

Last updated: 16 December, 2006

PARAPSAMMOPHILA

Parapsammophila Taschenberg, 1869:469. Type species: *Parapsammophila miles* Taschenberg, 1869 [= *Ammophila cyanipennis* Lepeletier de Saint Fargeau, 1845], designated by Pate, 1937c:48.

Ceratosphex Rohwer, 1922:671. Type species: *Sphex bakeri* Rohwer, 1922, by original designation and monotypy.

1. *algira* (Kohl)

Ammophila algira Kohl, 1901d:147, ♀. Holotype or syntypes: ♀, Algeria: Biskra (NHMW). – W. Schulz, 1905b:34 (Algeria: Biskra); Kohl, 1906b:306 (in revision of Palearctic Ammophilini); Roth, 1928:183 (in revision of North African Ammophilini); Alfieri, 1946:123 (in revision of Egyptian *Ammophila*, but unknown from Egypt); de Beaumont, 1950f:395 (Morocco), 1951e:263 (Morocco); Grandi, 1953:236 (Algeria: Touggourt); de Beaumont and Bytinski-Salz, 1955:35 (Israel); Leclercq, 1955h:71 (bibliographic references, Algeria: Ain Rich); de Beaumont, 1968b:146 (recognition characters), 1970a:387 (Afghanistan), 1970c:2 (Iran: Baluchistan). – As *Parapsammophila algira*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed; n. Africa to Afghanistan); Guichard, 1988a:123 (Saudi Arabia: El Riyad); Roche and Zalat, 1994:114 (Egypt: Sinai Peninsula); Gadallah and Assery, 2004a:222 (in catalog of Sphecidae of Saudi Arabia).

Ammophila caelebs Kohl, 1901d:148, ♂. Holotype: ♂, Egypt: Fayum (NHMW). Synonymized with *Parapsammophila algira* by Menke in Bohart and Menke, 1976:139. – Kohl, 1906b:307 (in revision of Palearctic Ammophilini); Alfieri, 1946:124 (in revision of Egyptian *Ammophila*); Leclercq, 1955h:71 (bibliographic references). – As *Parapsammophila caelebs*: Dollfuss, 1989:11 (holotype in NHMW).

Ammophila algira ab. *bituberculata* Bytinski-Salz in de Beaumont and Bytinski-Salz, 1955:35, ♀, ♂. Holotype: ♀, Kfar Yeroham (H. Bytinski-Salz coll., now Tel Aviv Univ.). Synonymized with *Ammophila algira* by de Beaumont, 1968b:148. – de Beaumont, 1968b:148 (individual form of *Ammophila algira*). – As *Parapsammophila bituberculata*: Menke, 1966a:150 (new combination, new status).

Ammophila gibba Alfieri, 1961:140, ♀, ♂. Holotype: ♀, SE Egypt: Wadi Aideb in Gebel Elba (originally A. Alfieri coll., now USNM). Synonymized with *Ammophila algira* by de Beaumont, 1968b:148. – As *Parapsammophila gibba*: Menke, 1966a:150 (new combination).

As *Psammophila gulussa*: Morice, 1900a:66, ♀ only (Algeria: Biskra), corrected to *Parapsammophila algira* by Kohl, 1906:306.

2. *bakeri* (Rohwer)

Sphex bakeri Rohwer, 1922:672, ♀. Holotype: ♀, Philippines: Luzon: Mount Makiling in Laguna (USNM). – As *Parapsammophila bakeri*: Menke, 1966a:150 (new combination); Baltazar, 1966:343 (in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:139 (listed); Tano, Nozaka, Kurokawa, and Murota, 1994:52 (Philippines).

3. *carinata* Guichard

Parapsammophila carinata Guichard, 1988a:124, ♂. Holotype: ♂, Oman: Qurum near Muscat at 23°20' 57°30'E (BMNH).

4. *caroli* (Pérez)

Psammophila caroli Pérez, 1906:498, ♀ (as *Caroli*, incorrect original capitalization). Holotype or syntypes: ♀, Oman: Dibba (MNHN). – Pérez, 1907:485 (listed); R. Bohart and Menke, 1976:144 (listed). – As *Podalonia caroli*: R. Bohart and Menke, 1976:144 (new combination, listed). – As *Parapsammophila caroli*: Guichard, 1988a:124 (new combination, discussion of status).

5. *caspica* (Gussakovskij)

Ammophila caspica Gussakovskij, 1930c:199, ♀, ♂. Syntypes: Turkmenistan: Firyuza and Krasnovodsk (ZIN). – As

Parapsammophila caspica: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed, e. Mediterranean area, sw. USSR); Kazenas, 1978b:34 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas, 2001b:16 (in checklist of Sphecidae of Kazakhstan and Central Asia). – As *Eremochares caspica*: Myartseva, 1971:76 (in key to *Eremochares* of Turkmenistan).

Ammophila macularis Gussakovskij, 1930c:200, ♀, ♂. Syntypes: Turkmenistan: Krasnovodsk (ZIN). Synonymized with *Parapsammophila caspica* by Pulawski in Bohart and Menke, 1976:139. – Kazenas, 1978b:34 (in key to Sphecidae of Kazakhstan and Central Asia). – As *Parapsammophila macularis*: Menke, 1966a:151 (new combination). – As *Eremochares macularis*: Myartseva, 1971:76 (in key to *Eremochares* of Turkmenistan).

Ammophila sacra Bytinski-Salz in de Beaumont and Bytinski-Salz, 1955:36, ♀, ♂. Holotype: ♀, Israel: Jerusalem (H. Bytinski-Salz coll., now Tel Aviv Univ.). Synonymized with *Parapsammophila caspica* by Pulawski in Bohart and Menke, 1976:139. – de Beaumont, 1967a:264 (Turkey), 1968b:146 (recognition characters); Menke, 1966a:151 (new combination). – As *Parapsammophila sacra*: Menke, 1966a:151 (new combination).

6. *consobrina* (Arnold)

Sphex consobrinus Arnold, 1928b:255, ♀. Holotype: ♀, South Africa: Cape Province: Willowmore (TMP). – Arnold, 1930:16 (in checklist of Afrotropical Sphecidae). – As *Ammophila consobrina*: Leclercq, 1955h:73 (new combination, bibliographic references, incorrectly spelled *consobrinus*). – As *Parapsammophila consobrina*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed, ? = *testaceipes*).

7. *cyanipennis* (Lepeletier de Saint Fargeau)

Ammophila cyanipennis Lepeletier de Saint Fargeau, 1845:370, ♀. Holotype or syntypes: ♀, Senegal: no specific locality (originally J. Serville coll., now M. Spinola coll., Torino). – F. Smith, 1856:213 (listed); Radoszkowski, 1881:211 (Angola); Dalla Torre, 1897:398 (in catalog of world Hymenoptera); Kohl, 1906b:297 (in revision of Palearctic Ammophilini); Alfieri, 1946:121 (in revision of Egyptian *Ammophila*); Berland, 1950b:295 (Niger: Air area); Leclercq, 1955h:72 (bibliographic references); Bradley, 1957:39 (type in Turin); Diniz, 1964b:237 (Guinea Bissau, redescription, as *cyaneipennis*); Casolari and Casolari Moreno, 1980:101 (specimens in M. Spinola collection). – As *Sphex cyanipennis*: Arnold, 1928b:256 (Kohl's description translated into English), 1930:16 (in checklist of Afrotropical Sphecidae, as *cyeneipennis*); Arnold, 1935b:1 and 8 (Mauritania: Nema, as *cyaneipennis*). – As *Parapsammophila cyanipennis*: Ed. André, 1886:86 (new combination, in revision of Sphecidae of Europe and Algeria), 1888:5* (bibliographic references); Menke, 1966a:150 (listed); R. Bohart and Menke, 1976:139 (listed, n. Africa).

Ammophila reticollis A. Costa, 1864b:111, sex not indicated. Syntypes: Senegal (NAPOLI). Synonymized with *Ammophila cyanipennis* by Kohl, 1906b:297. – Dalla Torre, 1897:406 (in catalog of world Hymenoptera).

Ammophila miles Taschenberg, 1869:430, ♀, ♂. Lectotype: ♂, Sudan: Khartum (HALLE), designated by Menke in Bohart and Menke, 1976:139. Synonymized with *Ammophila cyanipennis* by Ed. André, 1891:5*. – As *Ammophila miles*: Dalla Torre, 1897:404 (new combination, in catalog of world Hymenoptera).

8. *dolichostoma* Kohl

Ammophila dolichostoma Kohl, 1901d:146, ♀. Holotype or syntypes: ♀, Saudi Arabia: no specific locality (NHMW). – nec Roth, 1930:80 and 1934:185 (= *Parapsammophila foleyi*); Alfieri, 1946:127 (in revision of Egyptian *Ammophila*); Leclercq, 1955h:71 (bibliographic references); de Beaumont, 1968b:146 (recognition characters). – As *Parapsammophila dolichostoma*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed, Saudi Arabia, Egypt); Guichard, 1988a:123 (Saudi Arabia); Dollfuss, 1989:11 (type material in NHMW); Roche and Zalat, 1994:114 (Egypt: Sinai Peninsula); Gadallah and Assery, 2004a:223 (in catalog of Sphecidae of Saudi Arabia).

9. *errabunda* (Kohl)

Ammophila errabunda Kohl, 1901d:147, ♀. Holotype or syntypes: ♀, Somalia or Ethiopia: no specific locality (NHMW). – Kohl, 1906b:310 (in revision of Palearctic Ammophilini); Leclercq, 1955h:72 (bibliographic references). – As *Parapsammophila errabunda*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed, e. central Africa); Guichard, 1988a:124 (diagnostic characters); Dollfuss, 1989:11 (type material in NHMW).

10. *eremophila* (R. Turner)

Ammophila eremophila R. Turner, 1910a:342, ♂. Holotype or syntypes: ♂, Australia: Northern Territory: Hermannsburg (BMNH). – As *Parapsammophila eremophila*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:105 (listed); Cardale, 1985:228 (in catalog of Australian Sphecidae).

11. *erythrocephala* (Fabricius)

Sphex erythrocephalus Fabricius, 1782:204, sex not indicated (as *erythrocephala*, incorrect original termination). Holotype: ♀, India: Kerala: former Malabar District: no specific locality (BMNH, coll. Banks). – Fabricius, 1787:275 (...), 1793:204 (...); Lichtenstein, 1796:199 (in auction catalog); R. Turner, 1918a:90 (synonymy; claws have two teeth); Arnold, 1945:87 (de Saussure's 1892 record from Madagascar is unreliable); Misra, 1984:1203 (India: Siwalik Forest Division; nesting habits). – As *Pelopoeus erythrocephalus* [sic]: Fabricius, 1804:203 (new combination, redescription). – As *Ammophila erythrocephala*: Lepeletier de Saint Fargeau, 1845:385 (new combination, revision); F. Smith, 1856:216 (listed); Cameron, 1889:94 (listed), 100 (redescription); de Saussure, 1892:437 (Madagascar, redescription); Bingham, 1897:235 (redescription); Dalla Torre, 1897:399 (in catalog of world Hymenoptera); van der Vecht, Vecht, 1961a:40 (study of type, diagnostic characters); Casolari and Casolari Moreno, 1980:101 (specimens in M. Spinola collection). – As *Podalonia erythrocephala*: Ebrahimi, 1993:93 (Iran). – As *Parapsammophila erythrocephala*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed, India; as *erythrocephalus*); Jha and Farooqi, 1994:11 (description and illustration of male genitalia).

Ammophila fuscipennis F. Smith, 1870:187, ♂. Holotype or syntypes: ♂, India: North-West Provinces, now Uttar Pradesh: Manipuri (BMNH). Synonymized with *Sphex erythrocephala* by R. Turner, 1918a:90. – Cameron, 1889c:93 (listed); Bingham, 1897:233 (redescription); Dalla Torre, 1897:400 (in catalog of world Hymenoptera).

? *Ammophila violaceipennis* Cameron, 1889c:100, ♂, junior primary homonym of *Ammophila violaceipennis* Lepeletier de Saint Fargeau, 1845. Holotype or syntypes: origin not indicated, but probably India (OXUM). – Cameron, 1889c:94 (listed); R. Bohart and Menke, 1976:139 (as questionable synonym of *Parapsammophila erythrocephala*).

? *Ammophila indica* Dalla Torre, 1897:403. Replacement name for *Ammophila violaceipennis* Cameron.

12. *foleyi* de Beaumont

Ammophila dolichostoma var. – Roth, 1930:80 (Algeria: Tassili des Ajjer) and 1934:185 (Algeria), corrected to *Ammophila foleyi* by de Beaumont, 1956a:173.

Ammophila foleyi de Beaumont, 1956a:172, ♀, ♂. Holotype: ♀, southern Morocco: Tata (MNHN), 1958a:290 (illustration of genitalia), 1968b:146 (recognition characters). – As *Parapsammophila foleyi*: Menke, 1966a:151 (new combination); R. Bohart and Menke, 1976:139 (listed, North Africa); Guichard, 1980:224 (Oman).

13. *funerea* (Nurse)

Ammophila funerea Nurse, 1903b:9, ♂. Holotype: ♂, India: Gujarat: Deesa (BMNH). – Ramakrishna Aiyar, 1916:554 (in catalog of Indian aculeates described after Bingham, 1897). – As *Parapsammophila funerea*: Menke, 1966a:150 (new combination, as *funeria*); R. Bohart and Menke, 1976:139 (listed).

14. *herero* (Arnold)

Sphex herero Arnold, 1928b:253, ♀, ♂. Syntypes: Namibia: Kaross, Outjo, Otjikondo; Zimbabwe Bulawayo, Gwaai River (SAM). – Arnold, 1930:16 (in checklist of Afrotropical Sphecidae). – As *Ammophila herero*: Leclercq, 1955h:73 (new combination, bibliographic references). – As *Parapsammophila herero*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:139 (listed: Botswana, Namibia, Zimbabwe).

15. *lateritia* Taschenberg

Parapsammophila lateritia Taschenberg, 1869:431, ♀. Lectotype: ♀, Sudan: Khartum (HALLE), designated by Menke in Bohart and Menke, 1976:139. – Ed. André, 1886:89 (in revision of Sphecidae of Europe and Algeria), 1888:5* (bibliographic references); Menke, 1966a:150 (listed); R. Bohart and Menke, 1976:139 (listed, North Africa); Guichard, 1988a:123 (Saudi Arabia); Gadallah and Assery, 2004a:217 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 223 (in catalog of Sphecidae of Saudi Arabia). – As *Ammophila lateritia*: Dalla Torre, 1897:403 (in catalog of world Hymenoptera); Kohl, 1906b:300 (in revision of Palearctic Ammophilini); Roth, 1928:180 (in revision of North African Ammophilini), 1931:92 (Algeria, probably Hoggar area); Gussakovskij, 1933b:273 (Iran); Roth, 1934b:184 (Algeria); Alfieri, 1946:121 (in revision of Egyptian *Ammophila*); de Beaumont, 1950:365 (Morocco), 1950f:395 (Algeria: Tadjemout 1958a:290 (illustration of genitalia), 1962c:221 (Arabia: El Riyad), 1968b:146 (recognition characters).

Parapsammophila monilicornis Morice, 1900a:66, ♂. Syntypes: ♂, Algeria: Biskra (OXUM). Synonymized with *Ammophila lateritia* by Alfieri, 1946:121, synonymy confirmed by de Beaumont, 1950f:395. – As *Ammophila monilicornis*: Kohl, 1906b:299 (in revision of Palearctic Ammophilini); Morice, 1911:72 (Algeria: Biskra); Roth, 1928:179 (in revision of North African Ammophilini).

16. *litigiosa* (Kohl)

Ammophila litigiosa Kohl, 1901d:143, ♂. Holotype: ♂, Africa: no specific locality. – Leclercq, 1955h:72 (bibliographic references). – As *Parapsammophila litigiosa*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:140 (listed); Dollfuss, 1989:11 (type material in NHMW).

17. *ludovicus* (F. Smith)

Ammophila ludovicus F. Smith, 1856:212, ♀ (as *Ludovicus*, incorrect original capitalization). Holotype or syntypes: ♀, South Africa: Kwazulu Natal: Port Natal, now Durban (BMNH or OXUM). – Dalla Torre, 1897:404 (in catalog of world Hymenoptera); Bingham, 1902:218 (South Africa: Pretoria); Cameron, 1910:133 (South Africa: Transvaal: Kranspoort); Brauns, 1911a:238 (South Africa); Leclercq, 1955h:73 (bibliographic references, locality records from Zaire and elsewhere); Diniz, 1964c:109 (Angola: Lunda: Alto Cuilo, Camissombo, Rio Camaloa, Rio Caquele). – As *Sphex ludovicus*: Arnold, 1920:32 (revision), 1928b:252 (revision), 1930:16 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:95 (Zaire); Arnold, 1935a:503 (South Africa: Kalahari). – As *Parapsammophila ludovicus*: Menke, 1966a:150 (new combination); Leclercq, 1969:1051 (Congo Brazzaville); R. Bohart and Menke, 1976:139 (listed).

? *Ammophila gigantea* Kohl, 1901d:142, ♀. Holotype or syntypes: ♀, Zaire: no specific locality (Inst. Roy. Sci. Nat. Belgique). – Leclercq, 1955h:73 (as new synonym of *Ammophila ludovicus*), 75 (as *Ammophila ludovicus* var. *gigantea*). – As *Sphex giganteus*: Schouteden, 1930:95 (Zaire). – As *Sphex ludovicus* race *gigantea*: Arnold, 1928b:253 (revision), 1930:16 (in checklist of Afrotropical Sphecidae). – As *Parapsammophila ludovicus* var. *gigantea*: Leclercq, 1969:1051 (Congo Brazzaville). – As *Parapsammophila gigantea*: Menke, 1966a:150 and Bohart and Menke, 1976:140 (as questionable synonym of *Parapsammophila ludovicus*).

18. *ponderosa* (Gerstaecker)

Ammophila ponderosa Gerstaecker, 1871:352, ♀. Holotype: ♀, Kenya or Tanzania: Endara (ZMHU). – Leclercq, 1955h:93 (bibliographic references, as incertae sedis). – Dalla Torre, 1897:406 (in catalog of world Hymenoptera).

– As *Parapsammophila ponderosa*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:140 (listed).

Ammophila ponderosa Gerstaecker, 1873: 332, ♀. Objective synonym of *Ammophila ponderosa* Gerstaecker, 1871.

19. *testaceipes* (R. Turner)

Sphex testaceipes R. Turner, 1918a:90, ♂. Holotype or syntypes: ♂, Tanzania: Ruaha River Valley (BMNH). – Arnold, 1928b:257 (original description copied), 1930:16 (in checklist of Afrotropical Sphecidae). – As *Parapsammophila testaceipes*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:140 (listed).

20. *turanica* F. Morawitz

Parapsammophila turanica F. Morawitz, 1890:582, ♂. Holotype: ♂, Turkmenistan: Repetek (ZIN). – Myartseva, 1963b:59 (Turkmenistan: lower Murgab River), 1965:86 (Turkmenistan: Bayram-Ali district); Menke, 1966a:150 (listed); R. Bohart and Menke, 1976:140 (listed); Kazenas, 1978b:34 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1988a:123 (Arabian Peninsula); Roche and Zalat, 1994:114 (Egypt: Sinai Peninsula); Kazenas, 2001b:17 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:31 (geographic distribution, collecting localities in Kazakhstan); Gadallah and Assery, 2004a:223 (in catalog of Sphecidae of Saudi Arabia). – As *Ammophila turanica*: Dalla Torre, 1897:410 (new combination, in catalog of world Hymenoptera); nec Kohl, 1906b:303 (= *Eremochares kohlii*); Gussakovskij, 1928a:7 (synonymy); de Beaumont, 1968b:146 (*lutea* Kohl et auct., nec Taschenberg; recognition characters).

As *Ammophila lutea* (corrected to *Ammophila turanica* by ...): Kohl and Handlirsch, 1889:276 (Turkmenistan); Kohl, 1906b:304 (in revision of Palaearctic Ammophilini); Morice, 1911:73 (Algeria: Biskra); Roth, 1928:170 (in revision of North African Ammophilini), 1930:81 (Algeria: Fort Lallement S of Ouargla), 1934b:186 (Algeria); Giner Marí, 1945b:362 (Morocco: Western Sahara: Aserifa, Um at Sfaia); Alfieri, 1946:123 (in revision of Egyptian *Ammophila*); de Beaumont, 1951e:263 (Morocco); Leclercq, 1955h:70 (bibliographic references); de Beaumont and Bytinski-Salz, 1955:35 (Israel); de Beaumont, 1956a:172 (Libya), 1958b:56 (Tassili des Ajjer); Pulawski, 1964:65 (Egypt); de Beaumont, 1962c:221 (Arabia: El Riyadh); Kazenas, 1978b:34 (in key to Sphecidae of Kazakhstan and Central Asia). – As *Eremochares lutea*: Myartseva, 1971:76 (in key to *Eremochares* of Turkmenistan), 1972a:85 (Turkmenistan).

21. *unguicularis* (Kohl)

Ammophila unguicularis Kohl, 1901d:143, ♂. Holotype: ♂, Mozambique: Delagoa Bay (Berlin). – Leclercq, 1955h:73 (bibliographic references). – As *Sphex unguicularis*: Arnold, 1920:54 (original description translated into English), 1928b:256 (original description translated into English), 1930:16 (in checklist of Afrotropical Sphecidae). – As *Parapsammophila unguicularis*: Menke, 1966a:150 (new combination); R. Bohart and Menke, 1976:140 (listed, Mozambique).

sp.

de Beaumont, 1969:80 (Turkey), 1970c:2 (Iran: Baluchistan); Guichard, 1980:224 (Oman).

SPECIES DESCRIBED IN PARAPSAMMOPHILA AND TRANSFERRED TO ANOTHER GENUS

retowskii Konow, 1887 = *Eremochares dives* (Brullé, 1833)