

NEW RECORDS OF BEES OF THE GENUS *HOPLITIS* KLUG, 1807 (HYMENOPTERA, MEGACHILIDAE) FROM CENTRAL ASIA

M. Yu. Proshchalykin

Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far East Branch of the Russian Academy of Sciences, Vladivostok, 690022, Russia. E-mail: proshchalykin@biosoil.ru

Summary. An annotated list and illustrations of eight species of rarely collected and little known bees of the genus *Hoplitis* from Central Asia is given. Five species are firstly recorded from Uzbekistan, five species – from Kazakhstan, and one species – from Tajikistan.

Key words: Apiformes, Osmiini, fauna, Palaearctic region.

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Резюме. Приводится список и фотографии 8 редких видов пчёл из рода *Hoplitis*, собранных в различных регионах Центральной Азии. Впервые для Узбекистана приводятся 5 видов, для Казахстана – 5 и для Таджикистана один вид.

INTRODUCTION

The bee genus *Hoplitis* Klug, 1807 currently includes 377 valid species, with an estimated total of about 450 species (Müller, 2022) from the Palaearctic, the Nearctic and the Afrotropical regions (Michener, 2007). The Palaearctic fauna is sufficiently well studied and includes 301 species, of which 35 species have been described from Central Asia by F. Morawitz, O. Radoszkowski, K. Warncke, V. Popov, and A. Müller (Müller, 2022).

To further study on Palaearctic *Hoplitis* I here report records of eight rarely collected and little known species from some Central Asian countries for the first time (Uzbekistan – 5 species; Kazakhstan – 5, Tajikistan – 1). This paper is meant as a further step towards a better documentation of the species of *Hoplitis* and their distribution patterns in the Palaearctic region and adjacent areas.

MATERIAL AND METHODS

Studied specimens are deposited in the collections of the Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia (ZISP), and the Federal Scientific Center of the East Asia Terrestrial Biodiversity of the Far East Branch of the Russian Academy of Sciences, Vladivostok, Russia (FSCV). Taxonomy and distributional generally follow Müller (2022). A detailed synonymy of the species names can be found also in Müller (2022). New distribution records are asterisked (*).

LIST OF SPECIES

Genus *Hoplitis* Klug, 1807

Hoplitis (Alcidamea) mollis Tkalčú, 2000

Fig. 1

Hoplitis (Liosmia) mollis Tkalčú, 2000: 316, ♀, ♂ (holotype: ♂, Turkey: Erzurum).

MATERIAL EXAMINED. Kazakhstan: West Kazakhstan Province, Yanvartsevo, Ural River, 52°14'E 51°26'N, 31.V 1950, 1 ♂, coll. V. Rudolf (ZISP).

DISTRIBUTION. Azerbaijan, Bulgaria, Jordan, Syria, Turkey, *Kazakhstan.

REMARKS. It is first record of this species for Central Asia.

Hoplitis (Alcidamea) morinella (Warncke, 1991)

Fig. 2

Osmia (Alcidamea) morinella Warncke, 1991c: 714, ♀ (holotype: ♀, Tajikistan: “Reschen Pojom” [20 km E Pendzhikent]).

MATERIAL EXAMINED. Kazakhstan: Kyzylorda Province, 10 km W of Terenozek, 64°50'E 45°02'N, 3.VI 1979, 1 ♀, coll. Yu. Pesenko (ZISP); 60 km E of Arys Lake, 67°07'E 46°01'N, 13.VI 1979, 1 ♀, coll. Yu. Pesenko (ZISP).

DISTRIBUTION. Tajikistan, *Kazakhstan.

REMARKS. This species has only been known from the type series.

Hoplitis (Hoplitis) kaszabi Tkalčú, 2000

Fig. 3

Hoplitis (Annosmia) kaszabi Tkalčú, 2000: 318, ♀, ♂ (holotype: ♂, Mongolia: “Central Aimak [Töv Aimag], Ulan-Baator, Nucht im Bagdo ul, 1880 m”).

MATERIAL EXAMINED. Tajikistan: Gorno-Badakhshan Province, 40 km S of Mugrab, 74°00'E 37°48'N, 27.VII 1979, 1 ♂, coll. Yu. Pesenko (ZISP).

DISTRIBUTION. *Tajikistan, Mongolia, Russia (Siberia), North China.

REMARKS. First record of this species for Central Asia.

Hoplitis (Pentadentostmia) karakalensis (Popov, 1936)

Fig. 4

Osmia karakalensis Popov, 1936: 596, ♀ (holotype: ♀, Turkmenistan: “Kara-Kala, Kopet-Dagh-Bergkette” [Makhtumkuli]).

MATERIAL EXAMINED. Uzbekistan: Kashkadar'ya Province, Karshi, 65°49'E 38°52'N, 20.V 2015, 1 ♀, M. Proshchalykin, M. Mokrousov, K. Samartsev (FCBV).

DISTRIBUTION. Turkmenistan, *Uzbekistan, Iran, India.

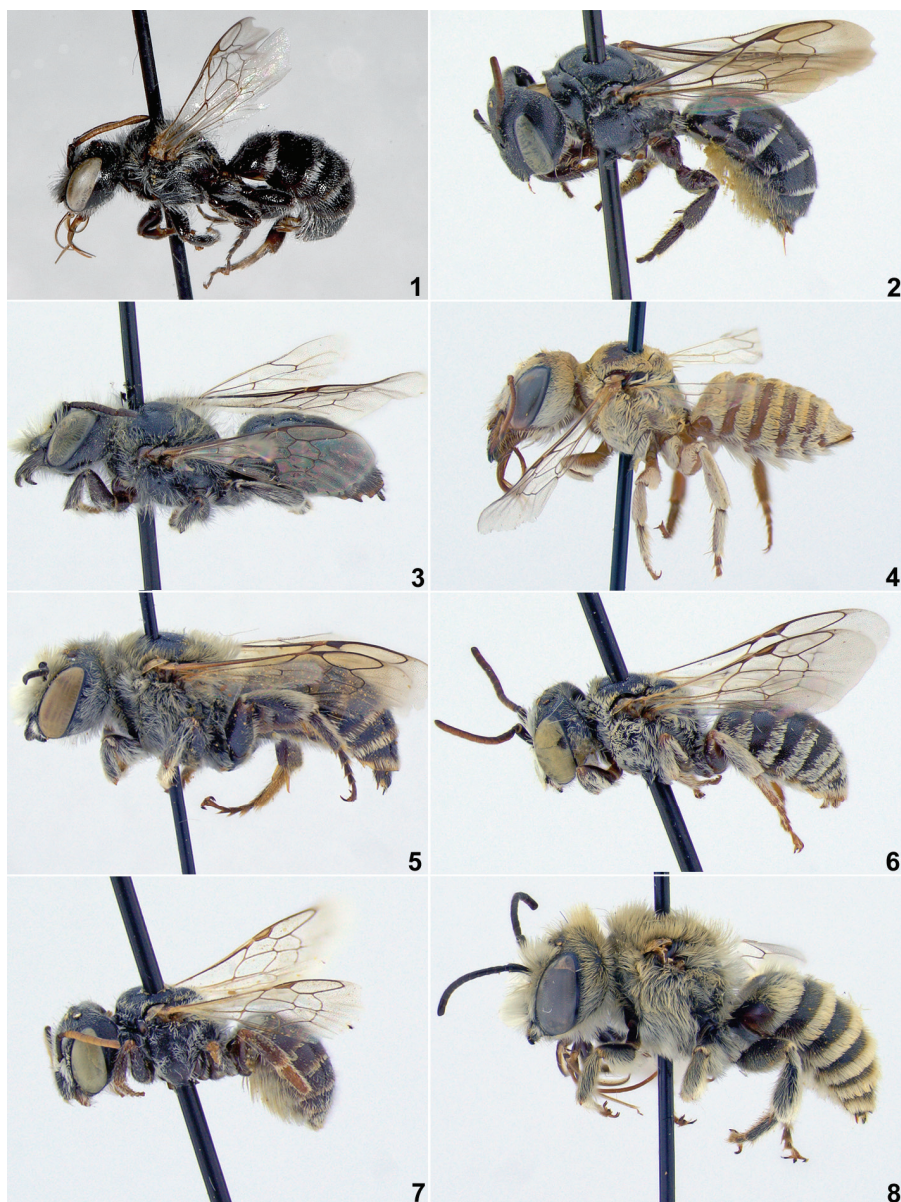
Hoplitis (Pentadentostmia) nitidula (Morawitz, 1877)

Fig. 5

Osmia nitidula Morawitz, 1877: 43, ♂ (lectotype: ♂, designated by Warncke, 1991a: 24, Armenia: “Etschmiadzin” [Vagharshapat]).

MATERIAL EXAMINED. Uzbekistan: Kashkadar'ya Province, 5 km N of Mubarek, 65°08'E 39°18'N, 14–15.V 2015, 4 ♂, coll. V. Gromenko (FCBV); idem, 1 ♀, coll. M. Proshchalykin, M. Mokrousov, K. Samartsev (FCBV).

DISTRIBUTION. Armenia, Iran, Pakistan, *Uzbekistan, Kazakhstan, Russia (south of European part).



Figs 1–8. *Hoplitis* species from Central Asia. 1 – *H. mollis*, male (from Kazakhstan); 2 – *H. morinella*, female (from Kazakhstan); 3 – *H. kaszabi*, male (from Tajikistan); 4 – *H. karakalensis*, female (from Uzbekistan); 5 – *H. nitidula*, male (from Uzbekistan); 6 – *H. dispersipunctata*, male (from Uzbekistan); 7 – *H. flavicornis* (from Uzbekistan); 8 – *H. fascicularia* (from Uzbekistan).

***Hoplitis (Stenomsmia) dispersipunctata* Müller, 2014**

Fig. 6

Hoplitis (Stenomsmia) dispersipunctata Müller, 2014: 309, ♀, ♂ (holotype: ♀, Turkmenistan: “Denev, 40 km N Tzardjou” [Türkmenabad]).

MATERIAL EXAMINED. Uzbekistan: Kashkadar’ya Province, Sundukli desert, Urta-Bulak, 64°32'E 38°57'N, 21.V 2015, 1 ♀, coll. M. Proshchalykin, M. Mokrousov (FCBV). Kazakhstan: Aktobe Province, Chelkar [=Shalkar], 59°37'E 47°50'N, 4.VII 1988, 2 ♀, coll. Malysheva (ZISP).

DISTRIBUTION. Turkmenistan, *Uzbekistan, *Kazakhstan.

REMARKS. This species has only been known from the type series.

***Hoplitis (Stenomsmia) flavicornis* (Morawitz, 1877)**

Fig. 7

Osmia flavicornis Morawitz, 1877: 47, ♂ (lectotype: ♂, designated by Warncke, 1991b: 406, Armenia: “Etschmiadsin” [=Vagharshapat]).

MATERIAL EXAMINED. Uzbekistan: Kashkadar’ya Province, Sundukli desert, Urta-Bulak, 64°32'E 38°57'N, 21.V 2015, 5 ♀, coll. M. Proshchalykin, M. Mokrousov (FCBV). Kazakhstan: Kyzylorda Province, Tomenaryk, 67°00'E 44°01'N 1.VI 1979, 3 ♂, coll. Yu. Pesenko (ZISP).

DISTRIBUTION. Armenia, Iran, Turkmenistan, *Uzbekistan, *Kazakhstan.

***Hoplitis (Pentadentomsmia) fascicularia* (Radoszkowski, 1886)**

Fig. 8

Osmia fascicularia Radoszkowski, 1886: 13, ♂ (syntypes: ♂♂, Turkmenistan: “montagnes Kokpet” [=Kopet Dagh Mts.]).

MATERIAL EXAMINED. Turkmenistan: Balkan Province: Kara-Kala [=Makhtumkuli], 56°44'E 38°54'N, 14.VI 1955, 1 ♂, coll. A. Ponomareva (ZISP). Uzbekistan: Kashkadar’ya Province, 5 km N of Mubarek, 65°08'E 39°18'N, 14–15.V 2015, 1 ♀; 20 km SW of Mubarek, 16.V 2015, 1 ♂, coll. M. Proshchalykin, M. Mokrousov, K. Samartsev (FCBV).

DISTRIBUTION. Turkmenistan, *Uzbekistan.

REMARKS. This species has only been known from the type series.

CONCLUSIONS

In total 53 *Hoplitis* species are now recorded from Central Asia (including current data): Tajikistan – 25; Turkmenistan – 13; Uzbekistan – 23; Kyrgyzstan – 16; Kazakhstan – 32. This is a comparable number to the Iranian fauna (37 species), but distinctly less in comparison with the fauna of Turkey (101 species), North Africa (99 species) and Europe (102 species) (Ascher & Pickering, 2022). This group of bees is still poorly known in Central Asia and further records of its representatives can be expected.

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Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.

E-mail: storozhenko@biosoil.ru

web-site: <http://www.biosoil.ru/fee>