 (Austria: Südtirol: Ratzes, now Italy: Trentino-Alto Adige: Razzes); Bouwman, 1928b:211 (in key to Sphecidae of Netherlands, not yet found in Netherlands); Schmiedeknecht, 1930:673, 674 (in keys to Hymenoptera of North and Central Europe); Šnoflák in Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Franz, 1949:13 (Austria: Hohe Tauern); de Beaumont, 1950a:90 (first record from Switzerland); Blüthgen, 1952a:127 (first record from Germany: Bayern: Gottesackerplateau); de Beaumont, 1958c:209 (Swiss National Park), 1964c:112 (in Sphecid Fauna of Switzerland); Bonelli, 1966c:219 (Italy: Trentino–Alto Adige: Razzes); Gauss and Perraudin, 1970:361 (Germany: Baden-Württemberg: Sankt Märgen in Schwarzwald); Kazenas, 1971:161 (in Kazakhstan found only in southeastern mountains); Balthasar, 1972:201 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Tsuneki, 1972a:189 (Mongolia), 207, 208 (in key to *Diodontus* of Central Asia); Leclercq, 1974b:203 (in key to *Diodontus* of western Europe), 204 (locality records); Kazenas, 1975b:424 (Kazakhstan), 426, 427 (in key to *Diodontus* of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kazenas, 1978b:155, 157 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:245, 246 (in key to Sphecidae of European part of USSR); Schedl, 1982:101 (Austria: Tirol: Ötztaler Alps); Dollfuss, 1983a:79 (Austria: endangered in Salzburg area), 1983b:5 (in catalog of Sphecidae of Austria: Salzburg: Hohe Tauern); Schmidt, 1984:245 (Germany: Schwarzwald); Dollfuss, 1989:9 (type material in NHMW); Pagliano, 1990:113 (in catalogue of Italian Sphecidae); Schwammbberger and Priesner, 1990:535 (Austria: Kärnten); Day, 1991:xiv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:54 (in key to Sphecidae of North and Central Europe); Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:396 (in key to Sphecidae of Russian Far East); Negrisolò in Minelli, Ruffo, and La Posta, 1995b:11 (in catalog of Italian fauna); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Budrys, 1996:38, 39, 42, 43 (morphometry); Schmidt and Schmid-Egger, 1997:12 (in checklist of German Sphecidae); Neumayer, Schwarz, and Bregant, 1999:224 (Austria: in checklist of Sphecidae of Land Kärnten); Blösch, 2000:163 (in Sphecid Fauna of Germany); Esenbekova and Kazenas, 2000:17 (southeast Kazakhstan: 3 km south of Alma Ata); Kazenas, 2000e:89 (in Sphecid Fauna of Kazakhstan); Dollfuss and Bitsch in Bitsch et al., 2001:60 (in Sphecid Fauna of Western Europe); Kazenas, 2001:20 (in checklist of Sphecidae

of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:138 (distribution in Germany by provinces); Bieri, 2002:74 (Liechtenstein); Kazenas, 2002a:46 (geographic distribution, collecting localities in Kazakhstan); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:65 (Germany: in catalog of wasps and bees of Bayern); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: extinct or no longer collected); Hellrigl, 2004a:173 (Italy: Trentino-Alto Adige, as Südtirol: Vinschgau = Val Venosta: Sulden); Kazenas, 2004b:100 (Kazakhstan: western Tien Shan); Kofler, 2005:167 (Austria: Tirol: Lienz District: Brugger Alm in Sankt Jakob Common, Lesach in Kals Common, Oblas See in Sankt Johann Common); Pagliano and Negrisolò, 2005:449 (in Sphecidae Fauna of Italy); Jacobs, 2007:61, 62 (in key to Crabronidae of Germany); Nemkov, 2008b:18 and 2009b:62 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Schmid-Egger, 2010a:15 (in red list of Aculeata of Germany: extremely rare), 2010c:73 (Germany: Bayern: Laufbacher Eck in Allgäu); Baghirov, 2011b:151 (Russia: recorded from Altay by Nemkov *in* Nemkov, Kazenas, Budrys, and Antropov, 1995); Schmid-Egger, 2011a:37 (France: Parc National du Mercantour: Col de Cayolle); Nemkov, 2012c:436 (in catalog of Crabronidae of Russian Far East); Bitsch, 2014:406 (record from France by Schmid-Egger noted); Olszewski, Ljubimirov, Wiśniowski, and Krzyżyński, 2016:166 (first record from Bulgaria: Rila Mountains: north of Parangalista reserve at 42°02'N 23°25'E and west of Macedonia hut at 42°02'49"N, 23°25'56"E, Pirin Mountains: E Kazanite at 41°46'N 23°25'E; first record from Montenegro: Durmitor Mountain: Bobotov Kuk peak at 43°07'N 19°02'E and Zeleni Vir at 43°07'N 19°03'E), 166 (in key to Central and Eastern European *Diodontus*); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Jacobs and Liebig, 2018:139 (Russia: Buryat Republic: East Sayan: 30 km northwest of Mondy); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1059, 1061 (in key to *Diodontus* of China), 1061 (first record from China: Nei Mongol, Sichuan, Tibet); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:57 (in revision of Sphecidae *sensu lato* of Europe). – *As Xylocelia handlirschi*: Wolf, 1959b:26 (new generic assignment, known from Germany but not from Nassau).

32. *hyalipennis* Kohl

Diodontus hyalipennis Kohl, 1892:204, ♀. Holotype or syntypes: ♀, Azerbaijan: Baku (NHMW). – Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 129 (in key to Palearctic *Diodontus*); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Dollfuss, 1989:9 (type material in NHMW); Tormos, Asís, and Gayubo, 1994:187, 199 (Spain: Albacete Province); Gadallah, 2020b:60 (in list of aculeate wasps of Arabian Peninsula); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:57 (in revision of Sphecidae *sensu lato* of Europe); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:419 (Uzbekistan: distribution); Kochetkov and Korsun, 2025:7 (Russia: Zabaikalskiy Krai: Dauriski Nature Reserve).

Diodontus major gobiensis Tsuneki, 1972a:191, ♂. Holotype: ♂, Mongolia: South Gobi Aymag: Gurban Sayhan (TMB). Synonymized with *Diodontus hyalipennis* by Budrys *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:399. – Tsuneki, 1972a:210 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

Diodontus mongolicus Tsuneki, 1972a:202, ♂. Holotype: ♂, Mongolia: Suhebaator Aymag: 44 km south-southwest of Buruun-urt (TMB). Synonymized with *Diodontus hyalipennis* by Budrys *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:399. – Tsuneki, 1972a:210 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

As *Diodontus oraniensis* partim: Pagliano, 2011a:159 (specimen in coll. M. Spinola, Torino).

33. *inalpellatus* Le Divelec

Diodontus inalpellatus Le Divelec, 2023:422, ♀, ♂. Holotype: ♂, France: Corse: Quenza at 41.83295°N 9.15318°E (MNHN).

34. *insidiosus* Spooner

Diodontus insidiosus Spooner, 1938:251, ♀, ♂. Syntypes: ♀, Britain: Dorset: Southhaven (BMNH). – Ribaut, 1946:271 (first record from France: Haute Garonne: Saint B at); Guichard and Yarrow, 1948:90 (Great Britain: London: Hampstead

Heath); Steiner, 1955:144 (France: Dordogne); Yeo, 1957:19 (England: Middlesex, now in London); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1964c:112 (in Sphecid Fauna of Switzerland); Richards, 1964:2 (in Britain south of River Thames), 25 (heath-lands in southern England); Benno, 1967:37 (in checklist of Sphecidae of Netherlands); Pekkarinen, 1967:135 (Finland: Siikajoki); Lefeber, 1969a:79 (Netherlands: Schoorl); Oehlke, 1970:749 (not recorded from Democratic Germany); Hellén, 1971:85 (recorded from Finland by Pekkarinen, 1967); Lefeber, 1973:152 (Netherlands: Bergen, De Beer, Groet, Hilversum, Meyendel, Noordwijk, Ouddorp, Schhol); Leclercq, 1974b:203 (in key to *Diodontus* of western Europe), 205 (first records from Belgium, locality records from France, Switzerland, and Austria); Lefeber, 1974:77 (Netherlands: Laren); Kazenas, 1975b:424 (Kazakhstan; determination tentative), 426 (in key to *Diodontus* of Kazakhstan and Central Asia); Lefeber, 1975:37 (Netherlands: Castricum); Lomholdt, 1975c:109 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Leclercq, 1976:152 (Netherlands: Helden); Guichard, 1977:252 (Great Britain: Surrey); Kazenas, 1978b:155, 157 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:245 (in key to Sphecidae of European part of USSR); Richards, 1979:400 (British Channel Islands), 1980:70 (in key to Sphecidae of British Isles); Gayubo, 1982f:247 (Spain: Cádiz Province); Dollfuss, 1983a:77 (endangered in Burgenland, Austria), 1983b:5 (in catalog of Sphecidae of Austria: Burgenland: Neusiedl); Lefeber, 1983a:84 (Netherlands: Waddendistrict: northern coast sand dunes, Terschelling and Schiermonnikoog islands); Gayubo, 1984a:167 (Spain: Salamanca Province), 1984c:359 (Portugal: El Algarve Province); Mingo and Gayubo, 1984:105 (Spain); Haeseler, 1985c:571 (Germany: Friesian Islands); Gayubo, 1986c:31 (Spain: Zamora Province); Gayubo and Sanza, 1986:35 (Spain: Burgos); Gayubo and Tormos, 1986a:10 (Spain: Castellón de la Plana); Islamov, 1985:529 (Uzbekistan: Tashkent Oblast'); Józán, 1986:368 (Hungary: Kiskunság National Park); Vickberg, 1986b:75 (Finland); Asís and Jiménez, 1987:25 (Spain: Castellón Province); Gayubo, 1987:108 (Spain: Ciudad Real Province); Haeseler, 1988:210 (Germany: Friesian Islands); Karsai, 1988:99 (Hungary: Kiskunság National Park); Wolf, 1988b:142 (Germany: Rheinland-Westfalen); Jacobs and Oehlke, 1990:143 (unknown from Democratic Germany); Pagliano, 1990:113 (first record from Italy); Day, 1991:xiv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:54 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:398 (Italy: Piemonte: Gravera di Susa); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Jakubzik, 1991:74 (Germany: Köln); Józán, 1992a:228 (Hungary: Béda-Karapanca Protected Area), 1992b:172 (Hungary: Boronka-melléki Protected Area); N. Schneider, 1992:178 (Luxembourg); Torregrosa, Gayubo, Tormos, and Asís, 1993:11 (Spain: Alicante Province); Theunert, 1994c:38 (Germany: summary of records from Niedersachsen and Bremen); Negriso *in* Minelli, Ruffo, and La Posta, 1995b:11 (in catalog of Italian fauna); Archer, 1996a:58 (Great Britain: Channel Islands); Budrys, 1996:38, 39, 42, 43 (morphometry); Harvey and Plant, 1996:77 (Great Britain: summary of records from Essex); Jakubzik, 1996:252 (Germany: Köln); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Schmidt and Schmid-Egger, 1997:12 (in checklist of German Sphecidae); Denton, 1998:350 (England: Surrey); Dollfuss, Gusenleitner, and Bregant, 1998:510 (Austria: summary of collecting records from Burgenland); N. Schneider and Wahis, 1998:20 (Luxemburg: sandstone quarries); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province), 1999:354 (Spain: Valladolid: Viana de Cega); Ljubomirov, 1999b:46 (Bulgaria: Mount Vitosha near Sofia); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Pauly, 1999:108 (in catalog of Belgian aculeates); Blösch, 2000:163 (in Sphecid Fauna of Germany); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Shkuratov, 2000:59 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Dollfuss and Bitsch *in* Bitsch et al., 2001:60 (in Sphecid Fauna of Western Europe); Ohl et al., 2001:138 (distribution in Germany by provinces); Zettel, Gross, and Mazzucco, 2001:68 (Austria: Wien); Archer and Edwards, 2002:103 (Great Britain: West Sussex: Ambersham and Iping commons); Beavis, 2002:110 (Great Britain: Kent: Tunbridge Wells area); Józán, 2002:53 (Hungary: Mecsek Mountains); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Straka and Farkač, 2002:261 (Czech Republic: Praha); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Deván, 2004:146 (western Slovakia); Esser, Jakubzik, and Sonnenburg,

2004:18 (Germany: Nordrhein-Westfalen); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (in checklist of Sphecidae of Nordrhein-Westfalen State of Germany); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Klein and Lefebvre in Peeters, van Achterberg, et al., 2004:378 (in Wasp and Ant Fauna of Netherlands); Kuhlmann, 2004:230 (Germany is responsible for preservation of this species on its territory); Majzlan and Deván, 2004:32 (Slovakia: Malacky-Široké); Shkuratov, 2004a:79 (Russia: Rostov Oblast'), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Zettel, 2004:4 (Austria: Niederösterreich: Oberweiden, Prellenkirchen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:221 (Spain: Salamanca: San Martín del Castañar); Pagliano and Negrisoló, 2005:449 (in Sphecidae Fauna of Italy); Straka, 2005a:397 (critically endangered in Czech Republic); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Archer, 2006c:217 (Great Britain: Staffordshire: Highgate Common); N. Schneider, 2006:142 (Luxemburg: anthropogenic habitats); Standfuss and Standfuss, 2006c:303 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Archer, 2007d:152 (Great Britain: first record from Watsonian Yorkshire); Jacobs, 2007:61, 62 (in key to Crabronidae of Germany); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Bohemia and Slovakia only), 213 (first recorded from Bohemia and Slovakia by Straka and Farkač, 2002); Archer, 2008c:145 (Great Britain: Nottinghamshire: Spalford Warren); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Haeseler, 2008:308 (Germany: Friesian Islands); Theunert, 2008:29 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:313 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d'Eyne); Gayubo, González, Tormos, and Asís, 2009:362 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Livory, Chevin, Lair, Sagot, and Baldock, 2009:13 (France: Département de la Manche: Bolleville, Réville); Pagliano, 2009:187 (Italy: Sardegna: Porto Torres); Archer, 2010a:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Falk, 2010:93 (Great Britain: heathland sites in West Midlands region); Mokrousov, 2010a:63 (Russia: Nizhniy Novgorod and Vladimir Oblast's: no specific localities), 2010b:100 (Russia: Nizhniy Novgorod Oblast': no specific localities); Schmid-Egger, 2010a:15 (in red list of Aculeata of Germany: extremely rare); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:497 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Falk, 2011:64 (Great Britain: Sussex: South Downs); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Saure, 2011d:199 (Germany: Sachsen-Anhalt: conservation area "Heide südlich Burg"); Schmid-Egger, 2011a:37 (Italy: Parco delle Alpi Marittime: Brignola, Valle Maira); Theunert, 2011a:19 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Prismaniy, 2012:47 (Russia: Belgorod Oblast'); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Vieira, Oliveira, Brewster, and Gayubo, 2013:18 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Baldock, 2014:358 (Spain: Island of Mallorca); Bitsch, 2014:406 (recorded from France from Loiret: Ardon, not from Eure-et-Loir as given by Dollfuss and Bitsch, 2011); Archer, 2015:203 (Great Britain: English coastal sand dunes); Else, Bolton, and Broad, 2016:36 (in checklist of Aculeata of Great Britain and Ireland: England); Mokrousov and Popov, 2016:586 (Russia: Krasnodarskiy Krai); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:165 (first record from Poland: Małopolska Upland: Pińczowskie Hills at 50°28'29"N, 20°24'1"E), 166 (in key to Central and Eastern European *Diodontus*); Stolle and Saure, 2016:922 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Magdalou, 2017:14 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Vallée d'Eyne); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Budryś, Budrienė, Orlovskytė, and Soon, 2019:577 (in key to Mediterranean species of *Diodontus minutus* species group); Rezaei, Fallahzadeh, Dousti, and Saghaei, 2020a:197 (first record from Iran: Fars: Larestan); Ben Khedher, Yildirim, and Braham, 2021a:62

(first record from Tunisia: Beja, Kebili, Mahdia, Nabeul, Sousse, and Tozeur governorates); Akulov, Proshchalykin, and Mokrousov, 2020:47 (Russia: central Krasnoyarsk Krai); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1060 (in key to *Diodontus* of China), 1062 (first record from China: Nei Mongol); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:82 (in catalog of Crabronidae of Turkey, first record from Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:88 (in commented list of Sphecidae *sensu lato* of Poland); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:58 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Pytel-Huta and Franchuk, 2024:85 (Ukraine: Rivno Nature Reserve).

As *Diodontus friesei*: Hallett, 1939:16 (Great Britain: Surrey: no specific locality) and Richards, 1937b:105 (in checklist of British aculeates), present correction based on geographic origin.

35. *kaszabi* Tsuneki

Diodontus kaszabi Tsuneki, 1972a:197, ♀. Holotype: ♀, Mongolia: Hövsgöl Aymag: Tunamal-nuur (TMB). – Tsuneki, 1972a:208 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Nemkov, 1986:94 (Russia: Siberia: Irkutsk Oblast'); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:400 (in key to Sphecidae of Russian Far East); Budrys, 1996:38, 39, 42, 43 (morphometry); Nemkov, 2008b:18 and 2009b:63 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Baghirov, 2011b:151 (Russia: recorded from Altay by Nemkov *in* Nemkov, Kazenas, Budrys, and Antropov, 1995); Nemkov, 2012c:436 (in catalog of Crabronidae of Russian Far East); Ma, X. Li, Chen, and Q. Li, 2013:584 (first record from China: Nei Mongol: Helan Mountains); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1060 (in key to *Diodontus* of China).

Diodontus monticola Tsuneki, 1972a:205, ♂. Holotype: ♂, Mongolia: Gobi-Altai: Hayrhan-ul (TMB). Synonymized with *Diodontus kaszabi* by Budrys *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:399. – Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

Diodontus obo Tsuneki, 1972a:204, ♂. Holotype: ♂, Mongolia: Central Aymag: 30 km E Somon Nalayh (TMB). Synonymized with *Diodontus kaszabi* by Budrys *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:399. – Tsuneki, 1972a:210 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

36. *kohli* Tsuneki

Diodontus kohli Tsuneki, 1972a:211, ♂. Holotype: ♂, Mongolia: Suhebaator Aymag: 45 km off Somon Erdenezagan (TMB). – Tsuneki, 1972a:210 (type of subgenus *Neodiodontus*); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39, 42, 43 (morphometry); Esenbekova and Kazenas, 2000:17 (southeast Kazakhstan: 3 km SE and 10 km E Kapchagay); Kazenas, 2000e:93 (in Sphecid Fauna of Kazakhstan, first records from Kazakhstan: 50 km southwest of Bairkum, 50 km west of village Koksus, Bakanas 10 km east of Kapchagai), 2002a:46 (geographic distribution, collecting localities in Kazakhstan), 2008a:99 (Southeastern Kazakhstan: 10 km east and 3 km southeast of Kapchagay in Ili River valley); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:28 (first record from Russia: Astrakhan Oblast': village Volzhski at 46.965°N 47.53°E); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia).

37. *kuroo* Tsuneki

Diodontus kuroo Tsuneki, 1972a:196, ♀. Holotype: ♀, Mongolia: Eastern Gobi Aymag: 60-70 km north-northwest of Sainshand (TMB). – Tsuneki, 1972a:208 (in key to *Diodontus* of Central Asia; a ssp. of *Diodontus parvulus*?); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Esenbekova and Kazenas, 2000:17 (southeast Kazakhstan: near Bakanas, landing place Dubun' on Ili River, 10 km northeast of Kapchagay); Kazenas, 2000e:95 (in Sphecid Fauna of Kazakhstan), 2008a:99 (Southeastern Kazakhstan: Ili River valley: near Dubun', 10 km east of Kapchagay, near Bakanas), 2013b:493 (southeast Kazakhstan: landing place Dubun' on Ili River); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:28 (first record from Russia: Astrakhan Oblast': village Volzhski at 46.965°N 47.53°E); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1060, 1061 (in key to *Diodontus* of China), 1062 (first record from China: Nei Mongol).

38. *leguminiferus* Cockerell

Diodontus leguminiferus Cockerell in Cockerell and Fox, 1897:141, ♂. Lectotype: ♂, USA: New Mexico: Santa Fé (ANSP), designated by Cresson, 1928:52. – Ashmead, 1899d:223 (in checklist of North American Crabronidae); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae; as *leguminiferus* Cockerell and W. Fox); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:24 (in revision of North American *Diodontus*; as *leguminifer*; Iowa and Missouri to Alberta and California); G. Scudder, 1994:75 (in checklist of rare and endangered invertebrates of British Columbia); Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos - Mount Kobau area at 119°40'W 49°05'N); Ratzlaff, 2016:27 (Canada: British Columbia: from Scudder, 1994), 2018:113 (Canada: first record from Yukon: Carcross Desert at 60.1876°N, 134.6899°W, Carcross sand dunes); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, first record from British Columbia: no specific locality). – **As *Xylocelia leguminifera***: Mickel, 1916b:347 (new generic assignment, in review of North American *Xylocelia*, as *leguminiferus*); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

39. *longicornis* de Beaumont

Diodontus longicornis de Beaumont, 1960b:248, ♀, ♂. Holotype: ♀, Algeria: Biskra (Lausanne). – Leclercq, 1974b:207 (Algeria: Biskra); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys, 1996:38, 39, 42, 43 (morphometry); Roche, 2007a:59 (in checklist of Egyptian Crabronidae), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Budrys, Budriené, Orlovskytė, and Soon, 2019:577 (in key to Mediterranean species of *Diodontus minutus* species group).

40. *luperus* Shuckard

Diodontus luperus Shuckard, 1837a:186, ♂, ♀. Syntypes: Great Britain: no specific locality (depository unknown). – Dahlbom, 1842a:12 (in review of Scandinavian aculeates), 1844:254 (in revision of Sphecidae and Pompilidae); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk); Dahlbom, 1845:506 (in key to European *Diodontus*); Wissmann, 1849:14 (Germany: Kingdom of Hannover: Münden); Tischbein, 1850:6, 9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); F. Smith, 1851c:33 (Great Britain: no specific locality), 1853:64 (in checklist of British Hymenoptera), 1856:432 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); F. Smith, 1858c:171 (in review of British Aculeata, redescription); Taschenberg, 1858:95 (Germany); Schenck, 1861:159 (redescription, Germany: Danzig and Münden, Danzig is now Gdańsk, Poland); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:187 (in revision of Hymenoptera of Germany); Kirchner, 1867:222 (in catalog of European Hymenoptera); Schenck, 1867a:353 (known from Germany); F. Smith, 1871b:17 (in catalog of British Aculeata); Wierzejski, 1874:260 (Poland: Kraków; determination tentative); E. Saunders, 1880:256 (in revision of British Aculeata); Brischke, 1888b:99 (Germany: Preussen Province, now Poland: Pomorze Region); Gribodo, 1881a:146 (Italy: Calabria: near Palizzi); Ed. André, 1888:218 (in revision of Sphecidae of Europe and Algeria), 20* (bibliographic references); Kohl, 1888b:726 (Austria: Tirol, now Italy: Alto Adige: Bolzano area), 1890a:59 (in review of *Diodontus*); V. Perkins, 1892:202 (Great Britain: Gloucestershire: Wotton-under-Edge); Kohl, 1893:36 (Austria: Niederösterreich); Krieger, 1894:14 (Germany: Kingdom of Saxony); De Stefani Perez, 1895:227 (in catalog of Sicilian Hymenoptera); E. Saunders, 1896:95 (in revision of British Aculeata); Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Mocsáry, 1897:79 (Kingdom of Hungary, localities are in today's Romania and Slovakia); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 130, 133 (in key to Palearctic *Diodontus*); de Cobelli, 1903:108 (Italy: Province of Trentino); E. Saunders, 1903a:16 (Great Britain: Woking); Antiga and Bofill, 1904:8 (Spain: Cataluña Province); W. Schulz, 1904b:92 (Greece: Corfu Island); Kubes, 1905:83 (Czech Republic: Kolín, Mančice, Obora); Schmiedeknecht, 1907:211, 212 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:103 (in catalog of French Hymenoptera); Morley, 1909:304 (Great Britain: Isle of Wight); Ditttrich, 1911b:22 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Schirmer, 1912:166 (Germany: Berlin area); Birula, 1913:539 (Ukraine: Zhytomyr Oblast: Radomyshl'); Alfken, 1914:278 (NW Germany); Birula, 1914:384 (Belorussia: Vitebsk); Zilahi Kiss, 1915:80 (Hungary: Bethlen, Nagylonda, Simontornya); Dubois, 1919:96 (first record from Belgium: Bruxelles: Uccle); O. Meyer,

1919:152 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1920:88 (Belgium: Uccle); A. Wagner, 1920:41 (Germany: Lower Elbe region); Dubois, 1922:197, 198 (in key to Belgian Sphecidae); R. Perkins, 1924:222 (record of Parfitt, 1889, from Devonshire is probably erroneous); Berland, 1925d:144 (in Sphecidae Fauna of France); R. Perkins, 1925:150 (Great Britain: Bristol, Gloucestershire: Wotton, probably in error); Schütze, 1925:112 (Germany: Lausitz Region); Carpentier, Crèvecoeur and Maréchal, 1926:354 (Belgium: Méry, Tilff); von Schulthess, 1926b:207 (Tunisia); Crèvecoeur and Maréchal, 1927:139 (Belgium: Limont); Benoist, 1928:410 (France: Basses-Alpes, Hautes-Alpes); Bouwman, 1928b:210, 211 (in key to Sphecidae of Netherlands, not yet found in Netherlands); Schmiedeknecht, 1930:674 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:8 (Spain); Grandi, 1931:49 (nesting habits), 57 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Pulkkinen, 1931:98 (in revision of Sphecidae of Finland, not yet found in Finland); Spooner, 1931:14 (Great Britain: Cambridgeshire); Bondroit, 1932:36 (Belgium: Solbosch); Drogoszewski, 1933:118 (Poland: Łowicz); E. Nielsen, 1933:319 (summary of nesting habits, as *lupinus*); Balles, 1934:19 (Germany: Baden-Württemberg: Achern, Fautenbach, Mannheim-Rheinau, Oberachern); Marchand and Dulac, 1935:61 (France: Saône-et-Loire: Saint Laurent d'Andenay); Vergne, 1935:119 (France: Auvergne: Les Martres-d'Artières); Crèvecoeur and Maréchal, 1936:251 (in catalog of Belgian Hymenoptera); Roller, 1936:315 (Austria: loess cliffs at Bisamberg near Vienna); Dulac, 1937:16 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Goebel, 1937:41 (Poland: Poznań District: Głuszyna, and Środa District: Tulce); Richards, 1937b:105 (in checklist of British aculeates); van Lith, 1937b:211 (first record from Netherlands: Bemelen); Zavadil, Šusterka, and Bat'a, 1937:183 (in catalog of Sphecidae of Czechoslovakia); Gussakovskij, 1938:14 (Mongolia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:120 (northwestern Germany); Aerts, 1939:134 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Móczár, 1939:5 (Hungary: Jászberény); Teunissen, 1939:174 (Netherlands: Bemelen, Eperheide); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Leclercq, 1941b:11 (Belgium: Liège area); Paul, 1941:42 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1037 (Germany: Bayern: Bamberg area); Balthasar, 1942:4 (Czech Republic: Moravia); Guiglia, 1942:61 (Greece: Island of Rhodes: Kremasti); Benno, 1943:68 (Netherlands); Giner Marí, 1943a:37 (in Sphecidae Fauna of Spain); Spooner, 1943:72 (Great Britain); Guiglia, 1944b:32 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); T. Fletcher, 1945:53 (Great Britain: Gloucestershire: Bristol, Wotton); Carl and de Beaumont, 1947:69 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Šnoflák in Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:100 (Spain); Chambers, 1949:225 (Great Britain: Bedfordshire); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Cavro, 1950:33 (France: Département du Nord); Graham, 1950a:37 (Great Britain: Lincolnshire: Bolingbroke); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km south of Poznań); de Beaumont, 1951h:34 (Switzerland: Neuchâtel area); Caruel, 1952b:101 (France: Marne Department); Móczár, 1953:310 (Hungary); Nouvel and Ribaut, 1953:180 (France: Haute-Garonne: Saint-Béat, Hautes-Pyrénées: Cautelets); Bischoff and Stadler, 1954:126 (Germany: Bayern: Romberg); de Beaumont, 1954e:94 (Italy); Aerts, 1955:61 (Germany: Rheinland); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vergne, 1955:5 (France: Auvergne); Vogrin, 1955:39 (Yugoslavia); Ceballos, 1956:356 (in catalog of Hymenoptera of Spain); Leclercq, 1956g:325 (Greece); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Bajári, 1957a:86 (in key to Hungarian Sphecidae); Zirmgiebl, 1957:180 (Germany: Rheinland-Pfalz: Birkenheide, Landau); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958c:209 (Swiss National Park); Nouvel and Ribaut, 1958:15 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Ceballos, 1959:228 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1959a:33 (Italy); Suárez, 1959:59 (Spain: Almería Province); Noskiewicz and Puławski, 1960:61, 62 (in key to Polish Sphecidae); Grandi, 1961:211 (nesting habits); Felton, 1963:177 (Great Britain: Kent County); Lehrer and Scutaru, 1963:285 (Romania: Moldova: Surănești in Iași District); Ceballos, 1964:86 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:112 (in Sphecidae Fauna of Switzerland), 1965a:58 (Greece); Lefebvre, 1966:209 (Netherlands: Amby and Bemelen); Benno, 1967:37 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:345 (Turkey); Gauss, 1967:556 (Germany: Baden-Württemberg); J. Heinrich, 1967:78 (Germany: Bayern: Unterfranken District); Miczulski, 1967:189 (Poland: Czechów near Lublin); Niedl and Deneš, 1967:78 (Czech Republic: Třeboň area);

Benedek, 1968:75 (Hungary, visiting flowers of *Angelica silvestris* L.); Parré, 1968:123 (Germany: Sachsen-Anhalt: Staßfurt); Scobiola-Palade, 1968c:386 (Romania: Alexandria, Bucureşti); Wolf, 1968:11 (Germany: Nordrhein-Westfalen: Siegen, inhabitant of forest edge); Benedek, 1969a:84 (Hungary; marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); de Beaumont, 1969:92 (Turkey); Lefeber, 1969a:79 (Netherlands: Amby; Belgium: Bassenge, Kanne), 1969c:234 (Netherlands: Sint Pietersberg = Montagne Saint Pierre); Romanova, 1969:134 (Russia: North Caucasus); Zangheri, 1969:1706 (Italy); Benedek, 1970:100 (Hungary: Tapolca); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Oehlke, 1970:749 (Democratic Germany); Lefeber, 1971b:223 (Belgium: Bassenge, Gruitrode); Schmidt, 1971b:44 (Germany: Rheinland-Pfalz: Mainzer Sand); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Wolf, 1971:375 (Italy: Trentino–Alto Adige: Alpi Siusi); Balthasar, 1972:201 (in Sphecidae Fauna of Czechoslovakia); Kofler, 1972:111 (Austria: eastern Tirol); Niedl and Deneš, 1972:152 (Czech Republic: Třeboň area); Tsuneki, 1972a:188 (Mongolia), 207, 209 (in key to *Diodontus* of Central Asia); Kazenas, 1972b:120 (Kazakhstan); Erlandsson, 1974:79 (Italy); Leclercq, 1974b:204 (in key to *Diodontus* of western Europe), 205 (locality records); Kazenas, 1975b:424 (Kazakhstan), 426, 427 (in key to *Diodontus* of Kazakhstan and Central Asia); Lefeber, 1975b:120 (Netherlands: Schiepersberg); Lomholdt, 1975c:110 (in Sphecidae Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Eck, 1976:93 (Democratic Germany); Leclercq, Gaspar, Delecluse and Thirion, 1976:149 (Belgium: Wallonian freeway median strip); Guichard, 1977:252 (Great Britain: Surrey); Kolesnikov, 1977:319 (Russia: Bryansk Oblast); Guichard, 1978:271 (Greece); Kazenas, 1978b:157, 158 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:246 (in key to Sphecidae of European part of USSR); Benedek, 1979:233 (Hungary: Bakony Hills); Schwammlberger, 1979:116 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Jacob-Remacle and Leclercq, 1980:193 (Belgium: gardens in Liège); Pagliano, 1980:130 (Italy: Piemonte); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:116 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Petit, 1980:42 (Belgium: Wévercé, Wollersheim); Richards, 1980:70 (in key to Sphecidae of British Isles); Westrich, 1980:632 (Germany: Baden-Württemberg: Tübingen area); Dollfuss and Ressel, 1981:321 (Austria: Niederösterreich: Scheibbs District); Skibińska, 1981:357 (Poland: Warszawa-Białołęka); Donath, 1982:214 (Germany: Cottbus Bezirk); Leclercq, 1982a:124 (Belgium: Liège); Skibińska, 1982:122 (Poland: Warszawa area); Dollfuss, 1983b:5 (in catalog of Sphecidae of Austria); Lefeber, 1983a:84 (Netherlands: Waddendistrict: Texel and Vlieland islands); Gayubo, 1984a:167 (Spain: Salamanca Province); Lefeber, 1984:29 (Netherlands: Maastricht); Mingo and Gayubo, 1984:106 (Spain); Schmidt, 1984:245 (Germany: Baden-Württemberg); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Józán, 1985b:55 (Hungary south of Lake Balaton), 77 (floral records), 83 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Brechtel, 1986:65 (Germany: Südpfalz); Gayubo, 1986c:31 (Spain: Zamora Province); Gayubo and Tormos, 1986a:10 (Spain: Castellón de la Plana); Józán, 1986:368 (Hungary: Kiskunság National Park); Nemkov, 1986:94 (Russia: Siberia: Irkutsk Oblast); Skibińska, 1986b:150, 153 (Poland: suburbs of Warszawa), 162 (urban parks), 164 (streetside green), 173 (various green urban habitats); Schmidt and Westrich, 1987:369 (Germany: Mainz area); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:10, 22 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:688 (Germany: Baden-Württemberg: Kaiserstuhl); Wolf, 1988b:142 (Germany: Rheinland-Westfalen); Józán, 1989:100 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivý, 1989a:169 (in checklist of Czechoslovakian Sphecidae); Skibińska, 1989a:204 (Poland: Warszawa area); Weiffenbach, 1989:106 (Germany: Hessen: Gießen area); Archer, 1990c:17 (Great Britain: Leicestershire); Jacobs and Oehlke, 1990:143 (new records from Democratic Germany); Kowalczyk, 1990:290 (Poland: Góry Świętokrzyskie); Kuznetzova, 1990:22 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:79 (Czech Republic: Praha area); Pagliano, 1990:113 (in catalogue of Italian Sphecidae); Schwammlberger and Priesner, 1990:535 (Austria: Kärnten); Gayubo, Borsato, and Osella, 1991:398 (Italy: Piemonte, Emilia); Dollfuss, 1991:54 (in key to Sphecidae of North and Central Europe); Jakubzik, 1991:74 (Germany: Köln); Józán, 1991:602 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:99, 101 (Poland: Łódź); Sorg and Wolf, 1991:195 (Germany: Koppelstein Reserve SE Koblenz); Budrys, 1992:24 (in list of Sphecidae of Lithuania); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Józán, 1992b:172 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:87

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Baker, 1998:172 (type origin and depository); F. Burger, Saure, and Oehlke, 1998:27 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:510 (Austria: summary of collecting records from Burgenland); Elligsen, 1998:70 (Ukraine: Sambir area); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:48 (Ukraine: Kiev and surroundings, as *lupersus*), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchina, as *lupersus*); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); N. Schneider and Wahis, 1998:20 (Luxemburg: sandstone quarries); Shkuratov, 1998:97 (Russia: Rostov Oblast'); K. Weber, 1998:138 (Germany: Bayern: Bamberg area); Cölln and Jakubzik, 1999:28 (Germany: Rheinland-Pfalz: Keuper-Scharren southwest of Hungerburg); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); Kuhlmann, Wolf, and Woydak, 1999:569 (Germany: strongly endangered in Nordrhein-Westfalen); Ljubomirov, 1999b:46 (Bulgaria: Mount Vitosha near Sofia); Mandery, 1999:105 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:224 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:108 (in catalog of Belgian aculeates); M. 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Schneider, 2006:142 (Luxemburg: anthropogenic habitats); Vepřek, 2006:509 (Czech Republic: Kokořínsko area); Beavis, 2007:96 (Great Britain: Tunbridge Wells and Central High Weald); Cungs, Jakubzik, and Cölln, 2007:139 (Luxemburg: Haardt Nature Reserve); Dorow, 2007:263 (Germany: Hessen: Schönbuche Forest Reserve); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:168 (Czech Republic: Vyšenské Kopce National Nature Reserve); Herrmann, 2007b:94 (Germany: Baden-Württemberg: Fürstenberg in Konstanz); Jacobs, 2007:61, 62 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:23 (Germany: northwestern Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Kazenas, 2007a:90 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Vago, 2007:174 (France: département du Nord); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Gayubo, González, Tormos, and Asís,

2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:111 (Kazakhstan: foothills of Zailiskiy Alatau: found on loess cliffs); Ljubomirov and Yildirim, 2008:173 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:18 (in catalog of Crabronidae of Asiatic Russia); Theunert, 2008:30 (Germany: map of distribution in Niedersachsen and Bremen); Archer, 2009a:24 (Great Britain: Yorkshire: Sheffield); Baños-Picón, Asís, Gayubo, and Tormos, 2009:313 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d’Eyne); Debuyser and Vago, 2009:3 (in list of Sphecidae *sensu lato* of northern France); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Livory, Chevin, Lair, Sagot, and Baldock, 2009:13 (France: Département de la Manche); Mokrousov, 2009:290 (Russia: Republic Mari El); Nemkov, 2009b:63 (in newnorthern catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:187 (Italy: Liguria: Ortovero); Shorenko, 2009:368 (in list of Sphecidae *sensu lato* of Crimea); Ermilov and Mokrousov: 2010:91 (phoretic mite *Schwiebea nova* in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:63 (Russia: Kirov, Kostroma, and Nizhniy Novgorod Oblast’s, Chuvash Republic, Mariy El Republic, Tatarstan: no specific localities); Rudoiskatel’, 2010:154 (Russia: southern Ural Mountains); Schmid-Egger, 2010a:15 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:134 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Konovalov, 2010:24 (Ukraine); van der Smissen, 2010a:338 (Germany: Schleswig-Holstein: locality records); Treiber, 2010:135 (France: départements du Bas-Rhin and du Haut-Rhin); van der Smissen, 2010b:384 (France: Ardèche and Vaucluse: locality records); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Archer, 2011d:187 (Great Britain: Watsonian Yorkshire: Hatfield Moor); Baghirov, 2011b:151 (Russia: Altayskiy Kray: Savvushka; Altay Republic: Kosh-Agach); Falk, 2011:64 (Great Britain: Sussex: South Downs); Gogala, 2011:10 (Slovenia); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:68 (Russia: Chuvash Republic); Protsenko and Drozdovskaya, 2011:90 (Ukraine: Mikolaiv Oblast’: Bugskiy Guard National Park); Saure, 2011c:198 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:199 (Germany: Sachsen-Anhalt: conservation area “Heide südlich Burg”); Schmid-Egger, 2011a:37 (France: Parc National du Mercantour, and Italy: Parco delle Alpi Marittime); Schwarz, Link, Pöll, Ambach, and Rabitsch, 2011:255 (Austria: Oberösterreich: Welser Heide); Theunert, 2011a:19 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:127 (Germany: Hessen: not endangered); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Hellrigl, 2012:129 (Italy: Provincia Autonoma di Bolzano-Alto Adige, as Südtirol); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Larivière, Chapelin-Viscardi, and Maillat-Mezeray, 2012:296 (France: Essonne: Maisse); Prisniy, 2012:47 (Russia: Belgorod Oblast’); Shlyakhtenok, 2012a:171 (Russia: Kirov Oblast’: Arkhangelskoye: collected in private plots); Akulov and Proshchalykin, 2013:112 (Russia: Siberia: Krasnoyarsk Kray: Krasnoyarsk); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Mokrousov, Ruchin, and Egorov, 2013:203 (Russia: Mordovian Republic: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast’); A. Scholz and Liebig, 2013:18 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Vieira, Oliveira, Brewster, and Gayubo, 2013:19 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Bitsch, 2014:407 (records from France by Schmid-Egger, 2011a and van der Smissen noted; new record: France: Isère: Prapoutel near Grenoble); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); U. Frommer, 2014:27 (Germany: Hessen: Lorch); U. Frommer, M. Niehuis, and O. Niehuis, 2014:1322 (Germany, Hessen: Roßstein); Kazenas, 2014a:133 (Kazakhstan: Karatau Mountain Range); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Yildirim, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:142 (in checklist of Hymenoptera of Turkey); Saure, 2015:13 (Germany: Berlin-Lichterfelde); Shorenko, 2015:331 (in list of Sphecidae *sensu lato* of Crimea); Simon, Lorthiois, and Macé, 2015:53 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Cölln and Jakubzik, 2016:17 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad,

2016:36 (in checklist of Aculeata of Great Britain and Ireland: England, Wales); Le Divelec, Chapelin-Viscardi, and Larivière, 2016:109 (northern France: in agricultural landscapes); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:166 (in key to Central and Eastern European *Diodontus*); Saure, 2016b:49 (Germany: Sachsen-Anhalt: fruit orchards); Stolle and Saure, 2016:922 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Vas, Szöllösi-Tóth, and Muskovits, 2016:154 (Romania: Sălaj County); Wiśniowski, 2016:128 (Poland: Ojców National Park); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:30 (Turkey: Erzurum Province); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Magdalou, 2017:14 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Mas Larrieu, Julols, Vallée d'Eyne); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Shorenko, 2017:78 (in Crimea collected in May and July); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Jacobs and Liebig, 2018:139 (Russia: Irkutsk Oblast: Bol'shoye Goloustnoye); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:22 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:10 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:96 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019:13237 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:110 (western Czech Republic); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:82 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:88 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:83 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Saure and Marten, 2021:135 (Germany: Sachsen-Anhalt: Nationalpark Herz); Can, 2022:222 (incomplete 1r-m crossvein); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:59 (in revision of Sphecidae *sensu lato* of Europe); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus rosellae* Haitlinger (Trombidiformes: Erythraeidae)); Kaplan and Yildirim, 2023:1689 (in checklist of Sphecidae *sensu lato* of Turkey); Frommer and Klenke, 2025:163 (Germany: Hessen: Lahntal near Weilburg). – **As *Xylocelia lupera***: Hellén, 1955a:123 (new generic assignment, not occurring in Finland, specimen recorded by Pulkkinen, 1931:98 is actually *Diodontus dahlbomi*); Wolf, 1959b:26 (new generic assignment, Germany: Nassau); Babiy, 1964:115 (Austria: Land Salzburg); B. Klug, 1965:134 (Germany: Baden-Württemberg: Freiburg im Breisgau area).

41. *major* Kohl

Diodontus major Kohl, 1901a:125, ♀. Syntypes: ♀, Austria: Niederösterreich: Bisamberg and Dornbach near Vienna (NHMW). – Kohl, 1901a:129, 132 (in key to Palearctic *Diodontus*, male tentatively); Schmiedeknecht, 1907:211 (in key to Hymenoptera of Central Europe); Alfken, 1914:275 (northwest Germany, record not confirmed by subsequent authors); Maidl, 1922:65 (Croatia: Salona); Noskiewicz, 1930:93 (Poland: Podole Region: Sinków, now Ukraine: Sinkiv); Schmiedeknecht, 1930:673, 674 (in keys to Hymenoptera of North and Central Europe); Zavadil, Šusterka, and Baťa, 1937:182 (in catalog of Sphecidae of Czechoslovakia); Kuntze and Noskiewicz, 1938:377 (in Poland known only from Podole region, now Ukraine); Šnoflák *in* Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia); Zavadil, 1951:86 (Slovakia: Štúrovo); Balthasar, 1954d:181 (Slovakia, as *maior*); Bajári, 1957a:85, 86 (in key to Hungarian Sphecidae), 1957b:139 (first record from Hungary); Pulawski, 1958a:187 (Bulgaria: Aitos); Noskiewicz and Pulawski, 1960:60, 61 (in key to Polish Sphecidae, not yet found in Poland); Balthasar, 1972:200 (in Sphecid Fauna of Czechoslovakia); Tsuneki, 1972a:191 (Mongolia; determination tentative), 210 (in key to *Diodontus* of Central Asia); Leclercq, 1974b:202 (in key to *Diodontus* of western Europe), 205 (Austria: Burgenland: Neusiedl); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kolesnikov, 1977:319 (Russia: Bryansk Oblast); Pulawski, 1978:245, 246 (in key to Sphecidae of European part of USSR); Benedek, 1979:233 (Hungary: Bakony Hills: Révfülpö); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 77 (endangered in Burgenland, Austria), 1983b:5 (in catalog of Sphecidae of Austria); Józán, 1985b:56 (Hungary south of Lake Balaton), 77 (floral records), 83 (ecological and zoogeographic characteristics), 1986:368 (Hungary: Kiskunság National Park); Dollfuss, 1987:19 (Austria), 1988:22 (Austria: Niederösterreich: Oberweiden); Józán, 1989:100 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivý, 1989a:169 (in checklist of Czechoslovakian

Sphecidae); Karsai, 1988:99 (Hungary: Kiskunság National Park); Dollfuss, 1989:9 (type material in NHMW); Day, 1991:xiv (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:54 (in key to Sphecidae of North and Central Europe); Gorobchishin, 1993:46 (Ukraine: Kanev Nature Reserve); Budrys, 1996:40-43 (morphometry); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Dollfuss, Gusenleitner, and Bregant, 1998:510 (Austria: summary of collecting records from Burgenland); Gorobchishin, 1998a:48 (Ukraine: Kiev and surroundings); Józán, 2000:105 (Hungary: Bakony Mountains: Balatonszőlős); Shkuratov, 2000:59 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Dollfuss and Bitsch *in* Bitsch et al., 2001:61 (in Sphecid Fauna of Western Europe); Józán, 2002:53 (Hungary: Mecsek Mountains), 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Shkuratov, 2004a:79 (Russia: Rostov Oblast': village Nedvigovka, Rostov-on-Don); Straka, 2005a:397 (critically endangered in Czech Republic); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Moravia and Slovakia only); Shorenko and Konovalov, 2010:24 (Ukraine: Khar'kov Oblast': villages Borki, Oktyabrskoye, and Zmiyev; Zaporozhskaya Oblast': village Kamenka-Dneprovskaya); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Ljubomirov, Wiśniowski, and Krzyżyński, 2016:166 (in key to Central and Eastern European *Diodontus*); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Can and Gülmez, 2018a:126 (first record from Turkey: Sivas: Şenbağlar village at 40°03'34"N 38°23'48"E); Budrys, Budrienė, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group); Kaplan and Yildirim, 2021:82 (in catalog of Crabronidae of Turkey); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:59 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1689 (in checklist of Sphecidae *sensu lato* of Turkey).

42. *medius* Dahlbom

As *Diodontus tristis* Dahlbom, 1842a:12, corrected to *Diodontus dahlbomi* by A. Morawitz, 1864:...

Diodontus medius Dahlbom, 1844:250, ♂, ♀. Syntypes: Sweden: Ostrogothia: no specific locality (Lund). – Dahlbom, 1845:506 (in key to European *Diodontus*); Wissmann, 1849:14 (Germany: Kingdom of Hannover: Münden); Kirschbaum, 1853:47 (Germany: Herzogtum Nassau: Wiesbaden); Taschenberg, 1858:95 (Germany); Schenck, 1860:147 (Germany: Nassau Region, determination tentative), 1861:159 (redescription, Germany: Münden); Siła-Nowicki, 1864:54 (Ukraine: L'viv, Drancza hill near Brody), 1865:54 (western Ukraine: Galicia region: no specific locality); Taschenberg, 1866:187 (in revision of Hymenoptera of Germany); Kirchner, 1867:222 (in catalog of European Hymenoptera); Schenck, 1867a:350 (known from Germany); Wierzejski, 1868:117 (Ukraine: L'viv and Podole Region: Drańcza), 1874:260 (Ukraine: L'viv, and Podole Region); Friese, 1883:201 (Germany: Sachsen-Anhalt: Weissenfels); Ed. André, 1888:220 (in revision of Sphecidae of Europe and Algeria), 20* (bibliographic references); Kohl, 1890a:59 (probably a synonym of *Diodontus dahlbomi*); Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Antiga and Bofill, 1904:8 (Spain: Cataluña Province); Aurivillius, 1904:261 (in revision of Swedish Sphecidae); Adlerz, 1906:34 (Sweden; nesting habits); de Gaulle, 1908:103 (in catalog of French Hymenoptera); Coulon, 1925:114 (France: Evreux); Bondroit, 1933:31 (Belgium: Bruxelles, Uccle), 1934:61 (Belgium: Solbosch); Jansson, 1934:289 (Sweden); Crèvecoeur and Maréchal, 1936:251 (in catalog of Belgian Hymenoptera); van Lith, 1944:29 (Netherlands: Epen); Ceballos, 1956:356 (in catalog of Hymenoptera of Spain); Benno, 1958b:12 (in review of Dutch Sphecidae); Leclercq, 1961f:157 (Belgium: entering room through open window after temperature raised to 31°C); Valkeila, 1962b:67 (southwestern Finland); Valkeila, Brander, and Käpylä, 1963:41 (Finland: historical region Lounais-Hämeen = southwest Häme), 1964:75 (Finland: southern Finland: Näyte, Tammela); Lomholdt, 1971:122 (first record from Denmark: Lisbjerg forest near Århus); Leclercq, 1974b:204 (in key to *Diodontus* of western Europe), 205 (does not occur in Belgium and Netherlands); Lomholdt, 1975c:112 (in Sphecid Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Pulawski, 1978:246 (in key to Sphecidae of European part of USSR); Axelsson, 1982:79 (Sweden); Dollfuss, 1983b:5 (questionable record from Austria cited); Mingo and Gayubo, 1984:107 (Spain); Nilsson, 1984:104 (Sweden: Västmanland Province); Nemkov, 1986:94 (Russia: Irkutsk Oblast': Angarsk); Vickberg, 1986b:75 (Finland); Nilsson, 1989:47 (Sweden); Jacobs and Oehlke, 1990:143 (status of *Diodontus medius* and *dahlbomi*); Nemkov, 1990c:79 (Russia: Kamchatka: Kozyrevsk); Dollfuss,

1991:54 (in key to Sphecidae of North and Central Europe); Budrys, 1992:24 (in list of Sphecidae of Lithuania); Nilsson, 1992:54 (Sweden); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:42 (Estonia); Theunert, 1994c:38 (summary of records from Niedersachsen and Bremen, Germany); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:396, 398 (in key to Sphecidae of Russian Far East); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Budrys, 1996:40-43 (morphometry); Schmidt and Schmid-Egger, 1997:12 (not occurring in Germany); Blösch, 2000:164 (in Sphecid Fauna of Germany); Dollfuss and Bitsch *in* Bitsch et al., 2001:62 (in Sphecid Fauna of Western Europe); Ohl et al., 2001:142 (recorded from Germany but not occurring there); Mokrousov, 2002:147 (Russia: Nizhniy Novgorod Oblast': Kerzhenskiy Nature Reserve); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Bergsten, Nilsson, and Hellquist, 2004:7 (Sweden: Västerbotten: Nordmaling); Liška, 2004:89 (first record from Slovakia: Vah River valley near Trenčín, as *medium*); Burger, 2005:36 (Germany: not occurring in Thüringen); Hallin, 2005:16 (Sweden: Örebro County: Hällefors); Nemkov, 2005a:145 (Russia: Island of Sakhalin); Riemann and Hohmann, 2005:554 (Germany: Niedersachsen: latest record is Alfken, 1915); Liška, 2006:88 (first record from Slovakia: Váh river valley near Trenčín); Shlyakhtenok, 2006:110 (Belorussia: Polesye Radiological Nature Reserve); Hallin, 2007b:24 (Sweden: Blekinge County); Jacobs, 2007:61, 63 (in key to Crabronidae of Germany); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia), 213 (record from Slovakia by Liš); Ljubomirov and Yildirim, 2008:174 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:18 and 2009b:63 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Humala and Polevoi, 2009:63 (Russia: Republic of Karelia east of Lake Onega); Nemkov, 2009c:235 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); Baghirov, 2010:679 (Russia: Altai Territories: village Kosh-Agach); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); Mokrousov, 2010a:63 (Russia: Kirov and Nizhniy Novgorod Oblast's: no specific localities); Rudoiskatel', 2010:154 (Russia: central and southern Ural Mountains); Baghirov, 2011b:151 (Russia: Altay Republic: Kosh-Agach); Rudoiskatel', 2011d:242 (Russia: central Ural Mountains); Franzén, Molander, Norén, and Nilsson, 2012:26 (Sweden: Skåne: Kullaberg Peninsula); Nemkov, 2012c:436 (in catalog of Crabronidae of Russian Far East); Danilov and Odintseva, 2013:332 (Russia: Western Siberia: 65 km NNE Tobol'sk at 58°45'N 68°74'E); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Shlyakhtenok, 2013:145 (in annotated catalog of aculeate wasps of Belorussia); Hellqvist, Abenius, and Norén, 2014:93 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Yıldırım, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:142 (in checklist of Hymenoptera of Turkey); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:165 (first record from Poland: Pomeranian Lakeland: Garcz at 54°20'48"N 18°6'12"E), 166 (in key to Central and Eastern European *Diodontus*); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Jacobs and Liebig, 2018:139 (Russia: Buryat Republic: East Sayan: 30 km northwest of Mondy; Irkutsk Oblast': Bol'shoje Goloustnoye); Olszewski and Kowalczyk, 2019:96 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019:13238 (Russia: Mordovia State Nature Reserve); Akulov, Proshchalykin, and Mokrousov, 2020:47 (Russia: central Krasnoyarsk Krai); Kaplan and Yildirim, 2021:82 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:88 (in commented list of Sphecidae *sensu lato* of Poland); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:60 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1689 (in checklist of Sphecidae *sensu lato* of Turkey). – **As *Xylocelia media***: Wolf, 1959b:26 (new generic assignment, known from Germany, but not from Nassau).

Diodontus dahlbomi A. Morawitz, 1864:461, ♀, ♂ (as *Dahlbomi*, incorrect original capitalization). Synonymized with *Diodontus medius* by Thomson, 1870:236. – Kirchner, 1867:222 (in catalog of European Hymenoptera); Thomson, 1874:194 (in revision of Hymenoptera of Scandinavia); Siebke, 1880:63 (Norway); Schøyen, 1881:11 (correction to Siebke, 1880); Kohl, 1883e:660 (Switzerland); Sickmann, 1885:179 (Germany: Niedersachsen: Wellingholthausen); Wüstnei, 1886:38 (Germany: Schleswig-Holstein: Sonderburg); Kohl, 1890a:57 (diagnostic characters); F. Morawitz, 1893a:110 (Russia: Karelian Isthmus); Dalla Torre, 1897:364 (in catalog of world Hymenoptera); Strand, 1898b:93 (Norway); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 130, 133 (in key to Palearctic *Diodontus*); Adlerz, 1904:133 (nesting habits); Schmiedeknecht, 1907:211, 212 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:103 (in catalog of

French Hymenoptera); Alfken, 1914:278 (NW Germany); Birula, 1914:384 (Belorussia: Vitebsk); A. Wagner, 1920:41 (Germany: Lower Elbe region, not found but can be expected); Dubois, 1922:197 (in key to Belgian Sphecidae); Fahringer, 1922:175 (Turkey); Bouwman, 1928b:210, 211 (in key to Sphecidae of Netherlands, not yet found in Netherlands); Schmiedeknecht, 1930:674 (in keys to Hymenoptera of North and Central Europe); Pulkkinen, 1931:98 (in revision of Sphecidae of Finland); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); A. Wagner, 1938a:120 (northwestern Germany); J. Perkins, 1942:198 (Sweden: Höör); Šnoflák *in* Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Fahlander, 1954:251 (Sweden: Gästrikland Region); Aerts, 1955:61 (Germany: Rheinland); Noskiewicz and Puławski, 1960:60, 61 (in key to Polish Sphecidae, not yet found in Poland); Babiš, 1964:115 (Austria: occurrence in Land Salzburg not confirmed); de Beaumont, 1964c:113 (in Sphecid Fauna of Switzerland, not recorded from Switzerland); Schmidt, 1969:165 (Germany: Rhein-Main area: specimen from Köln is actually *Diodontus luperus*); Oehlke, 1970:749 (not recorded from Democratic Germany); Tumšs, 1970:74 (first record from Latvia); Balthasar, 1972:202 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Leclercq, 1974b:203 (in key to *Diodontus* of western Europe); D. Peters, 1975:118 (Sweden: Lappland: Messaure at 66°41'N 20°20'E); Benedek, 1979:234 (Hungary: Bakony Hills); Dollfuss, 1989:9 (type material in NHMW), 1991:55 (in key to Sphecidae of North and Central Europe); Pankov, 2013:230 (Russia: Ivanovo Oblast').

43. *merisuoi* Kazenas

Diodontus merisuoi Kazenas *in* Budrys and Kazenas, 1992:25, ♀, ♂. Holotype: ♀, Kazakhstan: Chimkent Oblast': 10 km southwest of Chardara (ZIN). Paratype: Mongolia. – Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve); Budrys, 1996:40-43 (morphometry); Esenbekova and Kazenas, 2000:17 (southeast Kazakhstan: no specific locality); Kazenas, 2000e:100 (in Sphecid Fauna of Kazakhstan), 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:47 (geographic distribution, collecting localities in Kazakhstan), 2008a:99 (Southeastern Kazakhstan: 15-16 km east of Ayak-Kalkan in Ili River valley).

44. *metathoracicus* (Mickel)

Xylocelia metathoracica Mickel, 1916b:349, ♀ (as *metathoracicus*, incorrect original termination). Holotype: ♀, USA: Nebraska: Omaha (UNL). – Rohwer, 1917b:175 (Missouri); Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Rau and Rau, 1918:192 (nesting in clay cliff, sun dance, nest structure, prey: *Aphis setariae* (Thomas), now *Hysteroneura setariae*); Strickland, 1947:129 (Canada: Alberta: Drumheller); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey). – **As *Diodontus metathoracicus***: E. Nielsen, 1933:319 (new generic assignment, summary of nesting habits); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Steiner, 1986:99 (references to papers on nesting habits); Eighme, 1989:24 (in revision of North American *Diodontus*; South Carolina to Arizona, north to Iowa and Utah); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first record from Canada: Alberta: no specific locality).

Xylocelia antennata Mickel, 1916b:348, ♀ (as *antennatus*, incorrect original termination). Holotype: ♀, USA: Nebraska: Omaha (UNL). Synonymized with *Diodontus metathoracicus* by Eighme, 1989:24. – Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Krombein *in* Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL). – **As *Diodontus antennatus***: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera).

45. *minutus* (Fabricius)

Crabro minutus Fabricius, 1793:302, sex not stated. Lectotype: ♀, Denmark: Hafniae, now København (ZMK), designated by van der Vecht, 1961a:28. – Fabricius, 1796:51 (in Index to his Entomologia Systematica, 1793). – **As *Pemphredon minutus***: Fabricius, 1804:316 (new generic assignment, redescription); Jurine, 1807:214 (listed); Spinola, 1808:175 (Italy: Liguria); Latreille, 1825:48 (in review of *Pemphredon*); Vander Linden, 1829:80 (bibliographic references, redescription,

Belgium: Bruxelles, France: Paris, northern Europe); Shuckard, 1836:56 (may be a parasite); Dahlbom, 1844:241 and 1845:XXV (belongs in *Diodontus*); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk); Lepeletier de Saint Fargeau, 1845:96 (in revision of world Hymenoptera); Yaroshevskiy, 1881:123 (Ukraine: Khar'kiv Oblast': Kupyansk); Acloque, 1897:85 (in Sphecidae Fauna of France and Algeria, as *minutum*). – **As *Cemonus minutus***: Stephens, 1829a:366 (new generic assignment, in catalog of British insects), 1829b:34 (in checklist of British insects); Herrich-Schaeffer, 1840:292 (Germany: Bayern: Regensburg area). – **As *Xylocelia minuta***: Hellén, 1955a:122 (new generic assignment, Finland: Kuujärvi, Parikkala, Ruokolahti); Evans, 1958c:134 (new generic assignment, discussion of Grandi, 1934, description of larva); Wolf, 1959b:26 (Germany: Nassau); Hoop, 1961:65 (Germany: Schleswig-Holstein: Kronshagen); Babiy, 1964:115 (Austria: Land Salzburg); Evans, 1964b:252 (discussion of Janvier, 1962, description of larva); B. Klug, 1965:134 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Hoop, 1970:60 (Germany: Schleswig-Holstein: Kolberger Heide). – **As *Diodontus minutus***: Curtis, 1834:496 (new generic assignment; Great Britain); Shuckard, 1837a:185 (in revision of British Aculeata); Dahlbom, 1842a:12 (in review of Scandinavian aculeates), 1844:252 (in revision of Sphecidae and Pompilidae), 1845:506 (in key to European *Diodontus*); Eversmann, 1849:411 (Russia: Ural Mountains foothills); F. Smith, 1849b:2551 (nesting in bramble twigs, obviously in error, preying on aphids); Wissmann, 1849:14 (Germany: Kingdom of Hannover); Tischbein, 1850:6, 9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); F. Smith, 1851c:33 (Great Britain: no specific locality); Wesmael, 1852:284 (Belgium: Bruxelles); F. Smith, 1853:64 (in checklist of British Hymenoptera); Kirchner, 1854:312 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice, as *minus*); F. Smith, 1856:432 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:137 (in revision of fossorial wasps of Nassau Region, Germany); F. Smith, 1858c:170 (in review of British Aculeata, redescription); Taschenberg, 1858:95 (Germany); Assmuss, 1859:615 (Russia: Moscow Governorate); Schenck, 1860:147 (Germany: Nassau Region), 1861:142 (Germany: Hessen: Weilburg); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region); Brown, 1863:181 (Great Britain: Burton-on-Trent); A. Costa, 1863:66 (Italy: Calabria Ulteriore: no specific locality), 1864c:124 (Italy: Campania: Benevento area); Funk, 1864:156 (Germany: Bayern: Bamberg); A. Morawitz, 1864:461 (Russia: Sankt Petersburg); F. Smith, 1865b:86 (Great Britain: Dorset County: Bournemouth); Taschenberg, 1866:187 (in revision of Hymenoptera of Germany); A. Costa, 1867c:113 (in revision of Italian Sphecidae); Kirchner, 1867:222 (in catalog of European Hymenoptera); Schenck, 1867a:353 (Germany: Nassau Region); Wierzejski, 1868:117 (Poland: Kraków area; Ukraine: Podole Region); von Aichinger, 1870:316 (Austria: Tirol); Thomson, 1870:236 (in revision of Swedish wasps); A. Costa, 1871b:42 (in revision of Italian Sphecidae); F. Smith, 1871b:17 (in catalog of British Aculeata); P. Ivanov, 1872:152 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:145 (in catalog of Hymenoptera of France); Thomson, 1874:196 (in revision of Hymenoptera of Scandinavia); Wierzejski, 1874:260 (Poland: Kraków, Wadowice; Ukraine: L'viv, Podole Region); Marquet, 1875:206 (France: Montpellier, Toulouse); Taschenberg, 1875:388 (Germany: Halle); Radoszkowski, 1877:66 (Uzbekistan: Zeravshan River valley; Kazakhstan: Bairakum; Kyrgyzstan: Shahimardan); Daly, 1878:46 (Great Britain: Dorset: Glanville's Wootton); Roebuck, 1878:48 (Great Britain: recorded from Yorkshire county: Wakefield, by F. Smith, 1858); Girard, 1879:942 (morphology and habits); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:138 (Austria: Tirol, and Italy: Trentino–Alto Adige); E. Saunders, 1880:255 (in revision of British Aculeata); Marquet, 1881:183 (southern France); A. Costa, 1883:58 (Italy: Sardegna: Oristano); Kohl, 1883e:660 (Switzerland); Sickmann, 1883:79 (Germany: Niedersachsen: Wellingholthausen), 1886:280 (Germany: Friesian Islands: Spiekeroog Island); Wüstnei, 1886:38 (Germany: Schleswig-Holstein: Husum); Ed. André, 1888:217 (in revision of Sphecidae of Europe and Algeria), 19* (bibliographic references); Brischke, 1888b:99 (Germany: Preussen Province, now Poland: Pomorze Region); Kohl, 1890a:59 (in review of *Diodontus*); Assmuss, 1892:53 (Russia: earlier record from Moscow Governorate repeated); V. Perkins, 1892:202 (Great Britain: Gloucestershire: Wotton-under-Edge); Radoszkowski, 1892:588 (male genitalia); Alfken, 1893:120 (Germany: Friesian Islands: Juist Island); Kohl, 1893a:36 (Austria: Niederösterreich); F. Morawitz, 1893a:110 (Russia: Karelian Isthmus), 1893b:425 (Tajikistan: Iskander-kul in Zeravshan River valley); Sickmann, 1893:78 (Germany: Niedersachsen: Iburg); Westerlund, 1893:25 (Russia: Karelian Republic: northern shore of Lake Ladoga); Krieger, 1894:14 (Germany: Kingdom of Saxony); Schletterer, 1894:31 (Istria

Peninsula, now part of Croatia, Slovenia, and Italy); Sickmann, 1894:216 (China: Hopei Province: Tientsin); Meunier, 1896:271 (Belgium: Bruxelles area); E. Saunders, 1896:95 (in revision of British Aculeata); Borries, 1897:97 (nesting habits); Dalla Torre, 1897:365 (in catalog of world Hymenoptera); Mocsáry, 1897:79 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); O. Schneider, 1898:102 (Germany: Borkum Island); R. Bradley, 1900:13 (Great Britain: Birmingham); Sladen, 1900:265 (Great Britain: Kent: Saint Margaret's Bay); Dominique, 1901a:505 (France: Loire-Inférieure, now Loire-Atlantique: Le Pouliguen, Sainte-Marie-de-Pornic); Gardner, 1901:377 (Great Britain: Cheshire: Bowden); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 129, 132 (in key to Palearctic *Diodontus*); Nevinson, 1901:72 (Great Britain: Wales: Criccieth); J. Nielsen, 1901a:275 (nesting habits); Chyzer, 1902:34 (Hungary); E. Saunders, 1902b:143 (British Channel Islands: Jersey, Guernsey, and Alderney islands); de Cobelli, 1903:108 (Italy: Province of Trentino); Antiga and Bofill, 1904:7 (Spain: Cataluña Province); Aurivillius, 1904:261 (in revision of Swedish Sphecidae); Jourdain 1904:221 (Great Britain: Derbyshire: Burton, Little Eaton); E. Saunders, 1904c:606 (Spain: Mayorca); W. Schulz, 1904b:92 (Germany: Borkum Island); Ferton, 1905:73 (nesting habits); Kubes, 1905:83 (Czech Republic: Kolín); Luff, 1905b:390 (British Channel Islands: Island of Jethou); von Heyden, 1905:82 (Germany: Hessen: Lorsch); Mantero, 1905:67 (Italy: Toscana: Isola del Giglio); Móczár and Henter, 1907:205 (Romania: Caraş-Severin: Mehadia); Schmiedeknecht, 1907:211 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:103 (in catalog of French Hymenoptera); Morley, 1909:304 (Great Britain: Isle of Wight); Dittrich, 1911b:22 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:49 (Italy: Trieste area); Adlerz, 1912:57 (nesting habits); Schirmer, 1912:166 (Germany: Berlin area); Birula, 1913:539 (Ukraine: Zhytomyr Oblast': Radomyshl'); Hallett, 1913:99 (Great Britain: Glamorgan: Porthcawl); Lundblad, 1913:212 (Sweden); Smits van Burgst, 1913a:319 and 1913b:5 (Tunisia: no specific locality); Alfken, 1914:278 (NW Germany); Birula, 1914:384 (Belorussia: Ambrosovich near Vittebsk); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); O. Meyer, 1919:152 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:41 (Germany: Lower Elbe region); Dubois, 1922:197, 198 (in key to Belgian Sphecidae); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Jansson, 1922:23 (Sweden: Island of Öland); Maidl, 1922:65 (Croatia: Ragusa, now Dubrovnik); Alfken, 1924:425 (Germany: Memmert Island); Leininger, 1924:121 (Germany: Baden-Württemberg: Friedrichstal at Tuniberg, Karlsruhe); Maidl, 1924:246 (Sudan: Sennar, probably a misdetermination); R. Perkins, 1924:222 (Great Britain: Devon); Berland, 1925d:142 (in Sphecid Fauna of France); Bischoff, 1925:299 (Latvia: Poland: Grajewo area); Coulon, 1925:114 (France); R. Perkins, 1925:150 (Great Britain: Gloucestershire); Schütze, 1925:112 (Germany: Lausitz Region); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Kaiserstuhl, Sipplingen); Friese, 1926:152 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Hémon, 1926:199 (France: Finistère: Fouesnant); Benoist, 1928:410 (France: Basses-Alpes, Hautes-Alpes); Bouwman, 1928b:211 (in revision of Sphecidae of Netherlands); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); van der Vecht, 1928:93 (Netherlands: Meijndel sand dunes); Schmiedeknecht, 1930:673, 674 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:8 (Spain); Pulkkinen, 1931:97 (in revision of Sphecidae of Finland); Bondroit, 1932:36 (Belgium: abundant in Bruxelles area); Giordani Soika, 1932a:22 (Italy: Lido di Venezia); Guiglia, 1932c:4 (Italy: Valle d'Aosta: Parco Nazionale del Gran Paradiso); Chambers, 1933:188 (Great Britain: Bedfordshire); Gussakovskij, 1933b:276 (Iran); Masi, 1933:196 (Italy: Toscana: Isola di Capraia); E. Nielsen, 1933:319 (summary of nesting habits); Spooner, 1933:203 (Great Britain: Bedfordshire: Sandy); Balles, 1934:19 (Germany: Baden-Württemberg: Fautenbach, Oberachern); Bondroit, 1934:61 (Belgium: Ostende); Giner Marí, 1934:135 (Spain); Grandi, 1934:48 (nesting habits), 50 (description of mature larva), 128 (Italy: Toscana: San Vincenzo); Jansson, 1934:289 (Sweden); Spooner, 1934b:278 (Great Britain: Devon: Braunton Burrows); Bernard, 1935:66 (France: Var: Fréjus area); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Grandi, 1935a:110 (Italy); Gussakovskij, 1935:417 (Tajikistan: Stalinabad, now Dushanbe); Minkiewicz, 1935:196, 209 (Poland: Kazimierz on Wisła at 51°20'N 21°58'E), 215, 219, 221 (Poland: Lake Garbaś 20 km west of Suwałki); Vergne, 1935:119 (France: Auvergne: common); Crèvecoeur and Maréchal, 1936:251 (in catalog of Belgian Hymenoptera); Drogoszewski, 1936:129 (Poland: Opatów); Richards, 1936a:170 (the type corresponds to current interpretation of species); Roller, 1936:315 (Austria: loess cliffs at Bisamberg near Vienna); Goebel, 1937:41 (Poland: Poznań District: Poznań-Dębina, Strzeszyn); Richards, 1937b:105 (in checklist of British

aculeates); Zavadil, Šusterka, and Bat'a, 1937:182 (in catalog of Sphecidae of Czechoslovakia); Hallett, 1938:71 (Great Britain: Herefordshire: Mathon); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Molitor, 1938:451 (color recognition); A. Wagner, 1938a:120 (northwestern Germany); Aerts, 1939:134 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Móczár, 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); de Graham, 1941:99 (Great Britain: Lincolnshire); Kloet, 1941:235 (Great Britain: Wales: Wilmslow); Paul, 1941:42 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1037 (Germany: Bayern: Bamberg area); Balthasar, 1942:4 (Czech Republic: Moravia); Boyd, 1943:163 (Great Britain: eastern Dorset); Giner Marí, 1943a:36 (in Sphecid Fauna of Spain); Guiglia, 1943d:93 (Albania: Scutari); Móczár, 1943a:59 (Hungary: Kolozsvár, Szeged); Spooner, 1943:72 (Great Britain: Bournemouth, Bristol, Sandown, Swanage); Guiglia, 1944a:149 (Cyprus: Cherkos), 1944b:32 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); T. Fletcher, 1945:53 (Great Britain: Gloucestershire: Redland, Wotton); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); de Beaumont, 1947b:397 (Cyprus); Móczár, 1947a:60 (Hungary: Bars comitatus: Lekér, now in Slovakia: historical region Tekov), 1947b:90 (Hungary: Siebenbürgen: Székelykeresztúr, now Romania: Transylvania: Cristuru Secuiese); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Guichard and Yarrow, 1948:90 (Great Britain: London: Hampstead Heath); Guiglia, 1948c:202 (Italy: Sardegna: Cagliari); Šnoflák in Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:100 (Spain); Chambers, 1949:225 (Great Britain: Bedfordshire); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Cavro, 1950:33 (France: Département du Nord); Georgel, 1950:64 (France: Seine-et-Oise: Sucy-en-Brie); Pittioni, 1950:27 (Cyprus); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km south of Poznań); Caruel, 1951:100 (France: Marne Department); de Beaumont, 1951h:34 (Switzerland: Neuchâtel area); Móczár, 1953:310 (Hungary); Nouvel and Ribaut, 1953:180 (France: Central Pyrénées: common in Garonne River valley); Bischoff and Stadler, 1954:126 (Germany: Bayern: Romberg); de Beaumont, 1954e:94 (Italy); Grandi, 1954:242 (Italy); Tjeder, 1954:68 (Sweden: eastern Skåne: Löderup, Mälarhusen); Valkeila, 1954:87 (Finland: Lappeenranta); Aerts, 1955:61 (Germany: Rheinland); Lehrer, 1955:264 (Romania: Moldova: Dealul Seaca in Iași District); Steiner, 1955:144 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:39 (Yugoslavia); Ceballos, 1956:356 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Bajári, 1957a:85, 86 (in key to Hungarian Sphecidae); Bradley, 1957:48 (Lepeletier's specimens in Turin); Grandi, 1957:390 (Italy: Abruzzi, Sardegna); Yeo, 1957:19 (England: Middlesex, now in London); Zirmgiebl, 1957:180 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:12 (in review of Dutch Sphecidae); Nouvel and Ribaut, 1958:15 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Puławski, 1958a:187 (Bulgaria: Nesebar, Sandanski, Varna); Ceballos, 1959:228 (in supplement to catalog of Spanish Sphecidae); Compte Sart, 1959:129 (Spain: Majorca); de Beaumont, 1959a:33 (Italy); Suárez, 1959:59 (Spain: Almería Province); de Beaumont, 1960a:22 (Greece: Island of Rhodes); Hamann, 1960:198 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:60, 61 (in key to Polish Sphecidae); de Beaumont, 1961b:275 (Afghanistan), 1961c:51 (Greece: Island of Crete), 1961e:5 (Iraq); Grandi, 1961:214 (nesting habits), 510 (description of larva); de Beaumont, 1962b:27 (Spain); Janvier, 1962:494 (nesting habits, description of larva); Valkeila, 1962b:67 (southwestern Finland); Felton, 1963:177 (Great Britain: Kent County); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River); Ceballos, 1964:86 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:112 (in Sphecid Fauna of Switzerland); Richards, 1964:25 (heath-lands in southern England); Valkeila, Brander, and Käpylä, 1964:75 (Finland: southern Finland: Forssa, Näyte); de Beaumont, 1965a:57 (Greece); Fæster, 1965:192 (Denmark: Hansted Nature Reserve); Myartseva, 1965:81 (Turkmenistan: Karabata); Benedek, 1966a:163, 164 (nests occasionally in galls of *Cynips kollari* Htg.); Bonelli, 1966c:219 (Italy: Trentino–Alto Adige: Montagna); Balthasar, Hrubant, and Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nessebar); Benno, 1967:37 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:346 (Turkey); Gauss, 1967:556 (Germany: Baden-Württemberg); J. Heinrich, 1967:78 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:77 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:162 (Romania: Constanța District: Băneasa), 1967b:46 (Romania); Benedek, 1968:74 (Hungary,

floral records); Leclercq, 1968b:39 (Great Britain: Kent); Nagy, 1968:378 (nest parasite in Romania: *Smicromyrme septentrionalis* Hoffer, a mutillid, now *Smicromyrme sicana* (De Stefani Perez, 1887)); Scobiola-Palade, 1968b:143 (Romania: Island of Letea in delta of Danube), 1968c:386 (Romania: Budești, Cernica, Nanov, Tiğănești); Benedek, 1969a:84 (Hungary; marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geofroy)); Dathe, 1969:439 (Germany: Berlin Zoological Garden); de Beaumont, 1969:92 (Turkey); Lefeber, 1969c:234 (Netherlands: Sint Pietersberg = Montagne Saint Pierre); Zangheri, 1969:1705 (Italy); Benedek 1970:100 (Hungary: Tapolca); de Beaumont, 1970a:403 (Afghanistan); Oehlke, 1970:750 (Democratic Germany); Tumšs, 1970:74 (Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Schmidt, 1971b:43 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:200 (in Sphecidae Fauna of Czechoslovakia); Haeseler, 1972:156, 200 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:119 (Kazakhstan); Lomholdt, 1972:122 (Denmark: Island of Læsø); Myartseva, 1972a:82 (Turkmenistan); Oehlke, 1972:139 (Germany: Island of Hiddensee); Tsuneki, 1972a:191 (Mongolia), 208, 210 (in key to *Diodontus* of Central Asia); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:185 (France); de Beaumont, Bytynski-Salz and Pulawski, 1973:21 (Israel); Erlandsson, 1974:80 (Greece, Italy, Malta, Spain); Kämpylä, 1974:64 (Finland; diurnal activity); Kazenas, 1974b:109 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 112 (feeding on flowers of *Atraphaxis spinosa* L., Polygonaceae, in Kazakhstan); Leclercq, 1974b:202 and 203 (in key to *Diodontus* of western Europe), 206 (locality records); Levi, Sysoletina, and Shernin, 1974:269 (Russia: Kirov Oblast': Kirov); Kazenas, 1975b:424 (Kazakhstan), 426, 427 (in key to *Diodontus* of Kazakhstan and Central Asia); Lefeber, 1975b:120 (Netherlands: Schiepersberg); Lomholdt, 1975c:108 (in Sphecidae Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer polders); Georghiou, 1977:190 (Cyprus); Guichard, 1977:252 (Great Britain: Surrey); Kolesnikov, 1977:319 (Russia: Bryansk Oblast'); Guichard, 1978:271 (Greece); Haeseler, 1978b:62 (Germany: Niedersachsen: a bog near Oldenburg), 1978c:194 (Germany: Friesian Islands: Island of Borkum); Kazenas, 1978b:155, 157 (in key to Sphecidae of Kazakhstan and Central Asia); Petit, 1978:86 (Belgium: Vance); Pulawski, 1978:245, 246 (in key to Sphecidae of European part of USSR); Schwammbberger, 1978:418 (Germany: Württemberg); Benedek, 1979:233 (Hungary: Bakony Hills); Haeseler, 1979:10 (Germany: Niedersachsen: 10 km south of Oldenburg); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Richards, 1979:400 (British Channel Islands); Schmidt, 1979a:55 (Germany: Ost-Holstein); Schwammbberger, 1979:116 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection); Dathe, 1980:209 (Russia: northern Caucasus: Teberda); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:116 (Russia: Siberia: Altayskiy Krai: basin of Aley River); Pagliano, 1980:130 (Italy: Piemonte); Richards, 1980:70 (in key to Sphecidae of British Isles); Westrich, 1980:632 (Germany: Baden-Württemberg: Tübingen area); Gayubo, 1981a:145 (N Spain: Sierra de Béjar); Haeseler, 1981:51 (Germany: Friesian Island: Amrum Island); Skibińska, 1981:357 (Poland: Warszawa-Białołęka); Woydak, 1981:37 (Germany: Westfalen: Hamm); Donath, 1982:214 (Democratic Germany: Cottbus Bezirk); Gayubo, 1982f:247 (Spain: Cádiz Province: Algar, Castellar de la Frontera, Guadiaro, San Roque); Haeseler, 1982a:20 (Germany: Niedersachsen: urban habitats in Oldenburg); Leclercq, 1982a:124 (Belgium: Liège); Silvestre de Sacy, 1982:4 (France: Côtes-du-Nord: Paimpol area); Skibińska, 1982:122 (Poland: Warszawa area); Dollfuss, 1983b:5 (in catalog of Sphecidae of Austria); Janzon, 1983:171 (Sweden: Öland); Józán, 1983:100 (Hungary); Lefeber, 1983a:84 (Netherlands: Waddendistrict: West Friesian Islands); Riemann, 1983:81 (Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:121 (Greece); Gayubo, 1984a:168 (Spain: Salamanca Province), 1984c:359 (Portugal: El Algarve Province); Haack, Tschartnke, and Vidal, 1984:127 (Germany: Hamburg area); Jacob-Remacle, 1984:259 (Belgium: urban center of Liège); Lefeber, 1984:29 (Netherlands: Maastricht); Schmidt, 1984:245 (Germany: Baden-Württemberg); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Veenendaal, 1984:18 (Netherlands: Amsterdam); Mingo and Gayubo, 1984:107 (Spain); Gayubo, 1985c:167 (Spain: Cantabria: Santoña); Haeseler, 1985c:571 (Germany: Friesian Is-

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Kollar, 1988:21 (nesting in cliffs); Kowalczyk, 1988a:44 (Poland: Rogów), 1988b:64 (Poland: environs of Łódź); Riemann, 1988:223 (Germany: Bremen area); Wolf, 1988b:142 (Germany: Rheinland-Westfalen); Al-Houty, 1989:160 (Kuwait: Omariyah); Eighme, 1989:21 (in revision of North American *Diodontus*: USA: District of Columbia to New York, west to California and British Columbia; New Hebrides); Archer, 1989a:131, 133 (Great Britain: York: found before and after coniferization); Jacobs, 1989:6 (Germany: Mecklenburg-Vorpommern); Józán, 1989:100 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivý, 1989a:169 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:96 (Belorussia: Berezinskiy Nature Reserve); Scobiola-Palade, 1989:88 (Romania: delta of Danube); Skibińska, 1989a:204 (Poland: Warszawa area); Weiffenbach, 1989:106 (Germany: Hessen: Gießen area); Gayubo, Asís, and Tormos, 1990a:14 (Spain); Jacobs and Oehlke, 1990:144 (new records from Democratic Germany); Kowalczyk, 1990:290 (Poland: Góry Świątokrzyskie); Pádr, 1990:79 (Czech Republic: Praha area); Pagliano, 1990:113 (in catalogue of Italian Sphecidae); Rohe, 1990:1048 (Germany: Rheinland-Pfalz: Lenneberg forest); Schwammberger and Priesner, 1990:535 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Chinin, 1991:111 (Russia: Samara Oblast'); Dollfuss, 1991:54 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:398 (Italy); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Jakubzik, 1991:74 (Germany: Köln); Józán, 1991:602 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:89, 93, 97, 99, 101 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Kuhlmann et al., 1991:89 (Germany: Senne Region); Negrisolo, 1991:317 (Italy: Venezia Province); Schembri, 1991:182 (Malta); H.-J. Schulz, 1991:31 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Crellin, 1992:69 (Great Britain: first record from Isle of Man); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Józán, 1992a:228 (Hungary: Béda-Karapancsa Protected Area), 1992b:172 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); N. Schneider, 1992:178 (Luxembourg); Sorg and Cölln, 1992:132 (Germany: Rheinland-Pfalz: Gönnersdorf); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:42 (Estonia); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Torregrosa, Gayubo, Tormos, and Asís, 1993:11 (Spain: Alicante Province); Blagoveshchenskaya, 1994:88 (Russia: Ul'yanovsk Oblast'); Schmid-Egger, 1994a:688 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Kowalczyk, 1994:73 (Poland: Łagiewniki forest in Łódź); Theunert, 1994c:38 (summary of records from Niedersachsen and Bremen, Germany); Tormos, Asís, and Gayubo, 1994:187, 199 (Spain: Albacete Province); Archer and Burn, 1995:59 (Great Britain: Yorkshire: Crow Wood near Finningley); Budrys *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:399 (in key to Sphecidae of Russian Far East); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo, 1995a:23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:11 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:84 (Italy: Ferrara Province); Scharrer, 1995:23

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Burger, Saure, and Oehlke, 1998:27 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:510 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Elligsen, 1998:70 (Ukraine: Sambir area); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gorobchishin, 1998a:48 (Ukraine: Kiev and surroundings), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchyna); Haeseler and Ritzau, 1998:50 (Germany: Bremen: Harriersand Island in Weser River and Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); N. 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Schwarz, 1999:85 (Austria: Oberösterreich: city of Linz area); Sörensen, Mauss, and Schindler, 1999:503 (Germany: Schleswig-Holstein); Blösch, 2000:164 (in Sphecid Fauna of Germany); Dressler, 2000:31 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: thirteen localities); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:105 (Greece); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Grace, Yates, and Triplet, 2000:20 (Great Britain: East Sussex: Rye Bay area); Jacobs, 2000:7 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:105 (Hungary: Bakony Mountains); Kazenas, 2000e:101 (in Sphecid Fauna of Kazakhstan); Ljubomirov, 2000:8 (Bulgaria, specimens in N. Nedelkov collection); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Pijfers, 2000:4 (Netherlands: Twente Region); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); Vicidomini, 2000b:23 (Italy: previously recorded from Campania); Archer, 2001a:107 (Great Britain: Watsonian Yorkshire); Basset, 2001:80 (France: Département de Gironde); Dollfuss and Bitsch *in* Bitsch et al., 2001:64 (in Sphecid Fauna of Western Europe); Haeseler, 2001:266 (Germany: Niedersachsen: Brookdeich near Oldenburg); Kazenas, 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 124 (nesting habits); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve); Ohl

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Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); van der Meer, 2002:15 (Netherlands: costal dunes at Meijendel); Vischer, 2002:288 (Germany: Sachsen-Anhalt: vineyards in Saale-Unstrut area); Ziska, 2002:8 (Germany: Berlin-Köpenick: Krumme Lake); Archer, 2003a:58 (Great Britain: Watsonian Yorkshire); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); de Bruyn and Sinning, 2003:9 (Germany: Niedersachsen: Wümme-Nordarm northeast of Bremen); Drewes, 2003:136 (Germany, Italy: miscellaneous locality records); Generani, Pagliano, Scaramozzino, and Strumia, 2003:66 (Italy: Arcipelago Toscano); Haeseler, 2003:339 (Germany: Niedersachsen: Harriersand Island near Bremen); Józán, 2003:226 (Hungary: Látányi Puszta Nature Conservation Area); Lukáš, 2003:73 (Slovakia: Bratislava: old fruit orchard); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:65 (Germany in catalog of wasps and bees of Bayern); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Malyi Tataru island in Danube delta at 45.21°N 29.00°E); Reemer, 2003:62 (Netherlands: Gelderland: Zaltbommel area); Schmid-Egger, 2003:752 (Italy: Sicilia: Armerina, Castelammare, Madonie, Ragusa); Tischendorf and Treiber, 2003:120 (Germany: Hessen: 15 km southwest of Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:102 (Germany: Niedersachsen: Emsland area); Archer, 2004a:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004h:44 (Great Britain: Watsonian West Norfolk: Roydon Common); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 40 (first record from Ontario: list of localities); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gorobchishin and Protsenko, 2004:39 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:101 (Kazakhstan: western Tien Shan), 2004d:29 (Kazakhstan: northern Caspian region); Klein and Lefeber *in* Peeters, van Achterberg, et al., 2004:379 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:30 (Slovakia: Sekule), 32 (Slovakia: Malacky-Široké); Liška, 2004:89 (Slovakia: Vah River valley near Trenčín); Nazarova, 2004:105 (Tajikistan: Badakhshan Region: Rushan District: villages Visav and Siponch in Bartang River valley); Shkuratov, 2004a:79 (Russia: Rostov and Volgograd Oblast's), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muзей-Zapovednik M.A. Sholokhova); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); Szczepko and Kowalczyk, 2004:125 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:40 and 58 (in checklist of Polish Sphecidae); Archer, 2005c:56 (Great Britain: Suffolk County); Blösch, 2005:3 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:32 (Germany: Thüringen); Ebrahimi, 2005:132 (in key to selected Iranian Sphecidae); Gayubo and Özbek, 2005:36 (Turkey: Erzincan: Mutiköprüsü; Erzurum: Penkaya); Gülmez and Tüzün, 2005:52 (Turkey: Ankara Province); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Jacob and Remacle, 2005:62 (Belgium: Luxembourg Province: quarry Haut des Loges in Vance); Jacobs, 2005a:444 (Bulgaria); Kofler, 2005:168 (Austria: Tirol: Lienz District: Nörsach in Nikolsdorf Common, Nußdorf-Debant); Kowalczyk and Kurzac, 2005:105 (Poland: Botanical Garden in Łódź); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:173 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisolo, 2005:450 (in Sphecidae Fauna of Italy); Pijfers, 2005:49 (Netherlands: Twente: Noordelijke Manderheide); Riemann and Hohmann, 2005:554 (Germany: Niedersachsen: city of Bremen and

adjacent area); Saure, 2005:15 (Germany: Berlin); Schmalz, 2005:57 (references to XIXth century authors); Shorenko, 2005a:166 (Ukraine: Crimea); Theunert, 2005a:16 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:42 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Ziska and Saure, 2005:81 (Germany: Berlin: Biesenhorster Sand); Archer, 2006a:21 (Great Britain: Lincolnshire: Rauceby Warren National Park); Archer, 2006d:76 (Great Britain: Watsonian Yorkshire: Pollington Quarry); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); Liebig, 2006:38 (Germany: Sachsen: Muskauer Heide); Liška, 2006:88 (Slovakia: Váh river valley near Trenčín); Ljubomirov, 2006:539 (Bulgaria: Rhodope Mountains: Naretchen Village; Greece: record from Rhodope Mountains by Schmidt and Westrich, 1983, reported; as *minutus minutus*); Peeters, Krekels, and Megens, 2006:22 (Netherlands: Reichswald forest near Nijmegen); N. Schneider, 2006:139, 142 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:110 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006c:303 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Vepřek, 2006:509 (Czech Republic: Kokořínsko area); Vershinina, Mokin, Reshchikov, and Rudoiskatel', 2006:111 (Russia: Pskov Oblast': Selezhskiy National Park); Beavis, 2007:96 (Great Britain: Tunbridge Wells and Central High Weald); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:454 (France: first records from the following départements: Calvados: Honfleur; Ille-et-Vilaine: Saint-Lunaire; and Seine-Maritime: Dieppe); Burguet, 2007:unnumbered p. 30 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:168 (Czech Republic: Vyšenské Kopce National Nature Reserve); Guldmond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Hallin, 2007b:24 (Sweden: Blekinge County); Herrmann, 2007a:52 (Germany: Niedersachsen: Ostfriesland); Jacobs, 2007:60, 62 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:23 (Germany: north-western Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Kazenas, 2007a:90 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Roche, 2007a:140 (record from Egypt by Honoré, 1942 is questionable); Saure, 2007:81 (Germany: in checklist of Aculeata of Land Brandenburg); Smit and Megens, 2007:17 (Netherlands: Noort Brabant: vicinity of Leende); Vago, 2007:174 (France: départements d'Aisne, Nord, Pas-de-Calais, and Somme); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:29 (Germany: Niedersachsen: eastern Friesland); Archer, 2008b:145 (Great Britain: South Essex: West Tilbury); Danilov, 2008:350 (Russia: Altayskiy Krai: Barnaul area); Haeseler, 2008:308 (Germany: Friesian Islands); Heneberg, Bogusch, and Řehounek, 2008:unnumbered p. 7 (Czech Republic: sandpits); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: common on loess cliffs); Ljubomirov and Yildirim, 2008:174 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:18 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:126 (Ukraine: Sumy Oblast': Mogritsa village); Theunert, 2008:30 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:314 (Spain: frequency of specimens collected with hand nets and Malaise traps); Debuyser and Vago, 2009:3 (in list of Sphecidae *sensu lato* of northern France); Flügel, 2009b:63 (Germany: Hessen: Borken, in inactive open brown coal mine); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:362 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:263 (Bulgaria: Maleshevska Planina); Hessling, 2009:104 (Germany: Niedersachsen: Hunte River valley south of Oldenburg); Kowalczyk, Kurzac, and Nadolski, 2009:62 (Poland: between Warta and Widawka rivers); Livory, Chevin, Lair, Sagot, and Baldock, 2009:14 (France: Département de la Manche); Mokrousov, 2009:290 (Russia: Republic Mari El); Nemkov, 2009b:63 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ruchin, Antropov, and Shibayev, 2009:169 (Russia: Republic of Mordovia); Shorenko, 2009:368 (in list of Sphecidae *sensu lato* of Crimea); Szczepko and Wiśniowski, 2009:69 (Poland: Spała Landscape Park); Baghirov, 2010:679 (Russia: Altai Territories: villages Kosh-Agach and Ongudai); Burguet *in* Durand and Burguet, 2010:44 (France Département d'Ardèche: Ardèche Gorges); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Falk, 2010:93 (Great Britain: heathland sites in West Midlands region); Hable,

Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); J. Kim and Yang, 2010:148 (in checklist of Korean Pemphredoninae); Mokrousov, 2010a:63 (Russia: Kirov, Kostroma, Nizhniy Novgorod, Vladimir, and Yaroslavl Oblast's, Mariy El Republic, Tatarstan: no specific localities), 2010c:108 (Russia: Chuvash Republic: State Nature Reserve "Prisurskiy"); Rudoiskatel', 2010:154 (Russia: central and southern Ural Mountains); Saure, 2010a:87 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:15 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:134 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Konovalov, 2010:24 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:101 (Western Slovakia: recorded from Borská Nížina); Treiber, 2010:135 (France: département du Bas-Rhin); van der Smissen, 2010a:338 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:384 (France: Ardèche, Gard, and Vaucluse: locality records); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Archer, 2011d:187 (Great Britain: Watsonian Yorkshire: Hatfield Moor); Baghirov, 2011b:151 (Russia: Altay Republic: Kosh-Agach, Onguday); Falk, 2011:64 (Great Britain: Sussex: South Downs); Gogala, 2011:10 (Slovenia); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:78 (Russia: Chuvash Republic); Murai and Amr, 2011:113, 119 (first record from Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E); Rudoiskatel', 2011d:242 (Russia: central Ural Mountains); Saure, 2011a:6 (Germany: Berlin: former airport Tempelhof), 2011c:198 (Germany: Berlin-Spandau: Fort Hahneberg); Saure, Bohrer, Venne, and Diestelhorst, 2011:224 (Germany: Rheinland-Westfalen: Nature Reserves Doberg and Eiberg, nesting in cliffs); Schmid-Egger, 2011a:37 (France: Parc National du Mercantour: Le Pra); Shlyakhtenok, 2011:95 (Belorussia: city of Minsk); Theunert, 2011a:19 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:127 (Germany: Hessen: not endangered); Tripotin, 2011:23 (France: Seine-Maritime: artificial sand site near Sandouville); Ziska and Saure, 2011:108 (Germany: Berlin: Tegeler Fließ valley); Archer, 2012a:130 (Great Britain: Watsonian Yorkshire: Allerthorpe Common), 2012b:183 (Great Britain: urban York); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Cölln, Jakubzik, and Kinkler, 2012:24 (Germany: Nordrhein-Westfalen: Leverkusen); Di Giovanni and Mei, 2012:42 (Italy: Lazio: Roma: San Paolo Fuori le Mura); Franzén, Molander, Norén, and Nilsson, 2012:26 (Sweden: Skåne: Kullaberg Peninsula); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Nemkov, 2012c:436 (in catalog of Crabronidae of Russian Far East); Prisiy, 2012:47 (Russia: Belgorod Oblast'); Saure, 2012b:228 (Germany: Berlin-Spandau: Spandauer Forst); Shlyakhtenok, 2012a:171 (Belorussia: collected in private plots), 2012b:91 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Standfuss and Standfuss, 2012:428 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E: addition to flight period); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Tripotin, 2012:23 (France: Seine-Maritime: estuary of Seine river); Yildirim, 2012:79 (Turkey: Bayburt: Kopdaği: Şehitler Çeşmesi); Akulov and Proshchalykin, 2013:112 (Russia: Siberia: Krasnoyarsk Krai: Krasnoyarsk, near Minusinsk); Danilov and Odintseva, 2013:332 (Russia: Western Siberia: 65 km NNE Tobol'sk at 58°45'N 68°74'E); Flügel, 2013a:119 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Kazenas, 2013a:42, 43 (color photographs of adult wasps, short information on geographic distribution and nesting habits), 2013b:493 (southeast Kazakhstan: almost everywhere); Mokrousov, Ruchin, and Egorov, 2013:203 (Russia: Mordovian Republic: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:18 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:18 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:145 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Piotrowski, 2013:21 (Poland: Poleski National Park); Wiśniowski and Szczepko, 2013:31 (Poland: Kampinos National Park near Warszawa); Zettel, Zimmermann, and Wiesbauer, 2013:12 (Austria: Wien: Donaupark); Baldock, 2014:358 (Spain: Island of Mallorca); Bitsch, 2014:407 (records from France by van der Smissen, 2010b and Schmid-Egger, 2011a reported; new records: France: Ardèche: Saint-Remèze; Ariège: Rieucros); Dunford, Turbyville, and Leavengood, 2014:9 (listed as medically important in Afghanistan); Ebrahimi, 2014:43 (Iran: Alborz and Tehrān provinces); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); U. Frommer, 2014:27 (Germany: Hessen:

Lorch); Hellqvist, Abenius, and Norén, 2014:93 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Kazenas, 2014a:133 (Kazakhstan: Karatau Mountain Range); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Pagliano, 2014:76, 77 (specimens in M. Spinola collection, Torino); Turčinavičienė, Radzevičiūtė, Budrienė, and Budrys, 2014:4 (in DNA analysis); Yıldırım, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:10 (Iran: Fars Province, as *minutus minutus*); Koçak and Kemal, 2015:142 (in checklist of Hymenoptera of Turkey); Mokrousov and Zryanin, 2015:42 (Uzbekistan: Kashkadarya Oblast'); Rezaei and Fallahzadeh, 2015:11 (Iran: Fars: Kaftarak at 29°34'N 52°41'E); P. Rosa and Pagliano, 2015:100 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:13 (Germany: Berlin-Lichterfelde); Shorenko, 2015:331 (in list of Sphecidae *sensu lato* of Crimea); Simon, Lorthiois, and Macé, 2015:53 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakubzik, 2016:17 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:36 (in checklist of Aculeata of Great Britain and Ireland: England, Wales, Isle of Man); Mokrousov and Popov, 2016:586 (Russia: Krasnodarskiy Krai); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:166 (in key to Central and Eastern European Diodontus); Ratzlaff, 2016:27 (Canada: British Columbia: from Eighme, 1989 and Scudder, 1994); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province, as *minutus minutus*); Saure, 2016a:8 (Germany: Brandenburg: Uckermark District: dry slopes near Altgalow-Stützkow), 2016b:49 (Germany: Sachsen-Anhalt: fruit orchards), 1916c:205 (Germany: center of Berlin: Großer Tiergarten Park); Schmid-Egger, Dandria, and Xuereb, 2016:81 (in checklist of Crabronidae of Maltese Islands); U. Sörensen, 2016:426 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:922 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Vas, Szöllösi-Tóth, and Muskovits, 2016:154 (Romania: Sălaj County); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:31 (Turkey: Erzurum Province, as *minutus minutus*); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:73 (Iran: known from Alborz, Fars, Khorasan-e Razavi, and Tehran provinces); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Shorenko, 2017:78 (in Crimea collected in June and August); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Franken and Berg, 2018:67 (Netherlands: North Holland: sand dunes); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Budrys, Budrienė, Orlovskytė, and Soon, 2019:577, 578 (in key to Mediterranean species of *Diodontus minutus* species group); Carminati, Mora, and Cretin, 2019:22 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:10 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:96 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019:13238 (Russia: Mordovia State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:272 (Iran: Fars: nine localities); Gadallah, 2020b:60 (in list of aculeate wasps of Arabian Peninsula); Kejval, Blažej, and Erhart, 2020:110 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1060, 1061 (in key to *Diodontus* of China); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:82 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:88 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:83 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Can, 2022:222 (incomplete Irm crossvein); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:60 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1689 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:419 (Uzbekistan: distribution); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (Poland: common in river valleys: no specific localities); Pytel-Huta and Franchuk, 2024:85 (Ukraine: Rivno Nature Reserve); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Ontario, Quebec, Saskatchewan, first record from Manitoba: no specific locality); Frommer and Klenke, 2025:163 (Germany: Hessen: Lahntal near Weilburg).

Xylocelia franclemonti Krombein, 1939:141, ♀, ♂. Holotype: ♀, USA: New York: Buffalo (ANSP). Synonymized with *Diodontus minutus* (Fabricius) by Eighme, 1989:21. – Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera); Evans, 1958c:133 (description of larva); Krombein, 1963f:275 (Maryland: Plummers Island near Washington, D.C.); Kurczewski and Kurczewski, 1963:146 (Pennsylvania: Presque Isle State Park); N. Lin, 1967b:343 (linear copulation). – **As *Diodontus franclemonti***: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); N. Lin, 1978a:235 (malaxation of prey during heat wave); Krombein, 1979b:1601 (in catalog of North American Hymenoptera); Finnamore, 1982:67 (in Sphecidae Fauna of Southern Quebec); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Kurczewski, 1998d:250 (pine barrens in upstate New York).

ssp. *orientalis* Tsuneki

Diodontus minutus orientalis Tsuneki, 1974a:369, ♀. Holotype: ♀, Korea: Ryang-gang Province: Hyesan (TMB). – R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae); Tsuneki, 1982b:14 (known from Korea); Paik, 1985:198 (in list of Sphecidae of Korea); J.-K. Kim, 2014:441 (in catalog of Sphecidae *sensu lato* of Korean Peninsula).

Diodontus minutus orientalis Tsuneki, 1991:201, as new subspecies. Nomen nudum.

46. *montanus* Kazenas

Diodontus montanus Kazenas in Budrys and Kazenas, 1992:27, ♀, ♂. Holotype: ♀, Kazakhstan: Djambul Oblast': 25 km southwest of Lugovoy in Kirghiz Range (ZIN). – Budrys, 1996:40-43 (morphometry); Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: no specific locality); Kazenas, 2000e:104 (in Sphecidae Fauna of Kazakhstan), 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:47 (geographic distribution, collecting localities in Kazakhstan), 2004b:101 (Kazakhstan: western Tien Shan).

47. *mookoensis* Tsuneki

Diodontus mookoensis Tsuneki, 1972a:192, ♂, ♀. Holotype: ♂, Mongolia: Bayanhongor Aymag: Ehingol (TMB). – Tsuneki, 1972a:208, 209, 210 (in key to *Diodontus* of Central Asia; a ssp. of *Diodontus parvulus*?); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

ssp. *cervinicornis* Tsuneki

Diodontus mookoensis cervinicornis Tsuneki, 1972a:195, ♀. Holotype: ♀, Mongolia: South Gobi Aymag: Dundgol (TMB). – Tsuneki, 1972a:298 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

48. *neomexicanus* Rohwer

Diodontus neomexicanus Rohwer, 1909a:106, ♂. Holotype or syntypes: ♂, USA: New Mexico: Rowe (USNM). – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:27 (in revision of North American *Diodontus*; Iowa to California, north to Idaho); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Saskatchewan, first records from Alberta and British Columbia: no specific locality). – **As *Xylocelia neomexicana***: Mickel, 1916b:347 (new generic assignment, in review of North American *Xylocelia*, as *neomexicanus*); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).

49. *nigrinus* W. Fox

Diodontus nigrinus W. Fox, 1892h:317, ♀. Lectotype: ♀, USA: Colorado: no specific locality (ANSP), designated by Cresson, 1928:52. – Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Ashmead, 1899d:223 (in checklist of North American Crabronidae); H. Smith, 1908b:393 (in revision of Nebraskan Sphecidae); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:18 (as new synonym of *Diodontus flavitarsis*); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Alaska: no specific locality, Canada: Alberta, British Columbia, Yukon Territory, first records from Manitoba, Northwest Territories, Ontario, Saskatchewan: no specific locality), 289 (resurrected from synonymy, recognition

- character). – **As *Xylocelia nigrata***: Mickel, 1916b:351 (new generic assignment, in review of North American *Xylocelia*, as *nigratus*); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera).
- Diodontus vallicolae* Rohwer, 1909a:104, ♂. Lectotype: ♂, USA: Colorado: Florissant (USNM), designated by Eighme, 1989:19. Synonymized with *Diodontus nigratus* by Buck and Bennett, 2025:289. – R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae, as *vallicollae*); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:19 (in revision of North American *Diodontus*; Colorado to California, north to Alaska); Ratzlaff, 2016:27 (Canada: British Columbia: from Eighme, 1989), 2018:115 (Canada: first record from Yukon: Carcross sand dunes). – **As *Xylocelia vallicolae***: Mickel, 1916b:348 (new generic assignment, in review of North American *Xylocelia*); Krombein in Muesebeck, Krombein and Townes, 1951:964 (in catalog of North American Hymenoptera).
- Diodontus vallicolae salicis* Rohwer, 1909a:105, ♂. Holotype or syntypes: ♂, USA: Colorado: Boulder (USNM). Synonymized with *Diodontus vallicolae* by R. Bohart in R. Bohart and Menke, 1976:179, and with *Diodontus nigratus* by Buck and Bennett, 2025:289. – **As *Xylocelia vallicolae salicis***: Mickel, 1916b:348 (new generic assignment, in review of North American *Xylocelia*); Krombein in Muesebeck, Krombein and Townes, 1951:964 (in catalog of North American Hymenoptera).
- Xylocelia atra* Mickel, 1916b:351, ♀ (as *ater*, incorrect original termination). Holotype: ♀, USA: Nebraska: Omaha (UNL). Synonymized with *Diodontus flavitarsus* by Eighme, 1989:18, and with with *Diodontus nigratus* by Buck and Bennett, 2025:289. – Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Rau, 1922:21 (USA: Kansas: Lake View); Strickland, 1947:129 (Canada: Alberta: Edmonton); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL); Kurczewski and Kurczewski, 1963:146 (Pennsylvania: Presque Isle State Park). – **As *Diodontus ater***: Evans, 1970:486 (new generic assignment, Wyoming: Jackson Hole; nesting habits); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1601 (in catalog of North American Hymenoptera).
- Xylocelia maesta* Mickel, 1916b:347, ♂ (as *maestus*, incorrect original termination). Holotype: ♂, USA: Nebraska: Omaha (Univ. Nebraska). Synonymized with *Diodontus flavitarsis* by Eighme, 1989:18, and with with *Diodontus nigratus* by Buck and Bennett, 2025:289. – Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Krombein in Muesebeck, Krombein, and Townes, 1951:963 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL). – **As *Diodontus maestus***: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera).

50. *occidentalis* W. Fox

- Diodontus occidentalis* W. Fox, 1892h:315, ♀, ♂. Lectotype: ♀, USA: southern California: no specific locality (ANSP), designated by Cresson, 1928:52 (designation by Eighme, 1989:21, was unnecessary). – Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Ashmead, 1899d:223 (in checklist of North American Crabronidae); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Eighme, 1989:21 (in revision of North American *Diodontus*; District of Columbia to New York, west to California and Idaho); Finnamore, 1994:210 (Canada: Alberta: Wagner Natural Area 8 km west of Edmonton); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Ratzlaff, 2016:27 (first record from Canada: British Columbia: Southern Interior), 37 (British Columbia: Oliver), 2018:113 (Canada: first record from Yukon: several localities). – **As *Xylocelia occidentalis***: Mickel, 1916b:346 (new generic assignment, in review of North American *Xylocelia*), 1918b:429 (in catalog of Nebraskan Sphecidae); Krombein in Muesebeck, Krombein, and Townes, 1951:964 (in catalog of North American Hymenoptera); Powell, 1964a:155 (nesting site, male activities, transport prey, nest construction, cocoon, parasites); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey).

51. *oraniensis* (Lepelletier de Saint Fargeau)

- Pemphredon oraniense* Lepelletier de Saint Fargeau, 1845:97, sex not stated (as *Oraniense*, incorrect original capitalization). Lectotype: ♂, Algeria: Oran (Turin), designated by de Beaumont, 1951d:316. – Lucas, 1849:246 (original description

copied with modifications); Acloque, 1897:85 (in Sphecidae Fauna of France and Algeria); Dalla Torre, 1897:359 (in catalog of world Hymenoptera). – **As *Diodontus oraniensis***: de Beaumont, 1951d:316 (new generic assignment), 1952c:198 (Algeria: Hoggar), 1954b:4 (Canary Islands); de Beaumont, 1956a:211 (Libya), 1957a:150 (Morocco): Bradley, 1957:48 (Lepeletier's specimens in Turin; as *oraniense*); de Beaumont, 1960b:247 (Libya; diagnostic characters); Pulawski, 1964:143 (Egypt: Luxor, Maadi); de Beaumont, 1968a:272 (Canary Islands: Fuertaventura, Gran Canaria, Tenerife); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Casolari and Casolari Moreno, 1980:119 (specimens in M. Spinola collection); Wolf, 1980:72 (Canary Islands); Al-Houty, 1989:159 (Kuwait: Khwasat, Omariyah); Hohmann, La Roche, Ortega, and Barquín, 1993:210 (detailed locality records from Canary Islands); Budrys, 1996:40–43 (morphometry); Roche, 2007a:59 (in checklist of Egyptian Crabronidae, redescription), 2007b:3 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *oraniensis oraniensis*); Al-Houty, 2011:89 (Kuwait: no specific locality); Pagliano, 2011a:159 (specimens in coll. Spinola, Torino, are *Diodontus oraniensis*, including lectotype, and *D. friesei*); Budrys, Budrienè, Orlovskytè, and Soon, 2019:577, 578 (in key to Mediterranean species of *Diodontus minutus* species group); Ben Khedher, Yildirim, and Braham, 2020a:107 (Tunisia: Kebili, Mahdia, and Nabeul provinces); Gadallah, 2020b:61 (in list of aculeate wasps of Arabian Peninsula).

Diodontus punicus Ed. André, 1888:219, ♀ (authorship attributed to Gribodo). Holotype: Tunisia (not Algeria): no specific locality (Genova). Synonymized with *Diodontus oraniensis* by de Beaumont, 1951d:316. – Ed. André, 1888:20* (listed); Kohl, 1890a:60 (in review of *Diodontus*, tentatively synonymized with *Diodontus atratulus*); Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*); W. Schulz, 1905b:31 (redescription), 54 (Tunisia); Morice, 1911:68 (Algeria, Tunisia); de Beaumont, 1950e:264 (redescription of holotype), 1950f:410 (Algeria); Budrys, 1996:40, 41, 44, 45 (as valid species, morphometry); Penati and Mariotti, 2015:12 (reference to unpublished manuscript by Gribodo).

Diodontus punicus Gribodo, 1894b:23, ♂, ♀. Lectotype: ♀, Tunisia: Tunis area (Genova), designated by de Beaumont, 1950e:264. Objective junior synonym of *Diodontus punicus* Ed. André, 1888. – Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 127 (original description copied); Zavattari, 1913a:4 (omitted from Dalla Torre's catalog, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Penati and Mariotti, 2015:103 (in list of Hymenoptera described by G. Gribodo).

Diodontus moricei Kohl, 1901a:125, ♀, ♂ (as *Moricei*, incorrect original capitalization). Lectotype: ♂, Egypt: Helwan (NHMW), designated by de Beaumont, 1958b:67. Synonymized with *Diodontus oraniensis* by de Beaumont, 1956a:211 and 1958b:67. – Kohl, 1901a:129, 131 (in key to Palearctic *Diodontus*); Balthasar, 1954b:269 (Palestine: Wadi el Kelt near Jericho); de Beaumont, Bytinski-Salz and Pulawski, 1973:21 (Israel); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Dollfuss, 1989:9 (type material in NHMW).

Diodontus gracilipes E. Saunders, 1904a:202, ♂. Syntypes: Canary Islands: Tenerife: Guimar and Santa Cruz (OXUM). Synonymized with *Diodontus punicus* by Morice, 1911:69. – **As *Diodontus oraniensis gracilipes***: R. Bohart and Menke, 1976:179 (new status, in checklist of world Sphecidae).

52. *parvulus* (Radoszkowski)

Passaloecus parvulus Radoszkowski, 1877:65, ♀, ♂. Syntypes: Uzbekistan: Katta-Kurgan, Zaravschan valley, Samarkand, Tashkent, Keles; Kyrgyzstan: Shahimardan; Tajikistan: Varzaminor; Kazakhstan: Chardara, Kyzil-Kum; also Fana, Hodja-Chiburgan, Vorukh (ZMMU). – **As *Diodontus parvulus***: Radoszkowski, 1892:589 (new generic assignment, male genitalia); Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 122 (redescription), 128, 132 (in key to Palearctic *Diodontus*); Gussakovskij, 1935:417 (Tajikistan: Kulab); Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); Kazenas, 1975b:425 (Kazakhstan: locality records; in key to *Diodontus* of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:179 (as synonym of *Diodontus minutus*); Kazenas, 1978b:155, 177 (in key to Sphecidae of Kazakhstan and Central Asia); Budrys, 1996:40, 41, 44, 45 (morphometry); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 2005:93 (alfalfa fields

in southwestern Tajikistan); Mokrousov, 2017c:6 (Russia: Kalmykia: State Reserve «Chernye Zemli» 20 km south of Khulhuta), 2017e:247 (in catalog of Pemphredoninae of Russia).

Diodontus ruficornis F. Morawitz, 1890:612, ♂. Holotype or syntypes: Turkmenistan: Kazandjik (ZIN). Synonymized with *Diodontus parvulus* by Kazenas, 1975b:425. – Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Kohl, 1901a:120 (in checklist of Palearctic *Diodontus*), 124 (original description copied); Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kazenas, 1992c:25 (as valid species, Turkmenistan: Repetek Nature Reserve); Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: near Bakanas, Borandysu, 35-45 km E Chilik, near landing place Dubun' on Ili River); Kazenas, 2000e:106 (in Sphecidae Fauna of Kazakhstan, *spinicerus* regarded as junior synonym), 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:48 (geographic distribution, collecting localities in Kazakhstan), 2013b:493 (southeast Kazakhstan: 35-45 km E Chilik, near landing place Dubun' on Ili River).

53. *polytylus* Budrys

Diodontus polytylus Budrys in Budrys, Budrienė, Orlovskytė, and Soon, 2019:565, ♀, ♂. Holotype: ♂, Tunisia: Tozeur at 33°55'N 8°08'E (RMNH). Paratypes: Algeria, Chad, Libya, Morocco, Portugal, Spain, Tunisia. – Budrys, Budrienė, Orlovskytė, and Soon, 2019:577 (in key to Mediterranean species of *Diodontus minutus* species group); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae *sensu lato* of Portugal); Dollfuss, Bitsch, and K. Schmidt in Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:61 (in revision of Sphecidae *sensu lato* of Europe).

54. *puncticeps* Gussakovskij

Diodontus puncticeps Gussakovskij, 1935:417, ♀. Holotype or syntypes: ♀, "in Bucharica orientali", probably Tajikistan: no specific locality (ZIN). – Tsuneki, 1972a:207 (in key to *Diodontus* of Central Asia); Kazenas, 1975b:425 (in key to *Diodontus* of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kazenas, 1978b:154 (in key to Sphecidae of Kazakhstan and Central Asia); Budrys, 1996:40, 41, 44, 45 (morphometry); Kazenas, 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:48 (geographic distribution, collecting localities in Kazakhstan), 2004b:101 (Kazakhstan: western Tien Shan), 2008a:99 (Southeastern Kazakhstan: near Alma Ata, 8-16 km southwest of Alma Ata, 8-10 km south of Talgar); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:419 (Uzbekistan: distribution).

55. *reticulatus* Cameron

Diodontus reticulatus Cameron, 1905d:83, ♀. Holotype or syntypes: ♀, India: Gujarat: Deesa (BMNH). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

56. *retiolus* Eighme

Diodontus retiolus Eighme, 1989:25, ♀, ♂. Holotype: ♂, USA: California: Napa County: Anguin (CAS).

57. *rusticus* Nurse

Diodontus rusticus Nurse, 1903b:14, ♂. Syntypes: Pakistan: Quetta, Peshin (BMNH). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

58. *saegeri* Leclercq

Diodontus saegeri Leclercq, 1959a:58, ♀, ♂. Holotype: ♀, Namibia: Swakopmund (BMNH). – Leclercq, 1959a:57 (in key to Afrotropical *Diodontus*); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:101 (Namibia: visiting flowers of *Psilocaulon salicornioides* (Paz) Schwant., Aizoaceae and *Deverra denudata* (Viv.) Pfisterer and Podl., Apiaceae).

59. *schmiedeknechtii* Kohl

Diodontus schmiedeknechtii Kohl, 1898b:92, ♀, ♂ (as *Schmiedeknechtii*, incorrect original capitalization). Syntypes: Algeria: Oran (NHMW). – Kohl, 1901a:120 (in list of Palearctic *Diodontus*), 131, 133 (in key to Palearctic *Diodontus*); Morice, 1911:70 (Algeria); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Dollfuss, 1989:9 (type material in NHMW); Budrys, 1996:40, 41, 44, 45 (morphometry); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:61 (in revision of Sphecidae *sensu lato* of Europe).

Diodontus bejarensis Gayubo, 1982c:113, ♀, ♂. Holotype: ♀, Spain: Avila: El Losar (S. Gayubo coll., Salamanca). Synonymized with *Diodontus schmiedeknechtii* by Budrys *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:61. – Mingo and Gayubo, 1984:108 (Spain).

60. *selectus* Nurse

Diodontus selectus Nurse, 1903b:13, ♀, ♂. Syntypes: India: Gujarat: Deesa; Pakistan: Quetta, Baluchistan: Peshin (BMNH). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

61. *sorosi* Kazenas

Diodontus sorosi Kazenas, 2000e:110, ♀, ♂. Syntypes: ♀, Kazakhstan: Tarbagatay Range: 80 km south of Aksuat (ZIN).

Diodontus sorosi Kazenas, 2002b:107, ♀, ♂. Objective synonym of *Diodontus sorosi* Kazenas, 2000e:110. Holotype: ♀, Kazakhstan: Tarbagatay Range: 80 km south of Aksuat (ZIN).

62. *spinigerus* Kazenas

Diodontus spinigerus Kazenas, 1975b:423, ♂. Holotype: ♂, Kazakhstan: Ili River Valley near Kapchagay (V.L. Kazenas coll. or ZIN?). – Kazenas, 1975b:427 (in key to *Diodontus* of Kazakhstan and Central Asia), 1978b:157 (in key to Sphecidae of Kazakhstan and Central Asia); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2000e:106 (in Sphecid Fauna of Kazakhstan, as junior synonym of *Diodontus ruficornis*), 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:48 (geographic distribution, collecting localities in Kazakhstan); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Kazenas, 2008a:99 (Southeastern Kazakhstan: Ili River valley: Kapchagay, 65 km west of Bakanas); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1061 (in key to *Diodontus* of China), 1062 (first record from China: Nei Mongol).

63. *spinicollis* Gussakovskij

Diodontus spinicollis Gussakovskij, 1933b:276, ♀, ♂. Syntypes: Iran: Khorassan: Kerat-Sengun SE Ruihaf (ZIN). – Tsuneki, 1972a:207, 209 (in key to *Diodontus* of Central Asia); Kazenas, 1975b:426 (in key to *Diodontus* of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kazenas, 1978b:155 (in key to Sphecidae of Kazakhstan and Central Asia); Mokrousov, 2015a:538 (southeastern European Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:73 (Iran: known from Khorasan-e Razavi Province); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia).

64. *spiniferus* (Mickel)

Xylocelia spinifera Mickel, 1916b:348, ♀ (as *spiniferus*, wrong grammatical ending, but correct original spelling). Holotype: ♀, USA: Nebraska: Omaha (UNL). – Mickel, 1918b:429 (in catalog of Nebraskan Sphecidae); Rau, 1922:21 (USA: Missouri: Creve Coeur Lake); Krombein *in* Muesebeck, Krombein, and Townes, 1951:964 (in catalog of North American Hymenoptera); Muma, 1952:23 (holotype in UNL). – As *Diodontus spiniferus* (wrong grammatical ending): R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Eighme, 1989:25 (as *spinifer*, in revision of North American *Diodontus*; Maryland to California, north to Alberta); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 41 (first records from Ontario and Quebec: list of localities, recognition characters of ♂), 2018:114 (Canada: first record from British Columbia: Pink Mountain, and from Yukon: Carmacks, Ibex Valley Salt Flats at 60.8616°N 135.7126°W, Kluane National Park; diagnostic characters); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu*

lato of Canada, Alaska, and Greenland: first record from Alaska: no specific locality, Canada: Alberta, British Columbia, Ontario, Quebec, Yukon Territory, first records from Manitoba, Northwest Territories, and Saskatchewan: no specific locality).

65. *stigma* Budrys

Diodontus stigma Budrys in Budrys and Kazenas, 1992:28, ♀, ♂. Holotype: ♀, Turkmenistan: Badkhyz Nature Reserve (ZIN). – Budrys, 1996:40, 41, 44, 45 (morphometry); Kazenas, 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia); Budrys, Budrienė, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group).

66. *striolatus* Cameron

Diodontus striolatus Cameron, 1897c:19, ♂. Holotype or syntypes: ♂, Pakistan: Lahore (OXUM). – Cameron, 1905c:83 (comparison with *Diodontus reticulatus*); Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

67. *talgarensis* Kazenas

Diodontus talgarensis Kazenas, 2000e:112, ♂. Holotype or syntypes: ♂, Zailiyskiy Alatau: 3 km south of Talgar (ZIN). – Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: 6 km southwest and 5 km west of Alma Ata, 2-3 km south of Talgar); Kazenas, 2002a:48 (geographic distribution, collecting localities in Kazakhstan), 2008b:112 (Kazakhstan: foothills of Zailiyskiy Alatau: loess cliffs)

Diodontus talgarensis Kazenas, 2002b:108, ♂. Objective synonym of *Diodontus talgarensis* Kazenas, 2000e:112. Holotype: ♂, Kazakhstan: foothills of Zailiyskiy Alatau: 3 km south of Talgar and 6 km southwest of Alma-Ata (ZIN).

68. *temporalis* Kohl

Diodontus temporalis Kohl, 1901:122, ♀. Holotype or syntypes: ♀, Palestine: Jericho (NHMW). – Kohl, 1901a:128 (in key to Palearctic *Diodontus*); Balthasar, 1954b:268 (Palestine: Jerusalem); Myartseva, 1963b:59 (Turkmenistan: lower Murgab River), 1965:81 (Turkmenistan: Murgab district); de Beaumont, 1967a:344 (Turkey; description of ♂), 1969:92 (Turkey); de Beaumont, Bytinski-Salz and Pulawski, 1973:21 (Israel); Kazenas, 1975b:425 (in key to *Diodontus* of Kazakhstan and Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Kazenas, 1978b:155 (in key to Sphecidae of Kazakhstan and Central Asia); Dollfuss, 1989:9 (type material in NHMW); Guichard, 1991a:340 (Jordan); Budrys, 1996:40, 41, 44, 45 (morphometry); Kazenas, 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ljubomirov and Yildirim, 2008:175 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:10 (first record from Iran: Fars Province); Koçak and Kemal, 2015:143 (in checklist of Hymenoptera of Turkey); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:31 (Turkey: Şanlıurfa: Atatürk Barajı); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:73 (Iran: known from Fars Province); Budrys, Budrienė, Orlovskytė, and Soon, 2019:576 (in key to Mediterranean species of *Diodontus minutus* species group); Kaplan and Yildirim, 2021:83 (in catalog of Crabronidae of Turkey), 2023:1689 (in checklist of Sphecidae *sensu lato* of Turkey).

69. *tenuis* Nurse

Diodontus tenuis Nurse, 1903b:13, ♀, ♂. Syntypes: Pakistan: Baluchistan: Quetta, Peshin (BMNH). – Ramakrishna Aiyar, 1916:556 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae).

70. *tiemudzhin* Tsuneki

Diodontus tiemudzhin Tsuneki, 1972a:190, ♂. Holotype: ♂, Mongolia: Suhebaator Aymag: 44 km south-southwest of Baruun urt (TMB). – Tsuneki, 1972a:209 (in key to *Diodontus* of Central Asia); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:399 (in key to Sphecidae of Russian Far East,

as *tiemudzini*); Budrys, 1996:44, 45 (morphometry); Bashir, Yue, Jiang, L. Ma, and Q. Li, 2021:1061 (in key to *Diodontus* of China), 1062 (first record from China: Nei Mongol).

71. *tobiasi* Kazenas

Diodontus tobiasi Kazenas, 1975b:421, ♀, ♂. Holotype: ♀, Kazakhstan: Ili River Valley: 15 km E Ayak-Kalkan (ZIN). – Kazenas, 1975b:425 (in key to *Diodontus* of Kazakhstan and Central Asia), 1978b:155, 157 (in key to Sphecidae of Kazakhstan and Central Asia); Budrys, 1996:40, 41, 44, 45 (morphometry); Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: 8 km south of Kapchagay, 30 km south-southwest of Koktal on Ili River); Kazenas, 2000e:114 (in Sphecid Fauna of Kazakhstan), 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:48 (geographic distribution, collecting localities in Kazakhstan), 2008a:99 (southeastern Kazakhstan: Ili River valley: 15 km E Ayak Kalkan, 30 km southwest of Koktal, 8 km south of Kapchagay), 2013b:493 (southeast Kazakhstan: 30 km south-southwest of Koktal on Ili River).

72. *touroulti* Le Divelec

Diodontus touroulti Le Divelec, 2023:429, ♀, ♂. Holotype: ♂, France: Corse: Zicavo at 41.87636°N 9.13275°E(MNHN).

73. *tristis* (Vander Linden)

Pemphredon tristis Vander Linden, 1829:78, ♀, ♂. Syntypes: origin not stated, but probably Belgium: Bruxelles (Inst. Roy. Sci. Nat. Belgique, Bruxelles). – R. Bohart and Menke, 1965b:257 (petition to International Commission on Zoological Nomenclature to designate *Pemphredon tristis* as type species of *Diodontus*). – **As *Cemonus tristis***: Herrich-Schaeffer, 1840:292 (new generic assignment, Germany: Bayern: Regensburg area). – **As *Passaloecus tristis***: Casolari and Casolari Moreno, 1980:120 (new generic assignment, specimens in M. Spinola collection, Torino); Pagliano, 2014:76 (specimens in M. Spinola collection, Torino). – **As *Xylocelia tristis***: Hellén, 1955a:122 (new generic assignment, Finland: Lappeenranta, Parikkala), 1956:45 (recorded from Finland); Janvier, 1956b:203 (nests destroyed by rainy period); Evans, 1958c:134 (discussion of Maneval, 1939, description of larva), 1964b:252 (discussion of Janvier, 1962, description of larva); Wolf, 1959b:26 (Germany: Nassau); Hoop, 1961:65 (Germany: Schleswig-Holstein); Babiý, 1964:115 (Austria: Land Salzburg); B. Klug, 1965:134 (Germany: Baden-Württemberg: Freiburg im Breisgau area). – **As *Diodontus tristis***: Shuckard, 1837a:187 (new generic assignment, Great Britain); nec Dahlbom, 1842a:12 (= *Diodontus medius*); Dahlbom, 1844:249 (in revision of Sphecidae and Pompilidae); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk); Dahlbom, 1845:506 (in key to European *Diodontus*, as *tristus*), 1847:277 (nest and prey); Erichson, 1848:137 (Dahlbom's biological observations reported); Eversmann, 1849:411 (Russia: Kazan' Province); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Dresden); F. Smith, 1849b:2551 (nesting in bramble twigs, obviously in error, preying on aphids); Tischbein, 1850:6, 9 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); F. Smith, 1851c:33 (Great Britain: no specific locality); Wesmael, 1852:283 (Belgium: Bruxelles); F. Smith, 1853:64 (in checklist of British Hymenoptera), 1856:432 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:136 (in revision of fossorial wasps of Nassau Region, Germany); F. Smith, 1858c:172 (in review of British Aculeata, redescription); Taschenberg, 1858:94 (Germany); Assmuss, 1859:615 (Russia: Moscow Governorate); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:147 (Germany: Nassau Region), 1861:159 (redescription, Germany: Dresden, Herrstein); Brischke, 1862:103 (Germany: Preussen Province, now Poland: Pomorze Region); Brown, 1863:181 (Great Britain: Burton-on-Trent); A. Morawitz, 1864:461 (Russia: Sankt Petersburg); Taschenberg, 1866:187 (in revision of Hymenoptera of Germany); A. Costa, 1867c:113 (in revision of Italian Sphecidae); Kirchner, 1867:222 (in catalog of European Hymenoptera); Schenck, 1867a:353 (known from Germany); von Aichinger, 1870:316 (Austria: Tirol); Thomson, 1870:236 (in revision of Swedish wasps); A. Costa, 1871b:42 (in revision of Italian Sphecidae); F. Smith, 1871b:18 (in catalog of British Aculeata); Dours, 1874:145 (in catalog of Hymenoptera of France); Thomson, 1874:196 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:388 (Germany: Halle); Beuthin, 1876:230 (Germany: Hamburg area); Daly, 1878:46 (Great Britain: Dorset: Glanville's Wootton); Kohl, 1880:138 (Austria: Tirol, and Italy: Trentino–Alto Adige); E. Saunders, 1880:256 (in revision of British Aculeata); Siebke, 1880:63

(Norway); Kohl, 1883e:659 (Switzerland); Sickmann, 1883:78 (Germany: Niedersachsen: Wellingholthausen); Wüstnei, 1886:38 (Germany: Schleswig-Holstein: Elmshorn, Emmelsbüll, Husum, Sonderburg); Ed. André, 1888:219 (in revision of Sphecidae of Europe and Algeria), 20* (bibliographic references); Brischke, 1888b:99 (Germany: Preussen Province, now Poland: Pomorze Region); Kohl, 1888b:726 (Austria: Tirol, now Italy: Alto Adige), 1890a:56 (in review of Diodontus); Assmuss, 1892:53 (Russia: earlier record from Moscow Governorate repeated); V. Perkins, 1892:202 (Great Britain: Gloucestershire: Wotton-under-Edge); Alfken, 1893:120 (Germany: Friesian Islands: Island of Juist); Kohl, 1893a:37 (Austria: Niederösterreich); F. Morawitz, 1893a:110 (Russia: Karelian Isthmus); Sickmann, 1893:77 (Germany: Niedersachsen: Iburg, prey and parasitic flies); Krieger, 1894:14 (Germany: Kingdom of Saxony); Meunier, 1896:271 (Belgium: Bruxelles area); E. Saunders, 1896:96 (in revision of British Aculeata); Borries, 1897:97 (nesting habits); Dalla Torre, 1897:366 (in catalog of world Hymenoptera); Meunier, 1897b:353 (coastal sand dunes at Blankenberge); Mocsáry, 1897:79 (Kingdom of Hungary, some localities are in today's Romania); O. Schneider, 1898:102 (Germany: Island of Borkum); Strand, 1898b:93 (Norway); R. Bradley, 1900:13 (Great Britain: Birmingham); Hocking, 1901:68 (Great Britain: Surrey county); Kohl, 1901a:120 (in checklist of Palearctic Diodontus), 130, 132 (in key to Palearctic Diodontus); Nevinson, 1901:72 (Great Britain: Wales: Criccieth); J. Nielsen, 1901a:275 (nesting habits), 1903:113 (nesting habits); de Cobelli, 1903:108 (Italy: Province of Trentino); Antiga and Bofill, 1904:8 (Spain: Cataluña Province); Aurivillius, 1904:261 (in revision of Swedish Sphecidae); Jourdain 1904:221 (Great Britain: Derbyshire: Burton, Little Eaton); W. Schulz, 1904b:92 (Austria: Melk; Czechoslovakia; Germany: Island of Borkum); Kubes, 1905:83 (Czech Republic: Kolín, Mančice, Sušice); Schmiedeknecht, 1907:211, 212 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:103 (in catalog of French Hymenoptera); Ferton, 1908:563 (nesting site and prey); Morley, 1909:305 (Great Britain: Isle of Wight); Dittrich, 1911b:22 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Adlerz, 1912:56 (nesting habits); Schirmer, 1912:166 (Germany: Berlin area); Birula, 1913:539 (Ukraine: Zhytomyr Oblast': Radomyshl'); Alfken, 1914:278 (NW Germany); Birula, 1914:384 (Belorussia Belorussia: Ambrosovich near Vitebsk); Zilahy Kiss, 1915:80 (Hungary: Bethlen, Boksánbánya, Hadad); O. Meyer, 1919:152 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:41 (Germany: Lower Elbe region); Dubois, 1922:197, 198 (in key to Belgian Sphecidae); Fahringer, 1922:175 (Turkey); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Leininger, 1924:121 (Germany: Baden-Württemberg: Friedrichstal, Karlsruhe); Lauterborn, 1924:287 (Germany: Baden-Württemberg: Kaiserstuhl); Maréchal, 1924:6 (Belgium: Montagne Saint-Pierre); R. Perkins, 1924:222 (Great Britain: Devon); Berland, 1925d:142 (in Sphecid Fauna of France); Bischoff, 1925:299 (Latvia: Tauerkalln; Poland: Grajewo area); Coulon, 1925:114 (France: Evreux, Oise); R. Perkins, 1925:150 (Great Britain: Gloucestershire: Wotton); Schütze, 1925:112 (Germany: Lausitz Region); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Badenweiler, Kaiserstuhl, Sipplingen); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:152 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); K. Strohm, 1926:74 (reference to Lauterborn, 1924); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Bouwman, 1928b:211 (in revision of Sphecidae of Netherlands); van der Vecht, 1928:93 (Netherlands: Meijndel sand dunes); Schmiedeknecht, 1930:674 (in keys to Hymenoptera of North and Central Europe); Pulkkinen, 1931:97 (in revision of Sphecidae of Finland, not yet found in Finland); Bondroit, 1932:36 (Belgium: Solbosch, Uccle); Crèvecoeur and Maréchal, 1932:70 (in catalog of Belgian Hymenoptera); Drogoszewski, 1933:117 (Poland: Łowicz); E. Nielsen, 1933:319 (summary of nesting habits), 320 (original observations on nesting), 333 (figures of larva and pupa); Spooner, 1933:203 (Great Britain: Bedfordshire: Sandy); Balles, 1934:19 (Germany: Baden-Württemberg: Fautenbach); Bondroit, 1934:61 (Belgium: Ostende); Jansson, 1934:289 (Sweden); Bernard, 1935:66 (France: Var: Fréjus area); Minkiewicz, 1935:209 (Poland: Kazimierz on Wisła), 221 (Poland: Lake Garbaś 20 km west of Suwałki); E. Nielsen, 1935:207 (preying on aphid *Hyalopterus arundinis* F., now *Hyalopterus pruni* (Geoffroy); prey is killed by malaxation, not paralyzed); Vergne, 1935:119 (France: Auvergne: Les Martres-d'Artières); Crèvecoeur and Maréchal, 1936:251 (in catalog of Belgian Hymenoptera); Goebel, 1937:41 (Poland: Poznań District: Strzeszyn); Richards, 1937b:105 (in checklist of British aculeates); Zavadil, Šusterka, and Baťa, 1937:183 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:120 (northwestern Ger-

many); Aerts, 1939:134 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Maneval, 1939:74 (description of larva); Móczár, 1939:5 (Hungary: Jászberény); Dvornar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); de Graham, 1941:99 (Great Britain: Lincolnshire); Kloet, 1941:235 (Great Britain: Wales: Wilmslow); Leclercq, 1941b:11 (Belgium: Liège area); Paul, 1941:42 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1037 (Germany: Bayern: Bamberg area); Balthasar, 1942:4 (Czech Republic: Moravia); Spooner, 1942:110 (Great Britain: Bedfordshire); Giner Marí, 1943a:36 (in Sphecidae Fauna of Spain); Spooner, 1943:72 (Great Britain); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); T. Fletcher, 1945:53 (Great Britain: Gloucestershire: Wotton); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Guichard and Yarrow, 1948:90 (Great Britain: London: Hampstead Heath); Šnoflák in Zavadil and Šnoflák, 1948:49 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:101 (Spain); Chambers, 1949:225 (Great Britain: Bedfordshire); Franz, 1949:13 (Austria: Hohe Tauern); Cavo, 1950:33 (France: Département du Nord); Szulczewski, 1950:106 (Poland: Wielkopolski National Park 15 km south of Poznań); Caruel, 1951:100 (France: Marne Department); Nouvel and Ribaut, 1953:180 (France: Central Pyrénées: common in Garonne River valley); de Beaumont, 1954e:94 (Italy); Valkeila, 1954:87 (Finland: Lappeenranta, Mikkeli, Parikkala); Aerts, 1955:61 (Germany: Rheinland); Steiner, 1955:144 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vergne, 1955:5 (France: Auvergne); Vogrin, 1955:39 (Yugoslavia); Bajári, 1957a:85, 86 (in key to Hungarian Sphecidae); de Beaumont, 1957b:137 (n. Iran); Zirngiebl, 1957:180 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:12 (in review of Dutch Sphecidae); Nouvel and Ribaut, 1958:15 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Noskiewicz and Puławski, 1960:61, 62 (in key to Polish Sphecidae); Janvier, 1962:489 (nesting habits, description of larva); Valkeila, 1962b:67 (southwestern Finland); Felton, 1963:177 (Great Britain: Kent County); de Beaumont, 1964c:113 (in Sphecidae Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 198 (visiting flowers of *Daucus carota* L., Apiaceae); Bonelli, 1966c:219 (Italy: Trentino-Alto Adige: Cavalese, Vigo di Fassa); Balthasar, Hrubant, and Hrubant, 1967:170 (Bulgaria: Bachkovo near Asenovgrad, Kazanlik); Benno, 1967:37 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:344 (Turkey); Gauss, 1967:556 (Germany: Baden-Württemberg); J. Heinrich, 1967:78 (Germany: Bayern: Aschaffenburg, Lohr, Sulzbach); Niedl and Deneš, 1967:78 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:46 (Romania); Benedek, 1968:75 (Hungary, visiting flowers of *Angelica silvestris* L.); International Commission on Zoological Nomenclature, 1968a:10 (designated as type-species of *Diodontus*); Leclercq, 1968b:39 (Great Britain: Kent); Wolf, 1968:11 (Germany: Nordrhein-Westfalen: Siegen, inhabitant of forest edge); Benedek, 1969a:84 (Hungary; marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); Dathe, 1969:439 (Germany: Berlin Zoological Garden); Lefebber, 1969c:234 (Netherlands: Sint Pietersberg = Montagne Saint Pierre); Zangheri, 1969:1706 (Italy); Benedek, 1970:101 (Hungary: Tapolca); Oehlke, 1970:750 (Democratic Germany); Tumšs, 1970:74 (Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Schmidt, 1971b:44 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:202 (in Sphecidae Fauna of Czechoslovakia); Haeseler, 1972:156, 171, 200, 204 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:120 (Kazakhstan); Kofler, 1972:111 (Austria: eastern Tirol); Lomholdt, 1972:122 (Denmark: Læsø Island); Niedl and Deneš, 1972:152 (Czech Republic: Třeboň area); Scobiola-Palade, 1972a:149 (Romania: delta of Danube: Caraorman); Tsuneki, 1972a:187 (Mongolia), 207, 208 (in key to *Diodontus* of Central Asia); Erlandsson, 1974:80 (Italy); Kazenas, 1974b:109 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Leclercq, 1974b:203 (in key to *Diodontus* of western Europe), 206 (locality records); Lefebber and Petit, 1974:163 (Belgium: Plombières); Kazenas, 1975b:424 (Kazakhstan), 426, 427 (in key to *Diodontus* of Kazakhstan and Central Asia); Lefebber, 1975b:120 (Netherlands: Schiepersberg); Lomholdt, 1975b:32 (Denmark: Anholt Island), 1975c:111 (in Sphecidae Fauna of Fennoscandia and Denmark); R. Bohart and Menke, 1976:179 (in checklist of world Sphecidae); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer polders); Guichard, 1977:252 (Great Britain: Surrey); Kolesnikov, 1977:319 (Russia: Bryansk Oblast'); Schmidt, 1977:97 (Germany: Baden-Württemberg: Enzklosterle in Schwarzwald); Haeseler, 1978c:194 (Germany: Friesian Islands: Borkum Island); Schwammberger, 1978:418 (Germany: Württemberg); Kazenas, 1978b:155, 158

(in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:246 (in key to Sphecidae of European part of USSR); Benedek, 1979:233 (Hungary: Bakony Hills); Marchal and Leclercq, 1979:9 (Belgium: Gembloux); Schmidt, 1979a:55 (Germany: Ost-Holstein); Schwammberger, 1979:116 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection); Dathe, 1980:209 (Russia: northern Caucasus: Teberda); Jacob-Remacle and Leclercq, 1980:193 (Belgium: gardens in Liège); Kazenas, 1980e:89 (Russia: Amur Oblast'); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:116 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Petit, 1980:42 (Belgium: Prosperpolder); Richards, 1980:70 (in key to Sphecidae of British Isles); Westrich, 1980:632 (Germany: Baden-Württemberg: Tübingen area); Cooter, 1981:46 (Great Britain: Herefordshire); Dollfuss and Ressler, 1981:315, 321 (Austria: Niederösterreich: Scheibbs District); Gayubo, 1981a:145 (N Spain: Sierra de Béjar); Haeseler, 1981:51 (Germany: Friesian Island: Amrum Island); Skibińska, 1981:357 (Poland: Warszawa-Białoleka); Woydak, 1981:37 (Germany: Westfalen: Hamm); Donath, 1982:214 (Germany: Cottbus Bezirk); Leclercq, 1982a:124 (Belgium: Liège); Silvestre de Sacy, 1982:4 (France: Côtes-du-Nord: Paimpol area); Skibińska, 1982:122 (Poland: Warszawa area); Dollfuss, 1983b:5 (in catalog of Sphecidae of Austria); Lefeber, 1983a:84 (Netherlands: Wadden district: northern coast sand dunes and West Friesian Islands); Riemann, 1983:81 (Germany: Bremen-Daverden area); Archer, 1984:25 (Great Britain: York); Jacob-Remacle, 1984:259 (Belgium: urban center of Liège); Gayubo, 1984a:168 (Spain: previously recorded from Salamanca Province); Haack, Tschardtke, and Vidal, 1984:127 (Germany: Hamburg area); Lefeber, 1984:29 (Netherlands: Maastricht); Mingo and Gayubo, 1984:108 (Spain); Schmidt, 1984:246 (Germany: Baden-Württemberg); Veenendaal, 1984:18 (Netherlands: Amsterdam); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985b:56 (Hungary south of Lake Balaton), 77 (floral records), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Brechtel, 1986:66 (Germany: Südpfalz); Gayubo, 1986b:38 (Spain: Andalucía); Gayubo and Sanza, 1986:36 (Spain: Burgos, Soria); Islamov, 1985:529 (Uzbekistan: Tashkent Oblast'); Józán, 1986:368 (Hungary: Kiskunság National Park); Lefeber, 1985:87 (Netherlands: southern Limburg); Nilsson, 1985:43 (Sweden); Nemkov, 1986:95 (Russia: Siberia: Irkutsk Oblast'); Skibińska, 1986b:150, 153 (Poland: suburbs of Warszawa), 157 (rural and suburban parks), 160 (gardens), 164 (streetside green), 168 (green areas of housing estates), 173 (various green urban habitats); Vickberg, 1986b:75 (Finland); Gayubo, 1987:109 (Spain: Ciudad Real Province); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen Peninsula); Riemann, 1987b:36 (Germany: Niedersachsen: Nature Reserves Dünengebiet near Neumühlen and Voßberg); Schmidt and Westrich, 1987:369 (Germany: Mainz area); Dollfuss, 1988:10 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:688 (Germany: Baden-Württemberg: Kaiserstuhl); Haeseler, 1988: (Germany: Friesian Islands); H. Kollar, 1988:21 (nesting in cliffs); Kowalczyk, 1988b:64 (Poland: environs of Łódź); Riemann, 1988:223 (Germany: Bremen area); Wolf, 1988b:142 (Germany: Rheinland-Westfalen); Archer, 1989a:131, 133 (Great Britain: York: found before and after coniferization); Jacobs, 1989:7 (Germany: Mecklenburg-Vorpommern); Józán, 1989:100 (Hungary: Tihany Nature Reserve); Pádr in Šedivy, 1989a:169 (in checklist of Czechoslovakian Sphecidae); Archer, 1990b:136 (England: city of Leicester), 1990c:17 (Great Britain: Leicestershire); Jacobs and Oehlke, 1990:(new records from Democratic Germany); Kowalczyk, 1990:290 (Poland: Góry Świętokrzyskie); Pádr, 1990:79 (Czech Republic: Praha area); Pagliano, 1990:114 (in catalogue of Italian Sphecidae); Schwammberger and Priesner, 1990:535 (Austria: Kärnten); von der Heide and Witt, 1990:63 (Germany: Niedersachsen); Yeo, 1990:101 (Great Britain: Cambridge); Dollfuss, 1991:56 (in key to Sphecidae of North and Central Europe); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Józán, 1991:602 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:89, 93, 99, 101, 107 (Poland: Łódź); Kuhlmann et al., 1991:89 (Germany: Senne Region); Budrys, 1992:24 (in list of Sphecidae of Lithuania); Delarze, 1992:67 (Switzerland: Valais: Les Follatères); Józán, 1992b:172 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Nilsson, 1992:54 (Sweden); N. Schneider, 1992:178 (Luxembourg); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Wolf, 1992c:22 (Germany: Nordrhein-Westfalen: Plettenberg: castle Schwarzenberg ruin); Gorobchishin, 1993:46 (Ukraine: Kanev Nature Reserve); Józán, 1993:412 (Hungary: Bükk National Park); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:42 (Estonia); Blagoveshenskaya, 1994:88 (Russia: Ul'yanovsk Oblast'); Stöcklein, 1994:47 (nesting in sandstone walls); Theunert, 1994c:39 (summary of

records from Niedersachsen and Bremen, Germany); Archer and Burn, 1995:59 (Great Britain: Yorkshire: Crow Wood near Funningley); Budrys in Nemkov, Kazenas, Budrys, et Antropov, 1995:398 (in key to Sphecidae of Russian Far East); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Krasnobayev et al., 1995:138 (Russia: Zhiguli Hills northwest of Samara); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:11 (in catalog of Italian fauna); Schmid-Egger, 1995:60 (Germany: northwestern Baden-Württemberg); Schmid-Egger, Risch, and Niehuis, 1995:177 (Germany: summary of records from Rheinland-Pfalz); Archer, 1996a:58 (Great Britain: Channel Islands), 1996b:121 (Great Britain: Yorkshire); Arens, 1996:440 (Germany: Bayern: Bayreuth area); Budrys, 1996:40, 41, 44, 45 (morphometry); Doronin, 1996:18 (Latvia: Riga, nest parasitized by *Chrysis longula* Abeille, a chrysidid); Fowles, 1996:36 (Great Britain: in checklist of aculeates of Wales); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:77 (Great Britain: summary of records from Essex); Jakubzik, 1996:252 (Germany: Köln); Jakubzik and Cölln, 1996b:399 (Germany: Rheinland-Pfalz); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Saure, 1996:502 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:376 (Germany: Baden-Württemberg: endangered); Tischendorf, 1996:46 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:105 (Germany: Brandenburg); Woydak, 1996:20 (Germany: Westfalen: summary of distribution and nesting habits); Archer, 1997:23 (Great Britain: Yorkshire: frequency); Celary, 1997:57 (in checklist of Animals of Poland); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Riemann, 1997:49 (Germany: Achim 14 km SE Bremen); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Schmidt and Schmid-Egger, 1997:12 (in checklist of German Sphecidae); Budrys, 1998:82 (Russia: Belgorod Oblast': Borisovka at 50°36'N 36°04'E); F. Burger, Saure, and Oehlke, 1998:27 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:510 (Austria: summary of collecting records from Burgenland); Flügel, 1998:59 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:48 (Ukraine: Kiev and surroundings); Jakubzik, Schlüter, and Cölln, 1998:1181, 1183 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Mauss and Schindler, 1898:136 (Germany: Schleswig-Holstein: Nordfriesland District); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücke, as trisitis); van der Smissen, 1998:58 (Germany: Niedersachsen, Schleswig-Holstein); K. Weber, 1998:138 (Germany: Bayern: Bamberg area); Anan'eva and Kochetkov, 1999:7 (Russia: Ryazan Oblast': no specific locality); Archer, 1999a:9 (Great Britain: Lancashire); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Ljubomirov, 1999b:47 (Bulgaria: Mount Vitosha near Sofia); Löhr, 1999:62 (Germany: Hessen: Mücke-Merlau near Gemünden); Pauly, 1999:108 (in catalog of Belgian aculeates); Petit, 1999:112 (Netherlands: Nieuw-Namen); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); M. Schwarz, 1999:85 (Austria: Oberösterreich: city of Linz area); Sörensen, Mauss, and Schindler, 1999:503 (Germany: Schleswig-Holstein); Wickl, 1999a:104 (Germany: Bayern: Oberpfalz area); Blösch, 2000:166 (in Sphecid Fauna of Germany); Esenbekova and Kazenas, 2000:18 (southeast Kazakhstan: six localities); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Jacobs, 2000:7 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:106 (Hungary: Bakony Mountains); Kazenas, 2000e:116 (in Sphecid Fauna of Kazakhstan); Melo, 2000:91 (use of nest by more than one female); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Schmid-Egger, 2000b:275 (Germany: Baden-Württemberg: shores of Rhine River); Vicidomini, 2000b:23 (Italy: previously recorded from Campania); Archer, 2001a:107 (Great Britain: Watsonian Yorkshire); Dollfuss and Bitsch in Bitsch et al., 2001:65 (in Sphecid Fauna of Western Europe); Haeseler, 2001:266 (Germany: Niedersachsen: Brookdeich near Oldenburg); Kazenas, 2001:21 (in checklist of Sphecidae of Kazakhstan and Central Asia), 125 (nesting habits); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:139 (distribution in Germany by provinces); van der Smissen, 2001:60 (Germany: Schleswig-Holstein: endangered); Zettel, Gross, and Mazzucco, 2001:69 (Austria: Wien); Amiet and Moretti, 2002:177, 178 (Switzerland: Tessin); Archer, 2002b:125 (Great Britain: Watsonian Yorkshire: distribution map), 2002c:38 (Great Britain: Watsonian Yorkshire),

2002d:11 (Great Britain: Worcestershire: Hartlebury Common 17 km north of Worcester), 2002e:42 (Great Britain: Watsonian Yorkshire); Bieri, 2002:74 (Liechtenstein); Herrmann and Zinnert, 2002:25 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:48 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:152 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Vischer, 2002:288 (Germany: Sachsen-Anhalt: vineyards in Saale-Unstrut area); Wiśniowski, 2002:69 (Poland: Ojców National Park); Archer, 2003a:58 (Great Britain: Watsonian Yorkshire); Blösch, 2003a:7 (nest parasite: *Omalus auratus* (Linnaeus), a chrysidid); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); de Bruyn and Sinning, 2003:9 (Germany: Niedersachsen: Wümme-Nordarm northeast of Bremen); Drewes, 2003:136 (Germany: Baden-Württemberg: Kaiserstuhl; Schleswig-Holstein: Birk); Esser and Jakubzik, 2003:291 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Haeseler, 2003:339 (Germany: Niedersachsen: Harriersand Island near Bremen); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:65 (in catalog of wasps and bees of Bayern, Germany); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biológica de El Ventorrillo in Sierra de Guadarrama); Tischendorf and Treiber, 2003:120 (Germany: Hessen: 15 km southwest of Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:102 (Germany: Niedersachsen: Emsland area); Wiśniowski in Dylewska and Wiśniowski, 2003:137 (Poland: Ojców National Park); Archer, 2004a:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004h:44 (Great Britain: Watsonian West Norfolk: Roydon Common); Deván, 2004:147 (western Slovakia); Ebermann and Hall, 2004:942 (parasite: scutacarid mite *Imparipes breganti* Ebermann and Hall); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (Germany in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al. 2004:132 (Spain: Madrid: Estación Biológica de El Ventorrillo in Sierra de Guadarrama); Kazenas, 2004b:101 (Kazakhstan: western Tien Shan); Klein and Lefebvre in Peeters, van Achterberg, et al., 2004:379 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:79 (Russia: Rostov Oblast'), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muzej-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:355 (in catalog of Polish Crabronidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:40 and 58 (in checklist of Polish Sphecidae); Archer, 2005c:56 (Great Britain: Suffolk County); Burger, 2005:32 (Germany: Thüringen); Ebrahimi, 2005:132 (in key to selected Iranian Sphecidae); Gülmez and Tüzün, 2005:52 (Turkey: Ankara Province); Haeseler, 2005:628 (Germany: Niedersachsen: Steller Heide near Bremen); Kofler, 2005:168 (Austria: Tirol: Lienz District: Untergaimberg near Nußdorf in Gaimberg Common, city of Lienz, Stoan-Alm near Ströden in Prägraten Common); Kraatz, 2005:102 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mokrousov and Selivanova, 2005:753 (Russia: Voronezh Oblast'); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisoló, 2005:451 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:554 (Germany: Niedersachsen: city of Bremen and adjacent area); Saure, 2005:15 (Germany: Berlin); Theunert, 2005a:17 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Archer, 2006d:76 (Great Britain: Watsonian Yorkshire: Pollington Quarry); Liebig, 2006:38 (Germany: Sachsen: Muskauer Heide); Liška, 2006:88 (Slovakia: Váh river valley near Trenčín); Ljubomirov, 2006:539 (Bulgaria: previous record from Rhodope Mountains by Balthasar et al., 1967, reported); N. Schneider, 2006:142 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:110 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund), 2006c:303 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:454 (France: first records from the following départements: Savoie: Pont de Beauvoisin; and Seine-Maritime: Dieppe); Guldemond, Pijfers, and den Belder, 2007:202 (Netherlands: Gelderland: dairy farm in de Graafschap); Jacobs, 2007:61, 63 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:23 (Germany: northwestern Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Saure, 2007:81 (in checklist of Aculeata of Brandenburg Land, Germany); Smit and Megens, 2007:17 (Netherlands: Noort Brabant: vicinity of Leende); Vago, 2007:174 (France: départements du Nord, Pas-de-Calais, and Somme); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:200 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:29 (Germany: Niedersachsen: eastern Friesland); Archer,

2008c:145 (Great Britain: Nottinghamshire: Spalford Warren); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Haeseler, 2008:308 (Germany: Friesian Islands); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: loess cliffs); Ljubomirov and Yildirim, 2008:175 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:18 (in catalog of Crabronidae of Asiatic Russia); Theunert, 2008:31 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:314 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d'Eyne); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); Debuysse and Vago, 2009:3 (in list of Sphecidae *sensu lato* of northern France); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:362 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:622 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Hessling, 2009:104 (Germany: Niedersachsen: Hunte River valley south of Oldenburg); Kowalczyk, Kurzac, and Nadolski, 2009:62 (Poland: between Warta and Widawka rivers); Livory, Chevin, Lair, Sagot, and Baldock, 2009:14 (France: Département de la Manche: Pirou/Hacqueville); Mokrousov, 2009:290 (Russia: Republic Mari El); Nemkov, 2009b:64 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:71 (Norway: locality records); Szczepko and Wiśniowski, 2009:69 (Poland: Spała Landscape Park); Archer, 2010a:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren); Ermilov and Mokrousov, 2010:91 (phoretic mite *Calvolia* sp. in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Falk, 2010:93 (Great Britain: heathland sites in West Midlands region); Hable, Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:63 (Russia: Kirov, Kostroma, and Nizhniy Novgorod Oblast's, Chuvash Republic, Mariy El Republic, Tatarstan: no specific localities); Rudoiskatel', 2010:154 (Russia: southern Ural Mountains); Saure, 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:15 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:134 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Konovalov, 2010:24 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:101 (Western Slovakia: recorded from Borská Nižina); van der Smitten, 2010a:338 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010c:396 (Sweden: Öland: Gårdby); Baghirov, 2011b:151 (Russia: Altay Republic: Kosh-Agach, Kuray); Gogala, 2011:10 (Slovenia: Podčetrtek); Józán, 2011:179 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:78 (Russia: Chuvash Republic); Saure, 2011c:198 (Germany: Berlin-Spandau: Fort Hahneberg); Theunert, 2011a:19 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:128 (Germany: Hessen: not endangered); Tripotin, 2011:23 (France: Seine-Maritime: artificial sand site near Sandouville); Ziska and Saure, 2011:108 (Germany: Berlin: Tegeler Fließ valley); Archer, 2012a:130 (Great Britain: Watsonian Yorkshire: Allerthorpe Common), 2012b:183 (Great Britain: urban York); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Franzén, Molander, Norén, and Nilsson, 2012:26 (Sweden: Skåne: Kullaberg Peninsula); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Larivière, Chapelin-Viscardi, and Maillat-Mezeray, 2012:296 (France: Essonne: Maise); Nemkov, 2012c:436 (in catalog of Crabronidae of Russian Far East); Shlyakhtenok, 2012a:171 (Belarus, and Russia: Kirov Oblast': Arkhangelskoye: collected in private plots); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Tripotin, 2012:23 (France: Seine-Maritime: estuary of Seine river); Zettel, 2012:78 (Austria: Niederösterreich: Gollitsch); Archer, 2013b:119 (Great Britain: Leicestershire: suburban garden in Leicester); Dyuzhaeva, 2013:117 (Russia: Samara Oblast': Zhiguli Nature Reserve); Kazenas, 2013a:44 (color photograph of male, short information on geographic distribution and nesting habits), 2013b:493 (southeast Kazakhstan: almost everywhere); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:18 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:18 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:146 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:19 (Portugal: Douro International Natural Park); Wiśniowski and Szczepko, 2013:32 (Poland: Kampinos National Park near Warszawa); Ebrahimi, 2014:44 (Iran: Alborz and Tehrān provinces); Hellqvist, Abenius, and Norén, 2014:93 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces);

Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Pagliano, 2014:76 (specimens in M. Spinola collection, Torino); Yıldırım, Ljubomirov, and Lelej, 2014:10 (distribution in Turkey by biogeographic provinces); Archer, 2015:203 (Great Britain: English coastal sand dunes); Atbaei, Fallahzadeh, and Ljubomirov, 2015:10 (Iran: Fars Province); Koçak and Kemal, 2015:143 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:100 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:13 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:53 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakobzik, 2016:17 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:36 (in checklist of Aculeata of Great Britain and Ireland: England, Scotland, Wales); Olszewski, Ljubomirov, Wiśniowski, and Krzyżyński, 2016:166 (in key to Central and Eastern European Diodontus); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); U. Sörensen, 2016:426 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:922 (Germany: in list of Sphecidae sensu lato of Sachsen-Anhalt); Wiśniowski, 2016:128 (Poland: Ojców National Park); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:31 (Turkey: Erzurum Province); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:73 (Iran: known from Alborz, Fars, Mazandaran, and Tehran provinces); Magdalou, 2017:14 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d'Eyne); Mokrousov, 2017e:247 (in catalog of Pemphredoninae of Russia); Twerd, Krzyżyński, Waldon-Rudziolek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Jacobs and Liebig, 2018:139 (Russia: Irkutsk Oblast': Bolshoye Goloustnoye); Kraus and Wickl, 2018: (Germany: Bayern: Nürnberg); Akulov, Proshchalykin, and Mokrousov, 2020:47 (Russia: central Krasnoyarsk Krai); Kejval, Blažej, and Erhart, 2020:110 (western Czech Republic); Cross, Baldock, and Wood, 2021:59 (in catalog of Sphecidae sensu lato of Portugal); Kaplan and Yıldırım, 2021:77 (in catalog of Crabronidae of Turkey) and Yıldırım, 2021:84 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:88 (in commented list of Sphecidae sensu lato of Poland); Dollfuss, Bitsch, and K. Schmidt in Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:62 (in revision of Sphecidae sensu lato of Europe); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus rosellae* Haitlinger (Trombidiformes: Erythraeidae)); Kaplan and Yıldırım, 2023:1689 (in checklist of Sphecidae sensu lato of Turkey); Langfeld, 2023:61 (Germany: Mecklenburg-Vorpommern: Baltic island Greifswalder Oie); Medetov, Embergenov, Kholmatorov, Elmurodova, Rakhimov, and Tajibaeva, 2024:419 (Uzbekistan: distribution); Frommer and Klenke, 2025:163 (Germany: Hessen: Lahntal near Weilburg).

As *Crabro dimidiatus*: Shuckard, 1837a:151 (in revision of British Aculeata), corrected to *Diodontus tristis* by F. Smith, 1855:100.

As *Diodontus dahlbomi* Thomson, 1870:236 (in revision of Swedish wasps), corrected to *Diodontus tristis* by ...

74. *valkelai* Budrys

Diodontus valkelai Budrys in Budrys and Kazenas, 1992:30, ♀, ♂. Holotype: ♀, Mongolia: Kobdos Aymag: Mount Ih-Havtiin-Nuru: Dzegiin-Ama Canyon (ZIN). Paratypes: Russia: Chita Oblast'. – Budrys, 1996:40, 41, 44, 45 (morphometry).

75. *virginianus* Rohwer

Xylocelia virginiana Rohwer, 1917b:175, ♂. Holotype: ♂, USA: Virginia: Falls Church (USA). – Krombein, 1939:141 (New York State), 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew); Krombein in Muesebeck, Krombein and Townes, 1951:964 (in catalog of North American Hymenoptera); Evans, 1958c:133 (description of larva); Krombein, 1963d:264 (host of *Omalus intermedius* (Aaron)), 1963f:275 (Maryland: Plummers Island near Washington, D.C.), 1958b:22 (nest, prey, parasites). – As *Diodontus virginianus*: R. Bohart and Menke, 1976:179 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1602 (in catalog of North American Hymenoptera); Radović, 1985:64 (sting apparatus analyzed); Eighme, 1989:19 (in revision of North American *Diodontus*; Virginia to New York, west to California and Idaho); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Buck, 2004:24 (in checklist of Sphecidae of Ontario, Canada), 29 (distribution within Ontario), 41 (first record from Canada: Ontario: list of localities);

Ratzlaff, 2016:27 (Canada: first record from British Columbia: Southern Interior), 37 (British Columbia: Penticton); Buck and Bennett, 2025:218 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario, first record from Quebec: no specific locality).

76. *wahisi* Leclercq

Diodontus wahisi Leclercq, 1974b:206, ♀, ♂. Holotype: ♀, France: Hautes-Alpes: Saint Veran (FSAG). – Leclercq, 1974b:204 (in key to *Diodontus* of western Europe); R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae); Dollfuss, 1991:56 (in key to Sphecidae of North and Central Europe); Budrys, 1996:40, 41, 44, 45 (morphometry); Dollfuss and Bitsch *in* Bitsch et al., 2001:65 (in Sphecid Fauna of Western Europe); Leclercq, 2007g:195 (holotype in FSAG); Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d’Eyne); Schmid-Egger, 2011a:37 (France: Parc National du Mercantour: Col de Cayolle, Col de Tende, Le Pra, Millefontes); Bitsch, Grouet, and Savina, 2013:291 (France: Pyrénées centrales: département d’Ariège: Ascou-Pailhères); Bitsch, 2014:407 (record from France by Schmid-Egger, 2011a reported; locality Ascou-Pailhères given as new record); Magdalou, 2017:14 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d’Eyne); Dollfuss, Bitsch, and K. Schmidt *in* Bitsch, Antropov, Bouček, Dollfuss, Fernández Gayubo, and K. Schmidt, 2022:62 (in revision of Sphecidae *sensu lato* of Europe).

sp.

de Beaumont, 1950f:410 (Algeria), 1954b:4 (Canary Islands); Bytinski-Salz, 1956:227 (Turkey: Konya); de Beaumont, 1958b:67 (Algeria: Tassili des Ajjer); Evans, 1958c:134 (description of larva); de Beaumont, 1960a:22 (near *luperus*; Greece: Rhodes Island); Krombein, 1961a:82 (visiting flowers of mat euphorbia, *Euphorbia albomarginata*, as *Xylocelia*); de Beaumont, 1967a:347-348 (Turkey), 1968a:273 (Canary Islands: Fuertaventura), 1969:93 (Turkey); Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); Steiner, 1973:24 (Canada: Northwest Territories); Leclercq, 1974b:202 (aff. *friesei*, in key to *Diodontus* of western Europe); Kumar, Lavigne, Lloyd, and Pfadt, 1976:51 (USA: Colorado: Pawnee National Grassland); C. Ward et al., 1977:56 (associated with mesquite (*Prosopis glandulosa* Torr.), Fabaceae); Báez and Ortega, 1978:192 (Canary Islands); Gess, 1981:19 (South Africa: Hillton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); Hilchie, 1982:106 (prey of *Philanthus albopilosus*), 107 (Alberta: Empress); Gayubo, 1984a:166 (sp. aff. *friesei*; Spain: Salamanca Province); Guichard, 1991a:340 (Jordan); Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve, sp. aff. *kuroo*); Hohmann, La Roche, Ortega, and Barquín, 1993:209 (Canary Islands); Kuhlmann, 1996:220 (Portugal: Serra de Estrela, sp. near *bejarensis*); Finnamore, 1997:886 (Canada: Yukon); Cretin, 1999:8 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); González, Gayubo, and Torres, 1999:354 (Spain: Valladolid: Viana de Cega); Kazenas, 2000e:75 (Kazakhstan, sp. aff. *ammobius*), 79 (Kazakhstan, sp. aff. *cilisternus*), 85 (Kazakhstan: sp. aff. *gussakovskii*), 87 (Kazakhstan, sp. aff. *haemopus*), 108 (Kazakhstan: sp. aff. *rugulosus*), 118 (Kazakhstan: sp. aff. *turkestanicus*); Kazenas and Esenbekova, 2001:133 (Kazakhstan: Almatinskiy Nature Reserve, sp. aff. *hyalipennis*); Kazenas, 2004b:101 (Kazakhstan: western Tien Shan); Magdalou, 2006a:6, 10 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane; sp. aff. *insidiosus*); Kazenas, 2007a:90 (Kazakhstan: Akkala Oblast': Kurgandzhin Nature Reserve and vicinity); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia, sp. aff. *insidiosus*); Ljubomirov and Yildirim, 2008:176 (in catalog of Crabronidae of Turkey); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:357 (in new catalog of Sphecidae of Saudi Arabia, species near *hyalipennis*); Gadallah, 2020b:61 (in list of aculeate wasps of Arabian Peninsula).

NOMINA NUDA IN *DIODONTUS*

- ammobius* Budrys: Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve), 2000e:75 (in Sphecid Fauna of Kazakhstan), 2001:20 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:45 (geographic distribution, collecting localities in Kazakhstan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:419 (Uzbekistan: distribution).
- cilisternus* Budrys: Esenbekova and Kazenas, 2000:16 (southeast Kazakhstan: Aksu-Zhabagly); Kazenas, 2000e:79, 114 (in Sphecid Fauna of Kazakhstan), 2002a:45 (geographic distribution, collecting localities in Kazakhstan), 2004b:100 (Kazakhstan: western Tien Shan).
- geniculatus* Spinola: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, almost certainly not identical to *geniculatus* Cameron); Pagliano, 2014:77 (specimen in M. Spinola collection, Torino, is *Passaloecus* sp.).
- gussakovskii* Budrys: Esenbekova and Kazenas, 2000:17 (southeast Kazakhstan: 8 km south of Kapchagay); Kazenas, 2000e:85 (in Sphecid Fauna of Kazakhstan), 2002a:46 (geographic distribution, collecting localities in Kazakhstan), 2008a:99 (southeast Kazakhstan: 8 km south of Kapchagay in Ili River valley).
- haemopus* Budrys: Kazenas, 1992c:25 (Turkmenistan: Repetek Nature Reserve), 2000e:87 (in Sphecid Fauna of Kazakhstan), 2001:20 (in checklist of Sphecidae of Kazakhstan and Central Asia).
- masminus* Budrys: Kazenas, 2002a:47 (geographic distribution, collecting localities in Kazakhstan).
- oreophilus* Budrys: Kazenas, 2000e:114 (in Sphecid Fauna of Kazakhstan).
- punctatus* Westerlund, 1896:28 (Finland: no specific locality).
- rugulosus* Budrys: Kazenas, 2002a:48 (geographic distribution, collecting localities in Kazakhstan).
- transiliensis* Budrys: Kazenas, 2000e:108 (in Sphecid Fauna of Kazakhstan), 2002a:48 (geographic distribution, collecting localities in Kazakhstan), 2008a:100 (Southeastern Kazakhstan: foothills of Zailiyskiy Alatau: 3-5 km Talgar, 3 km south and 18 km west of Alma Ata).
- turkestanicus* Budrys: Esenbekova and Kazenas, 2000:19 (southeast Kazakhstan: 10 km S Kapchagay); Kazenas, 2000e:118 (in Sphecid Fauna of Kazakhstan), 2002a:49 (geographic distribution, collecting localities in Kazakhstan).

SPECIES DESCRIBED IN *DIODONTUS* AND TRANSFERRED TO OTHER GENERA

- ajax* Rohwer, 1921 = *Psenulus nigrolineatus ajax*
- ajaxellus* Rohwer, 1923 = *Psenulus*
- alienus* Krombein, 1950 = *Psenulus*
- antennatus* Rohwer, 1923 = *Psenulus puncticeps* (Cameron, 1907)
- basilanensis* Rohwer, 1921 = *Psenulus*
- bakeri* Rohwer, 1921 = *Psenulus*
- basilanensis* Rohwer, 1921 = *Psenulus erraticus basilanensis*
- borneensis* Rohwer, 1923 = *Psenulus scutatus borneensis*
- corusanigrens* Rohwer, 1920 = *Psenulus trisulcus* (W. Fox, 1898)
- davanus* Rohwer, 1923 = *Psenulus interstitialis davanus* (Rohwer)
- dapitanensis* Rohwer, 1923 = *Psenulus philippinensis dapitanensis*
- esuchus* Rohwer, 1923 = *Psenulus*
- filicornis* Rohwer, 1923 = *Psenulus*
- hesperus* Pate, 1944 = *Psenulus frontalis* (W. Fox, 1898)

luteopictus Rohwer, 1921 = *Psenulus*
luzonensis Rohwer, 1921 = *Psenulus interstitialis luzonensis*
maurus Rohwer, 1921 = *Psenulus*
mindanaoensis Rohwer, 1923 = *Psenulus scutatus mindanaoensis*
multipictus Rohwer, 1921 = *Psenulus*
occidentalis Malloch, 1933 = *Psenulus frontalis* (W. Fox, 1898)
parenosus Pate, 1944 = *Psenulus pallipes parenosus*
penangensis Rohwer, 1923 = *Psenulus*
philippinensis Rohwer, 1921 = *Psenulus*
sandakanensis Rohwer, 1923 = *Psenulus*
scutatus Rohwer = *Psenulus*
sulcatus Malloch, 1933 = *Psenulus trisulcus* (W. Fox, 1898)
tuberculifrons Rohwer, 1921 = *Psenulus*