



A review of the genus *Prosodes* Eschscholtz, 1829 (Coleoptera: Tenebrionidae) of Iran

IVAN CHIGRAY¹, MAXIM NABOZHENKO^{2,3}, OTTÓ MERKL^{4,7} & ALEXEY KOVALEV^{5,6}

¹*Southern Federal University, Bolshaya Sadovaya str., 105, 344006 Rostov-on-Don, Russia. E-mail: chigray93@bk.ru*

²*Caspian Institute of Biological Resources of the Russian Academy of Sciences, 367000, M. Gadzhiev str. 45, 367000, Makhachkala, Russia. E-mail: nalassus@mail.ru*

³*Dagestan State University, M. Gadzhiev str. 43-a, Makhachkala, 367000, Russia. E-mail: nalassus@mail.ru*

⁴*Hungarian Natural History Museum, H-1088 Budapest, Baross u. 13, Hungary. E-mail: merkl.otto@nhmus.hu*

⁵*All-Russian Institute of Plant Protection, 3 Podbelsky highway, St Petersburg, Pushkin 196608, Russia.*

E-mail: melasis313@gmail.com

⁶*Zoological Institute of the Russian Academy of Sciences, 1 Universitetskaya Emb., St Petersburg 199034, Russia.*

E-mail: melasis313@gmail.com

⁷*Corresponding author: merkl.otto@nhmus.hu*

Abstract

A taxonomic review of the genus *Prosodes* Eschscholtz, 1829 of Iran is given. Two new species from the subgenus *Meropersina* Reitter, 1909 are described, both from West Azerbaijan Province: *P. kasatkini* sp. n. and *P. shokhini* sp. n. Three new synonymies are proposed: *Prosodes* (*Dilopersina*) *mithras* Reitter, 1904 = *Prosodes* (*Dilopersina*) *chorassanica* G. Medvedev, 1996, **syn. n.**, *Prosodes* (*Dilopersina*) *neopersis* Semenov, 1910 = *Prosodes* (*Dilopersina*) *exilis* Medvedev, 1996, **syn. n.**, *Prosodes* (*Meropersina*) *cordicollis* Allard, 1883 = *P. cordicollis* v. *vermicularis* Reitter, 1909, **syn. n.** Lectotypes are designated for *Prosodes calcarata* Reitter, 1893, *Prosodes cordicollis* v. *vermicularis* Reitter, 1909, *Prosodes dentimana* Reitter, 1909, *Prosodes jakowlewi* Reitter, 1909, *Prosodes jakowlewi* Semenov, 1894, *Prosodes laticauda* Reitter, 1896, *Prosodes mithras* Reitter, 1904, *Prosodes vermiculosa* Reitter, 1909, and *Prosodes consanguinea* Allard, 1885. The Iranian species *Prosodes neopersis* Semenov, 1910 is resurrected from the synonymy of *Prosodes vestita* Allard, 1880 and recorded from Turkmenistan for the first time. *Prosodes vestita* Allard, 1880 is raised to species level. The distribution of *Prosodes kraatzi* Reitter, 1893 is corrected: this species is known only from Eastern Afghanistan (not from Iran). Morphology of the two closely related subgenera, *Dilopersina* Reitter, 1909 and *Meropersina* Reitter, 1909 is discussed. A key to 17 Iranian species of the genus *Prosodes* is given (*Prosodes kraatzi* with doubtful Iranian occurrence is also added).

Key words: Blaptini, Turkmenistan, Afghanistan, new species, key to species, synonymy, lectotypes

Introduction

The genus *Prosodes* Eschscholtz, 1829 (Coleoptera, Tenebrionidae) includes more than 220 species and many infraspecific forms (Löbl *et al.* 2008). The taxonomy of the genus was always difficult and complicated. Allard (1880) revised the genus *Prosodes* for the first time. Kraatz (1882, 1883, 1885 etc.), Semenov (1891, 1894a, 1910 etc.), Skopin (1966, 1971 etc.) and Kaszab (1960, 1970 etc.) contributed significantly to the knowledge of the genus. Reitter (1893, 1900) was the first who tried to modify the subgeneric grouping of the *Prosodes* species using habitus, punctures of body and especially the structure of legs as main diagnostic characters.

Until recently only some external morphological characters were used for descriptions of taxa. Medvedev (1995: 811) indicated that “species of the genus *Prosodes* often have a close similarity but belong to distantly related groups”, Therefore the Reitter’s system needed revision because it included many mixed groups. Medvedev made a significant revision of the system of *Prosodes* (Medvedev 1995, 1996, 1997a, 1997b, 1999, 2001a, 2001b, 2003a, 2003b, 2005). He used more stable taxonomic characters of male and female genitalia and female genital tubes.

Prosodes species from Iran were described by Baudi di Selve (1874), Faust (1875), Allard (1880, 1883, 1885), Semenov (1894a), Reitter (1893, 1896, 1904, 1909), Medvedev (1996), Medvedev & Merkl (2005) and Makhani (2012, 2013). Kühnelt (1957) discussed faunistic data of the Iranian fauna but the distribution of some species outlined by him are erroneous.

Until now 17 species and subspecies of *Prosodes* belonging to 5 subgenera are known from Iran. *P. kraatzi* was described from “Persia?”, but all studied specimens and published records are from Afghanistan, so the species is excluded from the Iranian list. Ten species are endemic or subendemic to Iran (Löbl *et al.* 2008; G. Medvedev & Merkl 2005). Ranges of the endemic species are usually small. Most Iranian species of *Prosodes* are distributed in the Turkmeno-Khorassan Mountains, Elburs and Zagros (G. Medvedev & Merkl 2005).

The subgenera *Dilopersina* Reitter, 1909 and *Meropersina* Reitter, 1909 are the most diverse in Iran. The species of *Dilopersina* and *Meropersina* are very similar as regards their external features and male terminalia (tegmen without penis). Reitter separated these subgenera only by the form of male protibiae and elytral wrinkles. G. Medvedev (2001a) added genital characters for the genera *Dilopersina* and *Meropersina*. The character states shared by the two subgenera include large serrate apical lobes of basal piece with transverse ventro-lateral ridges; apical piece widened, S-shaped, narrowed at base; gonopore moved to the base of parameres; basal duct of spermatheca is long. The reliable differences between these two subgenera are in the apical structure of the penis and the ovipositor. The penis of *Meropersina* has laterally granulate apex and a rounded membranous swelling at the apex; the apical lobes of the ovipositor in *Meropersina* are considerably elongated, without dull spot near the apices of the dorsal surface. The penis of *Dilopersina* has (in lateral view) dentate margins of the lateral sclerotized parts at the apex; apical lobes of ovipositor in *Dilopersina* are not elongated but widely rounded, have dull spot on the apex of dorsal surface (G. Medvedev, 1996). The aedeagus is very similar among different species of the subgenus *Meropersina*. As a result G. Medvedev used in his papers the structure of gastral spicula, male inner sternite VIII, female genitalia, terminalia and genital tubes which exhibit significant differences between species and more useful for species diagnoses. It should be noted that sometimes G. Medvedev (1996) compared his new species of *Meropersina* with species of the subgenus *Dilopersina*.

Other subgenera of *Prosodes* are represented in Iran by one or two species: *P. (Iranosodes) laticauda* Reitter, 1896, *P. (Prosodoscelis) dentimana* Reitter, 1909, *P. (Prosodoscelis) solskyi* Faust, 1875, *P. (Prosodina) calcarata* Reitter, 1893, and the doubtful *P. (Prosodina) kraatzi* Reitter, 1893.

Below two new species are described from North-Western Iran: *Prosodes kasatkini* **sp. n.** and *Prosodes shokhini* **sp. n.** Both species belong to the subgenus *Meropersina* based on the structure of the penis and the ovipositor.

Material

The study is based on examination of adult beetles from the Zoological Institute of the Russian Academy of Sciences, (ZIN, St. Petersburg), the Hungarian Natural History Museum (HNHM, Budapest), the Naturhistorisches Museum Wien (NHMW, Vienna), the Senckenberg Deutsches Entomologisches Institut (SDEI, Müncheberg), the Savaria Museum (SMS, Szombathely, Hungary), the private collection of M.V. Nabozhenko (CN, Rostov-on-Don, Makhachkala) and the private collection of D. Szalóki (CSZ, Budapest).

The lectotypes and paralectotypes designated herein are tagged with a red and yellow label, respectively, with the following text: Lectotypus [or] Paralectotypus Species name Author, year des. O. Merkl, 2017 (HNHM specimens) [or] des. A. Kovalev, 2017 (ZIN specimens).

Taxonomy

Prosodes (Prosodoscelis) solskyi Faust, 1875

(Figs 1A–C)

Prosodes solskyi Faust, 1875: 239.

Prosodes solskyi: Reitter (1893: 281); Kühnelt (1957: 76); Bogačev & Kryzhanovskij (1960: 274); G. Medvedev & Nepesova (1985: 110).

Prosodes (Prosodoscelis) solskyi: Reitter (1909: 129); G. Medvedev (2001a: 90); Löbl *et al.* (2008: 237).

Type material. Not studied, it is absent in ZIN.

Non-type material. Turkmenistan. 5♂♂: “Turkestan” (HNHM); 1♀: “Turkmenia Ex musaeo E. Allard 1899” (HNHM); 5♂♂, 2♀♀: “Turkest. Krsn.” “W. Petersen” (ZIN); 2♂♂, 3♀♀: “TransCaspi G. Turcmenien E.König” (ZIN); 11♂♂, 9♀♀: “Turcmenia Leder. Reitter” (4♂♂, 3♀♀: ZIN, 7♂♂, 6♀♀: HNHM); 2♂♂, 2♀♀: Transcaspian Region, leg. A. Komarov (Cyrillic labels) (ZIN); 1♀: 12 km SW of Kyzyl-Arvat [now Serdar], 14.iv.1953, leg. Ye. Arens (Cyrillic label) (ZIN); 1♀: Kopet Dag foothills, 12 km SW of Kyzyl-Arvat [now Serdar], 26.iv.52, leg. Romadina (Cyrillic label) (ZIN); 1♂: mountains 12 km SW Kyzyl-Arvat [now Serdar], 27.iv.1952, leg. D. Shteinberg (old Cyrillic label) (ZIN); 1♂: 13 km S Kyzyl-Arvat [now Serdar], 27.iv.1952, leg. V. Il’ichev (Cyrillic label) (ZIN); 1♀: 50 km from Kyzyl-Arvat [now Serdar] to Kara-Kala, 3.v.1952, leg. Romadina (Cyrillic label) (ZIN); Divan River valley, 25 km W Chat, 4.v.1952, leg. D. Shteinberg (Cyrillic label) (ZIN); 4♀♀: Divan River valley, 15 km W Chat, 4.v.1952, 5.v.1952, leg. Romadina (Cyrillic labels) (ZIN); 1♀: Western Turkmenistan, Meshed-Messer [near Madau], 22.IV.1971, leg. G.S. Medvedev (Cyrillic label) (ZIN); 1♂, 1♀: hills near Kara-Kala [now Garrygala], 30.iv.1957, 15.v.1957, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 2♀♀: Kara-Kala [now Garrygala], 5.v.1974, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 1♀: Bami, Transcaspian railway, 1896, leg. K.O. Anger (ZIN); 2♂♂, 1♀: Bami, 24.iv.1903, leg. b[aron] Loudon (Cyrillic labels) (ZIN); 1♀: Archman railway station, Transcaspian railway, leg. Christoff (Cyrillic label) (ZIN); 1♀: Transcaspian Region, Bakharden [now Baharly], 14.iv.1903, leg. K.O. Anger (old Cyrillic label) (ZIN); 5♂♂: “Transcasp., Koily, 26.IV.03, leg. B[aron] Loudon (Cyrillic labels) (ZIN); 1♂, 1♀: “Ashab.” “102” (collector unknown) (ZIN); 1♂: Ashgabat, foothills, iii.1896, leg. Varentsov (Cyrillic label) (ZIN); 4♂♂, 1♀: Ashgabat, 24.iii.1902, leg. K.O. Anger, collection of A. Yakovlev (Cyrillic labels), female with addition label: “*Pr. solskyi* f. *pseudolaevigata* n. typ. A. Bogacev det”, red label “Holotypus” and goldish circle (ZIN); 1♂, 2♀♀: Ashgabat (collector unknown) (ZIN); 1♂: Ashgabat, leg. N. Tsvetov (Cyrillic label) (ZIN); 1♂: Ashgabat, Transcaspia, iv. 1895, leg. N. Korshinsky (ZIN); 2♀♀: Transcaspian Region, Ashgabat, 24.iii.1902, leg. K.O. Anger (old Cyrillic label) (ZIN); 5♂♂: Ashgabat, 24.v.1934, leg. V. Popov (Cyrillic labels) (ZIN); 2♂♂: Ashgabat vicinities, clay hills, in copula, 10.iv.1951, leg. D. Shteinberg (Cyrillic labels) (ZIN); 1♂: 20 km NO Ashgabat, 27.iii.1952, leg. V. Il’ichev (Cyrillic label) (ZIN); 2♂♂, 1♀: “sands 25 km NW Ashgabat, 27.iii.1952, leg. O.L. Kryzhanovsky (Cyrillic labels) (ZIN); 1♂, 1♀: foothills near Ashgabat, 28.iii.1952, 29.iii.1952, leg. V. Il’ichev (Cyrillic label) (ZIN); 5♂♂, 3♀♀: Ashgabat vicinities, 28.iii.1952, 29.iii.1952, leg. Romadina (Cyrillic labels) (ZIN); 6♂♂, 2♀♀: hills near Ashgabat, 28–29.iii.1952, leg. Odintsova (Cyrillic labels) (ZIN); 9♂♂, 3♀♀: foothills near Ashgabat, 29.iii.1952, leg. O.L. Kryzhanovsky (Cyrillic labels) (ZIN); 3♂♂, 3♀♀: Ashgabat vicinities, 29.iii.1952, leg. D. Shteinberg (Cyrillic labels) (ZIN); 1♂: hills near Ashgabat, 29.iii.1954, leg. Потопольский Potapol’sky (Cyrillic labels) (ZIN); 1♀: N of Ashgabat, 23.iii.1957, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 2♂♂, 2♀♀: Ashgabat, Kalininsky [now Bagabat], 6.iv.1964, leg. V. Potapol’sky (Cyrillic labels) (ZIN); 1♂, 2♀♀: Ashgabat, hills, 25.02.1963, 18.03.1963, 17.iv.1964, leg. L. Fraiberg (Cyrillic labels) (ZIN); 3♂♂, 3♀♀: Ashgabat, foothills, 9.iii.1968, leg. V. Potapol’sky (Cyrillic label) (ZIN); 3♂♂, 3♀♀: Kelyata canyon, 19.iv.1974, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 1♂, 1♀: 68 km W of Ashgabat, 20.iv.1974, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 3♂♂, 3♀♀: Umg. v. Aschabad, 1800 m, 15.IV.1976, leg. V. Dolin (HNHM); 3♂♂, 7♀♀: Kopet-Dagh Mts, 1000 m, Kurkulab, 6 km W Germob, 38°04’ N, 57°50’ E, 3.x.1991, No. L34, leg. A. Podlussány, L. Ronkay & Z. Varga (HNHM); 3♂♂, 7♀♀: Kopet-Dagh Mts, 6 km S of Ipay-Kala, 1600 m, 38°17’ N, 57°07’ E, 16–23.viii.1992, No. L47, leg. M. Hreblay, Gy. László & G. Ronkay (HNHM); 1♂: Kopet-Dagh Mts, Bikrova, 300 m, 6.iv.1993, No. L83, 37°59’ N, 58°08’ E, leg. M. Hreblay, Gy. László, A. Podlussány (HNHM); 1♀: “Kopet-Dagh Eyl. 96” (ZIN); 1♂: “Trscsp., Kopet Dagh.” (collector unknown) (ZIN); 2♂♂, 1♀: “Tekke Radde Reitter” (ZIN); 2♂♂, 1♀: Transcasp. Reg., Nokhur near Archman, leg. Christoff (Cyrillic label) (ZIN); 3♂♂, 1♀: Central Kopet Dag, W Kurukhaudan natural boundary, Sherlovka cordon, Ak-Kaya Ridge, 18.iv.1990, leg. S.Yu. and N.V. Kuznetsov (Cyrillic labels) (ZIN); 3♂♂: Bacharden, 14.iv.1990, leg. R. Dunda (HNHM); 2♂♂, 1♀: Bacharden (Kov-Ata), 18–21.IV.1991, leg. R. Dunda (HNHM); 1♂, 1♀: Bagir, 400, 20.IV.1975, leg. Rataj (HNHM). **Uzbekistan.** 2♂♂: Samarkand, 1892, O. Herz (HNHM). **Iran.** 1♂♂: Imam Gulyar – Quchan, 16.iii.1898, leg. Zarudny, both specimens have additional labels: “*Pros. solskyi gracilicollis* subsp. n. typ. A. Bogacev & A. Semenov-Tian-Shansky det.” and “*solskii gracilicollis* subsp. n. ♂ A. Semenov-Tian-Shansky det. I.14” (ZIN). **Unknown country.** 1♂: “Caucaso” (HNHM); 1♀: “Caucasus. Reitter. Leder.” (HNHM).

Distribution. Turkmenistan: Kopet Dag and foothills; Iran: Eastern Kopet Dag (Razavi Khorasan Province). Specimens from Uzbekistan and the Caucasus are probably mislabelled.

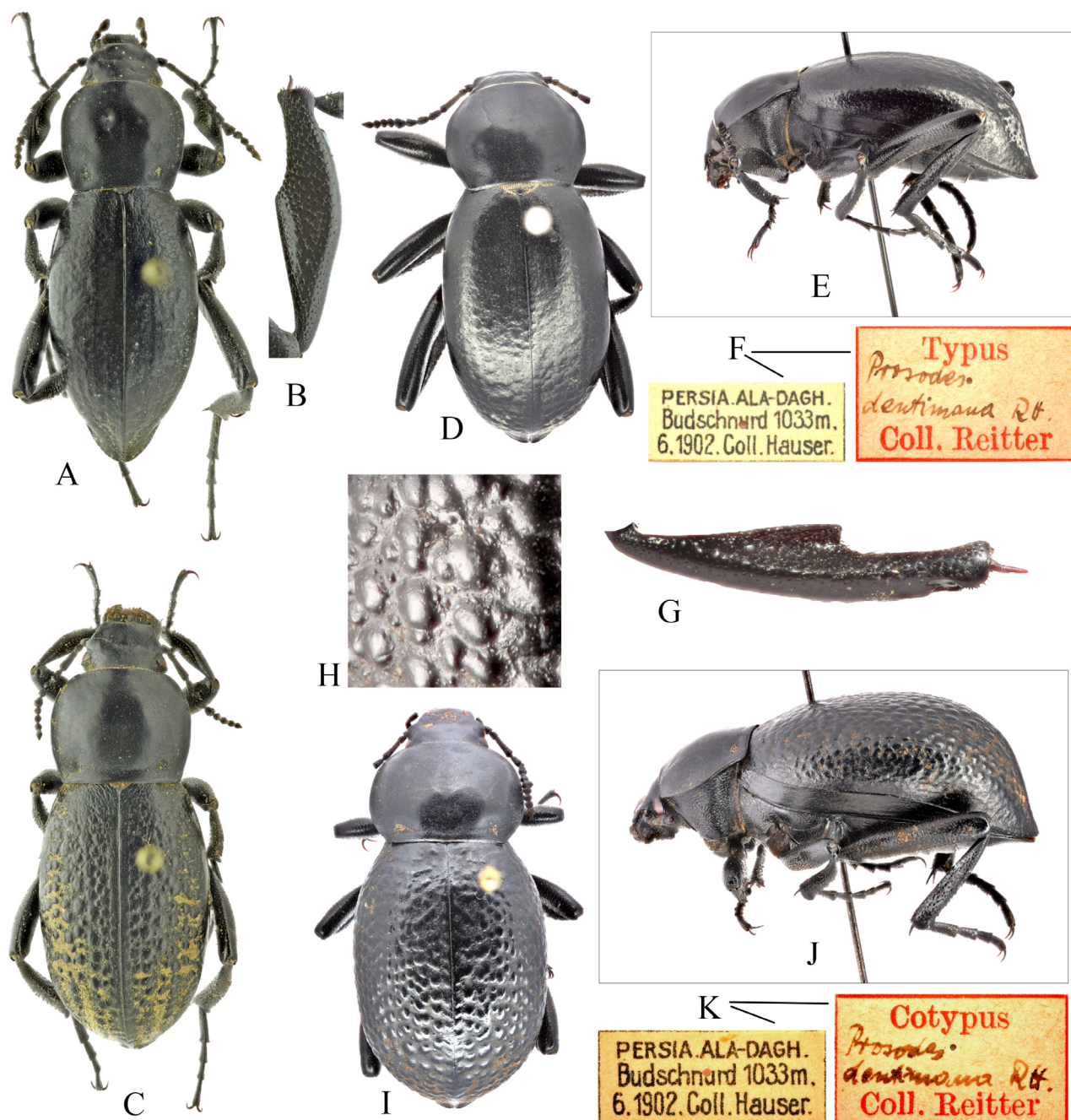


FIGURE 1. *Prosodes* (*Prosodoscelis*). A–C, *P. solskyi*: A, male (ZIN), dorsal view, B, male protibia; C, female (ZIN), dorsal view. D–K, *P. dentimana*: D, lectotype, male (HNHM), dorsal view; E, same lateral view; F, labels of lectotype; G, male protibia; H, sculpture of female elytra; I, paralectotype, female (HNHM), dorsal view; J, same, lateral view; K, labels of paralectotype. Not to scale.

***Prosodes* (*Prosodoscelis*) *dentimana* Reitter, 1909**
(Figs 1D–K)

Prosodes (*Prosodoscelis*) *dentimana* Reitter, 1909: 130.

Prosodes dentimana Kühnelt (1957: 76).

Prosodes (*Prosodoscelis*) *dentimana*: G. Medvedev (2001a: 90); Löbl *et al.* (2008: 236).

Type material. Lectotype (HNHM), ♂, designated here, with labels: “PERSIA. ALA-DAGH. Budschnurd 1033

m. 6.1902. Coll. Hauser.”, “*Typus Prosodes dentimana* Rtt. Coll. Reitter.” Paralectotypes (HNHM): 1♂, 2♀♀, with labels: “PERSIA. ALA-DAGH. Budschnurd 1033 m. 5.1902. Coll. Hauser.”, “*Typus Prosodes dentimana* Rtt. Coll. Reitter.”

Non-type material. Iran. 1♂: Imam-Gulyar between Gaudan [Turkmenistan] and Mashhad, 24.iii.1896, leg. Zarudny (ZIN); 3♂♂, 1♀: Ala-Dagh, Bojnourd, 1033 m. v.1902, vi.1902, coll. Hauser (2♂♂, 1♀: ZIN; 1♂: HNHM); 4♀♀: Montes Budschnurd [Bojnourd], leg. C. Saaro, iv.1902, coll. of A. Yakovlev (ZIN); 2♀♀: Bojnourd, 29.iv.1965, Mission Franco-Iranienne (HNHM).

Distribution. Iran: Central and Eastern Kopet Dag (North Khorasan and Razavi Khorasan provinces).

Prosodes (Prosodina) calcarata Reitter, 1893

(Figs 2A–F)

Prosodes calcarata Reitter, 1893: 309.

Prosodes calcarata: Semenov (1894a: 223); G. Medvedev & Nepesova (1985: 110).

Prosodes (Prosodina) calcarata: Reitter (1909: 115, 124); G. Medvedev (2001a: 89).

Prosodes (Prosodina) calcarata: Kaszab (1960: 59); G. Medvedev (1999: 867; 2003a: 385); Löbl *et al.* (2008: 236).

Type material. Lectotype (HNHM), ♀, designated here, with labels: “Ak-dagh 24.5.87”, “*Pr. calcarata* m. 1893”, “*Typus Prosodes calcarata* Rtt. Coll. Reitter.” The description is based on two females. One of them is in the HNHM and designated as lectotype. Whereabouts of the other specimen (paralectotype) is unknown to the authors.

Non-type material. Turkmenistan. 1♂: “TransCaspi G. Turcmenien E. K[ö]nig” (ZIN); 1♀: Kopet Dag, Shakh-Shakh, 12.viii.1935, leg. Arnoldi (Cyrillic label) (ZIN); 1♂, 1♀: Tagarev Mt., 20.iv.1989, leg. Dolin (Cyrillic label) (ZIN); 1♂: mountains around Germab, 27.v–9.vi.1989, A. Antonov (Cyrillic label) (ZIN). **Iran.** 2♂♂, 1♀: “Persia bor., Arvas” [probably Arbab Kandi, Ardabil Province] (HNHM).

Distribution. Turkmenistan (Central Kopet Dag), Iran (probably Ardabil Province).

Prosodes (Prosodina) kraatzi Reitter, 1893

(Figs 2G–M)

Prosodes kraatzi Reitter, 1893: 309.

Prosodes kraatzi: Kühnelt (1957: 76).

Prosodes (Prosodina) kraatzi: Reitter (1909: 125); G. Medvedev (2001a: 89).

Prosodes (Prosodina) kraatzi: Kaszab (1959: 249; 1960: 53, 59; 1968: 90); G. Medvedev (1999: 861; 2003a: 388); Löbl *et al.* (2008: 236).

Prosodes (Prosodina) refleximargo Gridelli, 1954: 251. (Synonymised by Kaszab, 1959: 249.)

Prosodes klapperichi Kaszab, 1960: Kaszab (1965: 668). (Misidentification, see Kaszab, 1968: 90.)

Type material. Holotype (SDEI), ♂, with labels: “Persia?”, “Holotypus”, “Dtsch. Entomol. Institut Berlin”, “coll. Kraatz E. Reitter det.”, pink label with unclear inscription, *Prosodes kraatzi* m.”, “206”, “30”.

Non-type material. Afghanistan. 1♂: Panjao, 8.vii.1948, N. Haarløv, Danske Exp. til Centralasien (HNHM); 1♂: Dival Kol (entre Kaboul et Panjao), No. 501, 13.viii.1957, leg. Dr. K. Lindberg (HNHM); 1♂: Guldara, cca 2000 m, 16.x.1964 (HNHM); 1♂: 80 km SW Kabul, 2400 m, 7.vi.1963, leg. Gazert (HNHM); 1♂: SW Kabul, 2300 m 5.vi.1970, leg. O. Kabakov (ZIN); 1♂: SW Kabul, 2400 m, 9.vi.1970, leg. O. Kabakov (ZIN); 1♂: Kabul, Maidan Prov., 2000 m (ZIN); 1♀: Dasht-i-Nawar, Hokak, 2950 m, 9.ix.1963, leg. Vartian (HNHM); 3♂♂, 1♀: Dasht-i-Nawar NW v. Ghazni 3000 m, 8–10.vi.1965, leg. Kasy and Vartian (3♂♂: HNHM; 1♀: ZIN); 6♂♂, 3♀♀: Prov. Ghazni, Dasht-e-Nawar, 3100 m, 4.vi.1971, Coll. Nr. 10h, 10i, 10j, 10k, 10l, 10m, 10n, 11, 26, leg. W. Böckeler (HNHM); 2♂♂, 1♀: Prov. Paktia, Kot-Gai, 1500 m, 22–27.x.1972, Coll. Nr. 1126, 1127, 1128, leg. W. Böckeler (HNHM); 9♂♂, 4♀♀: Prov. Paktia, Kot-Gai, 2500 m, 1–3.vii.1973, Coll. Nr. 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1412, 1413, 1414, 1415, 1416, leg. W. Böckeler (HNHM).

Distribution. Afghanistan. Although the holotype is labelled as if it were from Persia, all studied specimens come from Eastern Afghanistan and it is unlikely that the species occurs in Iran.

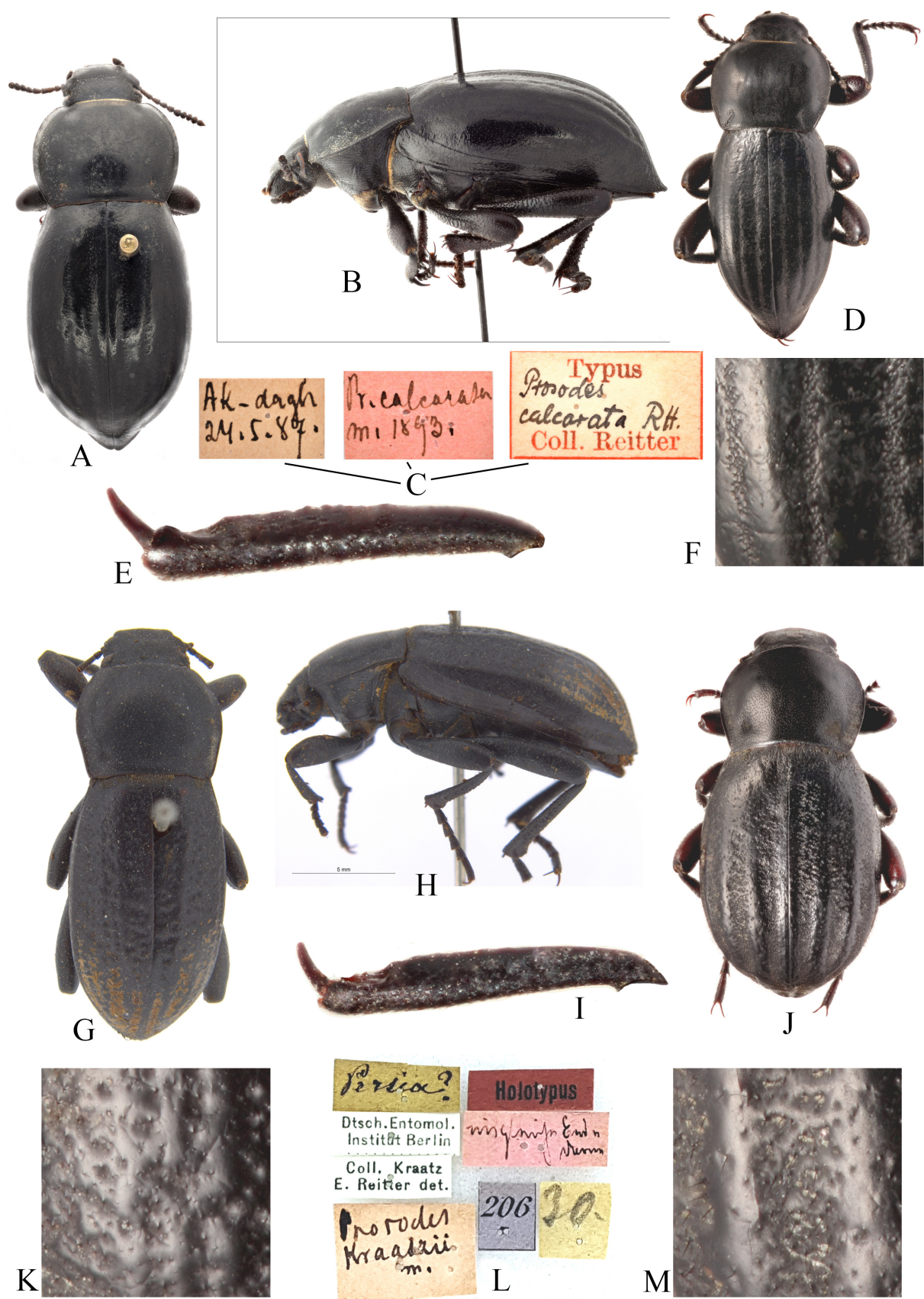


FIGURE 2. *Prosodes* (*Prosodina*). A–F, *P. calcarata*: A, lectotype, female (HNHM), dorsal view; B, same, lateral view; C, labels of lectotype; D, male (ZIN), dorsal view; E, male protibia; F, sculpture of male elytra. G–M, *P. kraatzii*: G, holotype, male (SDEI), dorsal view; H, same lateral view; I, male protibia; J, female (ZIN), dorsal view; K, sculpture of male elytra; L, labels of holotype; M, sculpture of female elytra. Not to scale.

***Prosodes (Iranosodes) laticauda* Reitter, 1896**

(Figs 3A–F)

Prosodes laticauda Reitter, 1896: 38.

Prosodes laticauda: Kühnelt (1957: 77); G. Medvedev & Nepesova (1985: 112).

Prosodes (Megaprosodes) laticauda: Reitter (1909: 136).

Prosodes (Iranosodes) laticauda: G. Medvedev (1996: 636; 2001a: 93); Löbl *et al.* (2008: 233).

Type material. **Lectotype** (HNHM), ♂, designated here, with labels: “Haidanab Transcasp 24.III.95 v. Rosen”, “*P. laticauda* m. 1895”, “Typus *Prosodes laticauda* Rtt. Coll. Reitter”. The description is based on two males. One of them is in the HNHM and designated as lectotype. Whereabouts of the other specimen (paralectotype) is unknown to the authors.

Non-type material. **Turkmenistan.** 1♂, 1♀: Western Kopet Dag, Syunt Mt., 18000 m, 14.v.1953, leg. D. Shteinberg (Cyrillic labels) (ZIN); 17♂♂, 7♀♀: Kara-Kala [now Garrygala], Syunt Mt., 20.v.1957, western slope of top, 1500–1700 m, leg. G.S. Medvedev (Cyrillic labels) (2♂♂, 1♀: HNHM; 15♂♂, 6♀♀: ZIN); 1♂, 1♀: Syunt Mt., 2.v.1974, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 2♂♂: Kopet Dag, W of Kara-Kala [now Garrygala], clay slope, 1300 m, 9.iv.1989, 11.iv.1989, leg. T. Kompantseva (Cyrillic labels) (ZIN); 2♂♂: Kopet-Dagh Mts, Dushak Mt., 2–3.iv.1993, 1800 m, No. L82, 3754' N, 5756' E, leg. M. Hreblay, Gy. Lászl, A. Podlussány (HNHM); **Iran.** 1♂: Imam Gulyar—Quchan, 16.iii.1898, leg. Zarudny (Cyrillic label) (ZIN); 2♂♂: between Quchan and Mashhad, 26–29.iii.1896, leg. Zarudny (Cyrillic label) (ZIN); 1♀: N. Khorasan, Aladag Mts. (3718' N, 5726'E) Asadli (25 km S Bojnurd), 31. III. 1999, leg. J. Kaláb (HNHM); 1♀: Khorasan, Prov., 70 km NE of Qucan, 2200 m, 12.v.2001, leg. B. Benedek & G. Csorba (CSZ).

Distribution. Turkmenistan: Western Kopet Dag; Iran: Eastern Kopet Dag (Razavi Khorasan Province).

***Prosodes (Dilopersina) mithras* Reitter, 1904**

(Figs 3G–L)

Prosodes mithras Reitter, 1904: 258.

Prosodes mithras: Kühnelt (1957: 77).

Prosodes (Dilopersina) mithras: Reitter (1909: 133); Löbl *et al.* (2008: 232).

Prosodes (Dilopersina) chorassanica G. Medvedev, 1996: 603, **syn. n.**

Prosodes (Dilopersina) chorassanica: G. Medvedev (2001a: 91); Löbl *et al.* (2008: 232).

Type material. *Prosodes mithras* Reitter. **Lectotype** (HNHM), ♂, designated here, with labels: “Budschnurt Persien”, “*Prosodes Mithras* n. sp”, “Typus *Prosodes Mithras* Rtt. Coll. Reitter”. The description is based on an undefined number of specimens (more than one). A male in the HNHM is designated as lectotype. Whereabouts of the rest of the type series are unknown to the authors.

Prosodes chorassanica G. Medvedev. **Holotype** (ZIN), ♀, with Cyrillic label “Иран, окрест. дер. Божнурт 20.05.1963 leg. О. Федосимов N. Skopin det.” [Iran, Bojnourd env., 20.v.1963, leg. O. Fedosimov, N. Skopin det.] and “Holotypus *Prosodes chorassanica* G. Medvedev”. **Paratype** (ZIN): ♀, with Cyrillic label “С. Иран, Хорассан 20.05.1963 leg. О.Федосимов Coll. N.Skopin” [N Iran, Khorasan, 20.v.1963, leg. O. Fedosimov, collection of Skopin], “*Prosodes* sp. aff. *laticauda* Rtt. 1964 N. Skopin” “*Prosodes* sp. ♀ 1198 Dr. Z. Kaszab det., 1964” and “Paratypus *Prosodes chorassanica* G. Medvedev”.

Non-type material. **Iran.** 1♂: N Iran, Khorasan, 20.v.1963, leg. O. Fedosimov, collection of Skopin (ZIN); 1♀: Kuh-e Aladag (Bojnurd) [North Khorassan Province], 2200–2400 m, 22.v.1966, G. Remaudière (HNHM).

Comments. The synonymy of *Prosodes mithras* and *P. chorassanica* is based on the identical sculpture of pronotum, elytral sculpture and microsculpture of male and female and the same type locality. The sculpture of male elytra is variable, a non-type specimen (male from ZIN) has coarser and denser granules.

Distribution. Iran: North Korassan Province.



FIGURE 3. *Prosodes* (*Iranosodes* and *Dilopersina*). A–F, *P. (Iranosodes) laticauda*: A, lectotype, male (HNHM), dorsal view; B, same lateral view; C, labels of lectotype; D, male protibia; E, sculpture of male elytra, F, female (ZIN), dorsal view. G–L, *P. (Dilopersina) mithras*: G, lectotype, male (HNHM), dorsal view; H, same, lateral view; I, labels of lectotype and broken tarsomeres mounted on separate card; J, male (ZIN), dorsal view; K, holotype of *P. chorassanica* (syn. of *P. mithras*), female (ZIN), dorsal view; L, sculpture of female elytra. Not to scale.

Prosodes (Dilopersina) rishwani Makhan, 2012

Prosodes rishwani Makhan, 2012: 1.

Prosodes rishwani: Makhan (2013: 1–8) (larva).

Type material. Not studied. The species was described from Semnan Province, type locality: Jangal-e Abr (Makhan 2012).

Non-type material. None.

Prosodes (Dilopersina) jakowlewi Semenow, 1894

(Figs 4A–I)

Prosodes jakowlewi Semenow, 1894a: 192.

Prosodes jakowlewi: Kühnelt (1957: 76)

Prosodes jakowlewi: Bogačev & Kryzhanovskij (1960: 273; misspelling)

Prosodes (Dilopersina) jakowlewi: G. Medvedev (2001a: 91); Löbl *et al.* (2008: 232).

Prosodes grouvellei Reitter, 1909: 132. (Synonymised by Semenov-Tian-Shansky (1910))

Type material. *Prosodes jakowlewi* Semenow. **Lectotype** (ZIN), ♂, designated here, with labels: goldish circle, “Turkest. + Krsn” [Turkmenistan, leg. Komarov], *Prosodes jakowlewi* m. ♂ typ. A.S. I.94. Paralectotype: ♂ with the same labels. Semenov (1894a) noted in the description that specimens of *P. jakowlewi* come from south of Buchar District, Uzbekistan, without exact locality: “Bucharica mer. (?) sine indicatione loci melius determinata (Dr. A. Regel. 1883)”. Later he deciphered from his diaries that specimens with labels “Turkestan +” or “Turkestan ×” come from Turkmenistan, with A. Krasnov as collector (Semenow, 1894b; Semenov-Tian-Shansky, 1910).

Prosodes grouvellei Reitter. **Holotype** (HNHM), ♂, with labels: “Transcaspian”, “*Grouvellei* m. type”, “Typus *Prosodes Grouvellei* Sem. Coll. Reitter”, “*Prosodes Jakowlewi* Se. det. dr. Kaszab”.

Non-type material. **Turkmenistan.** 1♂: Kyzyl-Arvat [now Serdar], vii.1897 (Cyrillic label), and label *Prosodes* sp.? det. A. Jakowlew (ZIN); 1♂: Koped Dag, 12 km SW of Kyzyl Arvat [now Serdar], 8.iv.1953, leg. Odintsova (Cyrillic label) (ZIN); 1♀: mountains 12 km SW of Kyzyl-Arvat [now Serdar], 27.iv.1952, leg. Il'ichev (Cyrillic label) (ZIN); 1♂: Kara-Kala [now Garrygala]—Chat. 5–6.v.1912, leg. Gedevanov (Cyrillic label) (ZIN); 1♂, 1♀: Kara-Kala, 30.v.1952, leg. O.L. Kryzhanovsky (Cyrillic labels) (ZIN); 1♂, 1♀: Syunt Mt., to 1000 m, 3.v.1974, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 1♂: 28 km NNW Sarakhs, Tejen River, 27.iv.1990, leg. Sitnikov (Cyrillic label) (ZIN); 2♂♂: Kushka [now Serhetabad], 15.iv.1904 (Cyrillic labels) (ZIN). **Iran—Turkmenistan.** 1♂, 1♀: Sarakhs (collector unknown) (ZIN); 1♀: Sarakhs, Transcaspia, 28.iv.1895, leg. Korshinsky (ZIN). **Iran.** 1♂: between Quchan and Mashhad, 26–29.iii.1896, leg. N. Zarudny (Cyrillic label) (ZIN); 2♀♀: Mashhad, 26–27.iii.1901, leg. N. Zarudny (Cyrillic label) (ZIN).

Distribution. Turkmenistan: Kopet Dag, Bathyz. Iran: North Khorasan and Razavi Khorasan provinces (Kopet Dag, Bathyz: Sarakhs).

Prosodes (Dilopersina) neopersis Semenov-Tian-Shansky, 1910, sp. resurr.

(Figs 4J–M, 5)

Prosodes (Dilopersina) jakowlewi Reitter, 1909: 131, not *Prosodes jakowlewi* Semenow, 1894a: 192.

Prosodes (Dilopersina) neopersis Semenov-Tian-Shansky, 1910: 435. (Nomen novum for *Prosodes jakowlewi* Reitter, 1909.)

Prosodes neopersis: Kühnelt (1957: 76).

Prosodes (Dilopersina) neopersis: Löbl *et al.* (2008: 232). (Listed as synonym of *Prosodes vestita* Allard, 1880.)

Prosodes (Meropersina) exilis G. Medvedev, 1996: 599, **syn. n.**

Prosodes (Dilopersina) exilis: G. Medvedev (2001a: 91); Löbl *et al.* (2008: 232).

Type material. *Prosodes (Dilopersina) jakowlewi* Reitter. **Lectotype** (HNHM), ♂, designated here, with labels: PERSIA. ALA-DAGH. Budschnurd 1033 m. 6.1902. Coll. Hauser., “Typus *Prosodes Jakowlewi* Rtt. Coll. Reitter, *Prosodes (Dilopersina) neopersis* Semenow, 1910 det. O. Merkl, 2017. Paralectotypes (HNHM), 1♂, 1♀, with

labels similar to those of lectotype; 1♀, with first label PERSIA. ALA-DAGH. Budschnurd 1033 m. 5.1902. Coll. Hauser. Paralectotypes (ZIN), 1♂, with labels: PERSIA. ALA-DAGH. Budschnurd 1033 m. 5.1902. Coll. Hauser., 188, *Prosodes Jacowlewi* Sem. Pers. ♂ *Dilopersina neopersis* m. Typ. ♂ A. Semenov-Tian-Shansky det. VII.04; 1♀, with labels PERSIA. ALA-DAGH. Budschnurd 1033 m. 5.1902. Coll. Hauser., *Prosodes Jacowlewi* Persia ♀ and *Dilopersina neopersis* m. Typ. ♀ A. Semenov-Tian-Shansky det. VII.04.

Prosodes (Meropersina) exilis G. Medvedev. **Holotype** (ZIN), ♂, with Cyrillic label “Хорасан Самхол 14.III.98 Н. Зарудный” [Shamkhal in Razavi Khorasan Province, leg. N. Zarudny], goldish circle, “*Pros. jakovlevi chorassanica* subsp. n. typ. A. Bogacev det.”, “Holotypus *Prosodes exilis* G. Medvedev, sp.n.”. Paratype (ZIN): ♂ with Cyrillic label “Хорасан Самхол 14.III.98 Н. Зарудный”, “*Prosodes neopersis* subsp.n. (*chorassanica*) ♂ A. Semenov-Tian-Shansky det. 14”, goldish circle, “*Pros. jakovlevi chorassanica* subsp. n. typ. A. Bogacev det.” and “Paratypus *Prosodes exilis* G. Medvedev, sp.n.”; Paratype (ZIN): ♀ with Cyrillic label “Хорасан Самхол 14.III.98 Н. Зарудный” and “Paratypus *Prosodes exilis* G. Medvedev, sp. n.”; Paratype (HNHM): ♂ with Cyrillic label “В Персия Имам Гуляр - Кучан 16.III.98 Зарудный” [E Persia, Imam Gulyar – Kuchan, Zarudny], “*Dilopersina* sp. n? pr. *Jakovlevi* m. ♂ det. A. Semenov-Tian-Shansky det.”.

Non-type material. Turkmenistan. 1♂: Kara-Kala [now Garrygala], 1–6.v.1925, leg. Moritz (ZIN). **Iran.** 1♀: “coll. R. Oberthür ex coll. Deyrolle Perse *Pr. pustulata* Faust” (HNHM); 5♂♂, 1♀: Ala-Dagh, Budschnurd, 1033 m, 6.1902, Coll. Hauser (HNHM); 2♂♂: Prov. Khorasan, Asadli, 1200 m, 57°16'18"E, 37°16'18"N, 26.IV.1999, leg. Gy. Fábíán, L. Nádaí, Z. Rahmé & K. Székely (HNHM).

Comments. Reitter (1909: 131) included *P. jakowlewi* Semenow, 1893 in his key to *Prosodes*. However, his specimens (from Iran) are not conspecific with those of Semenow (1894a) from “Bucharica (in fact Turkmenistan, see Semenow, 1894b), so Reitter’s text is in effect a description of a different species, *P. jakowlewi* Reitter, 1909. To resolve homonymy, Semenov-Tian-Shansky (1910: 435) proposed a new name *Prosodes neopersis* for Reitter’s specimens from Ala-Dagh (Iran, Razavi Khorasan Province, mountains near Bojnourd). Semenow and Reitter were in contact and traded materials, so the specimens from Ala-Dagh in the ZIN are also parts of the original syntype series, and are now paralectotypes. *Prosodes neopersis* was placed as a junior synonym of *Prosodes cribrella vestita* Allard, 1880 (Bogačev & Kryzhanovskij 1960; Löbl *et al.* 2008) and resurrected here as a valid species. Bogačev & Kryzhanovskij (1960: 273) made a nonsense nomenclatural act when synonymised female of *P. neopersis* with *P. cribrella vestita*, and male of *P. neopersis* with *P. jakowlewi* Semenov. Both synonymies are not supported in this paper.

Medvedev (1996) placed type specimens of *P. neopersis* Semenov (*P. jakowlewi* Reitter) and *P. jakowlewi* Semenov in the same series in the collection of ZIN. He interpreted a specimen of *P. neopersis* from Turkmenistan (Kara-Kala) as *P. mithras*. Additionally he described *P. exilis* (Medvedev 1996) from Iranian Kopet Dag, which is conspecific with *P. neopersis*. Males of *P. neopersis* are variable and have elytra from almost smooth (fig. 5A, J) to moderately (fig. 5I) and strongly (fig. 4J) sculptured. Males with smooth and sculptured elytra can be found within the same populations.

Distribution. Iran (North Khorasan and Razavi Khorasan provinces), Turkmenistan (known only from Garrygala, Kopet-Dag). New record for the fauna of Turkmenistan.

***Prosodes (Dilopersina) cribrella* (Baudi di Selve, 1874)** (Figs 6A–E)

Blaps (Prosodes) cribrella Baudi di Selve, 1874: 110.

Prosodes pustulata Faust, 1875: 237.

Prosodes consanguinea Allard, 1885: 180. (Synonymised by Reitter, 1893.)

Prosodes cribrella: Reitter (1893: 280); Kraatz (1881: 61); G. Medvedev & Nepesova (1985: 111).

Prosodes (Dilopersina) cribrella: Reitter (1909: 132); G. Medvedev (2001a: 91).

Prosodes (Dilopersina) cribrella cribrella: Löbl *et al.* (2008: 232).

Type material (studied). *Prosodes consanguinea* Allard. **Lectotype** (ZIN), ♂, designated here, with labels: “type”, “Astrab.”, “*consanguineus* All. 50”. Paralectotype (ZIN), 1♀, with the same labels. Paralectotype (ZIN), 1♀, with label “*Prosodes consanguineus* Allard. Type”.

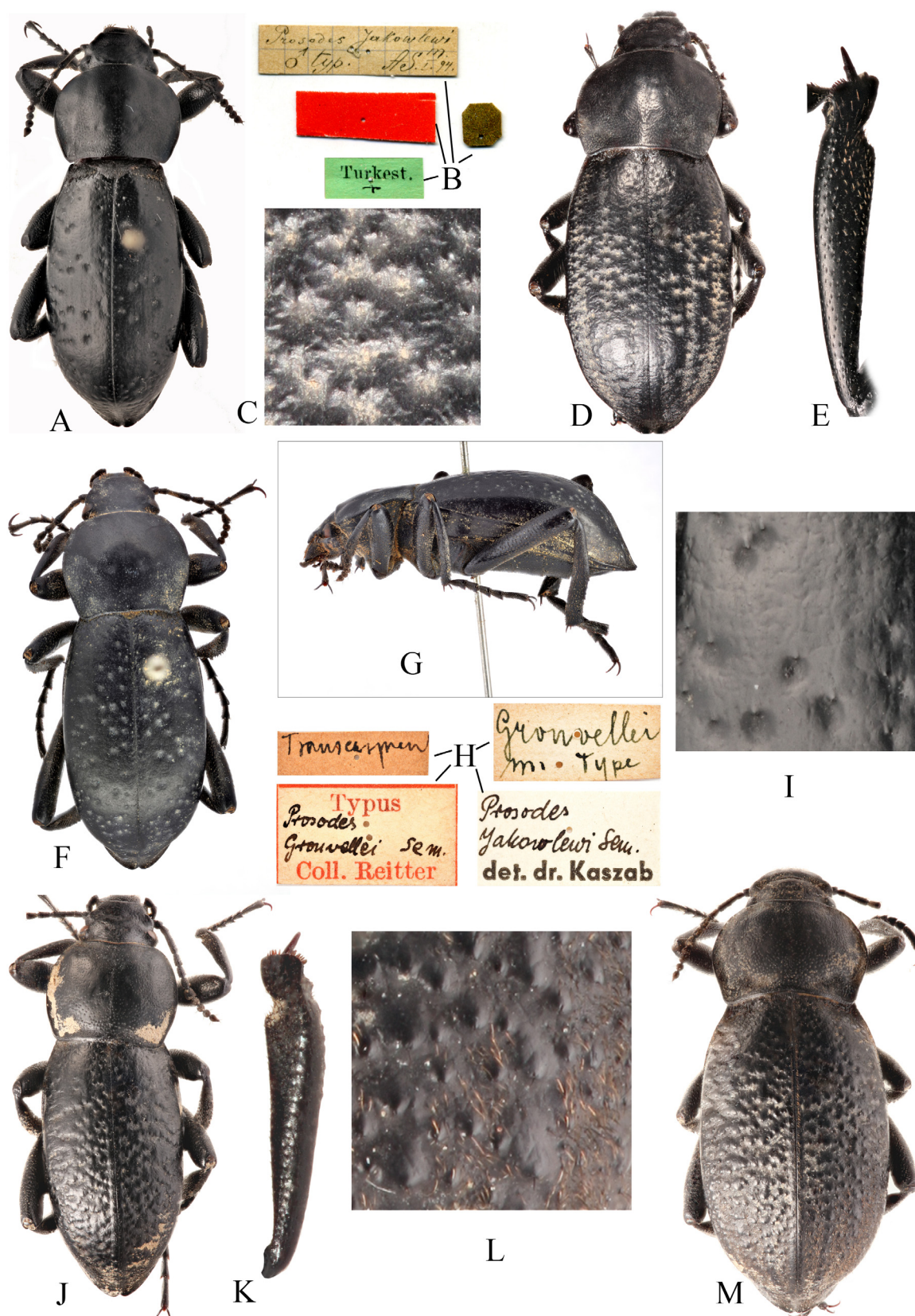


FIGURE 4. *Prosodes* (*Dilopersina*). A–I, *P. jakowlewi* Semenow: A, lectotype, male (ZIN), dorsal view; B, labels of lectotype; C, sculpture of female elytra; D, female (ZIN), dorsal view; E, male protibia; F, holotype of *P. grouvellei* (syn. of *P. jakowlewi* Semenow), male (HNHM), dorsal view; G, same, lateral view; H, labels of holotype of *P. grouvellei*; I, sculpture of male elytra. J–M, *P. neopersis* Semenow: J, holotype of *P. exilis* (syn. of *P. neopersis*), male (ZIN), dorsal view; K, male protibia; L, sculpture of female elytra; M, paratype of *P. exilis* (syn. of *P. neopersis*), female (ZIN). Not to scale.

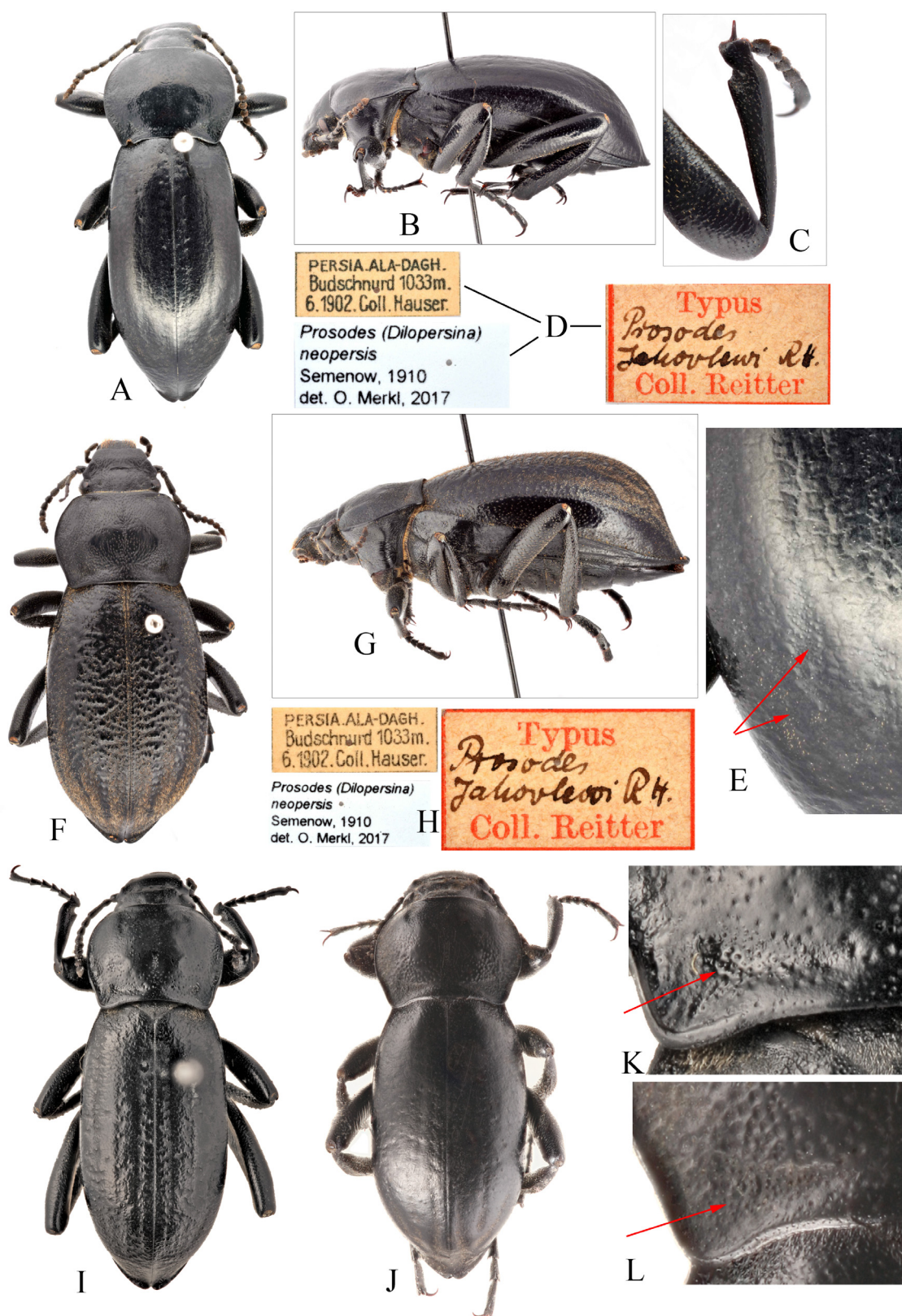


FIGURE 5. *Prosodes (Dilopersina) neopersis*. A, lectotype of *P. jakowlewi* Reitter (syn. of *P. neopersis*), male (HNHM), dorsal view; B, same, lateral view; C, male protibia; D, labels of lectotype; E, sculpture of male elytra (arrows showing microgranulate depressions) F, paralectotype of *P. jakowlewi* Reitter (syn. of *P. neopersis*), female (HNHM); G, same, lateral view; H, labels of paralectotype; I, paralectotype of *P. jakowlewi* Reitter (syn. of *P. neopersis*), male (ZIN), dorsal view; J, male from Kara-Kala, Turkmenistan (ZIN), dorsal view; K, same, base of pronotum of paralectotype of *P. jakowlewi* Reitter (ZIN); L, same of male from Kara-Kala (ZIN) (arrows showing microgranulate or rasp-punctated triangular depression). Not to scale.

Non-type material. Azerbaijan. 2♂♂, 1♀: “Lenkoran. Leder (Reitter).” (1♂, 1♀, ZIN; 1♂: HNHN); 2♀♀: “Russia merid. Reitter. Leder.” (ZIN). **Turkmenistan.** 2♂♂: “Turkestan” (HNHN); 1♂, 1♀: “Transkasp.” (HNHN); 1♀: “Trans Caspi Herz 1894” (HNHN); 1♀: “Turkmenia” (HNHN). **Iran.** 21♂♂, 19♀♀: “Pers.” (ZIN); 2♂♂: “Pers.” (HNHN); 5♂♂, 3♀♀: “Persia” (ZIN); 3♂♂, 2♀♀: “Perse” (HNHN); 1♂: “Persien” (HNHN); 1♂, 2♀: “Caspi.-M.-Gebiet. Rasano. Leder (Reitter)” (ZIN); 1♂: “Astrab.”. [Gorgan] (ZIN); 1♀: *Prosodes cribrella* Baudi Hadchiabad Christoph (ZIN); 2♂♂: *Prosodes cribrella* Baudi Schahkuh Cristoph (ZIN); 2♀♀: Astrabad Gebirge, coll. Morawitz (ZIN); 2♂♂, 2♀♀: Shakh Kuh (4000–10000 ft), S of Astrabad [now Gorgan], leg. Christoff (Cyrillic label) (ZIN); 1♂, 1♀: Golestan, Shahkuh, 2600–2900, 5–6.vi.1914 (collector unknown) (ZIN); 2♂♂, 1♀: Mazandaran Prov., Razi, 1900 m, 24.iv.1999, leg. K. Székely (CSN); 2♂♂, 3♀♀: Mazandaran, Razi, 1900 m, 24.iv.1999, leg. N. Rahm (HNHN); 17♂♂, 12♀♀: Mazandaran Prov., Razi, 5525'10" E, 3648'40"N, 1900 m, 24.iv.1999, leg. Gy. Fábíán, L. Nádaí, Z. Rahm & K. Székely (HNHN); 1♀: Prov. Mazandaran, Ghare Gach, 558'18" E, 379'29"N, 1900 m, 24.iv.1999, leg. Gy. Fábíán, L. Nádaí, Z. Rahm & K. Székely (HNHN); 1♂: Mazandaran, 3 km S of Kelerd, 200 m, 27.iv.1999, leg. N. Rahm (HNHN); 2♂♂, 2♀♀: Mazandaran Prov., Mt. Elburs, Pel, 3500 m, 4. V. 2000, leg. K. Gaskó (CSN); 3♂♂, 2♀♀: Golestan Prov., East Alborz Mts, Khosyelak, 2100 m, 3649.020'N, 5821.734'E, 3.vi.2010, singling and sweeping, leg. B. Benedek, T. Hác & K. Vig (SMS); 2♂♂: Prov. Gorgan, Gharamakhar, 14.v.1957, Avril-Août 1957, Mission R. Pasquier (HNHN); 1♂: Col Rochbeylag (Rte Gombad-Shahrud) [Semnan Prov.], 1900–2000 m, 29.v.1966, G. Remaudière (HNHN); 1♂: Khorasan, Aspirisfeh. [unclear locality], 3.iv.1858, leg. Keyserling and Bienert (ZIN); 2♂♂: Khorasan, Tschehardah [now Semnan Prov., Qual'eh, 36°25'N, 54°13'E], 9.iv.1858, leg. Keyserling and Bienert (ZIN); 1♀: Redkan 10.iv.1858, leg. Keyserling and Bienert (ZIN); 11♂♂, 8♀♀: Khorasan, leg. Keyserling and Bienert (ZIN); 1♀: Khorasan, Scharck-Kuh [now Golestan Province, Shar Kuh-e Pa'in], 5.iv.[1858], leg. Keyserling and Bienert (ZIN); 1♂: Assadli, 30 km S Bojnurd, 17–18.vi.1977, 1970 m, Loc. no. 374, Exp. Nat. Mus. Praha (HNHN); 1♂, 1♀: Prov. Khorasan, Asadli, 1200 m, 3716'18"N, 5716'18"E, 26.iv.1999, leg. L. Nádaí (HNHN); 3♂♂: Kuh-e Aladag (Bojnurd), 2200–2400 m, 22.V.1966, G. Remaudière (HNHN); 5♂♂, 2♀♀: Golestan Prov., Khoshyeylag, 15.v.2016, leg. D. Kasatkin (CN).

Comments. *Prosodes consanguinea* Allard, 1885 was treated as a subspecies by Löbl *et al.* (2008) and Nabozhenko *et al.* (2016), but it does not differ from the nominotypical subspecies, and was already synonymised by Reitter (1893).

Distribution. South-Eastern Azerbaijan: Lenkoran. Turkmenistan: Western and Central Kopet Dag. Iran: Golestan, Semnan (north) and North Khorasan provinces.

Prosodes (Dilopersina) vestita Allard, 1880, status resurrected

(Figs. 6F–K)

Prosodes vestita Allard, 1880: 289.

Prosodes vestita: Reitter (1893: 280; 1909: 132). (As “form” of *Prosodes cribrella*.)

Prosodes cribrella v. *vestita*: Kühnelt (1957: 76).

Prosodes cribrella vestita: Bogačev & Kryzhanovskij (1960: 273).

Prosodes (Dilopersina) cribrella vestita: Löbl *et al.* (2008: 232).

Type material. Not studied.

Non-type material. Turkmenistan. 1♀: Transcasp. reg., leg. A. Komarov (Cyrillic label) (ZIN); 1♀: “Transcasp. Herz 1894” (HNHN); 2♂♂: “Turkest. Krsn.” and addition label “Sim ullo dubio e Persia bor.!! W. Petersen”; 1♀: “Turkest. +” [Turkmenistan, leg. A. Komarov] (ZIN); 1♀: 50 km from Kyzyl-Arvat [now Serdar] to Kara-Kala [now Garrygala], 3.v.1952, leg. K. Romadina (Cyrillic labels) (ZIN); 1♂: Kara-Kala vicinities, Sumbar River valley, 16.iv.1952, leg. V. Kuznetsov (Cyrillic label) (ZIN); 1♂: Kara-Kala [now Garrygala], 20.v.1952, leg. O.L. Kryzhanovsky (ZIN); 1♀: 45 km from Kara-Kala [now Garrygala] to Kyzyl-Arvat [now Serdar], 3.v.1952, leg. Il'ichev (Cyrillic label) (ZIN); 1♀: Kara-Kala [now Garrygala], mouth of Yol-Dere canyon, 6.v.1957, leg. G.S. Medvedev (Cyrillic label) (ZIN); 1♂, 1♀: River Sumbar, confluent of Atrek, Transcasp. reg., 1894, leg. Herz (Cyrillic labels) (ZIN); 2♂♂, 1♀: Kara-Kala [now Garrygala], 11.iv.1952, 20.v.1952, 22.v.1952, leg. O.L. Kryzhanovsky (Cyrillic label) (ZIN); 1♂, 1♀: Yol-Dere, 15 km NO Kara-Kala, 3.vi.1952, leg. Borisova (Cyrillic labels) (ZIN); 3♂♂: Kara-Kala [now Garrygala], 5.iv.1952, 2.v.1952, 25.iv.1953, leg. Shteinberg (Cyrillic labels) (ZIN); 1♂, 2♀♀: Kara-Kala [now Garrygala], 9.iv.1952, leg. Il'ichev (Cyrillic labels)

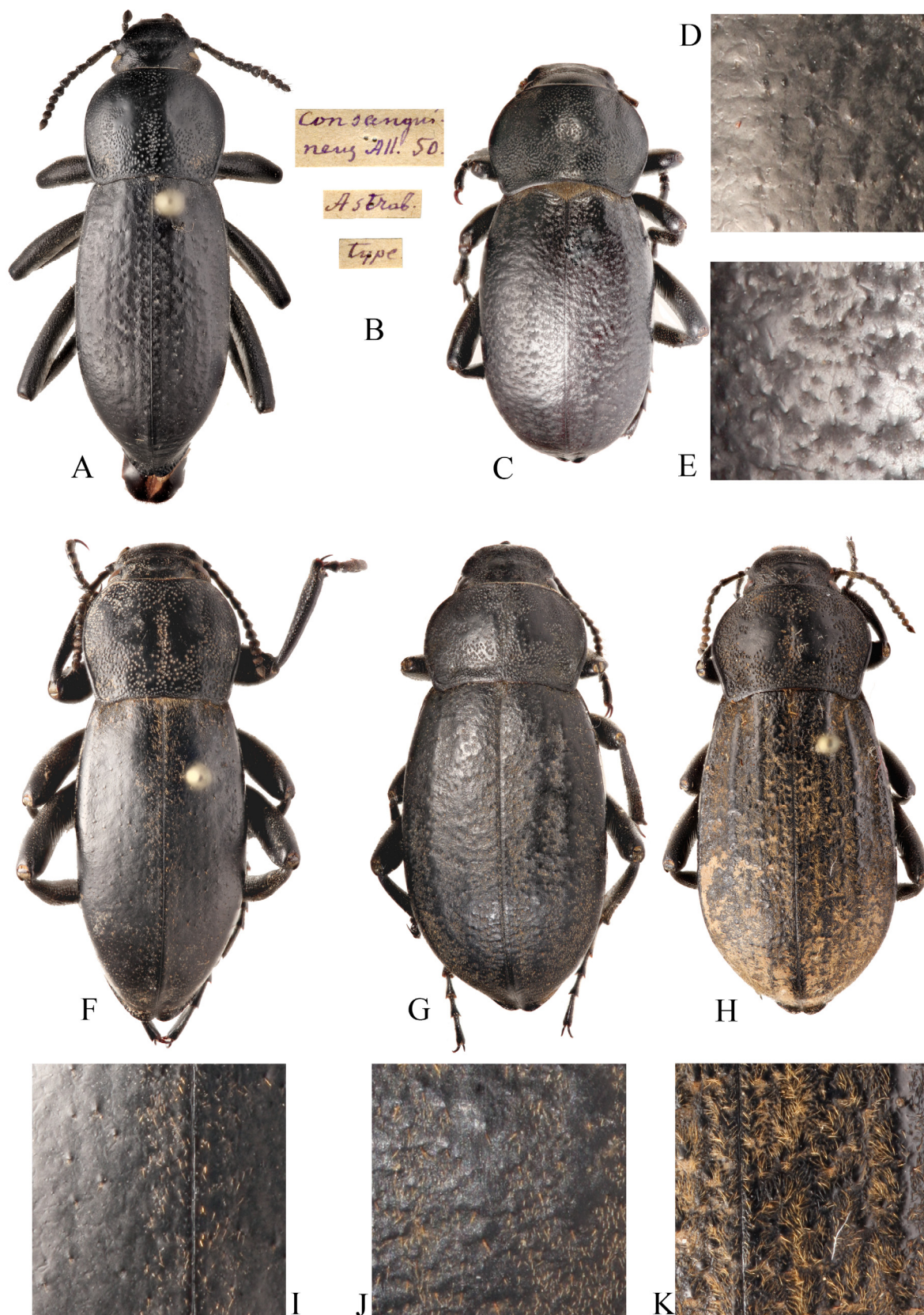


FIGURE 6. *Prosodes (Dilopersina)*. A–E, *P. cribrella*: A, lectotype of *P. consanguinea* (syn. of *P. cribrella*), male (ZIN), dorsal view; B, labels of lectotype; C, female (ZIN), dorsal view; D, sculpture of male elytra; E, sculpture of female elytra. F–K, *P. vestita*: F, male (ZIN), dorsal view; G–H, females (ZIN), dorsal view; I, sculpture of male elytra; J–K, sculpture of female elytra. Not to scale.

(ZIN); 2♂♂, 2♀♀: vicinities of Kara-Kala [now Garrygala], valley of Sumbar River, 16.iv.1952, leg. V. Kuznetsov (Cyrillic labels) (ZIN); 1♂: 32 èi E Kara-Kala [now Garrygala], 1000 m, 18.iv.1952, O.L. Kryzhanovsky (Cyrillic labels) (ZIN); 1♂: Kara-Kala [now Garrygala], 5.v.1974, leg. G.S. Medvedev (Cyrillic label) (ZIN); 2♂♂, 1♀: Kara-Kala, 18.iv.1975, leg. V. Yanushev (Cyrillic labels) (ZIN); 2♂♂: Kara-Kala [now Garrygala], 29.iv.1952, leg. K. Romadina (Cyrillic labels) (ZIN); 1♂, 2♀♀: Kara-Kala [now Garrygala], 10.iv.1953, leg. Garnovskaya (Cyrillic labels) (ZIN); 2♂♂: Kara-Kala [now Garrygala], 10.iv.1957, 5.v.1957, leg. G.S. Medvedev (Cyrillic labels) (ZIN); 4♂♂, 1♀: Kara-Kala [now Garrygala], arboretum of the All-Union Institute of Plants, 27.iv.1957, G.N. Medvedeva, G.S. Medvedev (Cyrillic labels) (ZIN); 1♂: Kara-Kala [now Garrygala], Yol-Dere canyon, 6.v.1957, G.S. Medvedev (Cyrillic labels) (ZIN); 1♂: Ashabad (HNHM); 2♂♂, 2♀♀: Nokhur near Archman, leg. Christoff (Cyrillic labels) (ZIN); 2♂♂, 2♀♀: N slopes of Kopet Dag near Ashgabat, 1967, leg. V. Potapol'sky (Cyrillic labels) (ZIN). **Iran.** 1♀: *Prosodes vestita* Persia (ZIN); 1♂, 2♀♀: “Persien” (HNHM); 1♂: the Caspian Sea Ashuradeh Island [Mazandaran Province], 1.v.1913, leg. Solovkin (Cyrillic labels) (ZIN); 3♂♂, 1♀: Gharasu River mouth [Golestan Province], 22.v.1913, leg. Solovkin (Cyrillic labels) (ZIN); 2♀♀: Hamish-Tepe village [Golestan Province], Persia, 19.v.1913, leg. Solovkin (Cyrillic label) (ZIN); 1♂: “Astrabad [now Gorgan], *Prosodes cribrella* Baud (ZIN); 1♂, 1♀: “Stauding. 50, *pustulata* Faust. Persia (ZIN); 1♂: *Prosodes dispar* Reit. i.l. Astrabad. Leder 1869 (ZIN); 1♂, 1♀: “Astrabad Herz 1887 (HNHM); 1♀: “Persia Astrabad” (HNHM); 1♀: “Astrabad (HNHM); 1♂: *Prosodes cribrella* Baudi Astrabad Christoph (ZIN); 13♂♂ 17♀♀: Astrabad [now Gorgan], N. Persia, 3.iii.1904, 15.iii.1904, 30.iv.1905, leg. Filippovich (ZIN); 6♂♂, 4♀♀: Gorgan, 1.v.1965, Mission Franco-Iranienne (HNHM); 1♀: Gorgan, 1.vi.1965, Mission Franco-Iranienne (HNHM); 3♂♂: Kopet-Dagh, Siaret [Golestan Province], 1160 m. v.1899, coll. Hauser (HNHM); 1♂: same data (ZIN); 1♂, 1♀: Kelyata near Shahrud, 3.vi.1942, leg. Ye. Pavlovsky (Cyrillic label) (ZIN); 1♀: Gorgan, 12.v.1942, leg. Ye. Pavlovsky (Cyrillic label) (ZIN); 1♀: N Iran, Khorasan, 20.v.1963, leg. O. Fedosimov (Cyrillic label) (ZIN).

Comments. *Prosodes vestita* was interpreted as a subspecies of *P. cribrella* by Bogačev & Kryzhanovskij (1960) and Löbl *et al.* (2008), but differs from *P. cribrella* in distinctive characters, especially in females (see key to species and images), therefore it is raised to species level.

Distribution. Turkmenistan: Western Kopet Dag. Iran: Mazandaran (Ashuradeh Island), Golestan and North Khorasan provinces.

Prosodes (Meropersina) laevigata (Baudi di Selve, 1874)

(Figs 7A–D)

Blaps (Prosodes) laevigata Baudi di Selve, 1874: 109.

Prosodes laevigata: Reitter (1893: 308).

Prosodes (Meropersina) laevigata: Reitter (1909: 130); Kühnelt (1957: 76); G. Medvedev (2001a: 91); Löbl *et al.* (2008: 234).

Type material. Not studied.

Non-type material. **Iran.** 1♂, 1♀: “Persien” (HNHM); 1♂: “Perse” (HNHM); 1♂: “Pers.” (HNHM); 4♂♂: “Pers.” (ZIN); 2♂♂, 1♀: “persica”, “Persia Staud 50 666” (ZIN); 2♂, 4♀: Khorasan, Redkan, 10.iv.1858, leg. Keyserling and Bienert (ZIN); 1♀: Khorasan, leg. Keyserling and Bienert (ZIN); 1♂, 1♀: Schahkuh [now Golestan Province, Shar Kuh-e Pa'in], leg. Cristoph (ZIN); 1♂, 1♀: “C. Christoph (ZIN); 1♂, 1♀: Shakh Kuh (4000–10000 ft), S of Astrabad [now Gorgan], leg. Christoff (Cyrillic label) (ZIN); 1♂, 1♀: Persia, Astrabad (HNHM); 1♂: “Turkest. Krsn.”, “Probabiliter e Persia bor.!” (W.Petersen) A.S.” (ZIN); 1♂: “Turkest. Krsn.”, “W.Petersen” (ZIN); 2♂♂: Persia, 11–12.x.1903, leg. N. Zarudny (Cyrillic labels) (ZIN); 1♀: “M-tes Elburs Èili inter Astrabad—Šachrud, 9.v.1914” (collector unknown) (ZIN); 16♂♂, 7♀♀: Shahrud, v.1914, 24.v.1914, leg. A.N. Kiritschenko (ZIN); 1♂: E. Elburz, Pass Gaduk [Tehran Province], 2200 m, 2.viii.1970, Loc. no. 82, Exp. Nat. Mus. Praha (HNHM).

Distribution. Iran: Golestan, north of Semnan and east of Tehran provinces.

Prosodes (Meropersina) cordicollis Allard, 1883

(Figs 7E–H, 8, 9A–C)

Prosodes cordicollis Allard, 1883: 25.

Prosodes cordicollis: Reitter (1893: 281).

Prosodes (*Meropersina*) *cordicollis*: Reitter (1909: 131); Kühnelt (1957: 76); Löbl *et al.* (2008: 234).

Prosodes (*Meropersina*) *cordicollis* v. *vermicularis* Reitter, 1909: 131, **syn. n.**

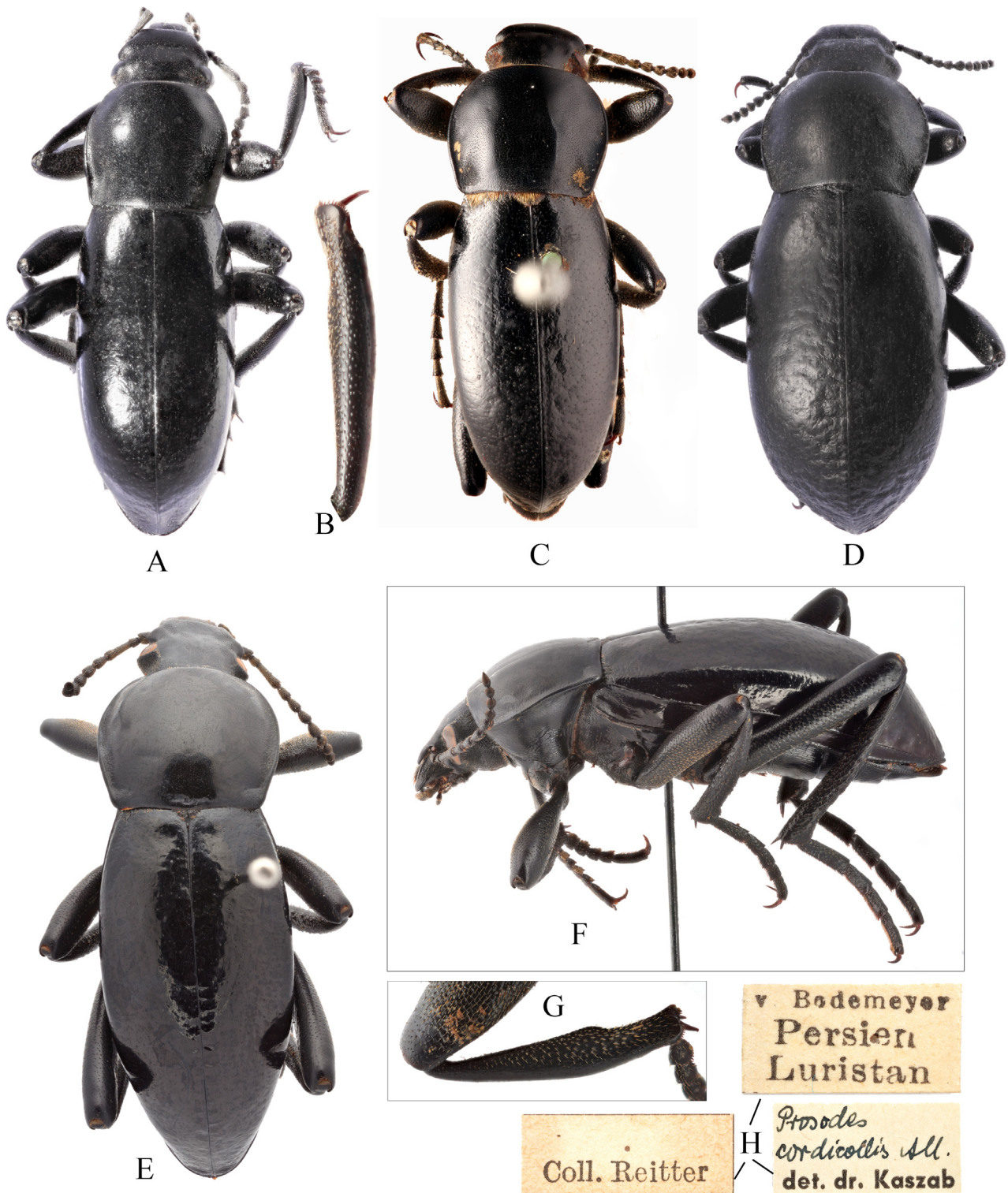


FIGURE 7. *Prosodes* (*Meropersina*). A–D, *P. laevigata*: A, male (ZIN), dorsal view; B, male protibia; C, male (ZIN), dorsal view; D, female (ZIN), dorsal view. E–H, *P. cordicollis*, from Zagros Mts: E, male (HNHM), dorsal view; same, lateral view; G, male protibia; H, labels of the same male. Not to scale.

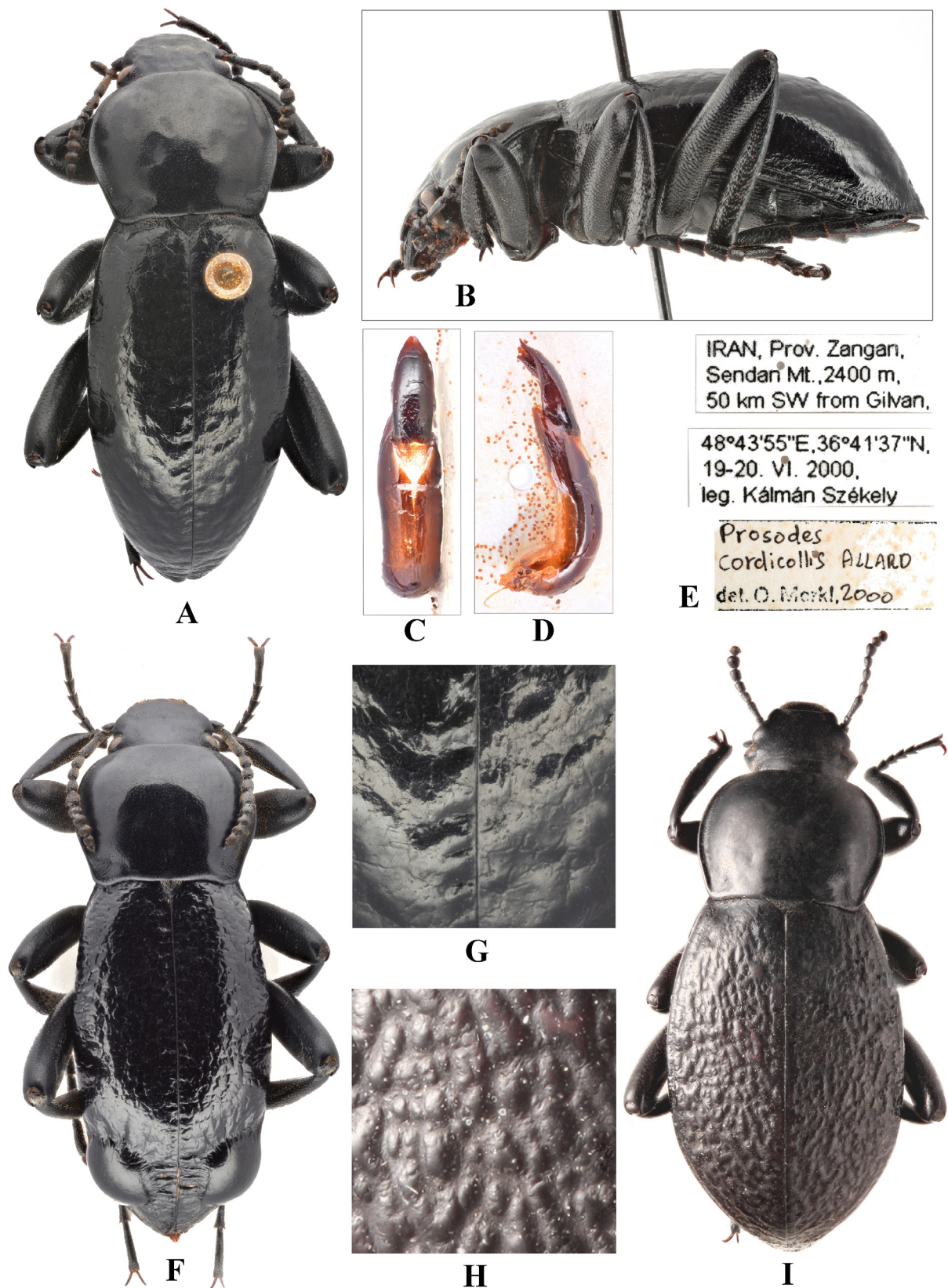


FIGURE 8. *Prosodes (Meropersina) cordicollis*. A, male, from Western Elburs (HNHM), dorsal view; B, same, lateral view; C, aedeagus, dorsal view; D, same, lateral view; E, labels of the same male; F, male with disfigured elytra, from the same locality (HNHM), dorsal view; G, sculpture of male elytra; H, sculpture of female elytra; I, female, from Zagros Mts (ZIN), dorsal view. Not to scale.

Type material. *Prosodes cordicollis* v. *vermicularis* Reitter. **Lectotype** (HNHM), ♀, herewith designated, with labels: “Sultanabad”, “*cordicollis* v. *vermicularis* m.”, “Typus *Prosodes cordicollis* v. *vermicularis* Rtt. Coll. Reitter”, “*Prosodes cordicollis* All. det. dr. Kaszab”. It is impossible to tell the number of specimens on which the description is based. Because existence of other type specimens cannot be ruled out, the female specimen in the HNHM is designated as lectotype.

Non-type material. **Iran.** 1♂: Kordestan Prov., pass 26 km SE Saqqaz, 17.IV.2002, leg. S. Kadlec (HNHM); 7♂♂: Kordestan prov., 30 km NNW of Divandarreh, Zarrineh, N35°58'34", E47°01'36", 2000m, 21.IV.2010, leg. T. HácZ (CSZ); 1♀: Kordestan Prov., 30 km NNW of Divandarreh, Zarrineh, N35°58'34", E47°01'36", 21.IV.2010, leg. T. HácZ (CSZ); 7♂♂, 4♀♀: Prov. Kordestan, 30 km NNW of Divandarreh, Zarrineh, the pass after Zarrineh, N35°58'34", E47°01'36", 21.IV.2010, leg. B. Benedek, K. Székely & T. HácZ (HNHM); 6♂♂, 1♀: Luristan, leg. v. Bodemeyer (HNHM); 1♂: Plateau Persan Occid. de Zendjan Ardébíl (alt. moy. 1330 m), 1904, J. de Morgan (HNHM); 4♂♂, 1♀: Prov. Zangan, Sendan Mt., 2400 m, 50 km SW from Gilvan, 48°43'55"E, 36°41'37"N, 10.VI.2000, leg. K. Székely (HNHM); 3♂♂, 1♀: Prov. Zangan, Sendan Mt., 2400 m, 50 km SW from Gilvan, 10.VI.2000, leg. Gy. Fábián & K. Székely (HNHM); 1♂: Prov. Zangan, Sendan Mt., 2400 m, 50 km SW from Gilvan, 48°43'55"E, 36°41'37"N, 19–20.VI.2000, leg. K. Székely (HNHM); 1♂, 1♀: Prov. Zangan, 30 km NE of Zangan, 2230 m, 36°46'23"N, 48°51'12"E, 16.V.2001, leg. Gy. Fábián & K. Vig (SMS); 1♂: Zanjan Prov., 20 km SW of Gilvan, 1000 m, 18.V.2001, leg. B. Benedek & G. Csorba (CSZ); 2♂♂: Zanjan Prov., 20 km E of Zanjan, 2300 m, 21.V.2001, leg. B. Benedek & G. Csorba (CSZ); 1♂: Zanjan Prov, Alborz Mts, Sendan Mt., Zanjan, Abbar, 1480 m, 36°48.462'N, 48°53.127'E, 11–12.V.2008, singling, leg. T. HácZ, K. Székely & K. Vig (SMS); 1♂, 1♀: Zanjan Prov., Sendan Mts, 50 km NE of Zanjan, 2200 m, N 36°42.238', E 48°44.379', 21.IV.2010, leg T. HácZ (CSZ); 1♂: Prov. Mazandaran, Alborz Mts., Mt. Damavand, Reyneh, 2481 m, N.3552.412', E. 5206.096', 13.V.2008, T. HácZ, K. Székely & K. Vig (HNHM).

Distribution. Iran: Western Alborz (Mazandaran and Zanjan provinces) and Northern Zagros (Kurdistan and Lorestan provinces).

Comments. *Prosodes (Meropersina) cordicollis* v. *vermicularis* Reitter, 1909 was described as a variety. According to the ICZN Art. 45.6.4, this name is deemed subspecific because it was first published before 1961, and the author expressly used the term “variety” (using the term “v.”), therefore it is available. The lectotype is a female with rugosely sculptured elytra, and does not differ from the majority of other females, so the name is herewith synonymised.

***Prosodes (Meropersina) vigi* G. Medvedev et Merkl, 2005**

(Figs 9D–H)

Prosodes (Meropersina) vigi G. Medvedev et Merkl, 2005: 172.

Prosodes (Meropersina) vigi: Löbl *et al.* (2008: 234).

Type material. Holotype (HNHM), ♂, with label: “IRAN, Prov. Fars Saadat-Shah, 1900 m, 53°12'38"E, 30°05'21"E 02. V. 2001 leg: Gy. Fábián & K. Vig”.

Distribution. Iran: Fars Province.

***Prosodes (Meropersina) vermiculosa* Reitter, 1909**

(Figs 10A–H)

Prosodes (Meropersina) vermiculosa Reitter, 1909: 131.

Prosodes (Meropersina) vermiculosa: Kühnelt (1957: 76); Löbl *et al.* (2008: 234).

Type material. **Lectotype** (HNHM), ♂, with labels: “Sultanabad Bodemeyer”, “*vermiculosa* m. ♂ Type”, “Typus *Prosodes vermiculosa* Rtt. Coll. Reitter”. Paralectotypes (NHMW), 2♂♂, with labels: “Strauss, Persien”, “*vermiculosa*, det. Reitter 09”. The description is based on an undefined number of specimens (more than one). A male of them in the HNHM with a relatively precise type locality is designated as lectotype.

Distribution. Iran: Lorestan Province.



FIGURE 9. A–C. *Prosodes cordicollis*: A, lectotype of *Prosodes cordicollis* v. *vermicularis* (syn. of *P. cordicollis*), female (HNHM), dorsal view; B, same, lateral view; C, labels of lectotype. D–H, *Prosodes vigi*: D, holotype, male (HNHM), dorsal view; E, lateral view; F, dissected female genital tubes; G, dissected female genitalia and terminalia; H, labels of holotype. Not to scale.

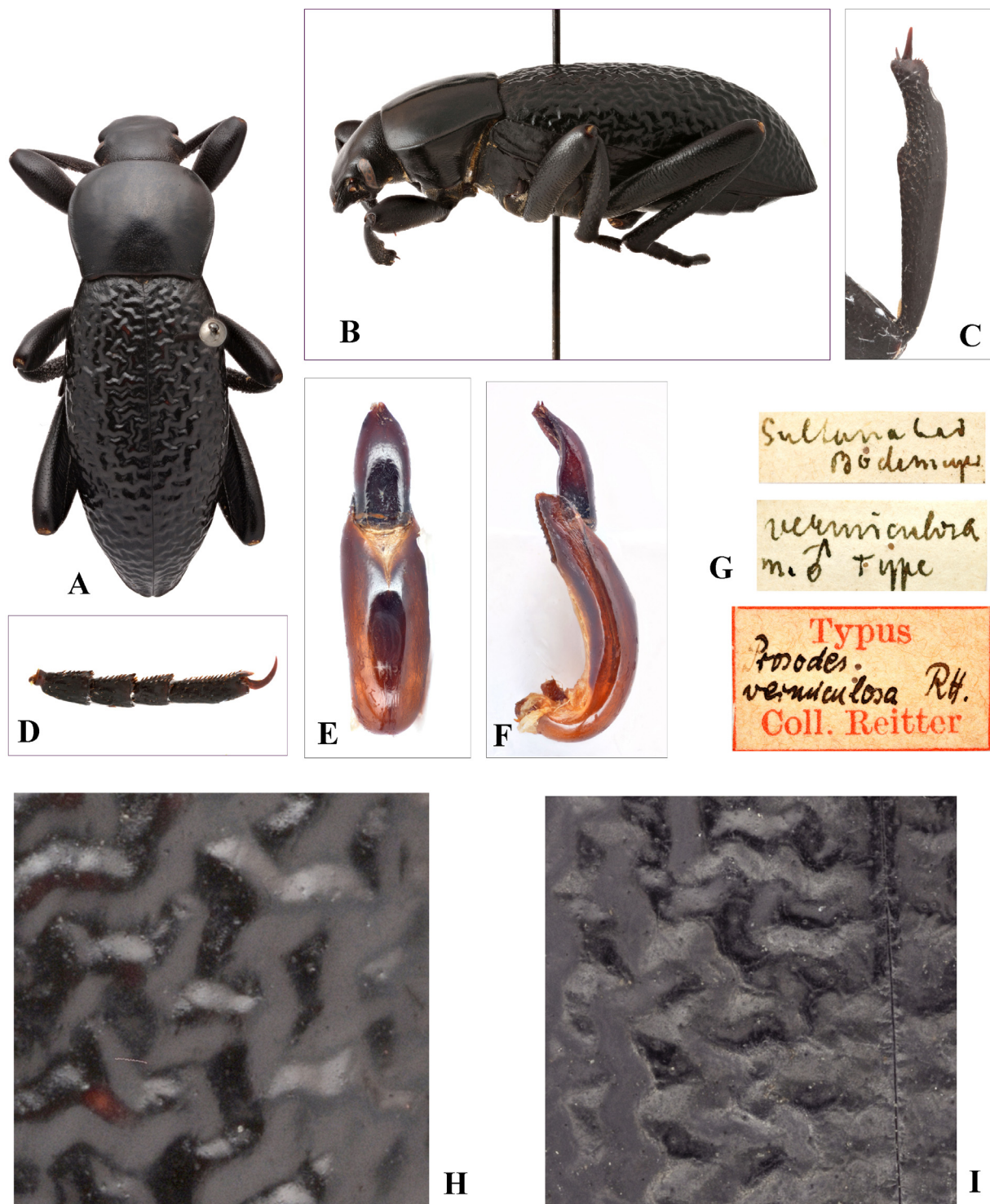


FIGURE 10. A–H, *Prosodes vermiculosa*: A, lectotype, male (HNHM), dorsal view; B, same, lateral view; C, male protibia; D, male protarsus; E, aedeagus, dorsal view; F, same, lateral view; G, labels of lectotype; H, sculpture of male elytra. I, sculpture of paratype of *Prosodes fabiani*, female (HNHM). Not to scale.

***Prosodes (Meropersina) fabiani* G. Medvedev et Merkl, 2005**
(Figs 10I, 11)

Prosodes (Meropersina) fabiani G. Medvedev et Merkl, 2005: 172.
Prosodes (Meropersina) fabiani: Löbl et al. (2008: 234).

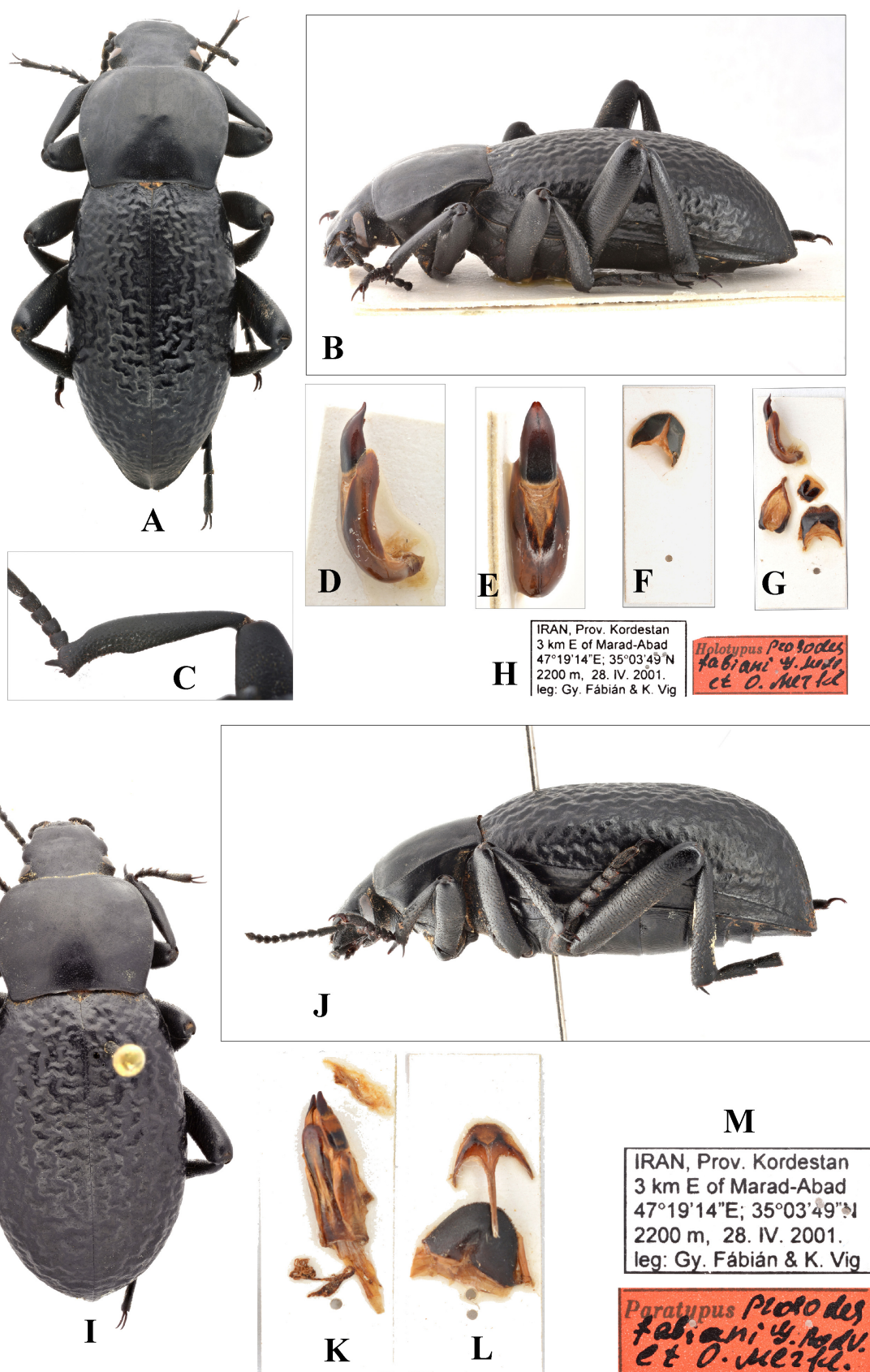


FIGURE 11. *Prosodes fabiani* (HNHM). A–G, holotype, male: A, dorsal view; B, lateral view; C, male protibia; D, aedeagus, lateral view; E, same, dorsal view; F–G, dissected male terminalia; H, labels of holotype. I–M, paratype, female: I, dorsal view; J, lateral view; K, dissected oviduct and genital tubes; L, dissected female terminalia; M, labels of paratype. Not to scale.

Type material. Holotype (HNHM), ♂, with labels: “IRAN, Prov. Kordestan, 3 km E of Marad-Abad, 47°19'14"E; 35°03'49" N 2200 m, 28. IV. 2001 leg: Gy. Fábián & K. Vig”, “Holotypus *Prosodes fabiani* G. Medv. et O. Merkl”. Paratype (HNHM), ♀, with first label as holotype, “Paratypus *Prosodes fabiani* G. Medv. et O. Merkl”.

Distribution. Iran: Kordestan Province.

***Prosodes (Meropersina) kasatkini* sp. n.**

(Figs 12–14)

Type material. Holotype (♂) and 9 paratypes (6 ♂♂, 3 ♀♀), Iran, West Azerbaijan Province, S of Piranshahr, 36°36.520' N, 45°08.355' E, 20–22.v.2015 (leg. D. Kasatkin, S. Kakunin). All types are deposited in ZIN.

Description. Male. Body slender, black, matt. Anterior margin of clypeus widely and weakly emarginate, lateral margins weakly rounded. Lateral margins of genae straight in anterior half, rounded at base. Lateral margin of head with distinct obtuse-angled sinuation between genae and clypeus. Head widest across eyes. Eyes convex, head width 1.42× wider than interocular space. Punctuation of clypeus and frons fine and sparse (puncture diameters 2–4× as wide as distance between punctures). Punctuation denser near eyes and genae (puncture diameters 1–2× as wide as distance between punctures). Occiput and temples with rasp-shaped punctuation and dense pubescence of short subrecumbent light hairs. Vertex with wrinkles, sparse small granules and light recumbent hairs. Mentum transverse, oval. Cardo and stipes covered with strong light setae. Antennae not reaching base of pronotum. Ratio of length/width of antennomeres 2–11 as 8(9), 23(9), 14(10), 12(10), 12(10), 12(13), 9(12), 9(11), 9(10), 14(9). Antennomeres 1–10 covered with light hairs, antennomeres 1–7 covered with dense brown hairs, antennomeres 8–10 with shorter and sparser hairs; antennomere 11 without light hairs.—Pronotum transverse (1.16× as wide as long), widest at middle, 1.44× as wide as head. Anterior margin of pronotum widely emarginate, straight near anterior margin. Lateral margins regularly and moderately rounded. Base of pronotum widely and weakly emarginate, straight at middle. Lateral margins and anterior angles of pronotum beaded, bead smooth near base, anterior margin and base of pronotum not beaded. Disc of pronotum weakly convex. Lateral sides and posterior angles of disc flattened. Punctuation of pronotum fine and sparse (puncture diameters 2–4× as wide as distance between punctures), denser near anterior angles (puncture diameters subequal to distance between punctures). Prothoracic hypomera with rasp-shaped punctuation and small longitudinal wrinkles, smoother near outer margins. Lateral margins of hypomera flattened in basal half.—Scutellum visible. Elytra elongate (2.17× as long as wide), 2.74× as long and 1.25× as wide as pronotum, 1.56× as wide as head. Elytra weakly convex, with smooth declivity in apical third, with fine, groove-like (not deeply depressed) wrinkles. Punctuation of elytra sparser (puncture diameters 7–8× as wide as distance between punctures) than on pronotum. Epipleura with fine wrinkles and sparse small granules. Mesoventrite with wrinkles and light recumbent hairs, with beaded intercoxal process. Metaventrte with beaded intercoxal process, rasp-shaped, dense but irregular punctuation (puncture diameters 0.5–0.7× as wide as distance between punctures). Mesepisterna, mesepimera and metepisterna with rasp-shaped punctuation and short light hairs. Abdominal ventrites 1–4 with longitudinal wrinkles along lateral margins. Abdominal ventrites with moderately dense punctuation (puncture diameters 1–2× as wide as distance between punctures), 1th and 2th ventrites with fine wrinkles. Intercoxal process of ventrite 1 square, with coarse wrinkles; ventrite 5 completely beaded except base and with unclear bead apically.—Legs slender. Ratio of lengths of femora, tibiae and tarsi of fore, middle and hind legs 6.2 : 5.7 : 4.5, 7.1 : 6.8 : 6.8 and 9.6 : 9.2 : 8. Ventral lamella of onychium between two tarsal claws of regularly and moderately rounded. Tibial spurs subequal in size. Protibiae bent, regularly widened from base to apex, with weakly emarginate inner side at apical third and without prominence. Mesotibiae bent. Metatibiae S-shaped.—Aedeagus C-shaped, length 5.8 mm, width 1.48 mm. Basal piece 1.66× as wide as apical piece. Apical lobes of basal piece large, serrate (with 9–10 denticles), with longitudinal ridges laterally. Length of apical piece 2.2 mm, width 0.9 mm. Dorsal side of parameres regularly and slightly rounded, regularly narrowing at apex. Parameres with sensillar punctuation apically. Visible part of medial piece (penis) with elongate granules and rounded membranous apex. Lobes of gastral spicule narrow, punctured. Rods of gastral spicule merged on apex, forming common trunk. Male sternite VIII covered with small setae denser in apical part, anterior margin widely emarginate, accessory gland of sternite VIII thin, rather long.—Body length 18–23.8 mm, width 6–7.8 mm.

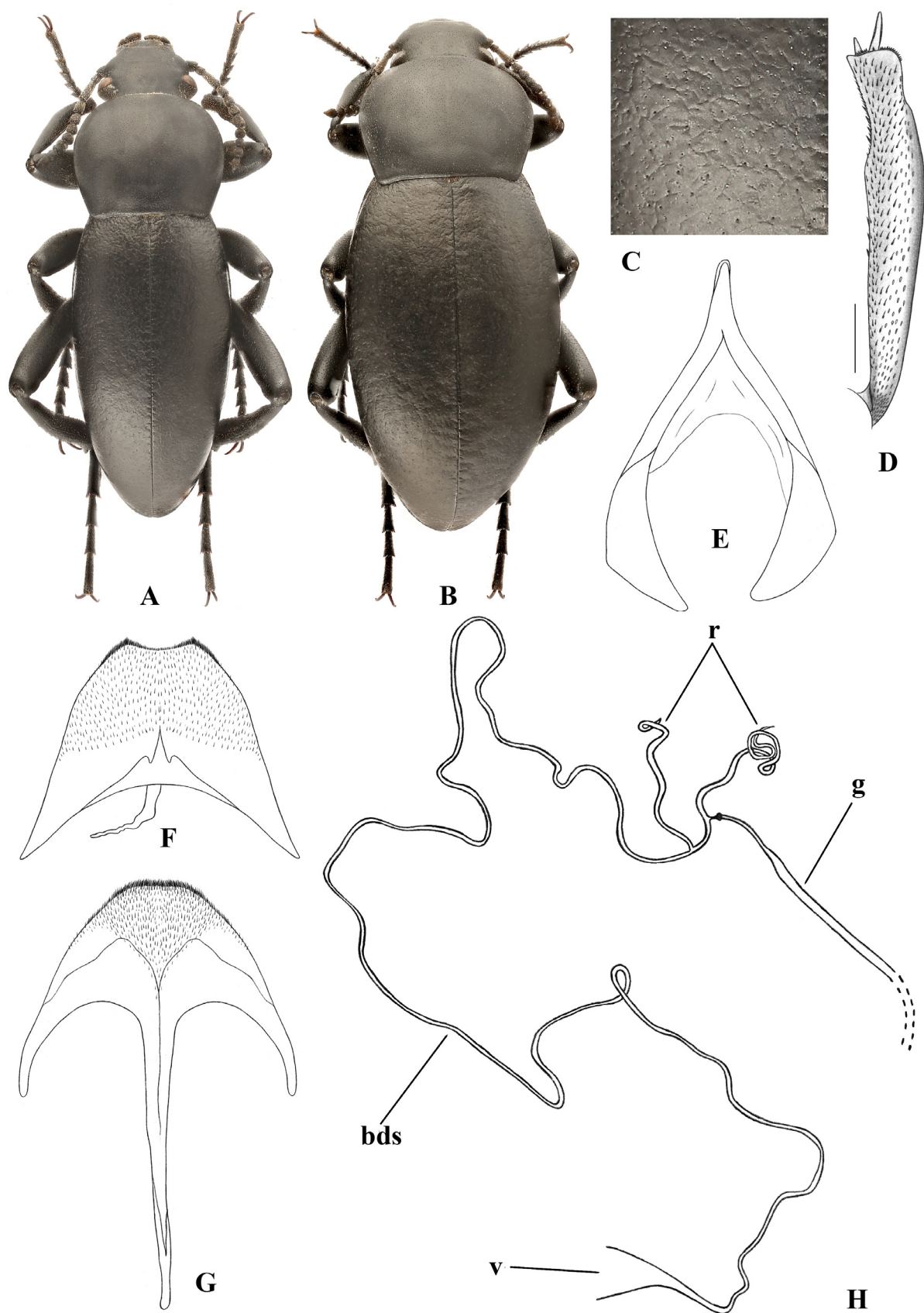


FIGURE 12. *Prosodes kasatkini* sp. n. (ZIN). A, holotype, male, dorsal view; B, paratype, female, dorsal view; C, sculpture of female elytra; D, male protibia; E, gastral spicula; F, male sternite VIII, G, ventral spicula; H, female genital tubes (v—vagina, bds—basal duct of spermatheca, r—reservoirs, g—accessory gland of spermatheca). Not to scale.

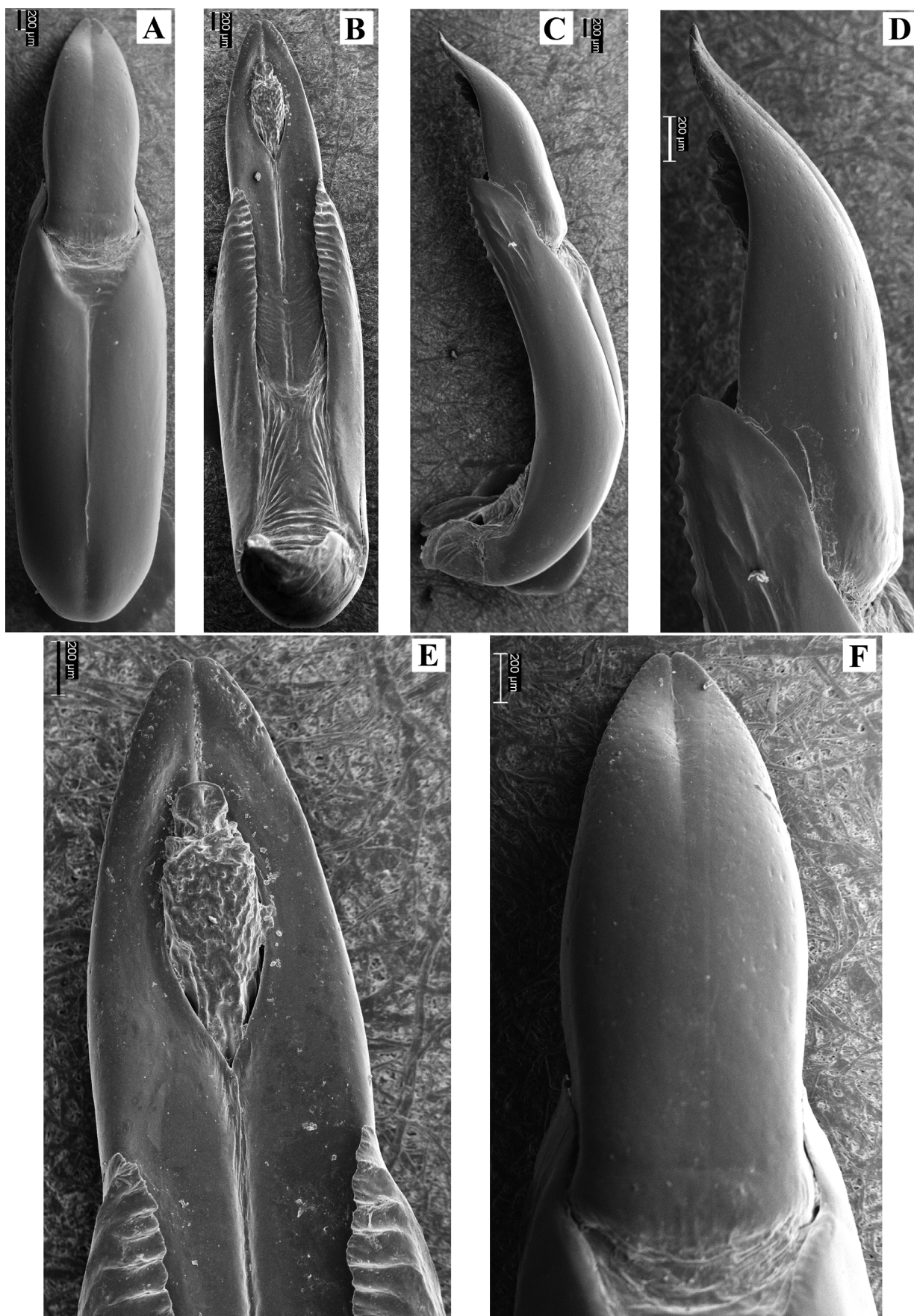


FIGURE 13. *Prosodes kasatkini* sp. n. (ZIN), aedeagus. A, dorsal view; B, ventral view; C, lateral view; D, apical piece, lateral view; E, same, ventral view; F, same, dorsal view.

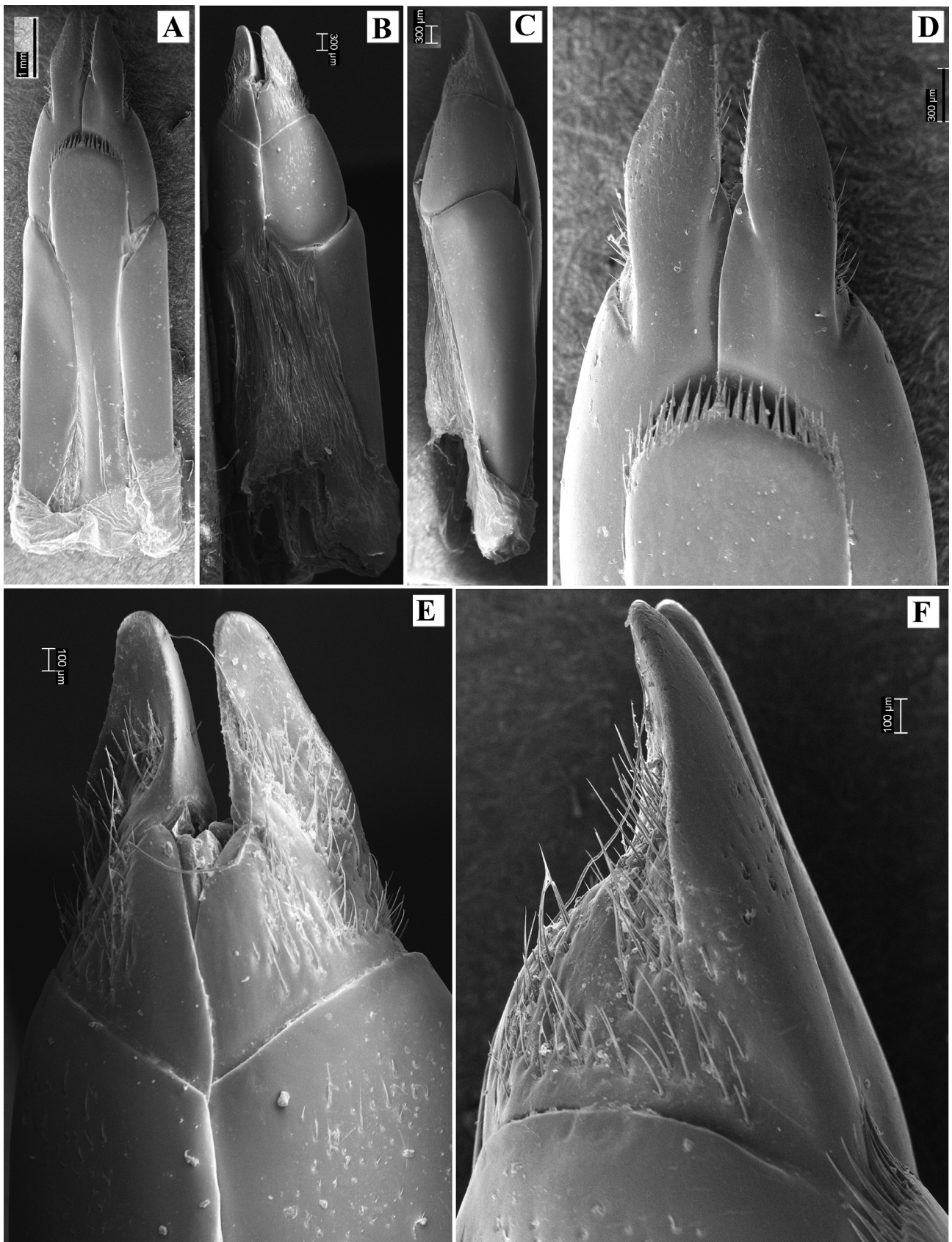


FIGURE 14. *Prosodes kasatkini* sp. n. (ZIN), ovipositor. A, dorsal view; B, ventral view; C, lateral view; D, apical lobes, dorsal view, E, same, ventral view, F, same, lateral view.

Female. Body black, wider and more robust than that of male. Punctuation of head and pronotum very fine. Pronotum transverse ($1.35\times$ as wide as long), $1.57\times$ as wide as head. Elytra widest at middle ($1.64\times$ as long as wide), $2.8\times$ as long and $1.23\times$ as wide as pronotum, $1.93\times$ as wide as head. Elytra with fine wrinkles, punctuation of elytra sparser (puncture diameter $4\text{--}5\times$ as wide as distance between punctures). Legs shorter than those of male, protibiae not emarginate in inner side, metatibiae not S-shaped.—Ovipositor wide, with narrow apical lobes. Ventral side of apical lobes with long setae. Anterior margin of proctiger rounded, with long setae. Trunk of ventral spicule long. Basal duct of spermatheca long, gland of spermatheca short. Reservoirs of spermatheca thin, 1st shorter than 2nd. Trunk of ventral spicule long.—Body length 20.1–21 mm, width 9.1–9.5 mm.

Etymology. The species is named in honour of our colleague and one of the collectors of the new species, Denis Kasatkin.

Diagnosis. *Prosodes kasatkini* **sp. n.** is similar among the described species to *Prosodes vigi* G. Medvedev et Merkl, 2005 and *Prosodes laevigata* Baudi di Selve, 1874 in the fine, not deeply depressed wrinkles on male elytra. The male of *P. kasatkini* **sp. n.** differs from that of *P. laevigata* by dull body (*P. laevigata* has strongly shiny body), narrowly and weakly beaded lateral margins and not flattened lateral sides of wider pronotum, and denser net of elytral microwrinkles. The female of *P. kasatkini* **sp. n.** differs from that of *P. laevigata* and *P. vigi* in the groove-like, not depressed wrinkles (both other species have weakly depressed wrinkles); from *P. vigi* additionally in the more slender body. The new species differs from all other species of the subgenus *Meropersina* in the absence of deeply depressed wrinkles on elytra, from *P. cordicollis* Allard, 1883 and *P. vermiculosa* Reitter, 1909 in the absence of sharp prominence in inner side of male protibiae. *Prosodes kasatkini* **sp. n.** is the most similar to *P. shokhini* **sp. n.**, differences from which see in the diagnosis of *P. shokhini* **sp. n.**

Prosodes (Meropersina) shokhini **sp. n.**

(Figs 15–17)

Type material. Holotype (♂) and 7 paratypes (5 ♂♂, 2 ♀♀), Iran, West Azerbaijan Province, near Rajan, $37^{\circ}22'44.65''\text{N}$, $44^{\circ}48'13.70''\text{E}$, 25.05.2014, leg. I. Shokhin, D. Kasatkin. All types are deposited in ZIN.

Description. Male. Body slender, black, matt. Anterior margin of clypeus widely weakly emarginate, lateral margins weakly rounded. Lateral margins of genae straight in anterior half, rounded at base. Lateral margin of head with distinct obtuse-angled situation between genae and clypeus. Head widest at across eyes. Eyes convex, head width $1.38\times$ wider than interocular space. Punctuation of head fine and moderately dense (puncture diameters $1\text{--}2\times$ as wide as distance between punctures). Punctuation of clypeus coarser and denser. Occiput and temples with very fine rasp-shaped punctuation. Vertex wrinkled, with small granules and dense pubescence. Mentum transverse, oval, base of mentum slightly emarginate, almost straight. Antennae not reaching base of pronotum. Ratio of length/width of antennomeres 2–11 as 10(9), 25(9), 14(9), 14(9), 13(10), 14(13), 10(11), 10(10), 9(10), 14(9). Antennomeres 1–7 covered with goldish hairs, antennomeres 8–11 covered with very fine hairs around.—Pronotum transverse ($1.18\times$ as wide as long), widest at middle, $1.62\times$ as wide as head. Anterior margin of pronotum widely emarginate. Lateral margins regularly and moderately rounded. Base of pronotum widely and weakly emarginate, straight at middle. Lateral sides and anterior angles of pronotum beaded. Anterior margin, posterior angles and base of pronotum not beaded. Disc of pronotum weakly convex. Lateral sides of disc not flattened. Punctuation of pronotum fine and sparse (puncture diameters $2\text{--}4\times$ as wide as distance between punctures), denser near anterior angles (puncture diameters subequal with distance between punctures). Prothoracic hypomera with longitudinally wrinkled and rasp-shaped punctuation. Lateral margins of hypomera flattened in basal half.—Scutellum visible. Elytra elongate ($1.93\times$ as long as wide), $2.65\times$ as long as and $1.08\times$ as wide as pronotum, $1.76\times$ as wide as head. Elytra weakly convex, with smooth declivity in apical third. Elytra with fine, groove-like (not depressed) wrinkles, punctuation of elytra sparse (puncture diameters $5\text{--}6\times$ as wide as distance between punctures). Epipleura with fine wrinkles and sparse fine punctuation. Mesoventrite with dense punctuation and light hairs, with beaded intercoxal process. Metaventrite with rasp-shaped punctuation. Mesepisterna, mesepimera and metepisterna with rasp-shaped and simple punctuation, covered with short light hairs. Abdominal ventrites 1–4 with longitudinal wrinkles along lateral margins. Ventrite 1 with transverse wrinkles in middle; intercoxal process of ventrite 1 square, with coarsest wrinkles. Abdominal ventrites with moderately dense punctuation (puncture diameters $1\text{--}2\times$ as wide as distance between punctures), ventrite 5 completely beaded except

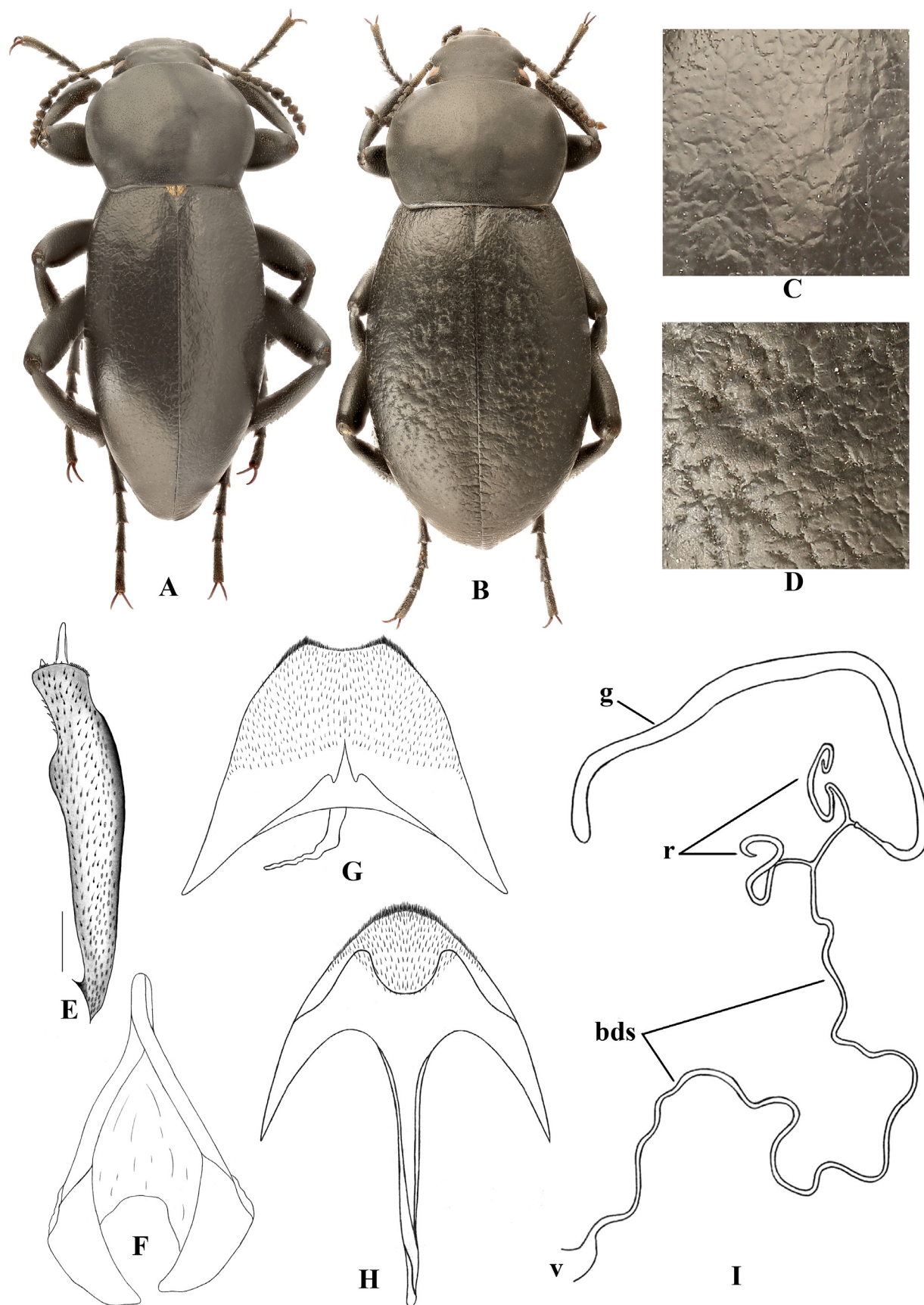


FIGURE 15. *Prosodes shokhini* sp. n. (ZIN). A, holotype, male, dorsal view; B, paratype, female, dorsal view; C, sculpture of male elytra; D, sculpture of female elytra; E, male protibia; F, gastral spicula; G, male sternite VIII; H, ventral spicula; I, female genital tube (v—vagina, bds—basal duct of spermatheca, r—reservoirs, g—accessory gland of spermatheca). Not to scale.

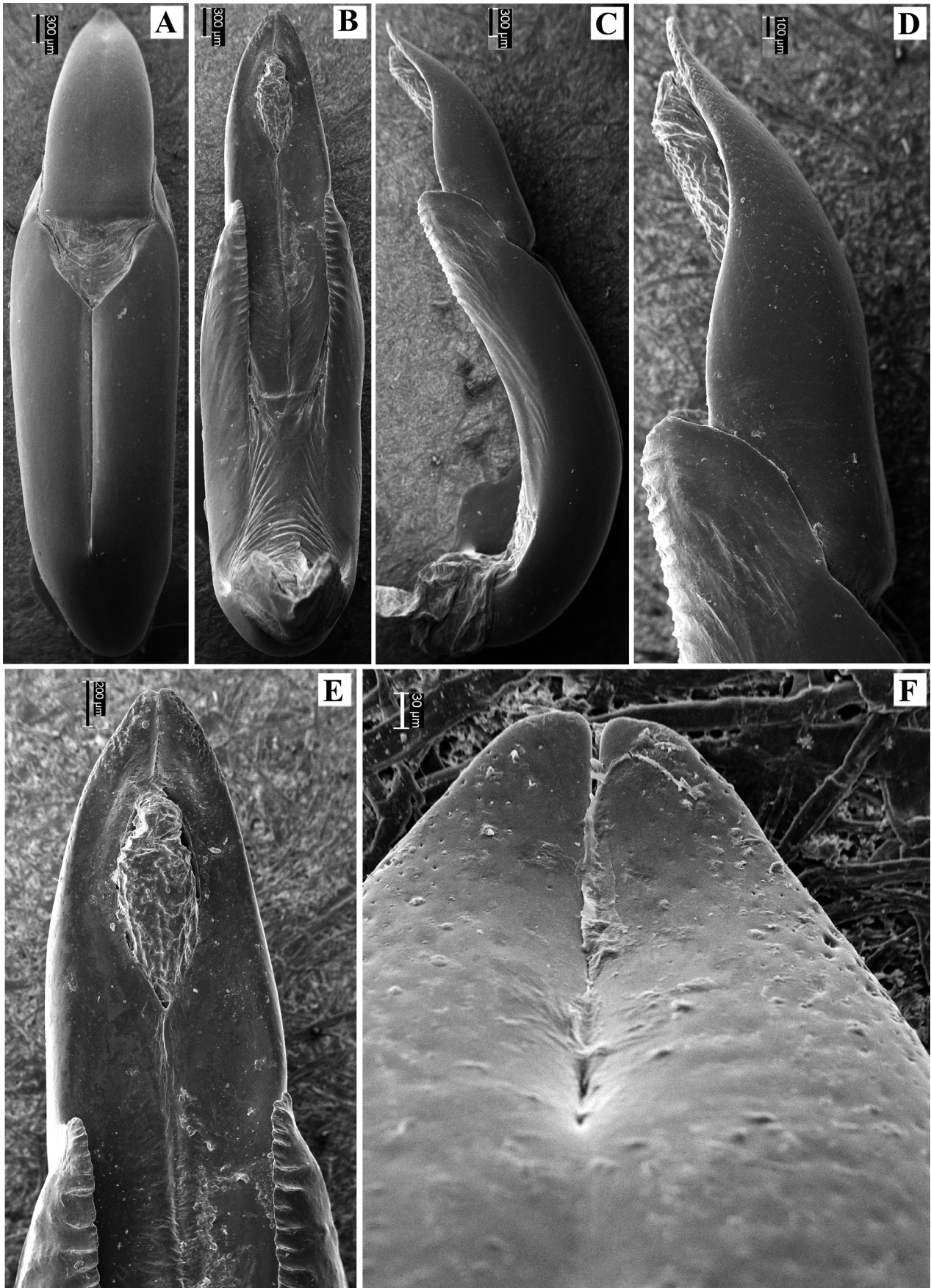


FIGURE 16. *Prosodes shokhini* sp. n. (ZIN), aedeagus. A, dorsal view; B, ventral view; C, lateral view; D, apical piece, lateral view; E, same, ventral view; F, same, dorsal view.

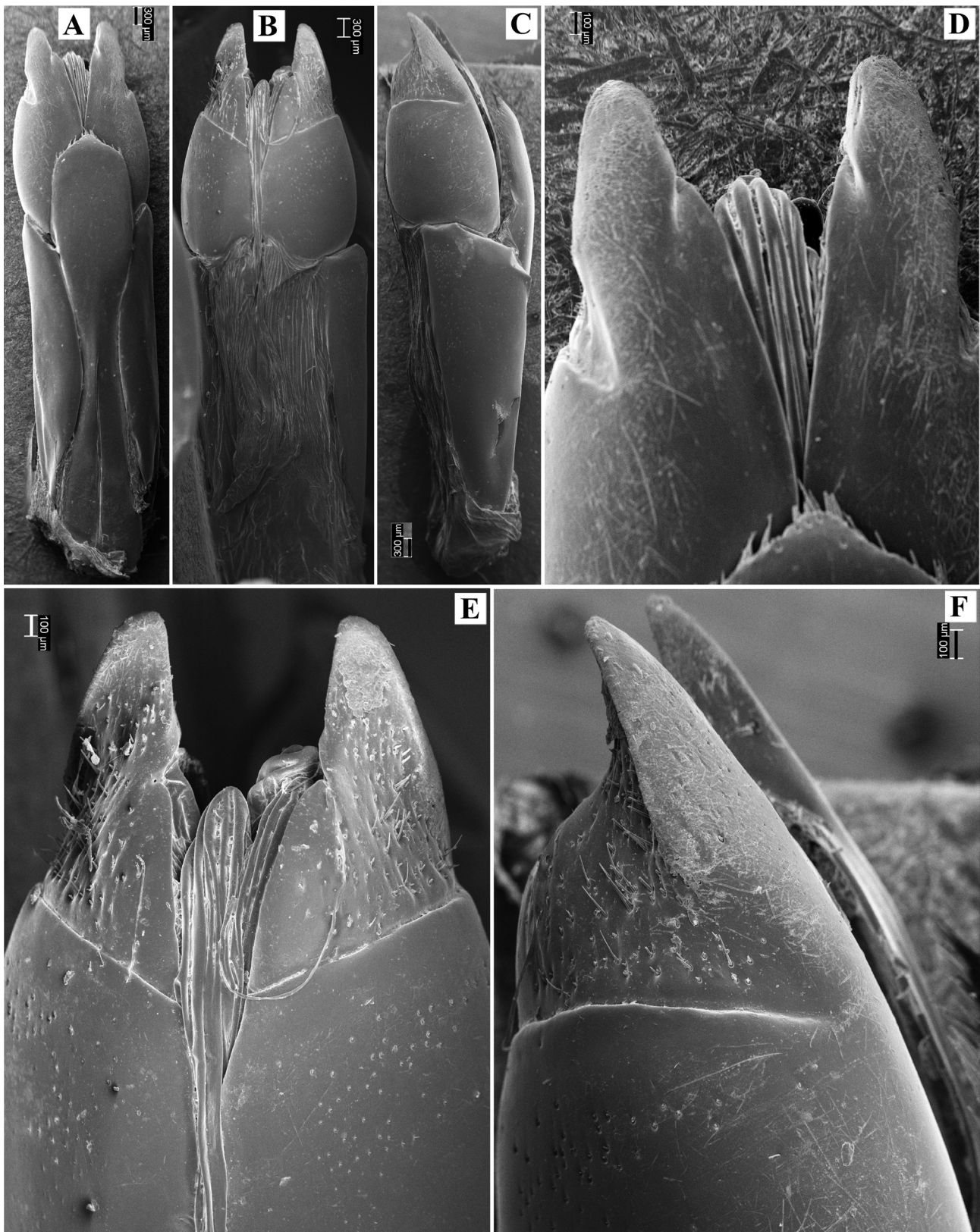


FIGURE 17. *Prosodes shokhini* sp. n. (ZIN), ovipositor. A, dorsal view; B, ventral view; C, lateral view; D, apical lobes, dorsal view, E, same, ventral view, F, same, lateral view.

base, apically with obsolete bead.—Legs slender. Ratio of lengths of femora, tibiae and tarsi of fore, middle and hind legs are 6.3 : 6.4 : 4.4, 7.3 : 7 : 6.9 and 10 : 10.4 : 8.7. Ventral lamella of onychium between two tarsal claws of tarsi regularly and moderately rounded. Tibial spurs slightly differ in size. Protibiae bent, regularly widened from base to apex, widely emarginate in apical third of inner side and with distinct blunt prominence. Metatibiae S-shaped.—Aedeagus C-shaped, length 6.9 mm, width 1.9 mm. Basal piece 1.52× as wide as apical piece. Apical lobes of basal piece large, serrate (with about 16 denticles), with longitudinal ridges ventrally. Length of apical piece 2.9 mm, width 1.25 mm. Dorsal side of parameres regularly and slightly rounded, regularly narrowing at apex. Parameres with sensillar punctation apically. Visible part of medial piece (penis) with elongate granules and rounded membranous apex. Lobes of gastral spicule narrow, punctured. Rods of gastral spicule merged at apex, forming common trunk. Male sternite VIII covered with small setae denser in apical part, anterior margin widely emarginate, accessory gland of sternite VIII thin, rather long.—Body length 20.1–21.5 mm, width 7.9–8.8 mm.

Female. Body wider and more robust than that of male. Punctuation of head and pronotum fine and sparse. Pronotum more transverse (1.34× as wide as long), 1.66× as wide as head. Elytra widest at middle (1.61× as long as wide), 2.69× as long and 1.24× as wide as pronotum, 2–2.05× as wide as head. Elytra with weakly depressed (only in middle) fine wrinkles, punctuation of elytra sparse. Legs shorter than those of male. Protibiae not emarginate and without prominence in inner side, metatibiae not S-shaped.—Ovipositor wide, with narrow apical lobes. Ventral side of apical lobes of ovipositor with moderately long setae. Anterior margin of proctiger rounded and punctured, with short setae. Basal duct of spermatheca long, gland of spermatheca long. Reservoirs of spermatheca thin, subequal in length. Trunk of ventral spicule moderately long.—Body length 20.2–23.1 mm, width 8.2–10.6 mm.

Etymology. The species is named in honour of our colleague and one of the collectors of the new species, Igor Shokhin.

Diagnosis. *Prosodes shokhini* sp. n. has the same differences from the known species of *Meropersina* as *P. kasatkini* sp. n. *Prosodes shokhini* sp. n. is most similar to *P. kasatkini* sp. n. from which it differs in the presence of larger prominence on inner side of male protibiae, having apical piece of aedeagus widest at base (dorsally), shorter and less pubescent apical lobes of oviduct, acute apex of proctiger (*P. kasatkini* has widely rounded apical margin of proctiger). In addition, female of *P. shokhini* sp. n. has more robust and wider body and weakly (more or less) depressed elytral wrinkles.

Key to Iranian species of the genus *Prosodes*

- 1(4) Proximal half of male and female protibiae with sharp-edged inner margin. Male protibiae strongly flattened in middle, with obtuse or acute angulation. Female elytra with large flat tubercles arranged in indistinct rows.
- 2(3) Male elytra smooth or with indistinct weakly depressed wrinkles. Male pronotum as long as or longer than wide. Male protibiae with obtuse angulation. Female pronotum almost as long as wide or slightly transverse. Female protibiae strongly widened and flattened in middle. Female body narrower *P. (Prosodoscelis) solskyi*
- 3(2) Male elytra with rows of indistinct, flat, often smoothed tubercles in apical 2/3. Male pronotum transverse. Male protibiae with acute angulation. Female pronotum strongly transverse, at least 1.5× wider than long. Female protibiae weakly widened in middle. Female body robust *P. (Prosodoscelis) dentimana*
- 4(1) Proximal half of male and female protibiae with blunt inner margin. Male protibiae not flattened, without distinct angulation, sometimes with blunt prominence in apical third. Female elytra without large flat tubercles, if tubercles present, not arranged in discernible rows.
- 5(8) Spurs of protibiae strongly differ in size: dorsal (outer) spur large, ventral (inner) spur very short, in females almost vestigial. Length of spurs of meso- and metatibiae also unequal.
- 6(7) Male and female elytra with four finely and very densely punctate (by simple punctures) impressed striae running throughout most of elytra and convex, nearly smooth interstriae. Female elytra with striae narrower than intervals, without setation *P. (Prosodina) calcarata*
- 7(6) Male elytra with irregular rows of large and deep foveae, traces of striae discernible in posterior 1/3 only; foveae and interspaces covered with very small sparse granules and very short and sparse brown setae. Female elytra with punctate and granulate striae wider than intervals, sparsely set with short brown setae (denser in striae) (Occurrence in Iran doubtful) *P. (Prosodina) kraatzii*
- 8(5) Spurs of protibiae subequal in size or inner spur shorter half. Length of spurs on meso- and metatibiae subequal.
- 9(10) Elytra with one wide elongate depression in apical declivity, covered with small and dense granules and brown setae. Elytra without wrinkles, with coarse and dense punctuation (each puncture with minute anterior granule) and very dense microreticulation *P. (Iranosodes) laticauda*
- 10(9) Elytra without wide elongate depression in apical declivity or females with more than one longitudinal striae on much of elytra. Elytra with wrinkles or smooth, with sparse tubercles. Elytra can be with large tubercles but in this case their punctuation

very fine and sparse.

- 11(22) Pronotum with large deep foveae (foveolate punctation) evenly scattered or located only on sides and in basal third, in that case anterior part and middle of pronotum with very fine and sparse punctation. Elytra with small rasp-shaped sparse tubercles, rarely smooth in male.
- 12(13) Foveolate punctation of pronotum very dense and coarse, without large smooth areas in middle. Elytra with 3 wide and shallow longitudinal depressions apically, covered with small tubercles and setae. Intervals between depressions smooth, weakly convex. ***P. (Dilopersina) mithras***
- 13(12) Pronotum with smooth areas in middle or along both sides of midline, other parts of surface with foveolate punctation. Only female elytra can have longitudinal flat depressions and wide carinae between them. Rarely male also with smoothed carinae apically but in that case male pronotum with deep triangular microgranulated or strongly punctate impression near posterior corners and elytra with more or less expressed microgranulated depressions.
- 14(15) Male elytra with distinct sparse foveae and small rasp-shaped granules between them. Female elytra with irregular flat densely punctate depressions and distinct large round foveae on smooth intervals between depressions. Parameres very wide, 1.55× as long as wide (according to original description). ***P. (Dilopersina) rishwani***
- 15(14) Male elytra with (1) sparse small rasp-shaped granules or (2) smooth, or (3) with distinct foveae but without granules between them. Female elytra without large round distinct foveae or with foveae, but also with vestiture of short reddish setae. Parameres more elongate, at least 2× longer than wide.
- 16(19) Male protibiae with deep triangular notch near apex of inner margin, extended by oblique dorsal impression. Foveiform punctures of male pronotum small, shallow, ill-defined, or pronotum virtually impunctate. Male elytra without setae.
- 17(18) Male pronotum with weak and shallow impression near posterior corners, with weak punctation. Disc of male pronotum slightly punctate to impunctate. Male elytra with several large, shallow foveae or nearly smooth, without tubercles and setae. Female elytra with distinct, dense coarse, larger tubercles and smaller granules, without traces of ribs, with very short setae apically ***P. (Dilopersina) jakowlewi***
- 18(17) Male pronotum with deep triangular impression near posterior corners, with strong punctation or microgranulation. Disc of male pronotum with slightly stronger punctation. Male elytra smooth to strongly sculptured (with sparse tubercles and flat elevations or with large tubercles and microgranulate depressions between them), without setae, never with large, shallow foveae. Female elytra with distinct, dense, coarse, larger tubercles and smaller granules, with traces of 3 blunt carinae, with dense, yellowish, short, erect setae arranged in irregular longitudinal bands. ***P. (Dilopersina) neopersis***
- 19(16) Male protibiae only weakly and shallowly sinuate near apex of inner margin. Foveiform punctures of pronotum large, deep, sharply defined. Male elytra with setae (could be very small). Female elytra without distinct and dense tubercles, with shallow sparse foveae (*P. cribrilla*) or with coarse punctures and flat elevations (*P. vestita*).
- 20(21) Pronotal punctures of males and females without setae. Male and female elytra with very sparse, shallow pits (denser in female) with minute granules in their anterior margin; granules bearing short black bristle-like setae (almost missing in male, much more distinct in female); female elytra without reddish setae and traces of ribs ***P. (Dilopersina) cribrilla***
- 21(20) Pronotal punctures of males and females with very short central reddish setae. Male elytra nearly smooth, with very short reddish setae in indistinct foveae; setation may be denser in apical declivity and along suture or nearly missing (abraded); female elytra with coarse, dense punctures, with less punctate flat elevations forming traces of 3 ribs, and with dense reddish setation ***P. (Dilopersina) vestita***
- 22(11) Pronotum with sparse and fine regular punctation. Elytra without rasp-shaped granules.
- 23(32) Male elytra absolutely smooth, or nearly so with very fine net of shallow wrinkles, or with weak and shallow, not undulating wrinkles. Female elytra as in males or with weakly depressed smoothed wrinkles or with deep vermiform wrinkles.
- 24(27) Males glossy. Females matt, elytra with deep vermiform wrinkles or with weakly depressed wrinkles in apical half (in this case female elytra widest behind middle).
- 25(26) Male body narrow, strongly elongate, elytra subparallel-sided; male pronotum weakly transverse (1.13 as wide as long); elytra without wrinkles. Male protibiae weakly widened in apical third with slightly and widely emarginate inner side, without inner prominence. Female elytra widest behind middle, with weakly depressed wrinkles in apical half ***P. (Meropersina) laevigata***
- 26(25) Male body broader, elytra with moderately rounded sides; male pronotum more transverse (1.22–1.3 as wide as long); elytra without wrinkles (Zagros population) or with weakly depressed wrinkles (Western Alborz population). Male protibiae clearly widened in apical third with obtuse inner prominence. Female elytra widest at middle, with deep vermiform wrinkles and flattened space between them. ***P. (Meropersina) cordicollis***
- 27(24) Males and females matt. Female with not depressed simple fine wrinkles or with weakly depressed wrinkles (in this case female elytra widest in middle).
- 28(29) Male protibiae without protruded prominence in apical third of inner side. Female elytra with not depressed simple wrinkles ***P. (Meropersina) kasatkini sp. n.***
- 29(28) Male (at least for *P. shokhini*, because male of *P. vigi* is unknown) protibiae with protruded prominence in apical third. Female elytra with weakly depressed wrinkles.
- 30(31) Female. Lateral sides of pronotum not flattened. Anterior margin of proctiger acute. Ratio of length/width of ventral spicule 13/9.5, its anterior margin narrow, rounded at middle. Basal duct of spermatheca 4.3× as long as reservoirs. Second reservoir located near accessory gland of spermatheca ***P. (Meropersina) shokhini sp. n.***
- 31(30) Female. Lateral sides of pronotum distinctly and widely flattened. Anterior margin of proctiger rounded. Ratio of length/width of ventral spicule 13/7.5, its anterior margin wide, straight in middle. Basal duct of spermatheca 3.6× as long as reservoirs. Second reservoir visibly distant from accessory gland of spermatheca ***P. (Meropersina) vigi***
- 32(23) Male and female elytra with coarse and dense undulating rugosities.

- 33(34) Male protibiae deeply emarginated and with distinct prominence on inner apical half. Pronotum narrowly flattened on sides. Parameres widest at middle. Female unknown..... ***P. (Meropersina) vermiculosa***
- 34(33) Male protibiae shallowly emarginated, without distinct prominence on inner apical half. Pronotum not flattened on sides. Parameres widest in basal half ***P. (Meropersina) fabiani***

Acknowledgements and Funding

The authors are much obliged to Dr Denis Kasatkin (Rostov Branch of All-Russian Center for Plant Quarantine, Rostov-on-Don), to Dr Igor Shokhin (Institute of Arid Zones of Southern Scientific Centre of the Russian Academy of Sciences, Rostov-on-Don), to Sergey Kakunin (Russian Entomological Society, Krasnodar), to Dr Károly Vig (SMS, Szombathely), to Dezső Szalóki (Hungarian Entomological Society, Budapest) for the provided material, to Dr Harald Schillhammer (NHMW, Vienna) for information on the paralectotypes of *Prosodes vermiculosa*, to Dr Konstantin Nadein (SDEI, Müncheberg) for the photographs of the holotype of *P. kraatzi*, to Denis Kasatkin for preparation of photographs of *P. kasatkini* and *P. shokhini*, to Tamás Németh and Aranka Grabant (HNHM, Budapest) for preparation of photographs of *P. calcarata*, *P. cordicollis*, *P. dentimana*, *P. fabiani*, *P. grouvellei*, *P. jakowlewi* Reitter, *P. laticauda*, *P. mithras*, *P. vermiculosa* and *P. vigi*, to Andrey Shapovalov (ZIN, St. Petersburg) for preparation of photographs of *P. solskyi*, to Dewanand Makhani (Netherlands) for sending photographs of *P. rishwani*. The study was partly supported by the Russian Foundation for Basic Research (grant 18-04-00243-A).

References

- Allard, E. (1880) Essai de classification des Blapsides de l'ancien monde. 1^{re} partie. *Annales de la Société Entomologique de France*, 10 (5), 269–320.
- Allard, E. (1883) Mélanges Entomologiques. *Annales de la Société Entomologique de Belgique*, 27, 5–49.
- Allard, E. (1885) Coleoptera nova. *Wiener Entomologische Zeitung*, 4, 180.
<https://doi.org/10.5962/bhl.part.20120>
- Baudi di Selve, F. (1874) Catalogo dei Tenebrioniti della fauna europea e circummediterranea del Museo Civico di Genova. *Annali del Museo Civico di Storia Naturale di Genova*, 6, 89–115.
- Bogačev, A.V. & Kryzhanovskij, O.L. (1960) New and little-known species of tenebrionid beetles (Coleoptera, Tenebrionidae) from western Turkmenia. *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR*, 17, 264–275. [in Russian]
- Faust, J. (1875) Beiträge zur Kenntnis der Käfer des Europäischen und Asiatischen Russlands mit Einschluss der Küsten des Kaspischen Meeres. *Horae Societatis Entomologicae Rossicae*, 11, 163–252.
- Gridelli, E. (1954) Catalogo regionato delle species della famiglia Tenebrionidae a me nota dell'Afghanistan (Coleoptera). *Atti del Museo Civico di Storia Naturale Trieste*, 19 (4), 169–292.
- Kaszab, Z. (1959) The 3rd Danish Expedition to Central Asia. Zoological Results 24. Ergänzungen zur Tenebrioniden (Insecta). Aufarbeitung von Dr. E. Gridelli der 3. Dänischen Zentralasiatischen Expedition. *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening i København*, 120 [1958], 237–255.
- Kaszab, Z. (1960) Die Tenebrioniden Afghanistans, auf Grund der Ergebnisse der Sammelreise des Herrn J. Klapperich in den Jahren 1952/53 (Col.). 1. Fortsetzung und Schluss. *Entomologische Arbeiten aus dem Museum G. Frey*, 11, 1–179.
- Kaszab, Z. (1965) Österreichische entomologische Expeditionen nach Persien und Afghanistan. Beiträge zur Coleopterenfauna. Teil I: Tenebrionidae, Meloidae und Pedilidae. *Annalen des Naturhistorischen Museum Wien*, 68, 667–670.
- Kaszab, Z. (1968b) Beiträge zur Kenntnis der Fauna Afghanistans (Sammelergebniss von O. Jakeš 1963–64, D. Povolný & Fr. Tenora 1966, J. Šimek 1965–66, D. Povolný, J. Geiser, Z. Šebek & Fr. Tenora 1967) Tenebrionidae, Col. *Časopis Moravského Musea, Vědy přírodní*, 53, Supplementum, 7–124, 4 pls.
- Kaszab, Z. (1970) Beiträge zur Kenntnis der Fauna Afghanistans (Sammelergebniss von O. Jakeš 1963–64, D. Povolný & Fr. Tenora 1966, J. Šimek 1965–66, D. Povolný, J. Geiser, Z. Šebek & Fr. Tenora 1967). Tenebrionidae, Col. *Časopis Moravského Musea, Vědy přírodní*, 54, Supplementum, 5–182, 23 pls.
- Kraatz, G. (1881) Ueber Veränderlichkeit der *Prosodes*-Arten. *Deutsche Entomologische Zeitschrift*, 25, 61–62.
- Kraatz, G. (1882) Beiträge zur Käferfauna von Turkestan. II. Neue Tenebrioniden von Margelan. *Deutsche Entomologische Zeitschrift*, 26, 81–95.
- Kraatz, G. (1883) [new taxa.] *Deutsche Entomologische Zeitschrift*, 27, 337–353. [in Turkestan]
- Kraatz, G. (1885) [new taxa.] Beiträge zur turkestanischen Coleopteren-Fauna. *Deutsche Entomologische Zeitschrift*, 29, 273–298.
- Kühnelt, W. (1957) Ergebnisse der österreichischen Iran-Expedition 1949/50. Die Tenebrioniden Irans. *Sitzungsberichte der*

- Österreichischen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, 166, 65–102.
- Löbl, I., Nabozhenko, M.V. & Merkl, O. (2008) Tribe Blaptini Leach, 1815. In: Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera. Vol. 5. Tenebrionoidea*. Apollo books, Stenstrup, pp. 219–257.
- Makhan, D. (2012) *Prosodes rishwani* sp. nov., a new darkling beetle from Jangal-e Abr, Semnan province, Iran (Coleoptera, Tenebrionidae: Blaptini). *Calodema*, 205, 1–5.
- Makhan, D. (2013) Further observations on *Prosodes rishwani* Makhan, 2012, a darkling beetle from Jangal-e Abr, Semnan province, Iran (Coleoptera, Tenebrionidae: Blaptini). *Calodema*, 241, 1–8.
- Medvedev, G.S. (1995) New darkling beetles of the genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae) from Middle Asia. I. Subgenera *Prosodes* S. Str., *Mesoprosodes* subgen. n., *Peltarium* F.-W. & *Uroprosodes* Rtt. *Entomological Review*, 74, 811–854.
- Medvedev, G.S. (1996) New Darkling beetles of the genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae) from Middle Asia. II. Subgenera *Meropersina* Rtt., *Dilopersina* Rtt., *Iranosodes* subgen. n., *Prosodura* Rtt., *Megaprosodes* Rtt., *Prosodella* Rtt. *Entomological Review*, 76, 627–664.
- Medvedev, G.S. (1997a) New darkling beetles of the genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae) from Middle Asia. III. Subgenera *Prosodinia* Rtt., *Diprosodes* Rtt. & *Ferganoprosodes* subgen. n. *Entomological Review*, 76, 563–605.
- Medvedev, G.S. (1997b) New synonymies in the genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae). *Zoosystematica Rossica*, 5, 294.
- Medvedev, G.S. (1999) Classification of the tenebrionid genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae). I. The subgenera *Oliprosodes* Rtt. & *Prosodina* Rtt. *Entomological Review*, 78, 849–886.
- Medvedev, G.S. (2001a) Evolution and system of darkling beetles of the tribe Blaptini (Coleoptera, Tenebrionidae). In: *Chteniyu pamyati N.A. Holodkovskogo. Issue 53*. Russian Entomological Society Publ., Saint Petersburg, pp. 1–332.
- Medvedev, G.S. (2001b) New species of tenebrionid beetles of the genera *Asidoblaps* Fairm. and *Prosodes* Eschsch. (Coleoptera, Tenebrionidae) from China and Mesopotamia. *Entomological Review*, 80, 81–89.
- Medvedev, G.S. (2003a) Classification of the tenebrionid genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae). II. The subgenus *Prosodinia* Rtt. (Supplement). *Entomological Review*, 82, 362–415.
- Medvedev, G.S. (2003b) Classification of the tenebrionid genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae). III. The subgenus *Indoprosodes* subgen. n. *Entomological Review*, 82, 690–697.
- Medvedev, G.S. (2005) Classification of the tenebrionid genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae). IV. The subgenera *Prosodestes* Rtt. and *Gebleria* Motsch. *Entomological Review*, 84, 62–107.
- Medvedev, G.S. & Merkl, O. (2005) Two new species of *Prosodes* Eschscholzh, 1829 (Coleoptera, Tenebrionidae: Blaptini) from Iran. *Acta Zoologica Academiae Scientiarum Hungaricae*, 51 (3), 171–180.
- Medvedev, G.S. & Nepesova, M.G. (1985) *Key to the Tenebrionidae of Turkmenistan*. Ylym, Ashgabat, 178 pp.
- Nabozhenko, M.V., Abdurakhmanov, G.M. & Chigray, I.A. (2016) Additions to the catalogue of darkling beetles of the Caucasus. In: Academy of Sciences of the Chechen Republic (Org.), *Materials of XVIII International scientific conference "Biodiversity of the Caucasus and south of Russia"* (Groznyi, 4–5 November 2016). Academy of Sciences of the Chechen Republic, Grozny, pp. 291–292.
- Reitter, E. (1893) Revision der Coleopteren-Gattung *Prosodes* Esch. *Deutsche Entomologische Zeitschrift*, 1893 (2), 261–312.
- Reitter, E. (1896) Beschreibungen neuer Coleopteren aus dem russischen Reiche. *Deutsche Entomologische Zeitschrift*, 1896 (1), 33–48.
- Reitter, E. (1904) Sechs neue Coleopteren aus der palaearktischen Region. *Wiener Entomologische Zeitung*, 23 (9), 255–258.
- Reitter, E. (1909) Neue Revision der Arten der Coleopterengattung *Prosodes* Esch. *Wiener Entomologische Zeitung*, 28 (5–6), 113–168.
- Semenov, A. (1891) Diagnoses Coleopterorum novorum ex Asia Centrali et Orientali. III. *Horae Societatis Entomologicae Rossicae*, 25, 262–385.
- Semenov, A. (1894a) Supplementum ad cl. Edm. Reitteri „Revisionem“ Tenebrionidarum generis *Prosodes* Eschsch. *Horae Societatis Entomologicae Rossicae*, 28, 179–223.
- Semenov, A. (1894b) Corrigenda in „Supplemento ad revisionem Tenebrionidarum generis *Prosodes* Eschsch.“. *Horae Societatis Entomologicae Rossicae*, 28, 549–550.
- Semenov-Tian-Shansky, A. (1910) *Analecta coleopterologica*. *Revue Russe d'Entomologie*, 9 [1909], 433–435.
- Skopin, N.G. (1966) Neue Tenebrioniden aus Zentralasien IV., nebst einigen systematischen sowie synonymischen Bemerkungen. *Annales Historico-Naturales Musei Nationalis Hungarici*, 58, 325–342.
- Skopin, N.G. (1971) Über einige *Prosodes*-Arten aus Mittelasien (Coleoptera, Tenebrionidae). *Beiträge zur Entomologie*, 21 (3–6), 495–501.