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A new species of *Hypoganus* Kiesenwetter, 1858 (Coleoptera: Elateridae: Dendrometrinae) from China, with notes on the Palearctic species of the genus

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Abstract

Hypoganus wenna sp. nov. is described and illustrated from Yunnan, China. Notes on the genus from the Palearctic region are given. A distribution map of Chinese *Hypoganus* species is provided, along with a key and a checklist of the species from Palearctic region. Habitats of *Hypoganus* species are illustrated.

Key words: *Hypoganus*, new species, Elateridae, Dendrometrinae, China

Introduction

The click beetle genus *Hypoganus* occurs throughout Europe, Asia and North America and consists of seven species (Tarnawski 1996; Čechovský & Kubáň 1997; Schimmel & Tarnawski 2017). It was first established as a subgenus of *Corymbites* based on *Elater cinctus* Paykull (Kiesenwetter 1858); later, it was treated as a subgenus of *Ludius* (Buysson 1894; Pic 1903, 1905); then, it was respectively treated as an independent genus among tribe Ludiini (Reitter 1911), among subfamily Corymbitinae (Schenkling 1927; Laurent 1965), and among tribe Ctenicerini/ subfamily Ctenicerinae (Leseigneur 1972; Dolin 1978, 1982; Kishii 1987; Gurjeva 1989; Tarnawski 1996, 2001; Cate *et al.* 2007). Currently this genus is in tribe Prosternini, subfamily Dendrometrinae (Platia & Gudenzi 1999; Mertlik & Platia 2008; Boucharad *et al.* 2011; Schimmel & Tarnawski 2017).

Five species of the genus *Hypoganus* are known from the Palearctic region, within which, two are found in Europe and Western Asia, two in west China, and one in Japan. In this article, a new species *Hypoganus wenna* sp. nov. is described from the southern part of Yunnan, China. Illustrations of this new species are provided along with notes, a key and a checklist of the Palearctic region species. A distribution map of the Chinese species and habitats are also provided.

Materials and methods

Specimens examined are deposited in the following collections:

- CLQC the collection of Lu Qiu/ Clyde Qiu (Southwest University, Chongqing, China).
CPM the collection of A.S. Prosvirov (Moscow State University, Moscow, Russia).
ZISP the collection of the Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia). The material from ZISP belongs to the collections of A.P. Semenov-Tian-Shansky and J.K.E. Faust (hereinafter—AS and JF respectively).

Morphological terminology used in this paper mainly follows Costa *et al.* (2010). The limits of the Palearctic region are based on Cate *et al.* (2007).

Study of *H. wennae* sp. nov.: The terminal segments and genitalia of the holotype were macerated in 10% NaOH and observed in glycerin jelly using a Motic® K400 stereomicroscope and a Leica® M205A stereomicroscope. Photographs of the specimen and characters were taken using a Leica® M205A stereomicroscope plus Leica® DFC 550. The habitat photos were taken using a Nikon® Coolpix P7700 digital camera.

Study of other species of *Hypoganus*: The genitalia were removed, cleaned and fixed under the body of the specimen in glycerol mounts. The procedure for making such mounts was described by Prosvirov & Savitsky (2011). The material was studied under a Motic® SMZ-143-N2GG stereomicroscope and Micromed® 3 trinocular microscope. Photographs of the beetles were taken using a Canon® EOS-6D camera with a Canon® MP-E 65 mm lens. Photographs of the genitalia were taken from glycerol mounts using a Micromed® 3 trinocular microscope with a ToupCam® 5.1 MP video eyepiece and a ToupCam® 18 MP video eyepiece. Extended focus technology was used.

All drawings were made with the aid of Adobe Photoshop® CS6 and all photographs were modified in Adobe Photoshop® CS6. Body length was measured from the apical margin of the frons to the apices of the elytra. Body width was measured at the widest point of the body (usually near the middle of the elytra).

The holotype of the new species was marked with red label indicating the type status. The labels of all specimens have been quoted verbatim; additional information and translations of the labels are given in square brackets.

Taxonomy

Hypoganus Kiesenwetter, 1858

Corymbites (*Hypoganus*) Kiesenwetter, 1858: 299.

Corymbites Candèze 1863: 88 (in section VI.).

Ludius Laporte de Castelnau 1840: 241; Schwarz 1906: 223 (in 5. section), 225 (in 4. section).

Ludius (*Hypoganus*) Buysson 1894: 114; Pic 1903:129; Pic 1905: 181.

Hypoganus Reitter 1911: 219; Schenkling 1927: 402; Miwa 1934: 38; Laurent 1965: 282; Ôhira 1970: 22; Leseigneur 1972: 302; Dolin 1978: 52; Lohse 1979: 156; Dolin 1982: 253; Kishii 1987: 103; Gurjeva 1989: 106; Tarnawski 1996: 613; Tarnawski 2001: 289; Cate *et al.* 2007: 117; Schimmel & Tarnawski 2017: 295.

Type species: *Elater cinctus* Paykull, 1800 (= *Athous inunctus* Lacordaire, 1835)

Generic diagnosis. Length 8.6–14.0 mm; body elongate, flat, shining, sides generally parallel. Pubescence weak to moderate, punctures sparse to moderate. Antennae just reach or extend slightly beyond hind angles of pronotum, serrated from antennomere 4. Frontal carina weak, mandible bidentate. Prosternal suture double-lined. Elytron with 8 striae. Aedeagus typical, trilobate; paramere apex usually triangular and hooked (Figs. 7A–F). Ovipositor (Figs. 9A, C) rather long and broad; baculum long, well sclerotized; coxite strongly sclerotized, narrowed to apex, with short stylus. Bursa copulatrix (Figs. 9B, D) rather elongate, with two groups of sclerotized spines, small spines at sides, and large spines mostly in central part.

Distribution. Europe, Western Asia, China (Fig. 10), Japan, North America.

Checklist of *Hypoganus* of Palaearctic region

Hypoganus inunctus (Lacordaire, 1835)—Europe, Turkey

Hypoganus miyatakei Ôhira, 1966—Japan: Honshu

Hypoganus sichuanensis Schimmel & Tarnawski, 2017—China: Sichuan

Hypoganus stepanovi Denisova, 1948—North and South Caucasus

Hypoganus tibetis Čechovský & Kubáň, 1997—China: Yunnan

Hypoganus wennae Qiu & Prosvirov sp. nov.—China: Yunnan

Key to *Hypoganus* from the Palearctic region

- 1 Hind angle of pronotum short, widely triangular, apex sharp, body dark brown, only female is known *H. sichuanensis*
- Hind angle of pronotum elongate, narrowed, apex sharp or blunt, body color various 2
- 2 Body generally smaller (male 8.0–11.0 mm in length, 2.5–3.0 mm in width). Penis rather thin and elongate, paramere broadly rounded at apex (Figs. 7E–F) 5
- Body generally larger (male 10–13.1 mm in length, 2.8–3.9 mm in width). Penis rather thick and shorter, paramere pointed or narrowly rounded at apex (Figs. 7A–D) 3
- 3 Elytra shining black, hind angle of pronotum with apex narrowed and blunt (Figs. 1A; 2F), body larger (male 13.1 mm in length, 3.9 mm in width). Paramere distinctly curved at apical 1/3 (Figs. 7A–B) *H. wennae* sp. nov.
- Elytra dark brown, hind angle of pronotum with apex sharp, body smaller (male 10.0–11.5 mm in length, 2.8–3.0 mm in width). Paramere only slightly curved or almost straight at apical 1/3 4
- 4 Head and pronotum shining black, elytra dark brown with metallic reflection, antenna of males exceeding the hind angle of pronotum by two antennomeres, hind angle of pronotum short, elytra 3 times longer than their width at base *H. tibetis*
- Body dark brown, elytra darker, palpi, antennae and legs reddish brown, antenna of males scarcely reach hind angles of pronotum, hind angle of pronotum elongate, apex curved, elytra 2.5 times longer than their width at base *H. miyatakei*
- 5 Body brown to black, elytra usually light colored, yellowish brown, reddish brown or dark brown, antennomere 3 cylindrical, barely broadened at apex, clearly narrower than antennomere 4 *H. inunctus*
- Body black, antennomere 3 conical, clearly broadened at apex, slightly narrower than antennomere 4 *H. stepanovi*

Hypoganus wennae Qiu & Prosvirov sp. nov.

(Figs. 1A–C; 2A–J; 3A–D; 4A–D; 7A–B; 8A; 10; 11A)

Type material. HOLOTYPE, male, CHINA: Yunnan: Mt. Daweishan [大围山], Pingbian County [屏边县], Honghe Prefecture [红河州], 2000–2100m, 15.VII.2016, Zhi-Wei Dong leg. (CLQC).

Diagnosis. This species resembles *H. tibetis*, but can be easily distinguished from the latter by the following characters in the male: 1) body distinctly larger (13.1 mm, while 10.0–10.1 mm in *H. tibetis*); 2) body shining black, only the apex of the antenna and the abdomen tip brownish (Figs. 2E, 3D), while in *H. tibetis*, head and pronotum shining black, antennae and elytra dark brown, legs brown; 3) pubescence black, while pubescence grey in *H. tibetis*; 4) hind angle of the pronotum obtuse at apex (Fig. 2F), while it is sharp in *H. tibetis*; 5) scutellum weakly covered with black pubescence, and widest at base (Fig. 2I), while it is covered with grey pubescence basally in *H. tibetis* and widest in basal third; 6) elytra wider with the sides slightly convex (Fig. 1A), whereas elytra narrower and the sides slightly concave in *H. tibetis*; 7) male genitalia also show differences in shape of the parameres (see Figs. 7A–C; 8A–B).

Description. Male (holotype). **General:** Body length 13.1mm, body width (elytra width) 3.9mm, elytra length 9.3mm, pronotum length 3.1mm, pronotum width 3.3mm, antenna length 3.8mm. Body shining, smooth, elongate, flat, dorsal surface sparsely covered with micro punctures and fine pubescence, ventral surface with relatively dense punctations and pubescence; color black except the follows parts: the apex of antennomere 11 and abdomen tip brownish yellow, tarsi slightly brownish yellow, claws yellow (Figs. 1A–C; 2E; 3D).

Head: Vertex trapezoid between eyes, with a shallow V-shaped depression, surface sparsely punctate, with sparse, short and black pubescence (Figs. 2A, D). Frontal region straight, frontal carina not strongly protruded, lateral sides ridged above antennae, smoothly declining medially (Fig. 2C). Eyes large, bulbous (Fig. 2A). Antennae (Fig. 2E) just reach the hind angles of pronotum, with yellowish pubescence, serrate from antennomere 4 to 10, and gradually narrowing from antennomere 4 on; scape long, generally equal to the length of antennomere 4, elongate oval shaped; pedicel shorter than other segments, coniform, slightly longer than wide; flagellum coniform, distinctly longer than wide; antennomeres 4 to 10 sub-triangular; antennomere 11 with apex trapezoid. Labrum (Fig. 2C) transverse, narrow, wrinkled and punctate, with some long yellowish pubescence medially.

Thorax: Prothorax slightly wider than long, thickest in median posterior slope. Pronotum (Fig. 2F) smooth, very sparsely punctate with micro punctures and small blackish pubescence only visible under magnification (Figs. 2G–H); disc arched, with a shallow depression in the middle posteriorly; lateral margins roundly convex, pronotal carinae almost straight in lateral view; hind angles long, distinctly divergent, apex thin and blunt. Hypomeron flat, slightly punctate and pubescent; prosternal sutures parallel medially, strongly curved anteriorly and posteriorly; prosternum with denser punctures and pubescence, two transverse wrinkled lines present distally, chin piece wrinkled, pubescent and punctate, with anterior margin convex, distinctly edged (Fig. 2B); prosternal process stick-like, rough, base slightly necked, apex narrowed, blunt (Fig. 3A).

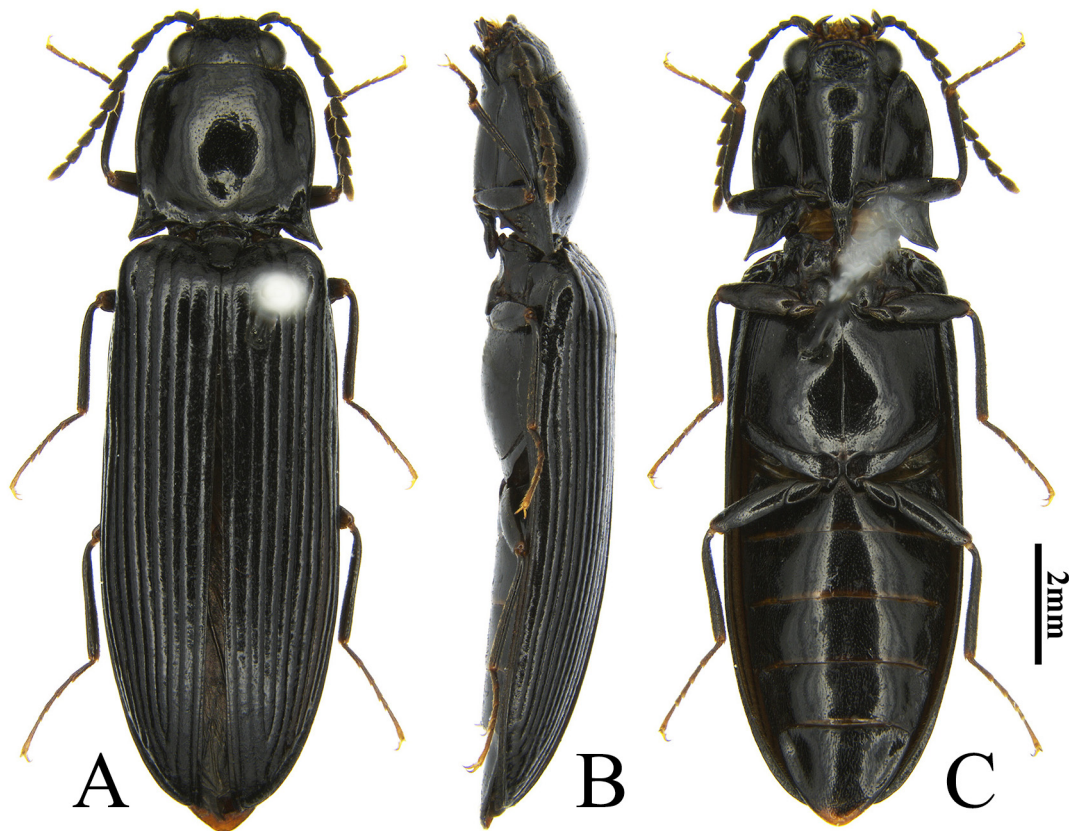


FIGURE 1. A–C. Habitus of *Hypoganus wenna* sp. nov., male (13.1mm), holotype: **A.** dorsal view; **B.** lateral view; **C.** ventral view.

Scutellum (Fig. 2I) flat, longer than wide, widest at anterior margin, sparsely punctate and pubescent; anterior margin slightly convex, lateral margins almost straight, narrowed from anterior to middle, posterior half slightly rounded. Mesoventral cavity tongue-shaped (Fig. 3B).

Elytra: Elongate, sides slightly convex, widest in posterior third; each with 8 deep striae, the interstriae clearly elevated, smooth, sparsely punctate and pubescent; each stria with a row of elongate punctures, the intervals between the punctures about 1–3 times of puncture length (Fig. 2J).

Legs: Slender, tarsi simple, segments 1 to 4 becoming sequentially shorter, segment 5 the longest, segment 4 the shortest. Metacoxal plate shaped as in Fig. 3C, widest at base, slightly curved and gradually narrowed towards lateral.

Abdomen: Sternite VII triangular, lateral portions distinctly depressed, tip with much larger punctures (Fig. 3D). Tergite VIII cordiform, densely pubescent, margin with additional long setae (Fig. 4A), tergite IX distinctly pubescent, hind lateral area with several long setae, apical portion triangularly concave (Fig. 4B), tergite X distinctly pubescent, apex round (Fig. 4B); sternite VIII transverse, hind lateral area with several short setae (Fig. 4C), sternite IX broadly elongate, apex obtusely angled, distal portion pubescent, with some small setae medially (Fig. 4D).

Genitalia: Penis wide, longer than parameres, apex short, strong narrowed and curved dorsally; paramere robust, each base with an incision in ventral view, the outer margin slightly convex, and then strong concave towards apex, apical portion triangular with hook-like angle, apex slightly pointed, phallobase with smoothly curved medially (Fig. 7A–B; 8A).

Female and larva. Unknown.

Distribution. China (South Yunnan).

Natural history. Remains unknown, the habitat photograph in Mt. Daweishan (2100m) is shown in Fig. 11A. It is possible that *H. wenna* sp. nov. as well as the other species of the genus inhabits forest biotopes.

Etymology. This new species is collected by the first author's good friend Mr. Zhi-Wei Dong, and the species epithet is named in honor of Dong's girlfriend Ms. Wen-Na Chen, for her support and love for Zhi-Wei Dong.

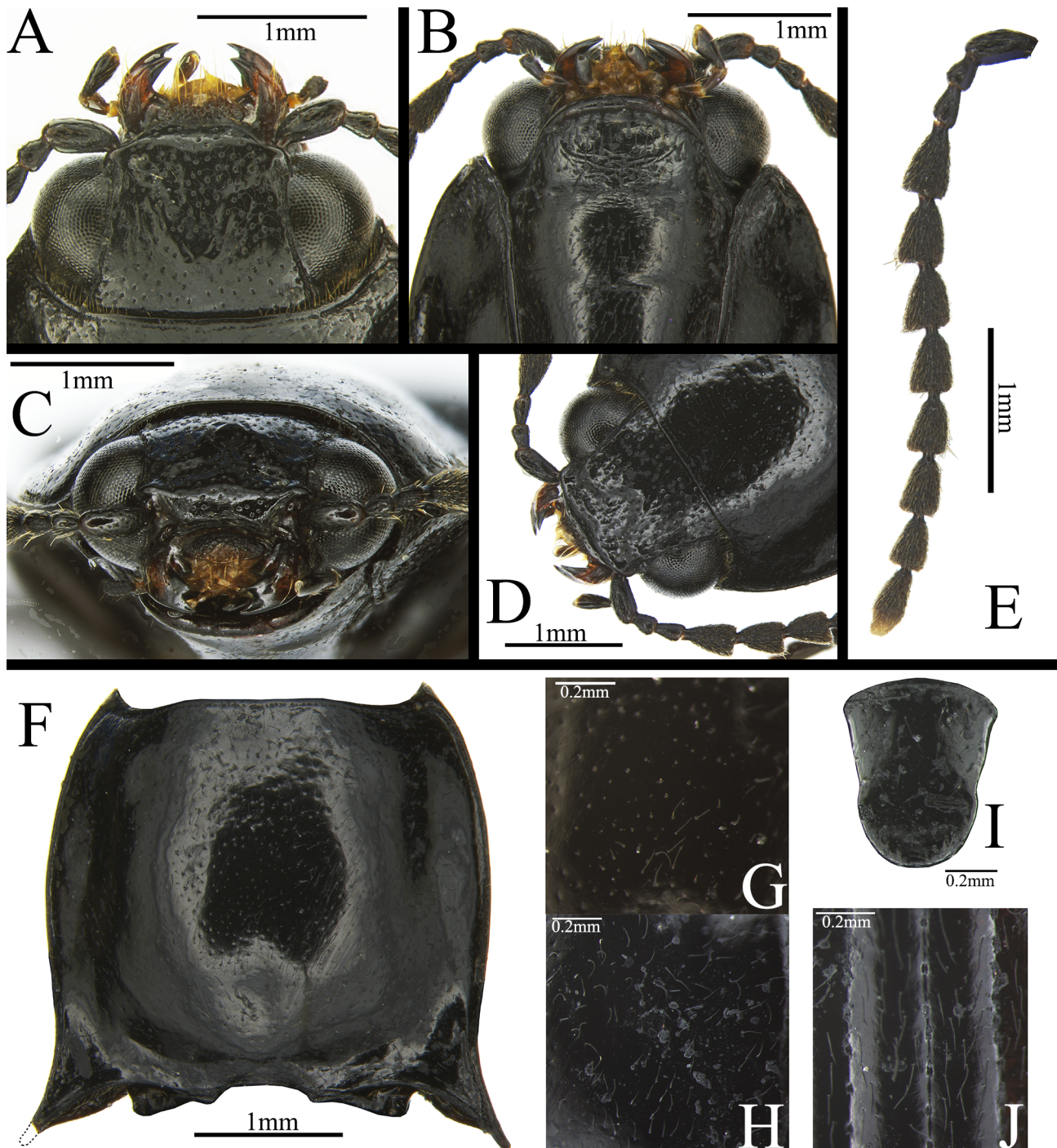


FIGURE 2. A–J. Head and thorax of *Hypoganus wenna* sp. nov., male, holotype: **A.** head, dorsal view; **B.** head and anterior half of prothorax, ventral view; **C.** head, anterior view; **D.** head, anterolateral view; **E.** antenna, dorsal view; **F.** pronotum, dorsal view; **G.** punctures on disc of pronotum; **H.** punctures on pronotum laterally; **I.** scutellum; **J.** punctures on disc of elytra.

***Hypoganus sichuanensis* Schimmel & Tarnawski, 2017**

Hypoganus sichuanensis Schimmel & Tarnawski, 2017: 295.

Diagnosis. Based on the original description, this species is characterized as followed: female body length 12.2 mm, width 2.9 mm. Body blackish-brown, shining, legs and hind angles of pronotum brownish, pubescence yellowish. Pronotum with fine and sparse punctures and pubescence, hind angle short and sharp, moderately divergent. Scutellum lingulate, smooth, without punctures.

Remarks. This species is described from 5 females from Sichuan, China. The holotype and 3 paratypes were collected from “Sabde”, “Sabde” is a township in Kangding City, Ganzi Prefecture, the correct spelling in Chinese *Pinyin* is Shade Town [沙德乡]. One paratype was also collected from Moxi [磨西] to Hailuogou [海螺沟], in Luding County, Ganzi Prefecture.

Distribution. China (Sichuan).

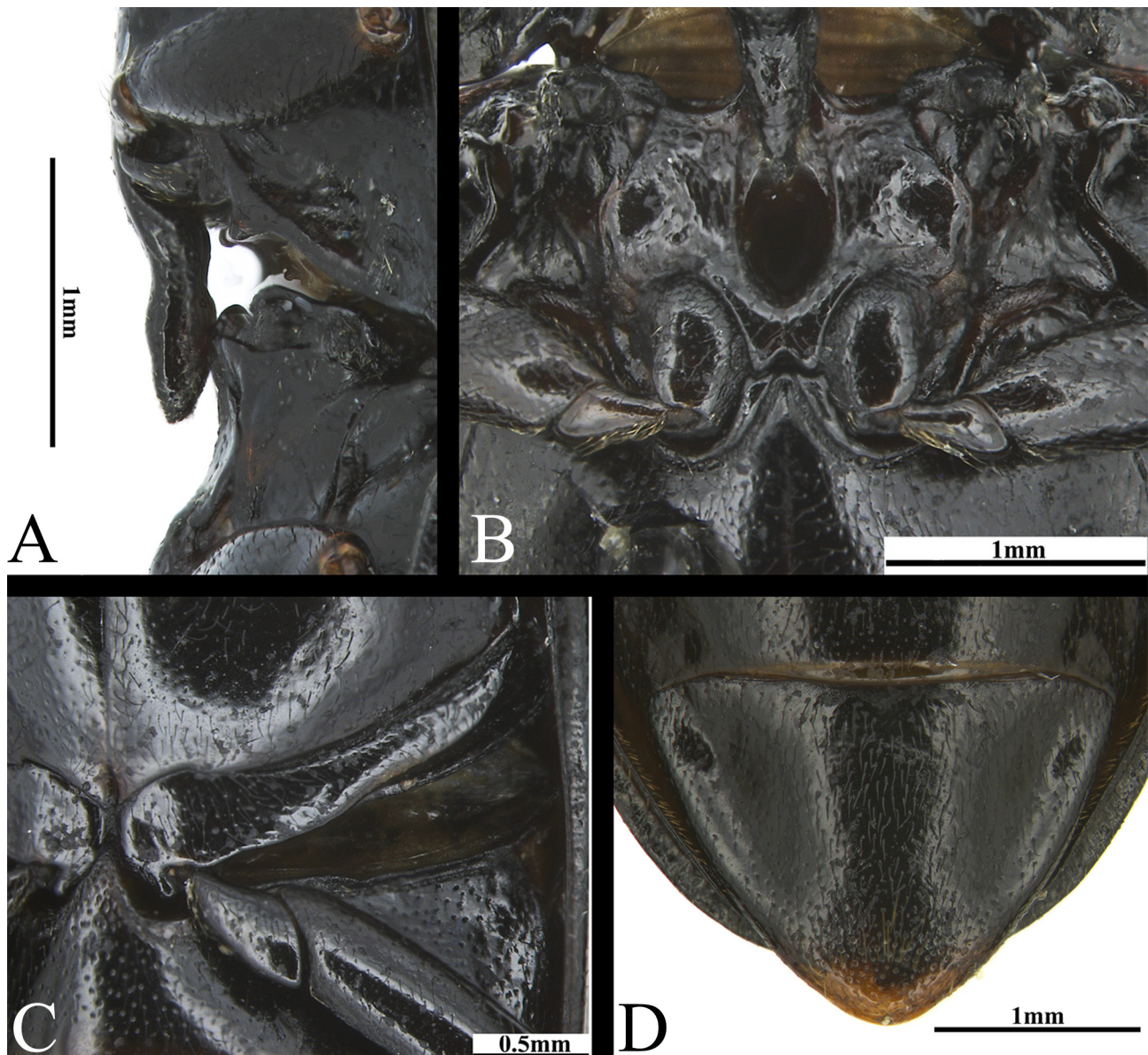


FIGURE 3. A–D. Thorax and abdomen of *Hypoganus wennae* sp. nov., male, holotype: A. prosternal process, lateral view; B. mesoventral cavity, ventral view; C. metacoxal plate, ventral view; D. sternite VII, ventral view.

Hypoganus tibetis Čechovský & Kubáň, 1997
(Figs. 7C; 8B)

Hypoganus tibetis Čechovský & Kubáň, 1997: 115; Cate *et al.* 2007: 117; Schimmel & Tarnawski 2017: 297.

Diagnosis. Based on the original description, this species is characterized as follows: male body length 10.0–10.1 mm, width 2.8–2.9mm; female body length 11.0mm, width 3.2mm. Head and pronotum shining black, hind angles of pronotum slightly brownish, antennae and elytra dark brown, elytra metallic, legs brown, pubescence grey. Pronotum with fine and sparse punctures, hind angle narrow and sharp, strongly divergent. Scutellum with grey

pubescence basally, widest in basal third. Male genitalia as Figs. 7C, 8B, penis robust but with narrow and short apex, parameres with lateral margin straight, apex distinctly pointed, the hook short.

Remarks. This species was described from 12 specimens from Yulongshan Mountain area, north of Lijiang City. “Baishui [白水]” and “Heishui [黑水]” are two close places in the east of Mt. Yulongshan. Schimmel & Tarnawski (2017) also recorded this species from the north of Mt. Habashan, which is very close to Mt. Yulongshan.

Distribution. China (Yunnan).

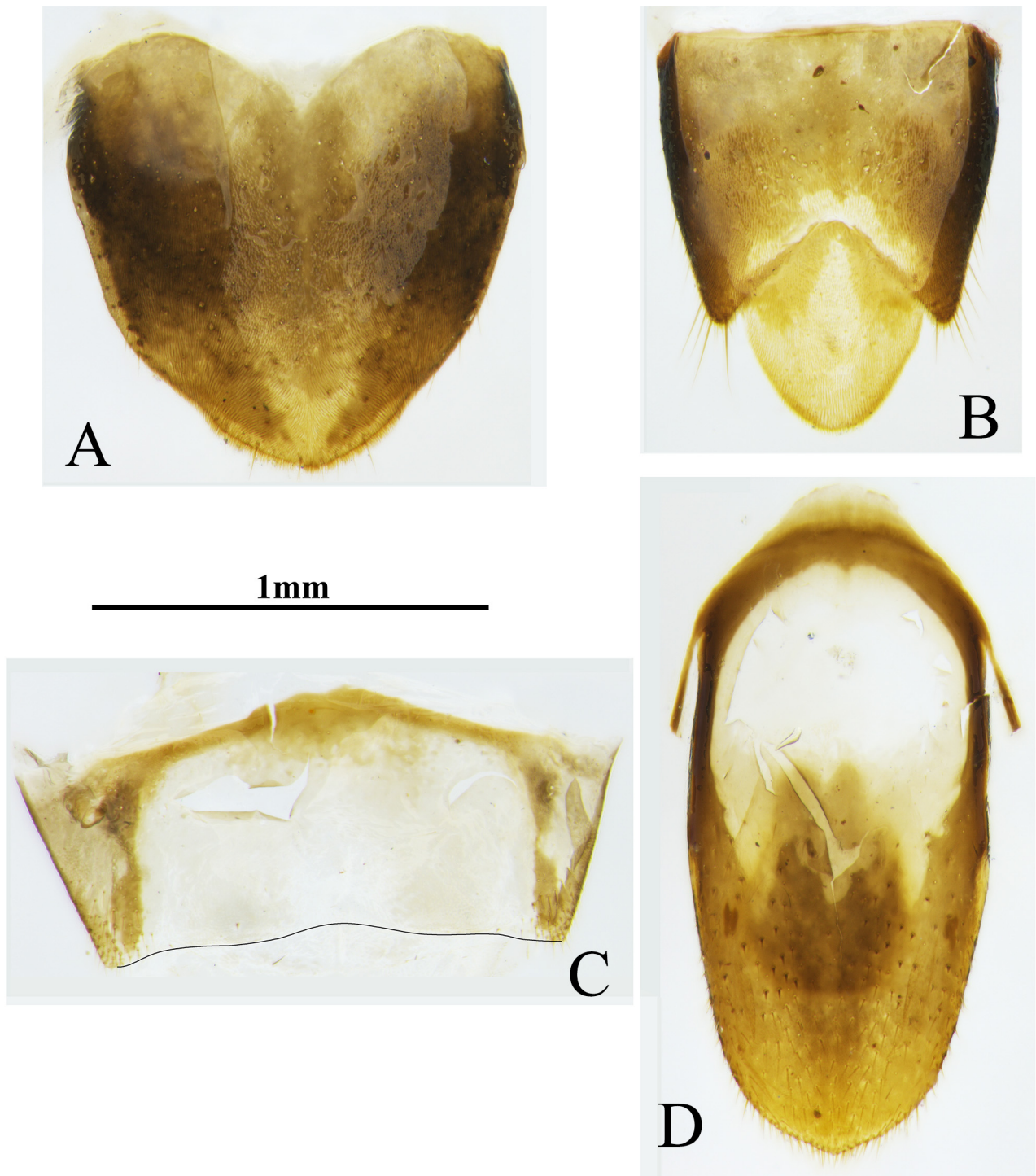


FIGURE 4. A–D. Terminal segments of *Hypoganus wenna* sp. nov., male, holotype: **A.** tergite VIII, dorsal view; **B.** tergite IX–X, dorsal view; **C.** sternite VIII, ventral view; **D.** sternite IX, ventral view.

***Hypoganus inunctus* (Lacordaire, 1835)**

(Figs. 5A–F; 7F; 8E; 9C–D)

Elater cinctus Paykull, 1800: 10.

Athous inunctus Lacordaire, 1835: 642 (replace name for *Elater cinctus* Paykull).

Diacanthus cinctus Germar 1843: 73.

Corymbites (*Hypoganus*) *cinctus* Kiesenwetter 1858: 299.

Corymbites cinctus Candèze 1863: 167.

Ludius incinctus Laporte de Castelnau, 1840: 241.

Ludius (*Hypoganus*) *cinctus* Buysson 1894: 114.

Ludius (*Hypoganus*) *cinctus* var. *akbesianus* Pic, 1903: 129.

Ludius (*Hypoganus*) *cinctus* var. *semitestaceus* Pic, 1905: 181.

Ludius cinctus Schwarz 1906: 223.

Hypoganus cinctus Reitter 1911: 219; Schenckling 1927: 402; Laurent 1965: 282; Leseigneur 1972: 302; Dolin 1978: 52; Dolin 1982: 254; Gurjeva 1989: 108; Tarnawski 1996: 614; Tarnawski 2001: 289; Schimmel & Tarnawski 2017: 293.

Hypoganus inunctus Cate et al. 2007: 117; Mertlik 2016: 67.

Material examined. 2 males, 2 females: 1 female, “Закарпатье, окр. Свалявы, сух. гн. граба, Компанцева Т., N 12, 25.4.90” [Ukraine, Zakarpattia Oblast, Svaliava City env., dry rot of hornbeam, 25 April 1990, T.V. Kompantseva leg.] (CPM); 1 female, “Бодзентинь, Кълецкаго уѣзд., Якобсонъ, 25.V.95” [Poland, Kielce County, Bodzentyn Town, 25 May 1895, G.G. Jacobson leg.] (ZISP); 1 male, “Grm. b., Dohrn.” [North Germany, Dohrn leg.] (ZISP, JF); 1 male, “95, Tirol” [Austria, Tyrol, 1895] (ZISP, AS).

Diagnosis. Male body length 8.5–11.0 mm, width 2.5–3.0 mm; female body length up to 14.0 mm, width up to 4.0 mm (Gurjeva 1989; Mertlik 2016). Coloration variable, body brown to black, legs lighter, elytra brownish red to brownish black (Mertlik 2016, and Figs. 5A–F). Pronotum with distinct punctures, hind angle slightly divergent and narrowed, apex sub-acute, with a distinct carina. Scutellum widest basally, lateral margins nearly straight and parallel. Elytra with clear striae, each stria consists of a row of deep punctures, the intervals between the striae not very elevated, distinctly pubescent. Male genitalia as Figs. 7F, 8E, penis thin, apex robust and long, paramere with lateral margin slightly curved, much more concave distally, apex round, the hook sharp; female genitalia as Figs. 9C–D, ovipositor with very small styli, spines in central part of bursa copulatrix small.

Remarks. Panzer (1796) firstly described a species under the name *Elater cinctus* (currently *Drapetes cinctus* (Panzer), a synonym of *Drapetes mordelloides* (Host)), while Paykull (1800) described another species and reused the name *Elater cinctus*. The subsequent species *Athous inunctus* Lacordaire, 1835 is the same as *Elater cinctus* Paykull, 1800, thus the name *Athous inunctus* Lacordaire replaces *Elater cinctus* Paykull. *Hypoganus inunctus* (Lacordaire, 1835) is the valid name instead of *Hypoganus cinctus* (Paykull, 1800).

Distribution. A widely distributed species among Europe and also in Turkey (Cate et al. 2007; Pedroni & Platia 2010; Németh et al. 2014).

***Hypoganus stepanovi* Denisova, 1948**

(Fig. 6A–C; 7E; 8D; 9A–B; 11B–C)

Hypoganus stepanovi Denisova, 1948: 46; Dolin 1978: 52; Gurjeva 1989: 110; Platia & Gudenzi 1999: 26; Cate et al. 2007: 117.

Material examined. 3 males, 6 females: 1 female, “Абхазия, С макросклон Бзыбского хр., ССВ перевала Гудаута, правый борт ущелья р. Решевие, ок. 1000–1100 м, 43°18'55" N, 40°48'35" E, 6.VII.2009, А.С. Просви́ров leg. / на рододендроне” [Abkhazia, N macroslope of Bzyb Range, NNE Gudauta Pass, right edge of Reshevie River gorge, ca. 1000–1100 m a.s.l., 43°18'55" N, 40°48'35" E, 6 July 2009, A.S. Prosvirov leg. / on rhododendron] (CPM); 1 female, “Абхазия, ССЗ г. Сухуми, правый борт ущелья р. Бзыбь, 3.15 км ЮВВ устья р. Бавю, ЮВ пос. Псху, ок. 600 м, 43°21'55" N, 40°49'50" E, 4.VII.2009, А.С. Просви́ров leg. / на стволе бука, у поросшего мхом комля” [Abkhazia, NNW Sukhumi City, right edge of Bzyb River gorge, 3.15 km SEE mouth of Vavyu River, SE Pskhu Vill., ca. 600 m a.s.l., 43°21'55" N, 40°49'50" E, 4 July 2009, A.S. Prosvirov leg. / on beech trunk, near stem base covered by moss] (CPM); 1 male, “Абхазия, Бзыбский хр., подъем по ущ. р. Хипста, h~1400 м, 22.VI.2011, А.С. Просви́ров leg.” [Abkhazia, Bzyb Range, climbing on Khipsta River gorge,

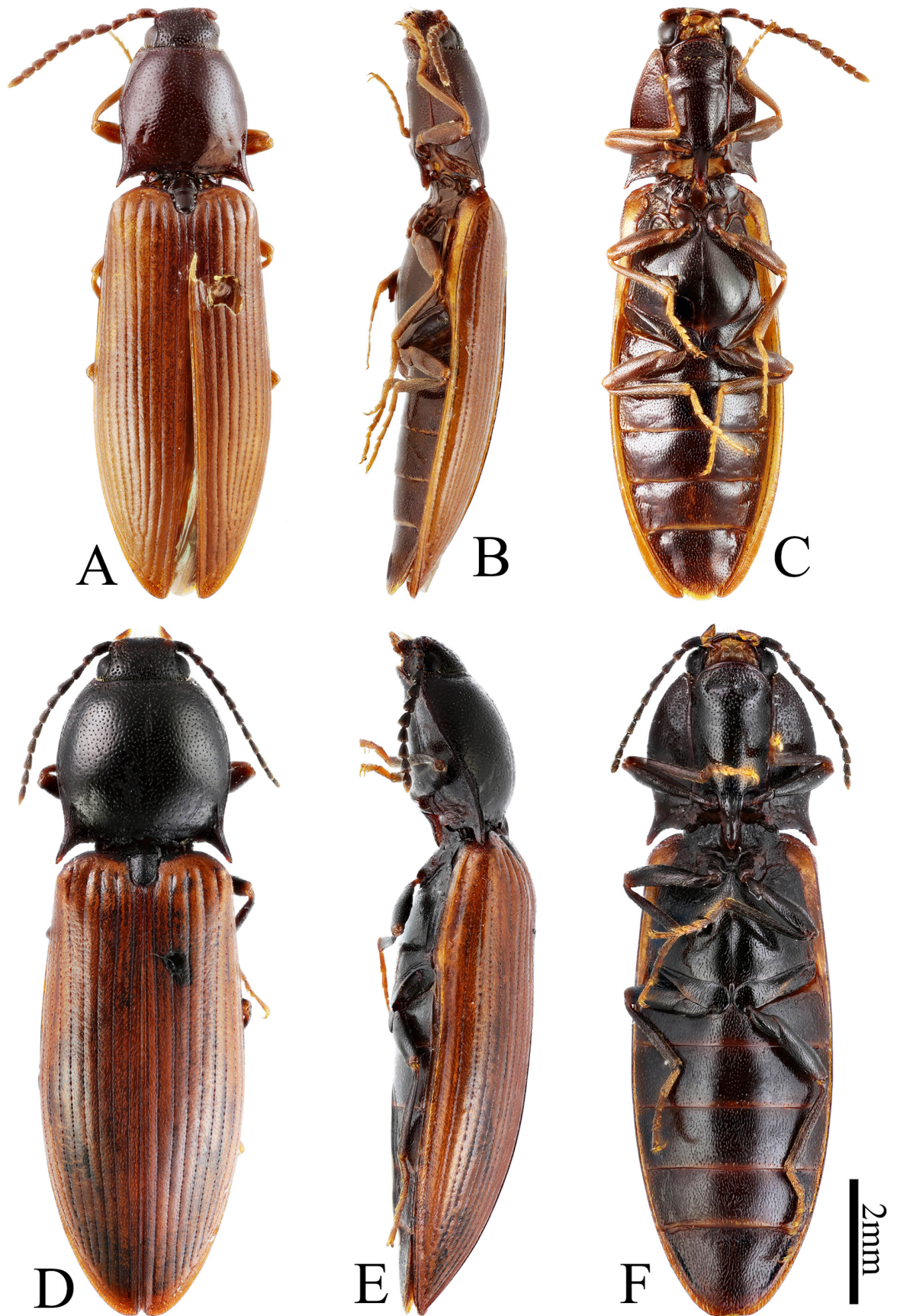


FIGURE 5. A–F. Habitus of *Hypoganus inunctus*, dorsal (A, D), lateral (B, E) and ventral (C, F) view. A–C. male (9.9 mm; Austria); D–F. female (11.1 mm; Ukraine).

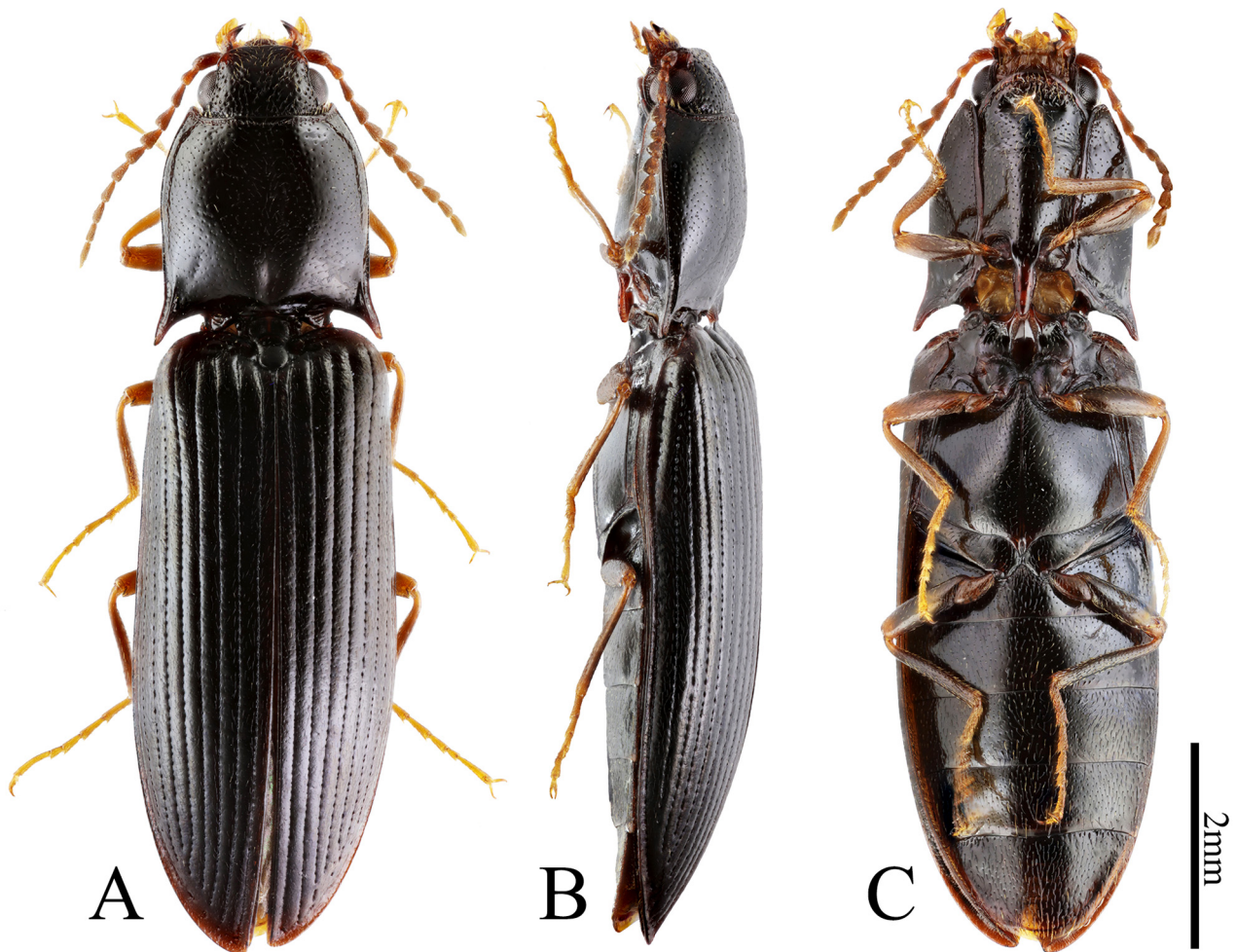


FIGURE 6. A–C. Habitus of *Hypoganus stepanovi*, male (9.0 mm, Abkhazia): A. dorsal view; B. lateral view; C. ventral view.

са. 1400 m a.s.l., 22 June 2011, A.S. Prosvirov leg.] (CPM); 1 female, “Ново-Прохладное, Краснодарск. кр., под корой дуб. колоды, 12.V.59 / 237” [Russia, Republic of Adygea, Novoprokhladnoye Vill., under bark of oak log, 12 May 1959] (CPM); 1 male, “Грузия, Аджаметский заповедник, прелый граб, 26.I.1983” [Georgia, Adjmeti State Natural Reserve, rotten hornbeam, 26 January 1983] (CPM); 1 female, “Аджария, с. Чаквистави, 7.V.87, С. Казанцев” [Georgia, Autonomous Republic of Ajara, Chakvistavi Vill., 7 May 1987, S.V. Kazantsev leg.] (CPM); 1 female, “Горяч. ключ, Кубань, Золотая горка, 14.4.52, К. Арнольди” [Russia, Krasnodar Krai, Goryachy Klyuch Town, Zolotaya Mt., 14 April 1952, K.V. Arnoldi leg.] (CPM); 1 male, “С. Кавказ: С. Осетия-Алания, 2,5 км к Ю от с. Тамиск, ущелье Кройгом, букняки, оконные ловушки, h=850 м, 42°56'22" N 44°12'32" E, 15.5.–18.6.2015, С.К. Алексеев, А. Девятков leg.” [Russia, Republic of North Ossetia-Alania, 2.5 km S Tamisk Vill., Kroygom gorge, beech forest, window traps, 850 m a.s.l., 42°56'22" N 44°12'32" E, 15 May–18 June 2015, S.K. Alekseev, A. Devyatov leg.] (CPM); 1 female, “Абхазия, 21 км С г. Гудаута, Бзыбский хр. (юж. макросклон), лев. борг ущелья р. Хипста, 43°17'25" N, 040°39'40" E, h=1020 м, на травян. и др. растит., 20.VI.2011, А.С. Просви́ров leg.” [Abkhazia, 21 km N Gudauta Town, S macroslope of Bzyb Range, left edge of Khipsta River gorge, 43°17'25" N 040°39'40" E, 1020 m a.s.l., on herbaceous vegetation and trees, 20 June 2011, A.S. Prosvirov leg.] (CPM).

Diagnosis. Male body length 8.0–9.5 mm, width 2.5–2.8 mm; female body length up to 12.0 mm, width up to 3.2 mm (Gurjeva 1989). Body black, antennae and legs lighter (Figs. 6A–C). Pronotum with distinct but sparse punctures, hind angle slightly divergent and narrowed, apex sub-acute, with a distinct carina. Scutellum elongate, widest at anterior margin, narrowest at middle, round posteriorly. Elytra with deep striae. Male genitalia as Figs. 7E, 8D, penis thin, apex robust and long, paramere with lateral margin curved, strong concave distally, apex round, the hook blunt; female genitalia as Figs. 9A–B, ovipositor with small styli, spines in central part of bursa copulatrix large.

Remarks. This species is very close to *H. inunctus* (Lacordaire), but can be distinguished from the latter by possession of the following characteristics: 1) body black, legs and antennae brown to dark brown, with body usually bicolored (elytra usually lighter than the rest of the body, or distinctly reddish brown) in *H. inunctus*; 2) antennomere 3 cylindrical, barely broadened at apex, clearly narrower than antennomere 4, with antennomere 3 conical, clearly broadened at apex, slightly narrower than antennomere 4 in *H. inunctus*; 3) prosternum and hypomeron with sparser punctuation, while denser in *H. inunctus*; 4) the apex of the paramere is rather narrow and with blunt hook while the apex of the paramere more expanded and with sharp hook in *H. inunctus*.; 5) female with larger styli in the ovipositor, and with the spines in the central part of the bursa copulatrix large, in *H. inunctus* the styli are very small, and the spines in the central part of bursa copulatrix are small.

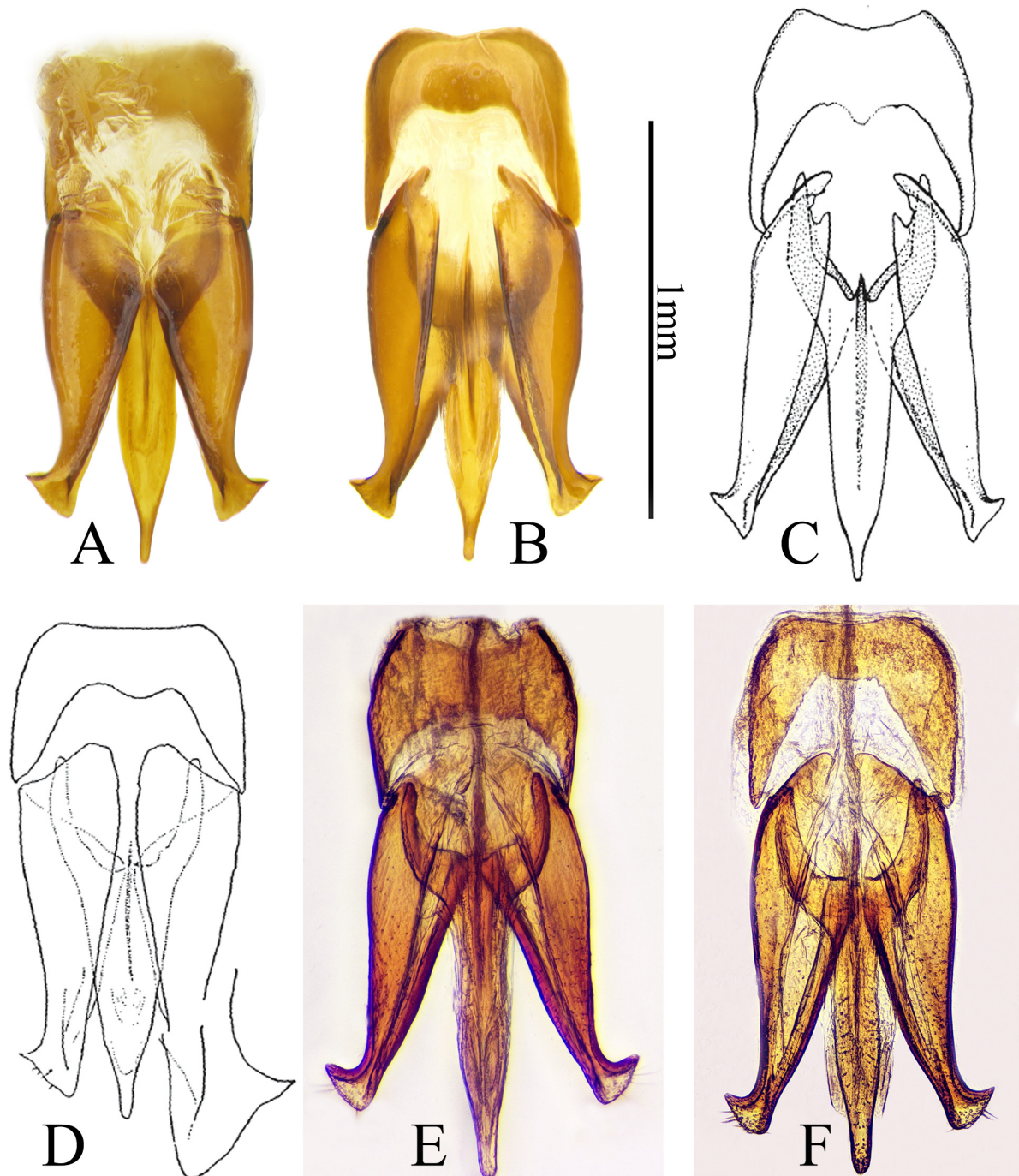


FIGURE 7. A–F. Aedeagus of *Hypoganus* species, dorsal (A) and ventral (B–F) view: A–B. *H. wennae* sp. nov. (holotype); C. *H. tibetis*, original figure in Čechovský & Kubáň (1997); D. *H. miyatakei*, original figure in Ōhira (1966); E. *H. stepanovi* (Abkhazia); F. *H. inunctus* (Germany).

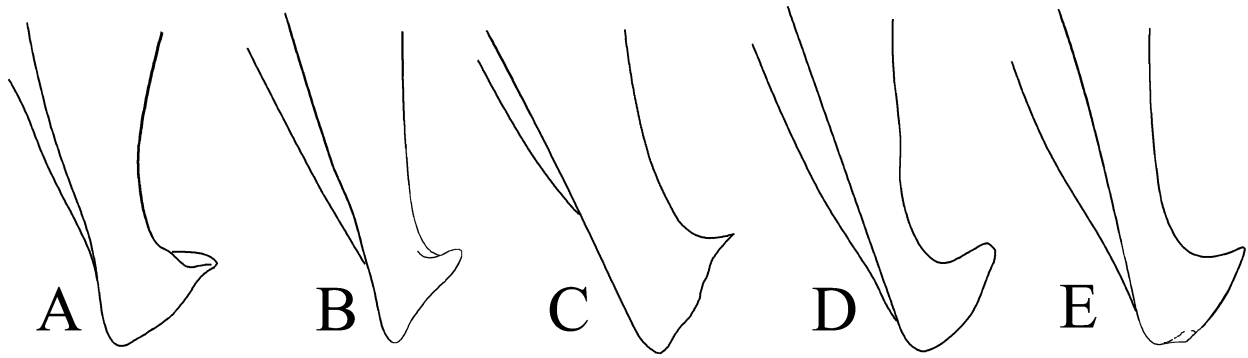


FIGURE 8. A–E. Apex of paramere of *Hypoganus* species, ventral view: **A.** *H. wennae* sp. nov. (holotype); **B.** *H. tibetis*, redraw from Čechovský & Kubáň (1997); **C.** *H. miyatakei*, redraw from Ôhira (1966); **D.** *H. stepanovi* (Abkhazia); **E.** *H. inunctus* (Germany). Not to scale.

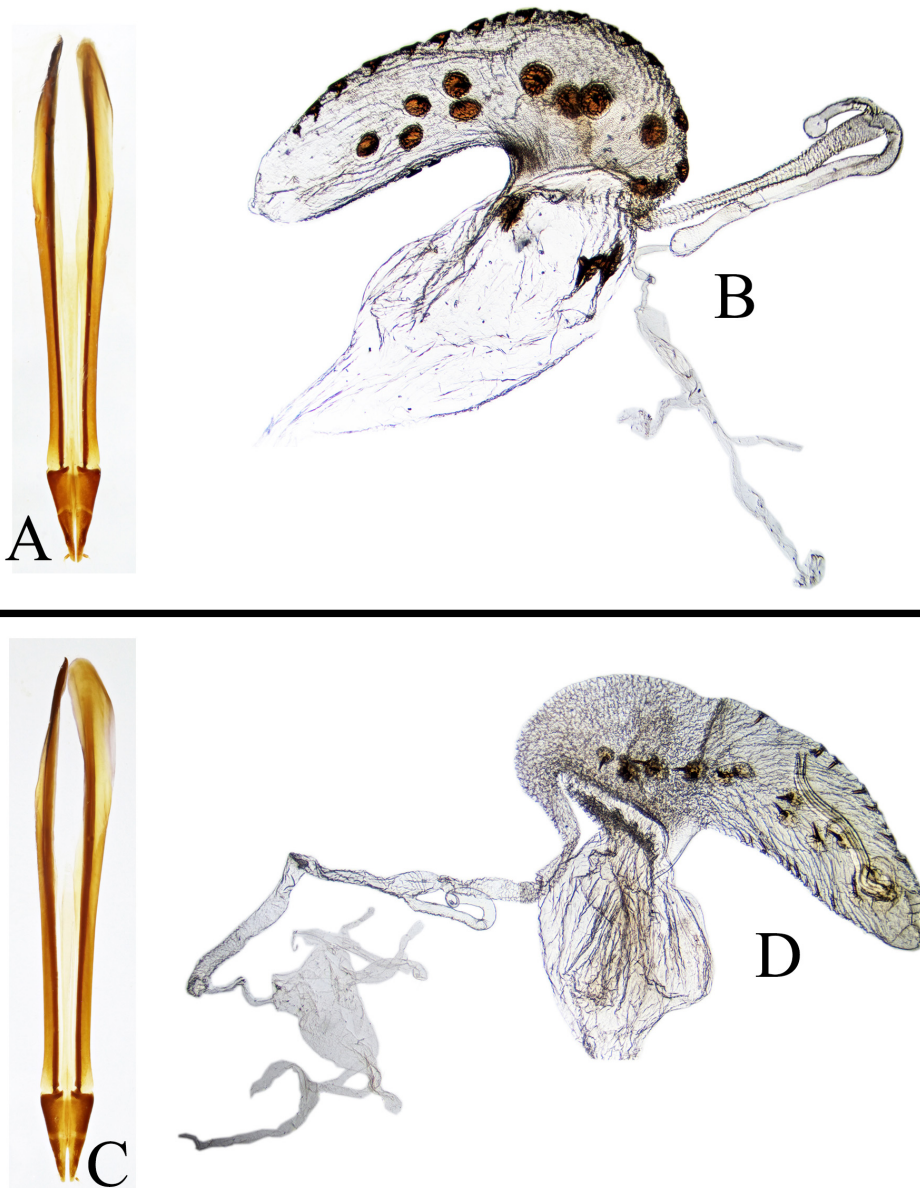


FIGURE 9. A–D. Genitalia of *Hypoganus* species: ovipositor, ventral view (A, C); part of female genital tract, general view (B, D). A–B. *H. stepanovi* (Abkhazia); C–D. *H. inunctus* (Poland). Not to scale.

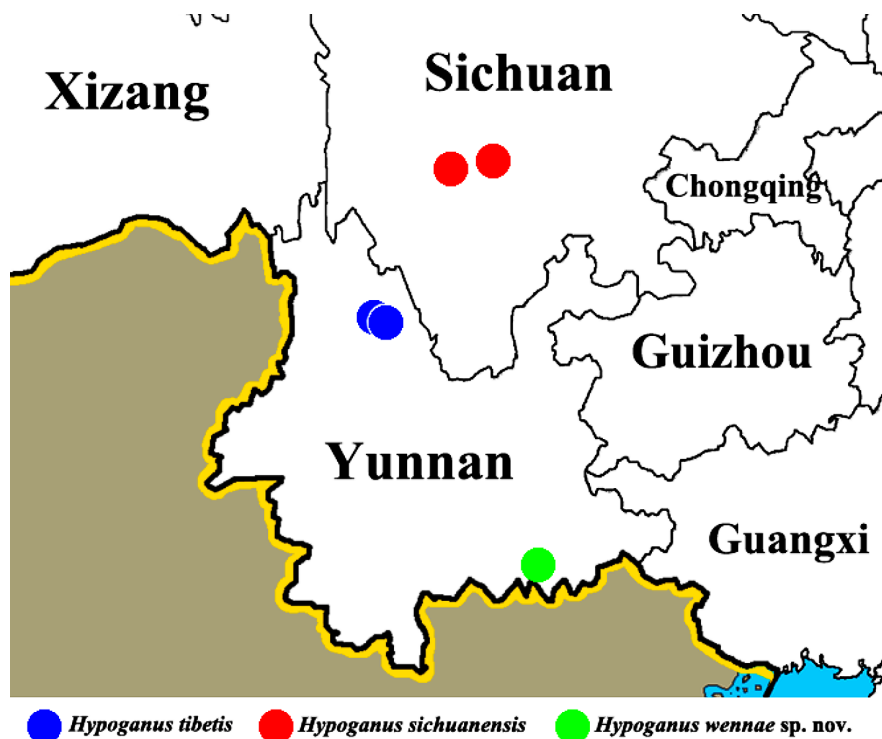


FIGURE 10. Distribution map of *Hypoganus* species in China.

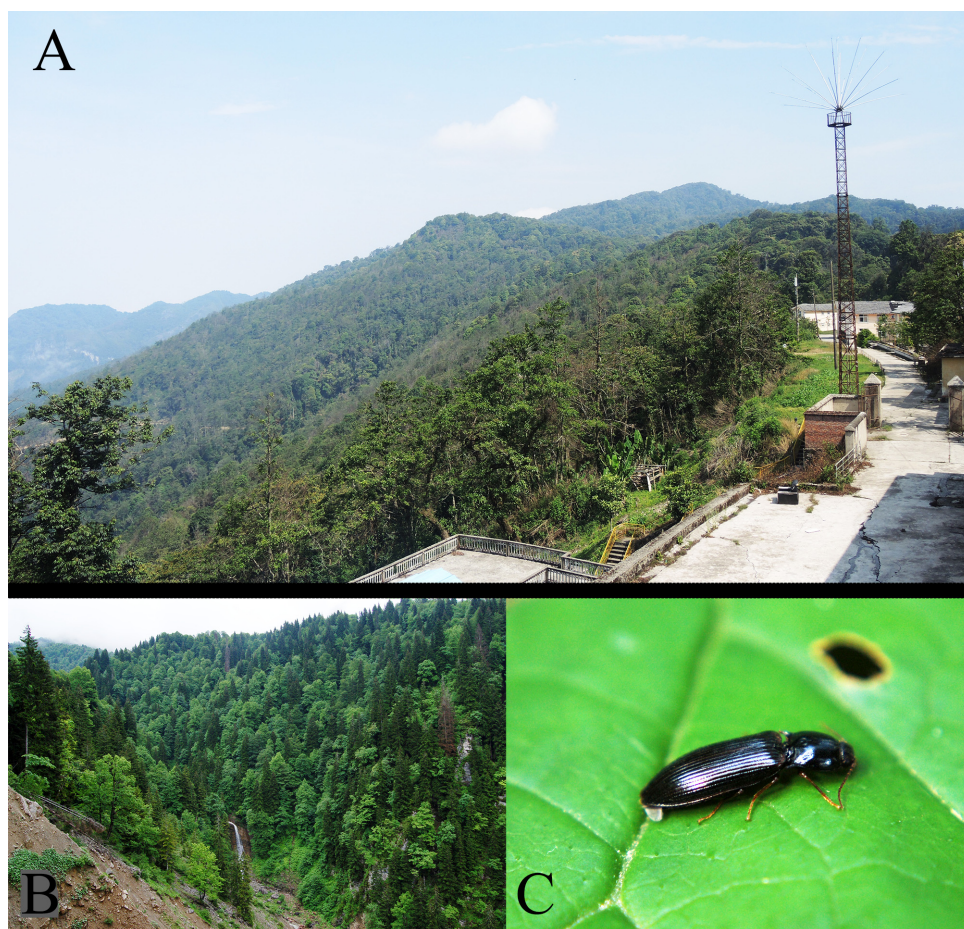


FIGURE 11. A–C. Habitats of *Hypoganus* species: A. Mt. Daweishan, Yunnan, China, the type locality of *H. wennae* sp. nov.; B–C. Habitats of *H. stepanovi*: B. Abkhazia, Bzyb Range, ca. 1000 m, mountain forest; C. in the same place, *H. stepanovi* sitting on the herbal leaf. (A. photographed by Clyde Qiu; B–C. photographed by Alexander Prosvirov)

Distribution. North and South Caucasus (Cate *et al.* 2007).

Natural history. Individuals have been collected from leaves in the montane forest (Figs. 11B–C).

Hypoganus miyatakei Ôhira, 1966

(Figs. 7D; 8C)

Hypoganus miyatakei Ôhira, 1966: 41; Ôhira 1970: 22; Kishii 1987: 103; Cate *et al.* 2007: 117.

Diagnosis. Based on the original description, this species is characterized as followed: male body length 11.5 mm, width 3.0 mm. Body dark brown, elytra somewhat darker, palpi, antennae and legs reddish brown. Pronotum quadrate, with fine and sparse punctures, hind angle sharp and elongate, apex acute and curved. Scutellum tongue-shaped, without punctures and pubescence. Male genitalia as Fig. 7D, 8C, penis robust, apex short and narrow, paramere robust, apex pointed, the hook pointed.

Remarks. This is the only species of *Hypoganus* recorded from Japan. It was described based on one male from Mt. Omogo, Shikoku, in Japan; Kishii (1987) also recorded this species from Honshu and Kyushu.

Distribution. Japan (Shikoku, Honshu, Kyushu).

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