

The type specimens of bees (Hymenoptera, Apoidea) deposited in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg. Contribution IX. Family Megachilidae, tribe Anthidiini, species described by F. Morawitz

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Abstract

The type specimens for names of bee taxa in the tribe Anthidiini, described by Ferdinand Morawitz and which are deposited in the Zoological Institute, Russian Academy of Sciences (St. Petersburg) are reviewed. Primary types of 35 taxa are illustrated and detailed information is provided. Lectotypes are here designated for the following seven nominal taxa: *Anthidium affine* Morawitz, 1874, *A. christophi* Morawitz, 1884, *A. insulare* Morawitz, 1873, *A. montanum* Morawitz, 1865, *Stelis aculeata* Morawitz, 1880, *S. scutellaris* Morawitz, 1894, and *S. simillima* Morawitz, 1875. The types of *Anthidium laticeps* Morawitz, 1874, *A. puncticolle* Morawitz, 1888, and *A. terminale* Morawitz, 1893 have not been found and are probably lost.

Key words: Anthophila, Apiformes, lectotypes, Palaearctic region, taxonomy

Introduction

The present paper is the ninth part (and first for the family Megachilidae) of a series of works (Astafurova & Proshchalykin 2018, 2019, 2020a, 2024; Astafurova *et al.* 2021, 2022a, 2023, 2024; see also Proshchalykin & Kuhlmann 2015; Dathe & Proshchalykin 2017; Astafurova & Proshchalykin 2020b; Astafurova *et al.* 2022b) dealing with the primary type specimens of bee taxa deposited in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg [ZISP], the main goal of which is to make the ZISP collection of bees more accessible and useful to scientists. A detailed history of the formation of this collection and description of its current state are provided in the first part of the series (Astafurova & Proshchalykin 2018).

The ZISP collection of the tribe Anthidiini is housed in 27 drawers and comprises more than 4500 pinned, labelled and identified specimens belonging to 149 species. The most valuable part of the general collection, in addition to 51 primary types of Anthidiini, are secondary type specimens (paratypes and paralectotypes; 72 specimens in total) of 32 species and subspecies described by Ferdinand Morawitz, Vladimir Popov, Vsevolod Gussakovskij, Klaus Warncke, and Heinrich Friese.

The tribe Anthidiini is considered by many authors to be a rather complex group from a taxonomic perspective. This is primarily due to strong geographic and biotope variability affecting the colour of the integument, the shape of the pregenital sterna, the genitalia and the density of punctation of various structures. This variability can be traced through a detailed analysis of certain genera and species in different parts of their range. The tribe Anthidiini, which comprises over 200 species in the Palaearctic region, is least studied in Asia (Niu *et al.* 2020a, b; Litman *et al.* 2021; Kasperek 2021b, 2022, 2024; Kasperek & Boustani 2025).

TABLE 1. (Continued)

N	Species name	Sex	Current status	Depositories of types
27	* <i>Anthidium nigrinum</i> Morawitz, 1875	♀	? synonym of <i>Anthidium punctatum</i> Latreille, 1809	HT (probably lost)
28	<i>Anthidium nitens</i> Morawitz, 1896	♀, ♂	valid as <i>Icteranthidium nitens</i> (Morawitz, 1896)	LT, PLT (ZISP)
29	<i>Anthidium nitidulum</i> Morawitz, 1893	♀	synonym of <i>Anthidium punctatum</i> Latreille, 1809	HT (ZISP)
30	* <i>Anthidium obscuratum</i> Morawitz, 1875	♀	valid as <i>Pseudoanthidium obscuratum</i> (Morawitz, 1875)	LT (ZISP); PL (ZMMU)
31	* <i>Anthidium petechiale</i> Morawitz, 1875	♀	? synonym of <i>Pseudoanthidium cribratum</i> (Morawitz, 1875)	HT (probably lost)
32	<i>Anthidium pictipes</i> Morawitz, 1893	♂	valid as <i>Pseudoanthidium pictipes</i> (Morawitz, 1893)	HT (ZISP)
33	<i>Anthidium politum</i> Morawitz, 1894	♀	valid	HT (ZISP)
34	<i>Anthidium pubescens</i> Morawitz, 1872	♂	valid as <i>Trachusa pubescens</i> (Morawitz, 1872)	LT, PLT (ZISP)
35	<i>Anthidium puncticolle</i> Morawitz, 1888	♀, ♂	valid as <i>Pseudoanthidium puncticolle</i> (Morawitz, 1888)	ST (probably lost)
36	<i>Anthidium pusillum</i> Morawitz, 1894	♂	valid as <i>Afranthidium pusillum</i> (Morawitz, 1894)	LT, PLT (ZISP)
37	* <i>Anthidium ruficorne</i> Morawitz, 1875	♀, ♂	valid as <i>Icteranthidium ruficorne</i> (Morawitz, 1875)	LT, PLT (ZMMU)
38	<i>Anthidium taschenbergi</i> Morawitz, 1893	♀, ♂	valid	LT, PLT (ZISP)
39	<i>Anthidium tegulare</i> Morawitz, 1886	♂	synonym of <i>Pseudoanthidium reticulatum</i> (Mocsáry, 1884)	HT (ZISP)
40	<i>Anthidium terminale</i> Morawitz, 1893	♀	synonym of <i>Anthidium diadema</i> Latreille, 1809	HT (probably lost)
41	<i>Anthidium thomsoni</i> Morawitz, 1893	♀, ♂	valid	LT, PLT (ZISP)
42	<i>Anthidium trochantericum</i> Morawitz, 1893	♂	valid	HT (ZISP)
43	* <i>Anthidium unicum</i> Morawitz, 1875	♂	valid	HT (ZMMU)
44	<i>Anthidium venustum</i> Morawitz, 1877	♀	valid	HT (ZISP)
45	<i>Stelis aculeata</i> Morawitz, 1880	♂	valid	LT, PLT (ZISP)
46	<i>Stelis ruficornis</i> Morawitz, 1871	♂	valid	HT (ZISP)
47	<i>Stelis scutellaris</i> Morawitz, 1894	♀, ♂	valid	LT (ZISP)
48	<i>Stelis simillima</i> Morawitz, 1875	♀, ♂	valid	LT, PLT (ZISP)

Comment. HT—holotype; LT—lectotype, PLT—paralectotype/s; ST—syntype/s; *—species described by Morawitz (1875) from the collection of A. Fedtschenko from Turkestan and not included in the current publication (see Ivlev *et al.* 2025).

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