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The *Pselaphodes* (Coleoptera: Staphylinidae: Pselaphinae) of Nepal

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Abstract: The genus *Pselaphodes* Westwood, 1870 is poorly known from the Himalayas, and represented in Nepal by a single species. In this paper 15 new Nepalese species are described: *P. ampliatus* sp. nov., *P. bagmatius* sp. nov., *P. bilobatus* sp. nov., *P. corniger* sp. nov., *P. coxatus* sp. nov., *P. khandbarius* sp. nov., *P. loebli* sp. nov., *P. procerus* sp. nov., *P. psomus* sp. nov., *P. robustus* sp. nov., *P. rotundatus* sp. nov., *P. sagephorus* sp. nov., *P. smetanai* sp. nov., *P. symmetricus* sp. nov., and *P. tmesisternus* sp. nov. Main characters distinguishing species include secondary sexual characters of males and morphological differences in the aedeagi. New collecting records for *P. unicornis* Bekchiev & Hlaváč, 2013 in Nepal are given. *Pselaphodes spinosus* Champion, 1925, previously known from northern India and southwestern China, is newly recorded from Nepal.

Keywords: Taxonomy - *Pselaphodes* - new species - new records - Nepal.

INTRODUCTION

The genus *Pselaphodes* Westwood, 1870 of the tribe Tyrini is the largest group of the Oriental *Pselaphodes*-complex formed by nine morphologically similar genera (sensu Hlaváč, 2003; key to genera also see Yin *et al.*, 2013a). A total of 65 species have been previously described from the Philippines (1 sp.), East Malaysia (1 sp.), Thailand (2 spp.), Sri Lanka (1 sp.), India (2 spp.), Nepal (1 sp.), and China (58 spp.) (Huang *et al.*, 2018b). Most species of this group were described during the last decade (Bekchiev & Hlaváč, 2013; Yin *et al.*, 2010, 2011, 2012a, b, 2013a, b; Yin & Li 2012, 2013; Huang *et al.*, 2018a, b), and some taxonomic confusion has been recently clarified (Yin & Li, 2015).

The *Pselaphodes* fauna of the Himalayan region is poorly understood due to the lack of taxonomic treatments. To date, only a single *Pselaphodes* species has been described from Nepal (Bekchiev & Hlaváč, 2013). Here, we describe fifteen new Nepalese species of the genus based on an examination of the large pselaphine collection deposited in the Muséum d'histoire naturelle, Geneva. In addition, new collecting records of the previously described *P. unicornis* Bekchiev & Hlaváč, 2013, and a new country record for *P. spinosus* Champion, 1925 are provided. Accordingly, the total species number of *Pselaphodes* now reaches 80.

MATERIAL AND METHODS

The material used in this paper is housed in the Muséum d'histoire naturelle, Geneva, Switzerland (MHNG), the National Museum of Natural History, Sofia, Bulgaria (NMNHS), the Insect Collection of Shanghai Normal University, Shanghai, China (SNUC), and the Institute of Zoology, Chinese Academy of Sciences (IZ-CAS). In most cases, the text of the specimen labels is quoted verbatim in quotation marks (‘ ’). For the type localities, an interpretation of the locality data is given.

Dissected parts were preserved in Euparal on plastic slides that were placed on the same pins with the specimens. The habitus images were taken using a Canon 5D Mark III camera with a Canon MP-E 65 mm f/2.8 1-5X Macro Lens, and a Canon MT-24EX Macro Twin Lite Flash used as the light source. Images of the morphological details were produced using a Canon G9 camera mounted to an Olympus CX31 microscope under transmitted light. Zerene Stacker (version 1.04) was used for image stacking. All images were modified and grouped into plates in Adobe Photoshop CS5 Extended.

The following acronyms are used in the text:

BL – length of the body (= HL + PL + EL + AL);

HL – length of the head from the anterior clypeal margin to the occipital constriction;

HW – width of the head across eyes;

PL – length of the pronotum along the midline;

PW – maximum width of the pronotum;

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EL – length of the elytra along the suture;
EW – maximum width of the elytra;
AL – length of the abdomen along the midline;
AW – maximum width of the abdomen.

TAXONOMY

Description of new species

***Pselaphodes ampliatus* sp. nov.**
Figs 1A, 2A-L

Type material (7 specimens)**:** Holotype; MHNG-ENTO-43959; ♂; NEPAL, 'NEPAL (Prov. Bagmati), Yangri Ridge, 4350 m, 22.IV.81, Löbl & Smetana'. – Paratypes; MHNG-ENTO-43960 to 43963; 1 ♂, 3 ♀♀; NEPAL, same label data as holotype. – MHNG-ENTO-43964 to 43965; 1 ♂, 1 ♀; NEPAL, same label data as holotype, except '4200 m, 21.IV.81' (all paratypes in MHNG).

Type locality: Nepal, Sindhupalchowk District, Yangri Mountains, 4350 m alt.

Diagnosis of males: Length 2.63-2.76 mm. Antennal clubs lacking modification. Metaventral processes long, apically broadened. Profemora with small ventral projection, protibiae with distinct projection at apex; mesotrochanters with slender ventral spine, mesotibiae with small projection at apex; metafemora broadly thickened ventrally. Median lobe of aedeagus narrowed apically; parameres slender and elongate.

Description: Male (Fig. 1A). Body reddish brown, BL 2.63-2.76 mm. Head slightly longer than wide, HL 0.53-0.55 mm, HW 0.52-0.53 mm; each eye composed of about 26 facets; ocular canthus weak. Antennomeres



Fig 1. Dorsal habitus of *Pselaphodes* males. (A) *P. ampliatus* sp. nov. (B) *P. bagmatius* sp. nov. Scale bars: 1 mm.

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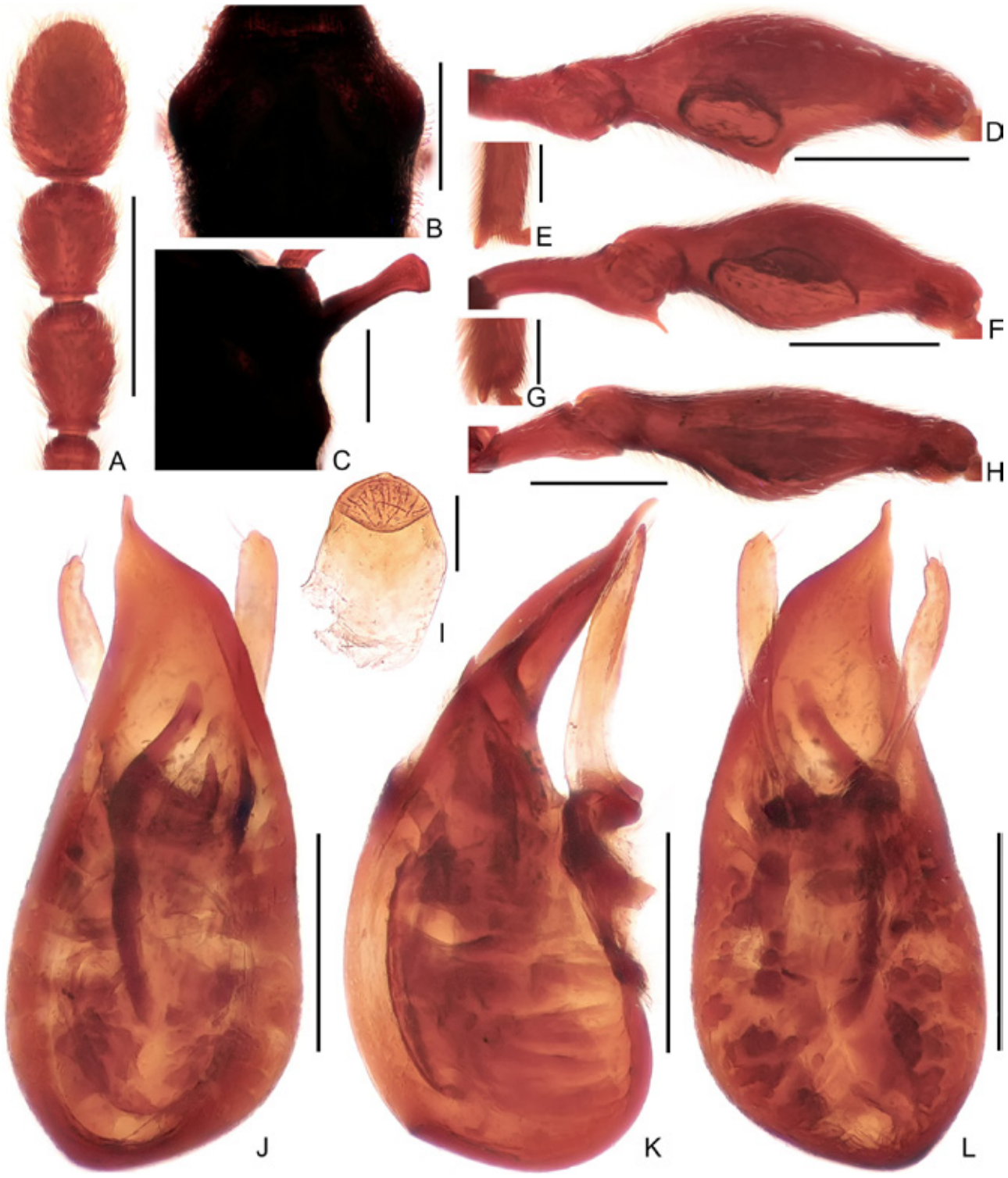


Fig 2. Male diagnostic features of *Pselaphodes ampliatus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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(Fig. 2A) 9-11 forming distinct enlarged club, lacking modification. Pronotum (Fig. 2B) slightly longer than wide, PL 0.59-0.61 mm, PW 0.56-0.59 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.73-0.79 mm, EW 1.11-1.16 mm. Metaventral processes (Fig. 2C) long, apically broadened. Profemora (Fig. 2D) with small ventral projection, protibiae (Fig. 2E) with distinct projection at apex; mesotrochanters (Fig. 2F) with slender ventral spine; mesotibiae (Fig. 2G) with small projection at apex; metafemora (Fig. 2H) broadly thickened ventrally. Abdomen broad at base and narrowing apically, AL 0.78-0.81 mm, AW 1.16-1.17 mm. Sternite IX semi-membranous, shape as in Fig. 2I. Length of aedeagus (Figs 2J-L) 0.61 mm; median lobe asymmetric; apically narrowed, parameres elongate; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 23 facets; antennae simple. Measurements: BL 2.78-2.80 mm, HL 0.55-0.56 mm, HW 0.53-0.56 mm, PL 0.58-0.64 mm, PW 0.59-0.61 mm, EL 0.74-0.76 mm, EW 1.23-1.32 mm, AL 0.87-0.88 mm, AW 1.23-1.32 mm.

Distribution: Nepal, Bagmati.

Comparative notes: This species can be readily separated from all other congeners from Nepal based on the simple antennal clubs, the apically broadened metaventral processes, and the unique form of the aedeagus.

Etymology: The specific epithet '*ampliatus*' means 'widened, extended, enlarged', referring to the strongly expanded male femora of the new species.

Pselaphodes bagmatius sp. nov.

Figs 1B, 3A-L

Type material (3 specimens)**:** Holotype; MHNG-ENTO-43966; ♂; NEPAL, 'NEPAL (Prov. Bagmati), Malemchi, 2900 m, 14.IV.81, Löbl & Smetana'. – Paratypes; MHNG-ENTO-43967 to 43968; 2 ♀♀; NEPAL, same label data as holotype (MHNG).

Type locality: Nepal, Sindhupalchok District, Melamchi, 2900 m alt.

Diagnosis of males: Length 3.06 mm. Antennomeres 9 with disc-shaped process at apex, antennomeres 10 with small projection at base. Metaventral processes long, apically broadened. Protrochanters with small ventral spine, profemora with big, blunt ventral spine, protibiae with slender spine at apex; mesotrochanters with acute ventral spine, mesotibiae with small projection at apex; metacoxae with sharp ventral spine. Median lobe of aedeagus narrowed apically; parameres slender at base and broadening apically.

Description: Male (Fig. 1B). Body reddish brown, BL 3.06 mm. Head wider than long, HL 0.58 mm, HW 0.62 mm; each eye composed of about 30 facets; with well-developed ocular canthus. Antennomeres (Fig. 3A) 9-11 forming distinct club, antennomeres 9 with disc-shaped process at apex, antennomeres 10 with small, lamina-like projection at base. Pronotum (Fig. 3B) longer than wide, PL 0.68 mm, PW 0.65 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.78 mm, EW 1.20 mm. Metaventral processes (Fig. 3C) long, apically expanded. Protrochanters with small ventral spine, profemora with blunt ventral spine (Fig. 3D), protibiae (Fig. 3E) with slender spine at apex; mesotrochanters (Fig. 3F) with acute ventral spine; mesotibiae (Fig. 3G) with small projection at apex; metacoxae (Fig. 3H) with sharp ventral spine. Abdomen broad at base and narrowing apically, AL 1.02 mm, AW 1.40 mm. Sternite IX semi-membranous, shape as in Fig. 3I. Length of aedeagus (Figs 3J-L) 0.74 mm; median lobe strongly asymmetric, narrowed at apex; parameres narrowed at base and broadening apically; endophallus composed of one elongate and one short sclerites.

Female. Each eye composed of about 30 facets; antennae simple. Measurements: BL 3.14-3.16 mm, HL 0.62-0.65 mm, HW 0.58-0.61 mm, PL 0.68-0.70 mm, PW 0.61-0.67 mm, EL 0.68-0.74 mm, EW 1.34-1.38 mm, AL 1.09-1.14 mm, AW 1.40-1.52 mm.

Distribution: Nepal, Bagmati.

Comparative notes: Among the Nepalese *Pselaphodes*, the males of 15 species (out of 17 spp.) share the following traits: i) a modified base of antennomere 9, ii) a modified apex of antennomere 10, and iii) an endophallus of the aedeagus composed of one long and one short sclerite. These species seem to have undergone a relatively rapid speciation and form a group of putatively closely related species (here termed as '*P. bagmatius* species-group'). *Pselaphodes bagmatius* belongs to this group and can be readily separated from all similar congeners based on the unique spination of the legs, the shapes of the antennal club, the metaventral process, and the aedeagus.

Etymology: The specific epithet refers to the type locality of the new species, *i.e.*, Bagmati Province.

Pselaphodes bilobatus sp. nov.

Figs 4A, 5A-L

Type material (12 specimens)**:** Holotype; MHNG-ENTO-43969; ♂; NEPAL, 'NEPAL, Khandbari District, above Sheduwa, 3000 m, 31.III.-1.IV.1982, A. & Z. Smetana' (MHNG). – Paratypes; MHNG-ENTO-43970 to 43974; 2 ♂♂, 3 ♀♀; NEPAL, same label data as holotype. – MHNG-ENTO-43975; 1 ♀; NEPAL; same label data as for preceding, except '2.IV.1982'. – MHNG-ENTO-43976; paratype, 1 ♂; NEPAL;

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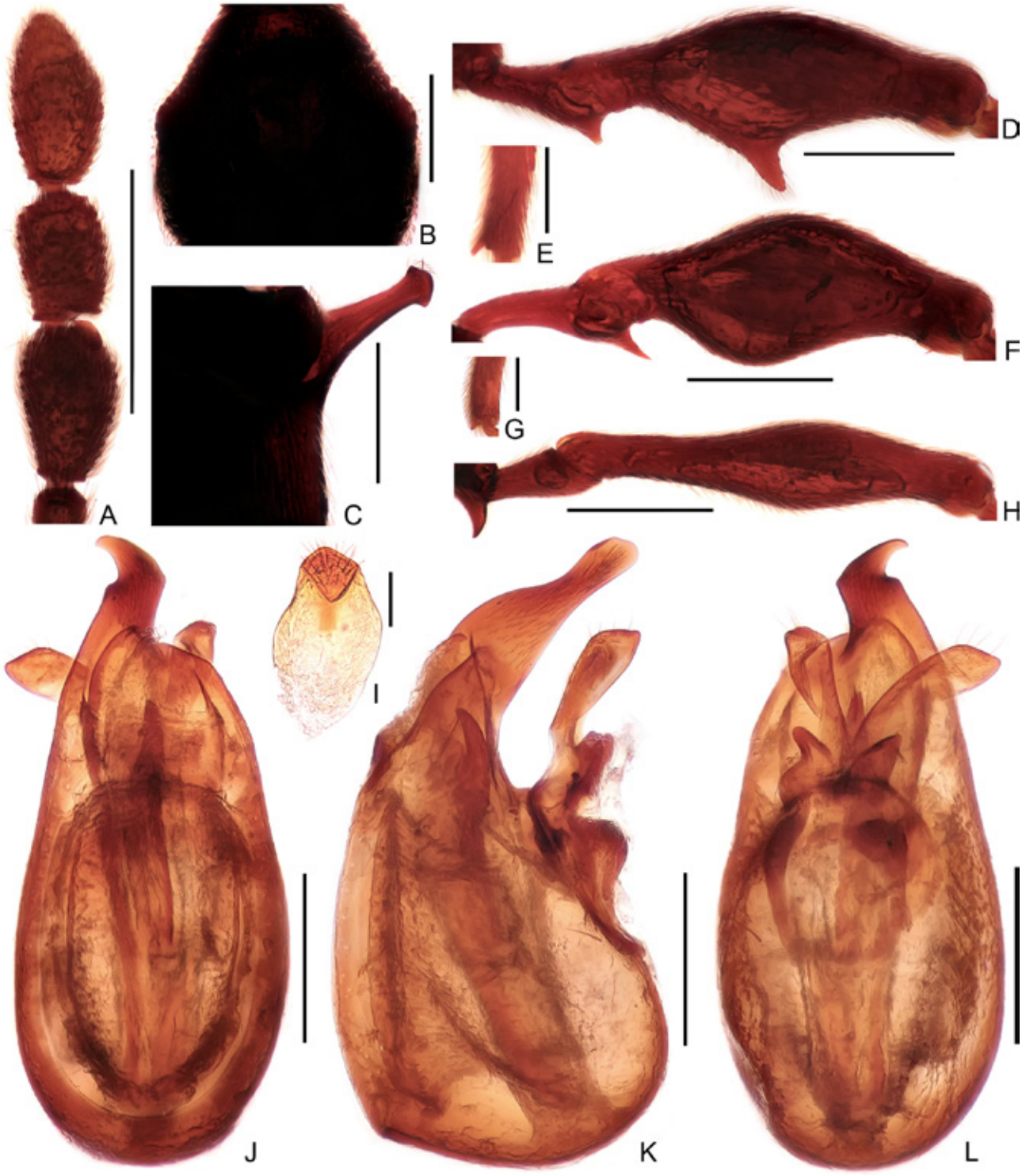


Fig 3. Male diagnostic features of *Pselaphodes bagmatius* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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'NEPAL, Khandbari District, "Bakan" W of Tashigaon 3200 m, 5.IV.1982, A. & Z. Smetana'. – MHNG-ENTO-43977 to 43980; 1 ♂, 3 ♀♀; NEPAL, 'E. NEPAL: KOSI Crête N-E Mangmaya, 2800 m, 7.IV.84, Löbl - Smetana' (all paratypes in MHNG).

Type locality: Nepal, Sankhuwasabha District, Khandbari, 3000 m alt.

Diagnosis of males: Length 3.02-3.29 mm. Antennomeres 9 with projection at apex, antennomeres 10 with projection at base. Metaventral processes long, apically expanded, with additional pair of small triangular projections. Protrochanters with small ventral spine, profemora with large, blunt ventral spine, protibiae with small, blunt projection at apex; mesotrochanters with acute ventral spine, mesotibiae with small spine at apex. Median lobe of aedeagus bifid apically; parameres slender at base and strongly broadened apically.

Description: Male (Fig. 4A). Body reddish brown, BL 3.02-3.29 mm. Head longer than wide, HL 0.65-0.68 mm, HW 0.55-0.64 mm; each eye composed of about 35 facets; with well-developed ocular canthus. Antennomeres (Fig. 5A) 9-11 forming distinct club, antennomeres 9 with projection at apex, antennomeres 10 with projection at base. Pronotum (Fig. 5B) longer than wide, PL 0.59-0.68 mm, PW 0.61-0.62 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.76-0.82 mm, EW 1.06-1.25 mm. Metaventral processes (Fig. 5C) long, apically broadened, with pair of small triangular projection in addition to long



Fig 4. Dorsal habitus of *Pselaphodes* males. (A) *P. bilobatus* sp. nov. (B) *P. corniger* sp. nov. Scale bars: 1 mm.

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processes. Protrochanters with small ventral spine, profemora with large, blunt ventral spine (Fig. 5D), protibiae (Fig. 5E) with blunt projection at apex; mesotrochanters (Fig. 5F) with acute ventral spine; mesotibiae (Fig. 5G) with small spine at apex; metatrochanters and metafemora (Fig. 5H) simple. Abdomen broad at base and narrowing apically, AL 1.02-1.11 mm, AW 1.09-1.40 mm. Sternite IX semi-membranous, shape as in Fig. 5I. Length of aedeagus (Figs 5J-L) 0.59 mm; median lobe strongly asymmetric, bifid at apex; parameres short and apically broadened; endophallus composed of two sclerites.

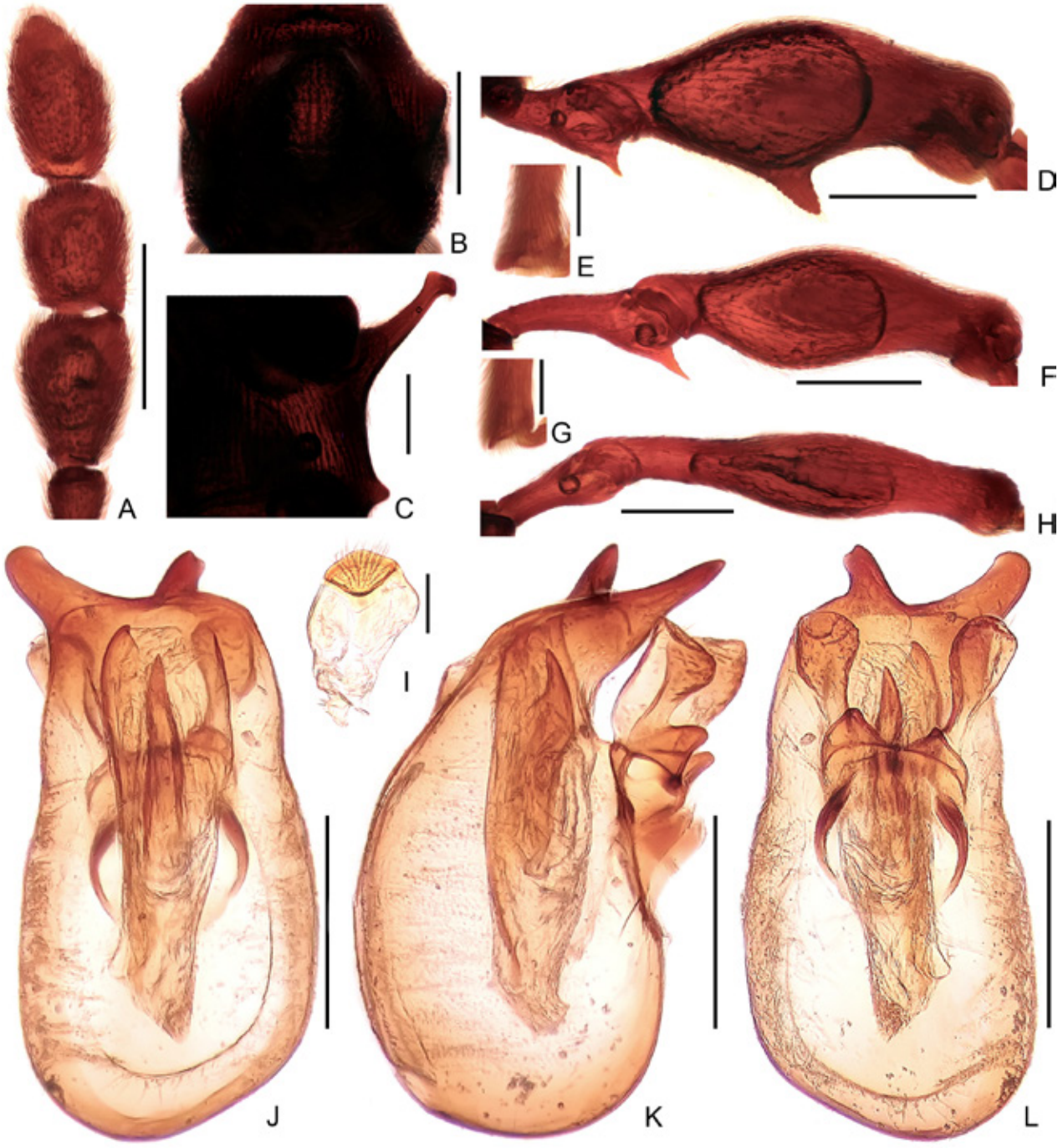


Fig 5. Male diagnostic features of *Pselaphodes bilobatus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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Female. Each eye composed of about 30 facets; antennae simple. Measurements: BL 3.02-3.03 mm, HL 0.65-0.68 mm, HW 0.59-0.61 mm, PL 0.62-0.65 mm, PW 0.61-0.62 mm, EL 0.71-0.73 mm, EW 1.12-1.16 mm, AL 0.99-1.02 mm, AW 1.26-1.31 mm.

Distribution: Nepal, Koshi.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and can be readily separated from all congeners of the group based on the angulate pronotal lateral margins, the broad male protibiae, and the unique forms of the male antennal clubs and the aedeagus.

Etymology: The specific epithet refers to the bi-lobed apex of the aedeagal median lobe of the new species.

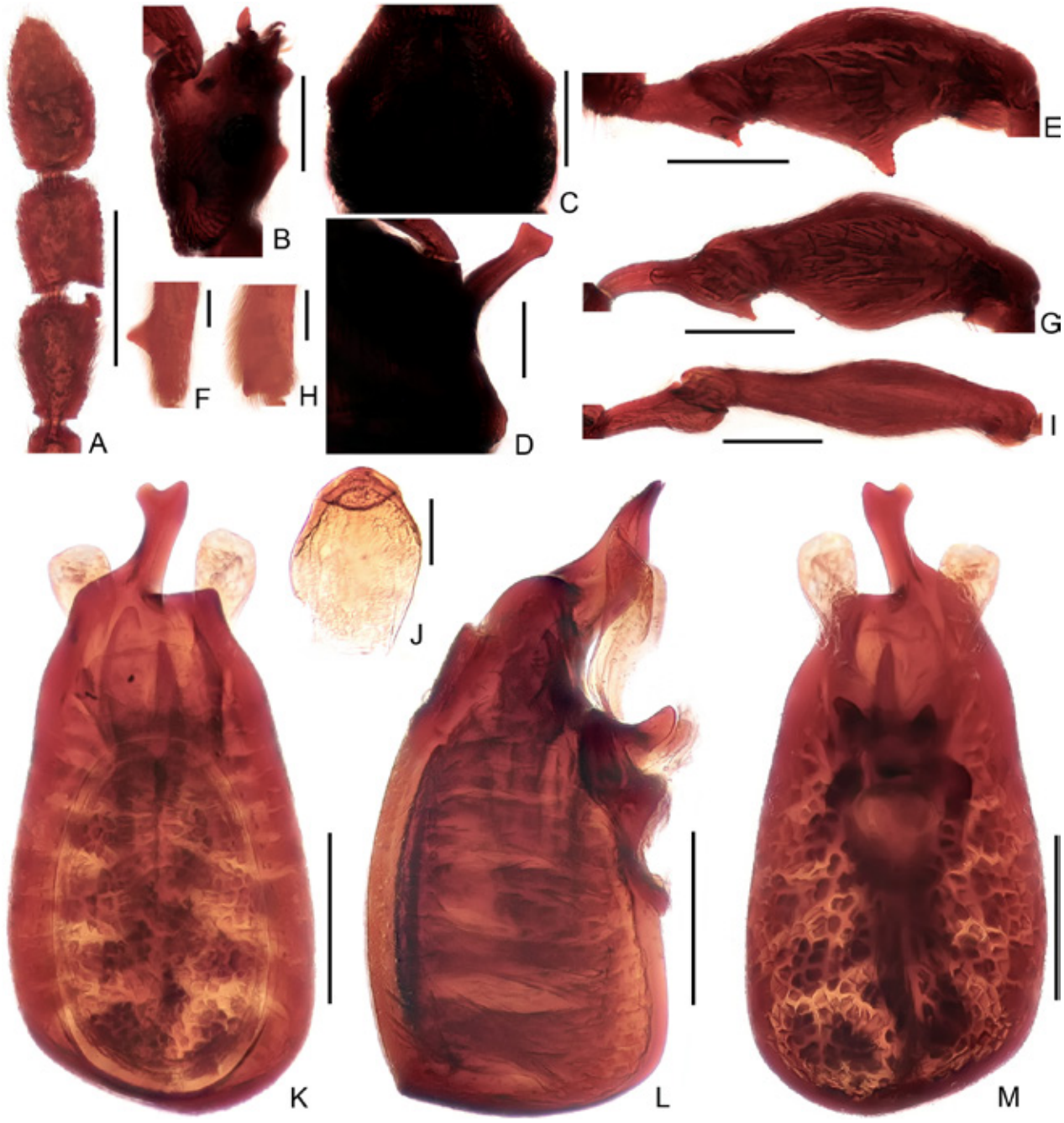


Fig 6. Male diagnostic features of *Pselaphodes corniger* sp. nov. (A) Antennal club. (B) Head, in lateral view. (C) Pronotum. (D) Metaventral process, in lateral view. (E) Protrochanter and profemur. (F) Apex of protibia. (G) Mesotrochanter and mesofemur. (H) Apex of mesotibia. (I) Metatrochanter and metafemur. (J) Sternite IX. (K-M) Aedeagus, in dorsal (K), lateral (L), and ventral (M) view. Scale bars: 0.3 mm in A-C, E, G, I; 0.2 mm in D, K-M; 0.1 mm in F, H, J.

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Pselaphodes corniger sp. nov.

Figs 4B, 6A-M

Type material (1 specimen)**:** Holotype; MHNG-ENTO-43981; ♂; NEPAL, 'NEPAL (Prov. Bagmati), Pokhare NE Barahbise, 3000 m, 7.V.81, Löbl & Smetana' (MHNG).

Type locality: Nepal, Sindhupalchok District, Pokhare NE Barahbise, 3000 m alt.

Diagnosis of males: Length 3.32 mm. Clypeus projected anteriorly, forming horn-like process in male. Antennomeres 9 with large projection at apex, antennomeres 10 with distinct projection at base. Metaventral processes long, apically broadened. Protrochanters with small ventral spine, profemora with blunt ventral spine, protibiae with triangular preapical spine; mesotrochanters with distinct ventral spine, mesotibiae with small projection at apex. Median lobe of aedeagus abruptly narrowed apically; parameres slender at base and strongly broadened apically.

Description: Male (Fig. 4B). Body reddish brown, BL 3.32 mm. Head as long as wide, HL 0.62 mm, HW 0.62 mm, clypeus projected anteriorly, forming horn-like process (Fig. 6B); each eye composed of about 35 facets; with well-developed ocular canthus. Antennomeres (Fig. 6A) 9-11 forming distinct club, antennomeres 9 with large projection at apex, antennomeres 10 with distinct projection at base. Pronotum (Fig. 6C) longer than wide, PL 0.78 mm, PW 0.70 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.84 mm, EW 1.23 mm. Metaventral processes (Fig. 6D) long, apically broadened. Protrochanters with small ventral spine, profemora with large, blunt ventral spine (Fig. 6E), protibiae (Fig. 6F) with triangular spine near apex; mesotrochanters (Fig. 6G) with distinct ventral spine; mesotibiae (Fig. 6H) with small projection at apex; metatrochanters and metafemora (Fig. 6I) simple. Abdomen broad at base and narrowing apically, AL 1.08 mm, AW 1.40 mm. Sternite IX semi-membranous, shape as in Fig. 6J. Length of aedeagus (Figs 6K-M) 0.76 mm; median lobe asymmetric, apically narrowed; parameres moderately elongate, basally narrowed and broadening apically; endophallus composed of one long and one short sclerite.
Female. Unknown.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and is most similar to *P. unicornis* Bekchiev & Hlaváč from Nepal and *P. monoceros* Yin & Hlaváč from Xizang based on the modified clypeus of the male. *Pselaphodes corniger* can be readily separated from both known species based on the presence of a preapical spine of the protibiae (spine at the apex of the protibiae in *P. unicornis* and *P. monoceros*), as well as the unique forms of the antennal clubs, metaventral processes, and the strongly asymmetric median lobe of the aedeagus (median lobe nearly symmetric dorso-ventrally in *P. unicornis* and *P. monoceros*).

Etymology: The specific epithet refers to the horned clypeus of the new species.

Pselaphodes coxatus sp. nov.

Figs 7A, 8A-L

Type material (10 specimens)**:** Holotype; MHNG-ENTO-43982; ♂; NEPAL, 'NEPAL (Prov. Bagmati), Yangri Ridge, 4500 m, 23.IV.81, Löbl & Smetana' (MHNG). – Paratypes; MHNG-ENTO-43983 to 43984; 2 ♂♂; NEPAL, same label data as holotype. – MHNG-ENTO-43985 to 43991; 2 ♂♂, 5 ♀♀; NEPAL, same label data as holotype, except '4350 m, 22.IV.81' (all paratypes in MHNG).

Type locality: Nepal, Sindhupalchowk District, Yangri Mountain, 4500 m alt.

Diagnosis of males: Length 3.10-3.19 mm. Antennomeres 9 with disc-shaped process at apex, antennomere 10 with distinct projection at base. Metaventral processes long, apically expanded. Protrochanters with slender ventral spine, profemora with small ventral spine, protibiae with blunt projection at apex; mesotrochanters with long acute ventral spine, mesotibiae with tiny projection at apex; metacoxae with short ventral projection. Median lobe of aedeagus broad and strongly asymmetric at apex; parameres moderately broadened throughout entire length.

Description: Male (Fig. 7A). Body reddish brown, BL 3.10-3.19 mm. Head longer than wide, HL 0.62-0.64 mm, HW 0.56-0.58 mm; each eye composed of about 26 facets; with well-developed ocular canthus. Antennomeres (Fig. 8A) 9-11 forming distinct club, antennomeres 9 with disc-shaped process at apex, antennomeres 10 with distinct projection at base. Pronotum (Fig. 8B) longer than wide, PL 0.67-0.68 mm, PW 0.64-0.65 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.82-0.84 mm, EW 1.20-1.22 mm. Metaventral processes (Fig. 8C) long, apically broadened. Protrochanters with slender ventral spine, profemora with small ventral spine (Fig. 8D), protibiae (Fig. 8E) with blunt projection at apex; mesotrochanters (Fig. 8F) with long acute ventral spine, mesotibiae (Fig. 8G) with small projection at apex; metacoxae (Fig. 8H) with short ventral projection. Abdomen broad at base and narrowing apically, AL 0.99-1.03 mm, AW 1.29-1.32 mm. Sternite IX semi-membranous, shape as in Fig. 8I. Length of aedeagus (Figs 8J-L) 0.66 mm; median lobe broad and strongly asymmetric at apex; parameres moderately broadened throughout entire length; endophallus composed of two long sclerites.

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Female. Each eye composed of about 28 facets; antennae simple. Measurements: BL 3.13-3.19 mm, HL 0.62-0.67 mm, HW 0.59-0.62 mm, PL 0.65-0.67 mm, PW 0.65-0.70 mm, EL 0.76-0.81 mm, EW 1.23-1.29 mm, AL 1.05-1.09 mm, AW 1.44-1.47 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and can be readily separated from all congeners of the group based on the roundly angulate pronotal lateral margins, the strongly broadened male profemora, and the unique forms of the male antennal clubs and aedeagus.

Etymology: The specific epithet refers to the spinose male metacoxae of the new species.

***Pselaphodes khandbarius* sp. nov.**

Figs 7B, 9A-K

Type material (15 specimens)**:** Holotype; MHNG-ENTO-43992; ♂; NEPAL, 'NEPAL, Khandbari District, above Tashigaon, 3600 m, 6.IV.1982, A. & Z. Smetana' (MHNG). – Paratypes; MHNG-ENTO-43993 to 43998; 5 ♂♂, 1 ♀; NEPAL, same label data as holotype (MHNG). – 5 ♂♂, 2 ♀; CHINA, 'China: Xizang, Cuona County (错那县), 13 km of Bian-fang-liu-lian Road. (边防六连公路13公里处), 2016.VI.4, 3356 m, N° 27.8050, E° 91.7620, beating, Hong-Bin Liang (梁红斌) leg.' (IZ-CAS). – 1 ♂, also from Cuona, 'Le Village, Simuzha Park (勒村斯木扎景区), 2016.VI.1, 2793 m, N° 27.8262, E° 91.7293, Hong-Bin Liang leg.' (IZ-CAS)'.

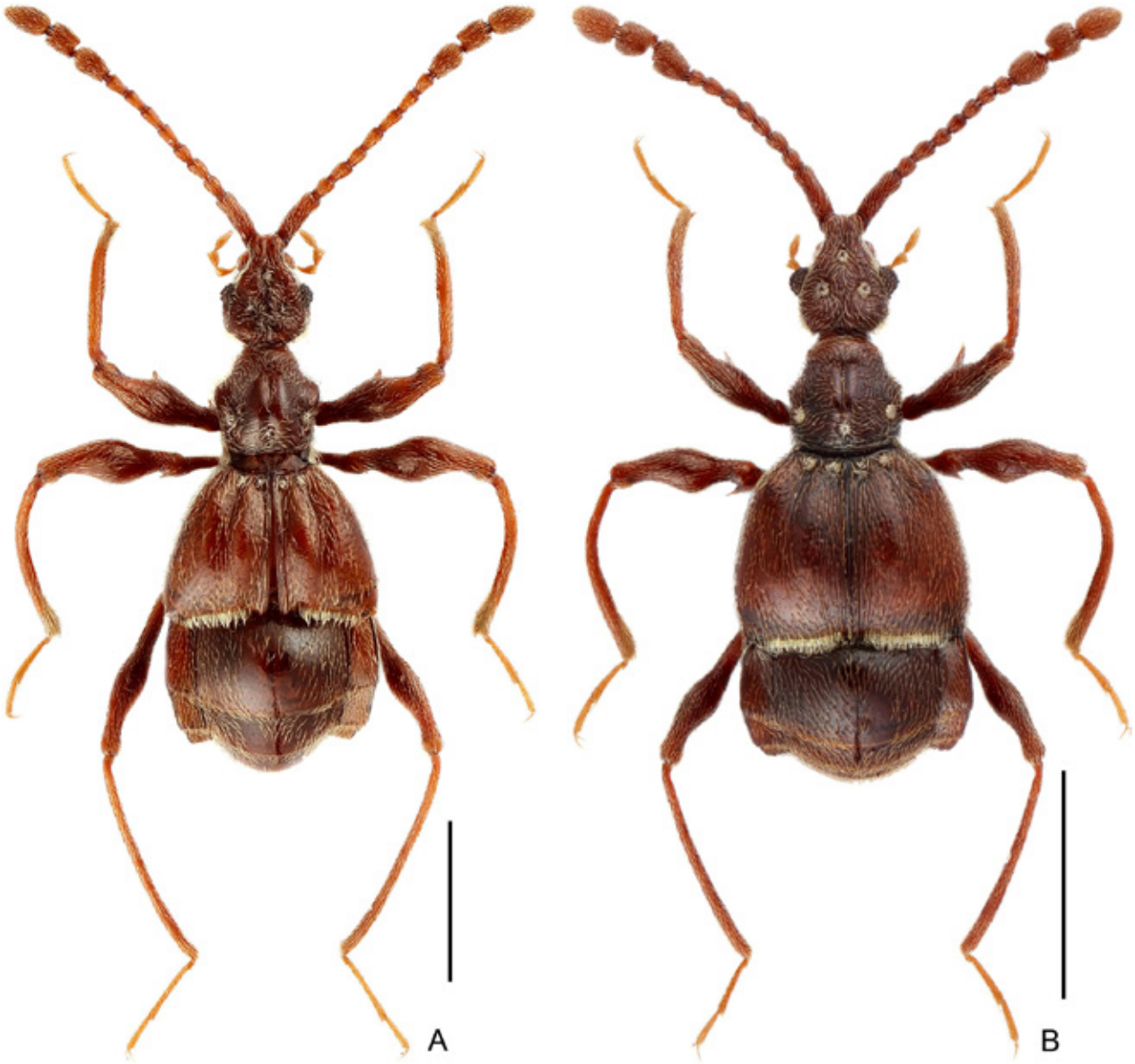


Fig 7. Dorsal habitus of *Pselaphodes* males. (A) *P. coxatus* sp. nov. (B) *P. khandbarius* sp. nov. Scale bars: 1 mm.

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Type locality: Nepal, Khandbari District, above Tashigaon, 3600 m alt.

Diagnosis of male: Length 2.71-2.76 mm. Antennomeres 9 strongly constricted at apical third, with disc-shaped process at apex, antennomeres 10 with strongly constricted at base, asymmetrically conjoined to antennomeres 9. Metaventral processes long, with pair of small projection in addition to long processes. Profemora with large ventral spine, protibiae with acute spine at apex; mesotrochanters with three ventral spines. Median lobe of aedeagus nearly asymmetric, strongly constricted at apex; parameres long and symmetric.

Description: Male (Fig. 7B). Body reddish brown, BL 2.71-2.76 mm. Head longer than wide, HL 0.57-

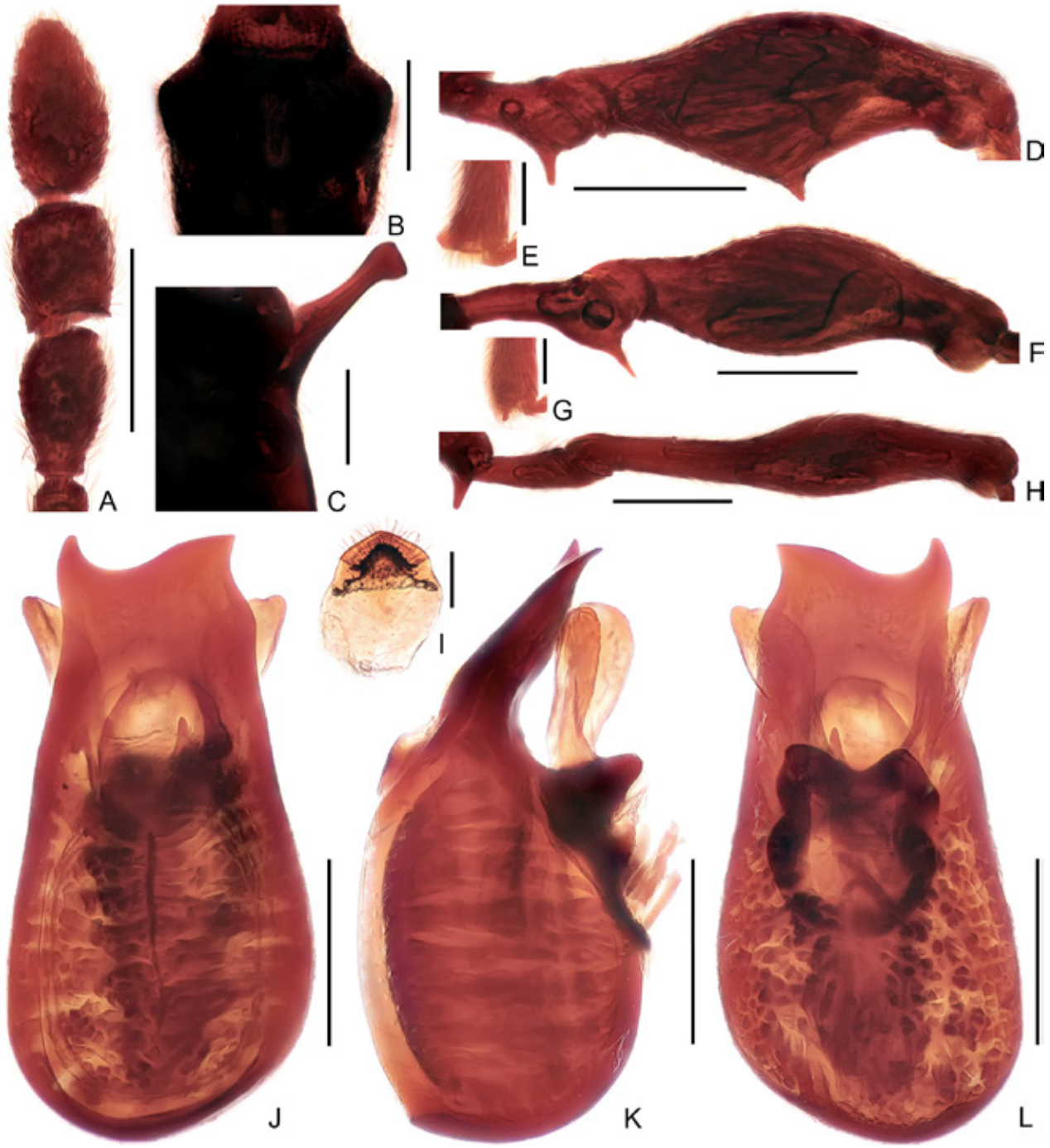


Fig 8. Male diagnostic features of *Pselaphodes coxatus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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0.59 mm, HW 0.55-0.57 mm; each eye composed of about 38 facets; with well-developed ocular canthus. Antennomeres (Fig. 9A) 9-11 forming distinct club, antennomeres 9 strongly constricted at apex, and with disc-shaped apical process, antennomeres 10 strongly constricted at base, laterally conjoined to antennomeres 9. Pronotum (Fig. 9B) wider than long, PL 0.54-0.55 mm, PW 0.55-0.57 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.84-0.88 mm, EW 1.12-1.17 mm. Metaventral processes (Fig. 9C) long, with pair of small projection in addition to long processes. Protrochanters with small spine, profemora with distinct large ventral spine (Fig. 9D), protibiae (Fig. 9E) with acute spine at apex; mesotrochanters (Fig. 9F) with three ventral spines, metatrochanters and metafemora (Fig. 9G)

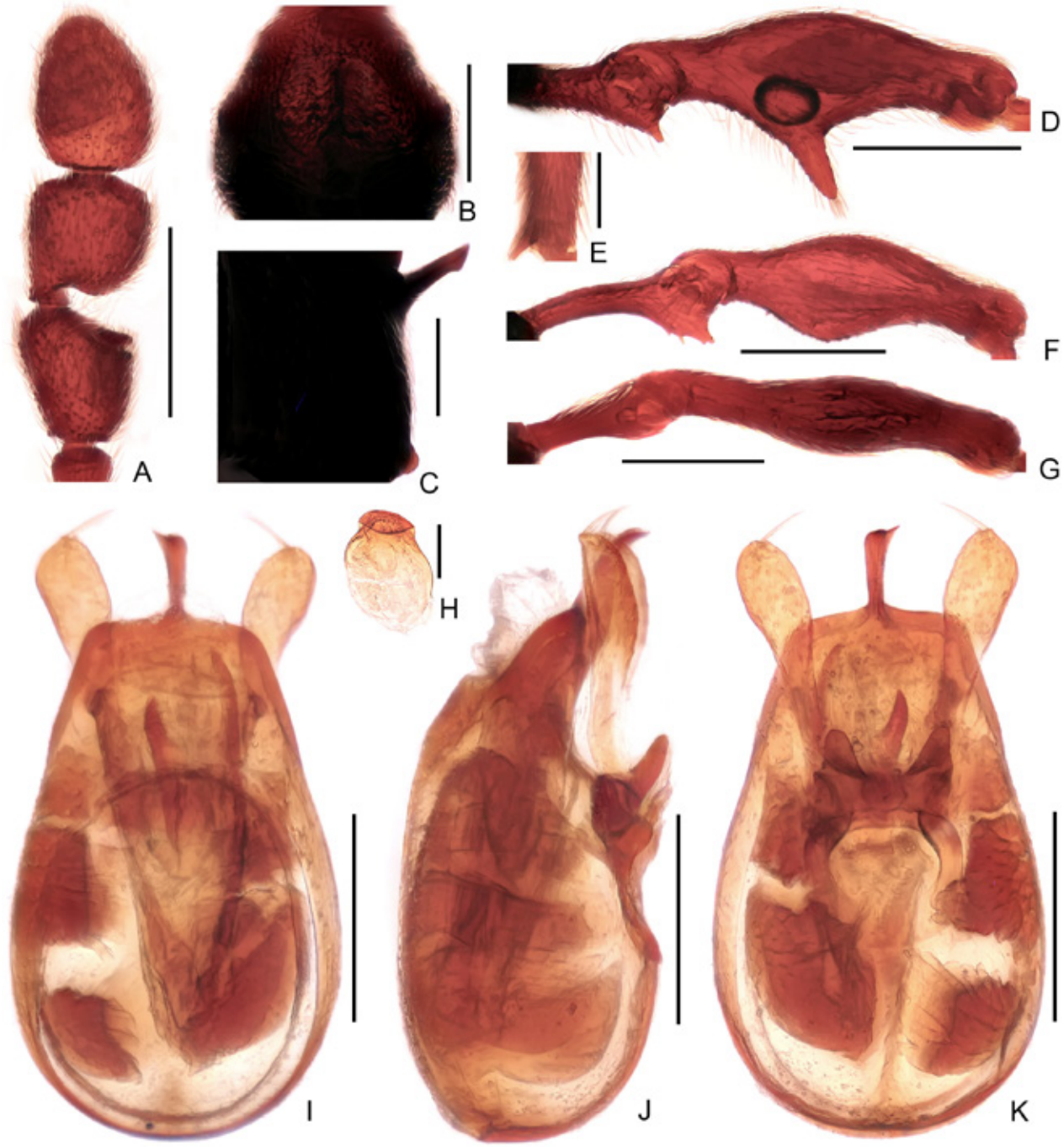


Fig 9. Male diagnostic features of *Pselaphodes khandbarius* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Metatrochanter and metafemur. (H) Sternite IX. (I-K) Aedeagus, in dorsal (I), lateral (J), and ventral (K) view. Scale bars: 0.3 mm in A-B, D, F-G; 0.2 mm in C, I-K; 0.1 mm in E, H.

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simple. Abdomen broad at base and narrowing apically, AL 0.74-0.76 mm, AW 1.16-1.17 mm. Sternite IX semi-membranous, shape as in Fig. 9H. Length of aedeagus (Figs 9I-K) 0.63 mm; median lobe asymmetric, strongly narrowed at apex; parameres long, almost symmetric, each with one macroseta at apex; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 32 facets; antennae simple. Measurements: BL 2.50 mm, HL 0.53 mm, HW 0.52 mm, PL 0.54 mm, PW 0.53 mm, EL 0.64 mm, EW 1.02 mm, AL 0.79 mm, AW 1.16 mm.

Distribution: Nepal, Koshi; China, Xizang.

Comparative notes: The new species seems to be a derived member of the *P. bagmatius* species-group, and can be readily recognized based on the unique form of the male antennal clubs, the distinct large ventral spine of the profemora, the multiple spines of the mesotrochanters, the almost symmetric median lobe of the aedeagus, and the elongate parameres with single long apical seta. The males of Xizang, China differs slightly from that of Nepal in the form of the apex of the aedeagal median lobe (shallowly split), but otherwise the combination of the rest sexual features seems quite stable.

Etymology: The specific epithet refers to the type locality of the new species, *i.e.*, Khandbari District.

***Pselaphodes loebli* sp. nov.**

Figs 10A, 11A-L

Type material (9 specimens): Holotype; MHNG-ENTO-43999; ♂; NEPAL, 'NEPAL (Prov. Bagmati),



Fig 10. Dorsal habitus of *Pselaphodes* males. (A) *P. loebli* sp. nov. (B) *P. procerus* sp. nov. Scale bars: 1 mm.

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Malemchi, 2800 m, 14.IV.81, Löbl & Smetana'. – Paratypes; MHNG-ENTO-44000 to 44007; 3 ♂♂, 5 ♀♀; NEPAL, same label data as holotype (MHNG).

Type locality: Nepal, Sindhupalchok District, Melamchi, 2900 m alt.

Diagnosis of males: Length 3.01-3.14 mm. Antennomeres IX with disc-shaped process at apex. Metaventral processes long, with pair of small projection in addition to long processes. Protrochanters with slender ventral spine, profemora with large, blunt ventral spine, protibiae with acute spine at apex; mesotrochanters with multiple ventral spines, mesotibiae with small tubercle at apex. Median lobe of aedeagus almost symmetric, narrowing apically; parameres broad dorso-ventrally.

Description: Male (Fig. 10A). Body reddish brown, BL 3.01-3.14 mm. Head about as long as wide, HL 0.58-0.62 mm, HW 0.59-0.61 mm; each eye composed of about 40 facets; with well-developed ocular canthus. Antennomeres (Fig. 11A) 9-11 forming distinct club, antennomeres 9 with disc-shaped process at apex, antennomeres 10 constricted mediobasally. Pronotum (Fig. 11B) longer than wide, PL 0.64-0.70 mm, PW 0.64-0.65 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.81-0.84 mm, EW 1.28-1.34 mm. Metaventral processes (Fig. 11C) long, with pair of small projection in addition to long processes. Protrochanters with slender ventral spine, profemora with large, blunt ventral spine (Fig. 11D), protibiae (Fig. 11E) with acute spine at apex; mesotrochanters with multiple small to large spines (Fig. 11F); mesotibiae (Fig. 11G) with small projection at apex; metatrochanters and metafemora (Fig. 11H) simple. Abdomen broad at base and narrowing apically, AL 0.94-1.02 mm, AW 1.31-1.35 mm. Sternite IX semi-membranous, shape as in Fig. 11I. Length of aedeagus (Figs 11J-L) 0.62 mm; median lobe almost symmetric; parameres elongate and broad dorso-ventrally; endophallus composed of one long and one short sclerites.
Female. Each eye composed of about 33 facets; antennae simple. Measurements: BL 2.97-2.98 mm, HL 0.59-0.61 mm, HW 0.58-0.61 mm, PL 0.64-0.68 mm, PW 0.64-0.68 mm, EL 0.68-0.70 mm, EW 1.23-1.26 mm, AL 1.02-1.03 mm, AW 1.38-1.44 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species is a member of the *P. bagmatius* species-group, and can be readily recognized based on the unique forms of the male antennal clubs, the distinct large ventral spine of the profemora, and the almost symmetric aedeagus with broadened parameres.

Etymology: The new species is named after Ivan Löbl, co-collector of the holotype.

***Pselaphodes procerus* sp. nov.**
Figs 10B, 12A-L

Type material (1 specimen)**:** Holotype; MHNG-ENTO-44008; ♂; NEPAL, 'C-Nepal: Manaslu massif, Barapokhari Lekh, 23 km, NE Besisahar vill. 28°21′N, 84°33′E, 14.IX.2000, leg. A. Hetzel, 3800-4100 m, sieved from moss and *Rhododendron* leaf litter' (MHNG).

Type locality: Nepal, Lamjung District, Manaslu Mountain, Bara Pokhari, 3800-4100 m alt.

Diagnosis of males: Length 3.15 mm. Antennomere 9 with projection at apex, antennomeres 10 with distinct projection at base. Metaventral processes broad, and apically forked. Protrochanters with acute ventral spine, profemora with blunt ventral spine, protibiae with distinct projection at apex; mesotrochanters with long acute ventral spine, mesotibiae with two distinct projections at apex; metacoxae with large blunt ventral projection. Median lobe of aedeagus broad apically; parameres moderately elongate and apically broadened.

Description: Male (Fig. 10B). Body reddish brown, BL 3.15 mm. Head longer than wide, HL 0.67 mm, HW 0.62 mm; each eye composed of about 45 facets; with well-developed ocular canthus. Antennomeres (Fig. 12A) 9-11 forming distinct club, antennomeres 9 with projection at apex, antennomeres 10 with distinct projection at base. Pronotum (Fig. 12B) as long as wide, PL 0.65 mm, PW 0.65 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.96 mm, EW 1.34 mm. Metaventral processes (Fig. 12C) broad, apically forked, anterior branch smaller than posterior branch. Protrochanters with acute ventral spine, profemora with large, blunt ventral spine (Fig. 12D), protibiae (Fig. 12E) with distinct projection at apex; mesotrochanters (Fig. 12F) with long, sharp ventral spine; mesotibiae (Fig. 12G) with two distinct projections at apex; metacoxae (Fig. 12H) with large blunt ventral projection. Abdomen broad at base and narrowing apically, AL 0.87 mm, AW 1.31 mm. Sternite IX semi-membranous, shape as in Fig. 12I. Length of aedeagus (Figs 12J-L) 0.69 mm; median lobe broad and asymmetric (basal capsule collapsed in holotype); parameres narrowed at base and broadened apically; endophallus composed of one long and one short sclerites.
Female. Unknown.

Distribution: Nepal, Gandaki.

Comparative notes: The new species is a member of the *P. bagmatius* species-group, and can be readily recognized based on the unique forms of the male antennal clubs, the distinct large ventral projection of the metacoxae, and the broad apex of the median lobe of the aedeagus.

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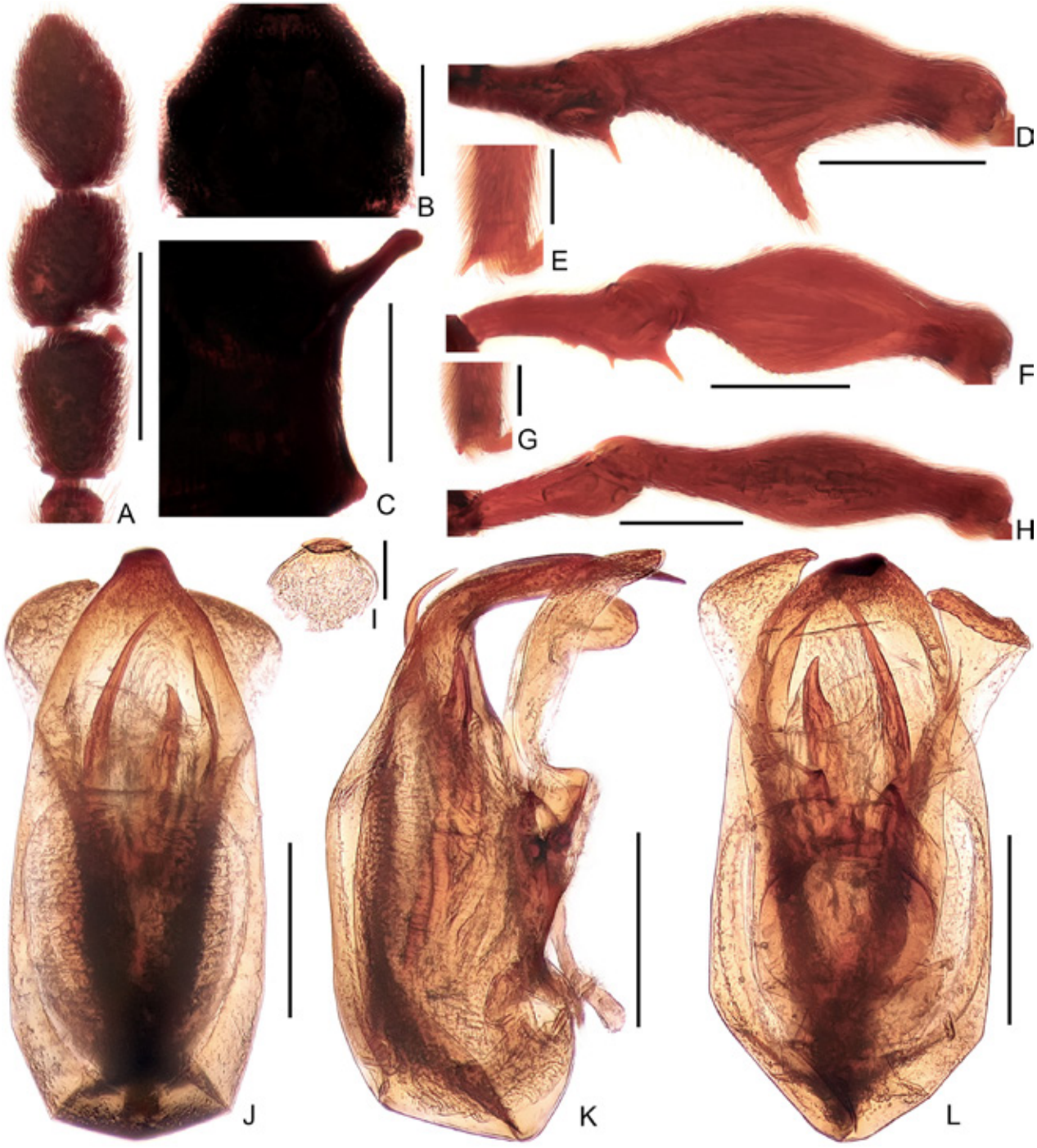


Fig 11. Male diagnostic features of *Pselaphodes loebli* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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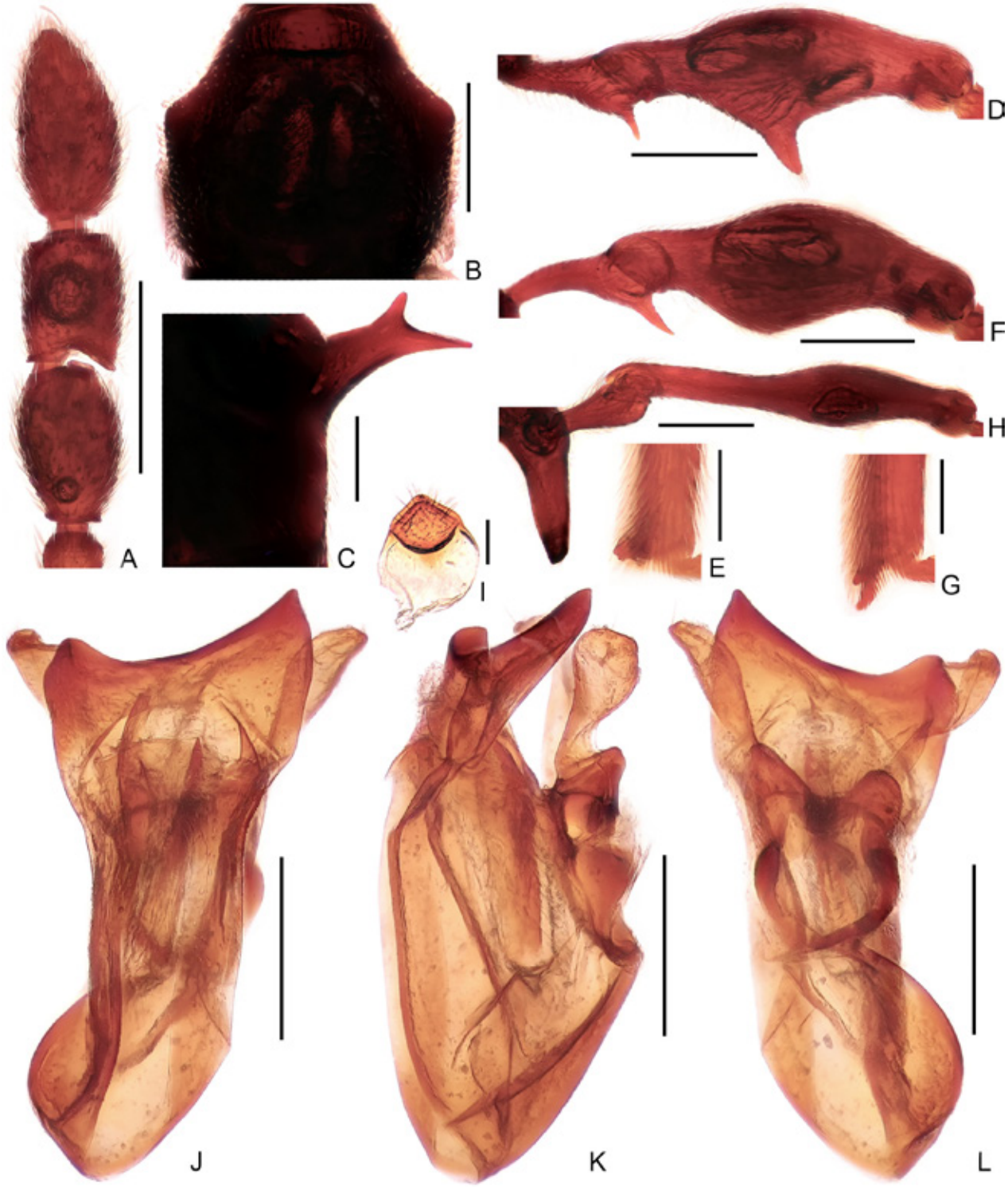


Fig 12. Male diagnostic features of *Pselaphodes procerus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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Etymology: The specific epithet refers to the large blunt projection of the metacoxa of the new species.

***Pselaphodes psomus* sp. nov.**

Figs 13A, 14A-L

Type material (23 specimens)**:** Holotype; MHNG-ENTO-44009; ♂; NEPAL, 'NEPAL (Prov. Bagmati), Gul Bhanjyang, 2600 m, 6.IV.81, Löbl & Smetana' (MHNG). – Paratypes; MHNG-ENTO-44010; 1 ♀; NEPAL, same label data as holotype. – MHNG-ENTO-44011; 1 ♂; NEPAL, same label data as holotype, except 'Chaubas, 5.IV.81'. – MHNG-ENTO-44012 to 44013; 1 ♂, 1 ♀; NEPAL, same label data as holotype, except 'Phulchauki nr. Kathmandu, 2500 m, 10.V.81, l. Löbl'. – MHNG-ENTO-44014 to 44015; 2 ♂♂, 1 ♀; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2700 m, 16.X.83, Smetana & Löbl'. – MHNG-ENTO-44016 & 44017; 1 ♂, 1 ♀; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2700 m, 15.X.83, Smetana & Löbl'. – MHNG-ENTO-44018 to 44021; 2 ♂♂, 2 ♀♀; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2550 m, 15.X.83, Smetana & Löbl'. – MHNG-ENTO-44022; 1 ♂; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2650 m, 13.X.83, Smetana & Löbl'. – MHNG-ENTO-44023 to 44027; 1 ♂, 4 ♀♀; NEPAL, 'NEPAL, Kathmandu District, Phulcoki, 2600 m, 20.IV.1982, A. & Z. Smetana'. – MHNG-ENTO-44028; 1 ♂; NEPAL, 'NEPAL, Kathmandu District, Phulcoki, 2650 m, 21.IV.1982, A. & Z. Smetana'. – MHNG-ENTO-44029; 1 ♂; NEPAL, 'NEPAL, Phulchoki, 3.II.1982, de Rougemont'. – MHNG-ENTO-44030; 1 ♂; NEPAL 'Nepal, Pulchoki/godabari, 2750 m, Deharveng' (all paratypes in MHNG).

Type locality: Nepal, Sindhupalchok District, Helambu Valley, Gul Bhanjyang, 2600 m alt.

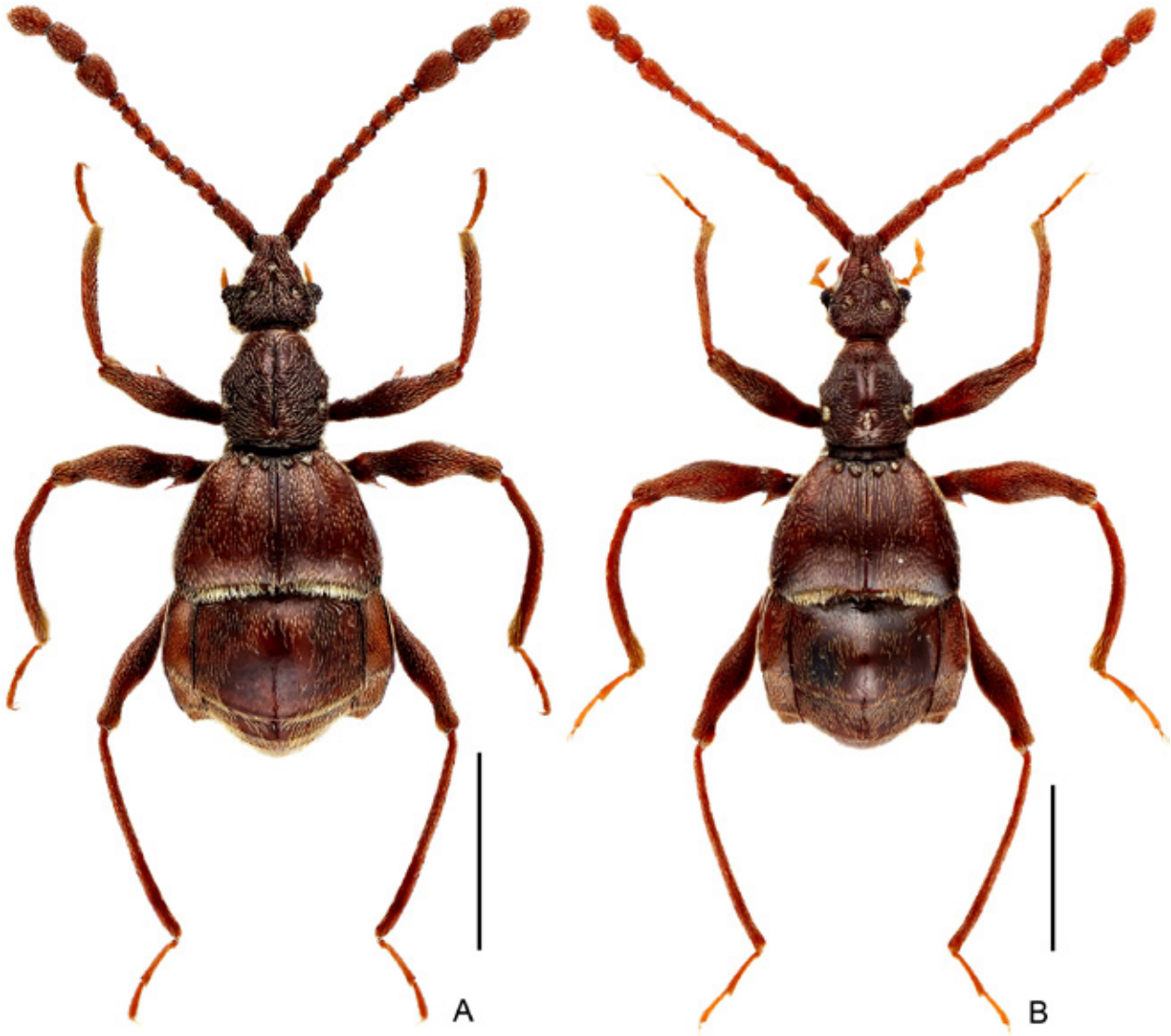


Fig 13. Dorsal habitus of *Pselaphodes* males. (A) *P. psomus* sp. nov. (B) *P. robustus* sp. nov. Scale bars: 1 mm.

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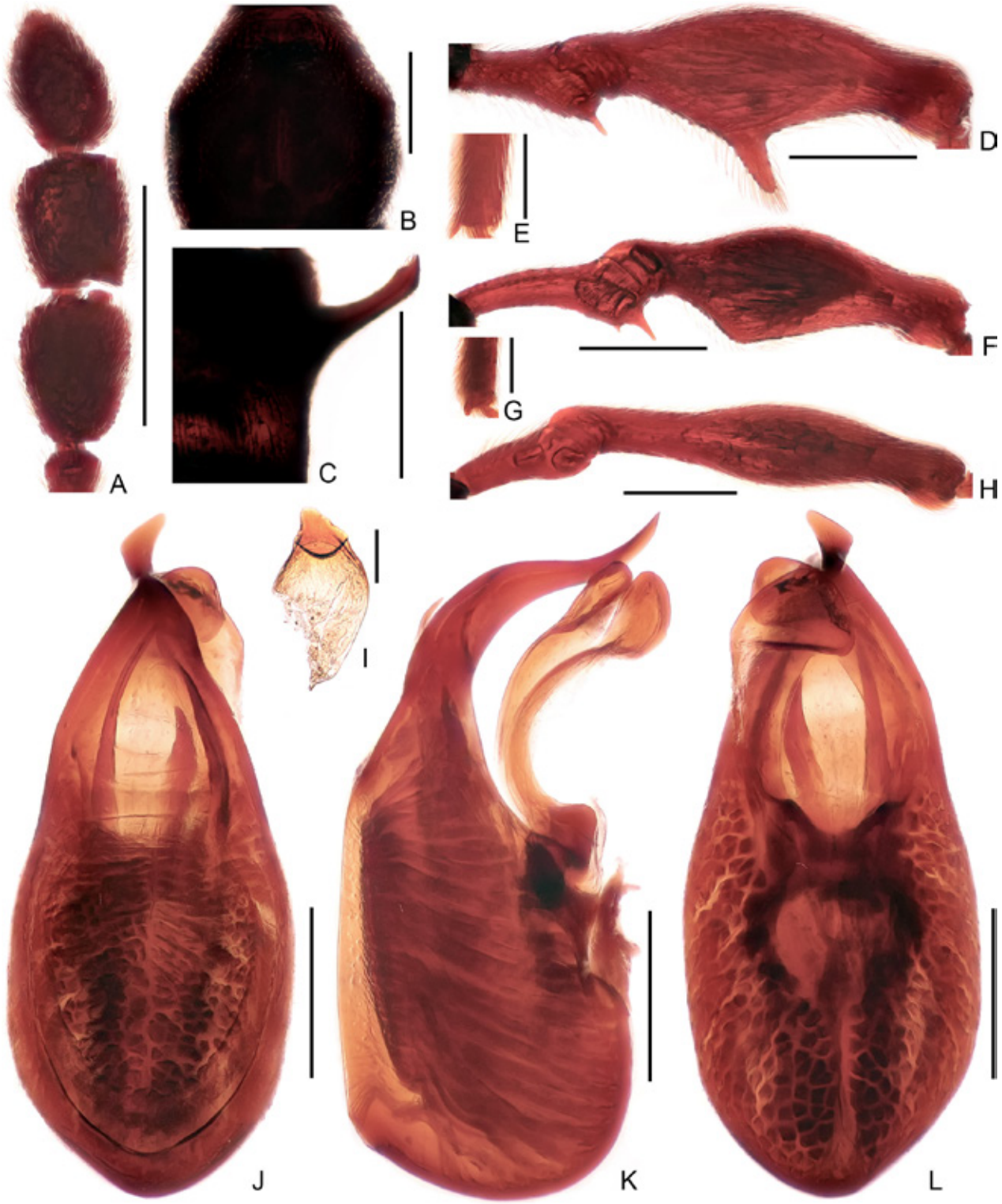


Fig 14. Male diagnostic features of *Pselaphodes psomus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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Diagnosis of males: Length 2.95-3.06 mm. Antennomeres 9 with disc-shaped process at apex. Metaventral processes long. Protrochanters with slender ventral spine, profemora with large blunt ventral spine, protibiae with distinct spine at apex; mesotrochanters with two ventral spines, mesotibiae with small tubercle at apex. Median lobe of aedeagus extending at apex; parameres elongate and broadened at apex.

Description: Male (Fig. 13A). Body reddish brown, BL 2.95-3.06 mm. Head as long as wide, HL 0.58-0.62 mm, HW 0.58-0.62 mm; each eye composed of about 35 facets; with well-developed ocular canthus. Antennomeres (Fig. 14A) 9-11 forming distinct club, antennomeres 9 with disc-shaped process at apex, antennomeres 10 projected posteriorly at base. Pronotum (Fig. 14B) almost as long as wide, PL 0.65-0.67 mm, PW 0.64-0.65 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.74-0.81 mm, EW 1.26-1.29 mm. Metaventral processes (Fig. 14C) long. Protrochanters with slender ventral spine, profemora with large blunt ventral spine (Fig. 14D), protibiae (Fig. 14E) with distinct spine at apex; mesotrochanters (Fig. 14F) with two ventral spines; mesotibiae (Fig. 14G) with small projection at apex; metatrochanters and metafemora (Fig. 14H) simple. Abdomen broad at base and narrowing apically, AL 0.94-1.00 mm, AW 1.38-1.41 mm. Sternite IX semi-membranous, shape as in Fig. 14I. Length of aedeagus (Figs 14J-L) 0.86 mm; median lobe slightly asymmetric, strongly extended and constricted apically; parameres rather elongate and apically broadened; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 23 facets; antennae simple. Measurements: BL 2.99-3.02 mm, HL 0.56-0.58 mm, HW 0.56-0.58 mm, PL 0.65-0.70 mm, PW 0.64-0.67 mm, EL 0.67-0.71 mm, EW 1.25-1.28 mm, AL 1.05-1.09 mm, AW 1.41-1.44 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and is most similar to *P. smetanai* described below in sharing similar forms of the antennal clubs, and the median lobe of the aedeagus being strongly extending apically. *Pselaphodes psomus* can be separated from *P. smetanai* only based on the slightly different position of the apical process of the antennomeres 9, the relatively longer metaventral processes with a different form of the apex, and the longer ventral spine of the profemora.

Etymology: The specific epithet refers to the round apical process of male antennomeres 9 of the new species.

***Pselaphodes robustus* sp. nov.**

Figs 13B, 15A-K

Type material (32 specimens)**:** Holotype; MHNG-ENTO-44031; ♂; NEPAL, 'NEPAL: distr. Kathmandu: Phulcoki, 2400-2600 m, 28-30.IV.84, Löbl - Smetana' (MHNG). – Paratypes; MHNG-ENTO-44032 to 44036; 2 ♂♂, 3 ♀♀; NEPAL, same label data as holotype. – MHNG-ENTO-44037 to 44047; 5 ♂♂, 6 ♀♀; NEPAL, same label data as holotype, except '2500 m, 28-29. IV.84'. – MHNG-ENTO-44048 & 44049; 1 ♂, 1 ♀; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2600 m, 14.X.83, Smetana & Löbl'. – MHNG-ENTO-44050 to 44054; 3 ♂♂, 2 ♀♀; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2650 m, 13.X.83, Smetana & Löbl'. – MHNG-ENTO-44055 to 44056; 2 ♂♂; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2550 m, 15.X.83, Smetana & Löbl'. – MHNG-ENTO-44057; 1 ♂; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2700 m, 16.X.83, Smetana & Löbl'. – MHNG-ENTO-44058; 1 ♂; NEPAL, 'NEPAL (Prov. Bagmati), Phulchauki nr., Kathmandu, 2500 m, 10.V.81, l. Löbl'. – MHNG-ENTO-44059 to 44062; 2 ♂♂, 2 ♀♀; NEPAL, 'NEPAL, Kathmandu District, Phulcoki, 2550 m, 21.IV.1982, A. & Z. Smetana' (all paratypes in MHNG).

Type locality: Nepal, Kathmandu District, Phulchoki Hill, 2400-2600 m alt.

Diagnosis of males: Length 3.37-3.43 mm. Antennomeres 9 with disc-shaped process at apex. Metaventral processes short and broad. Protrochanters with small ventral spine, profemora with bluntly triangular projection, protibiae with small projection at apex; mesotrochanter with sharp ventral spine. Median lobe of aedeagus strongly asymmetric at apex; parameres elongate and broadened throughout entire length.

Description: Male (Fig. 13B). Body reddish brown, BL 3.37-3.43 mm. Head longer than wide, HL 0.71-0.74 mm, HW 0.63-0.65 mm; each eye composed of about 32 facets; with well-developed ocular canthus. Antennomeres 9-11 (Fig. 15A) forming distinct club, antennomeres 9 slightly modified, with disc-shaped process at apex, antennomeres 10 simple. Pronotum (Fig. 15B) longer than wide, PL 0.71-0.76 mm, PW 0.66-0.68 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.88-0.89 mm, EW 1.34-1.41 mm. Metaventral processes (Fig. 15C) short and broad, apically rounded. Protrochanters with small ventral spine, profemora with bluntly triangular ventral projection (Fig. 15D), protibiae (Fig. 15E) with small projection at apex; mesotrochanters (Fig. 15F) with sharp triangular ventral spine; metatrochanters and metafemora (Fig. 15G) simple. Abdomen broad at base and narrowing apically, AL 1.03-1.06 mm, AW 1.46-1.49 mm. Sternite IX semi-membranous, shape as in Fig. 15H. Length of aedeagus (Figs 15I-K)

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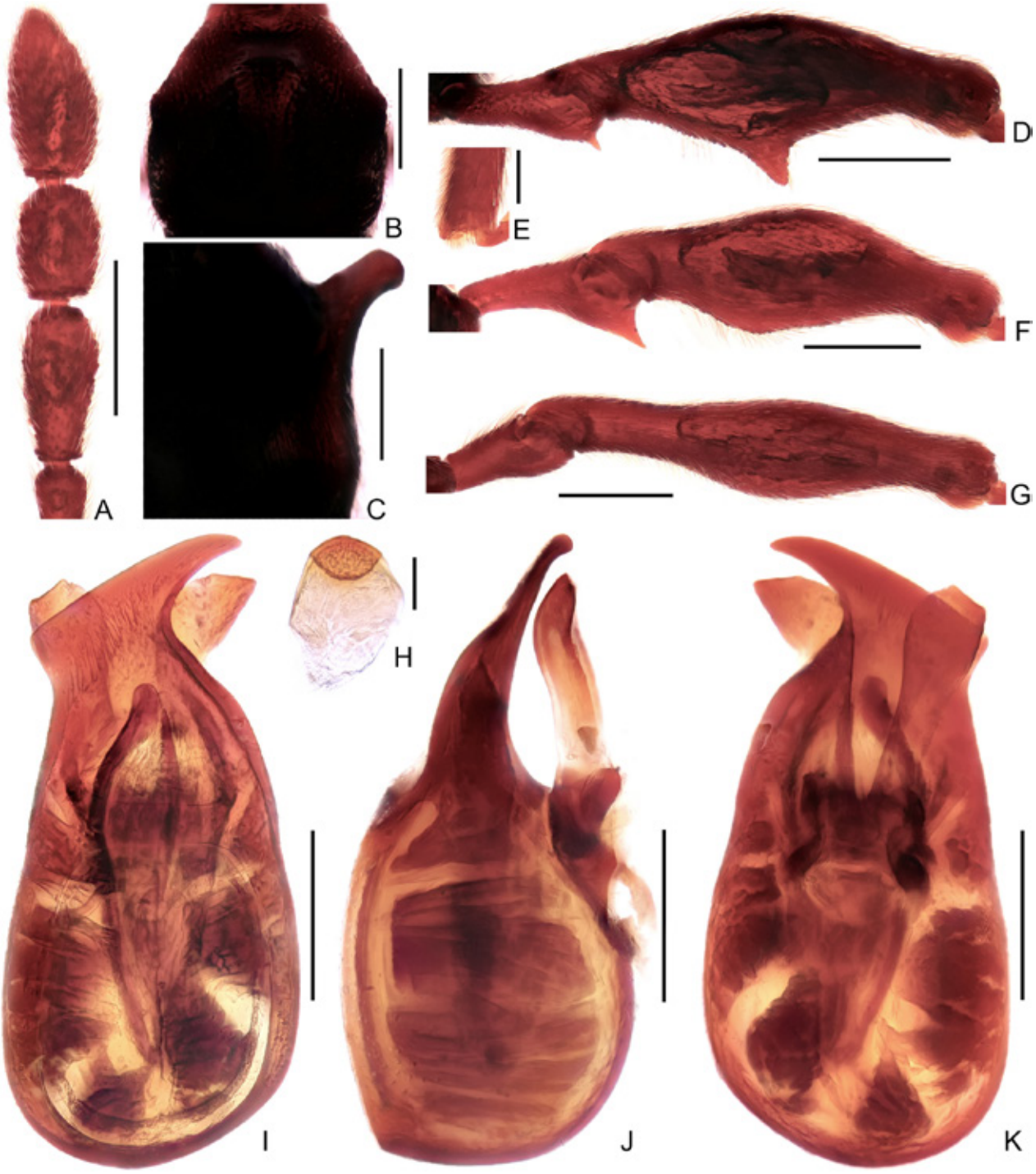


Fig 15. Male diagnostic features of *Pselaphodes robustus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Metatrochanter and metafemur. (H) Sternite IX. (I-K) Aedeagus, in dorsal (I), lateral (J), and ventral (K) view. Scale bars: 0.3 mm in A-B, D, F-G; 0.2 mm in C, I-K; 0.1 mm in E, H.

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0.75 mm; median lobe broad and strongly asymmetric; parameres moderately broadened throughout entire length; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 30 facets; antennae simple. Measurements: BL 3.21-3.64 mm, HL 0.63-0.74 mm, HW 0.62-0.68 mm, PL 0.69-0.73 mm, PW 0.67-0.69 mm, EL 0.82-0.88 mm, EW 1.20-1.46 mm, AL 1.00-1.29 mm, AW 1.44-1.57 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, but has less modified antennal clubs. It can be readily separated from all other members of the group based on the elongate antennomeres, the short metaventral processes, and the apically strongly asymmetric median of the aedeagus.

Etymology: The specific epithet refers to the short and broad male metaventral processes of the new species.

***Pselaphodes rotundatus* sp. nov.**

Figs 16A, 17A-L

Type material (5 specimens)**:** Holotype; MHNG-ENTO-44063; ♂; NEPAL, 'NEPAL (Prov. Bagmati), below Thare Pati, 3300 m, 11.IV.81, Löbl & Smetana'. – Paratypes; MHNG-ENTO-44064 to 44066; 1 ♂, 2 ♀♀; NEPAL, same label data as holotype. – MHNG-ENTO-44067; paratype, 1 ♂; NEPAL, same label data as holotype, except '10.IV.81' (all paratypes in MHNG).

Type locality: Nepal, Sindhupalchok District, Melamchi, Thare Pati, 3300 m alt.

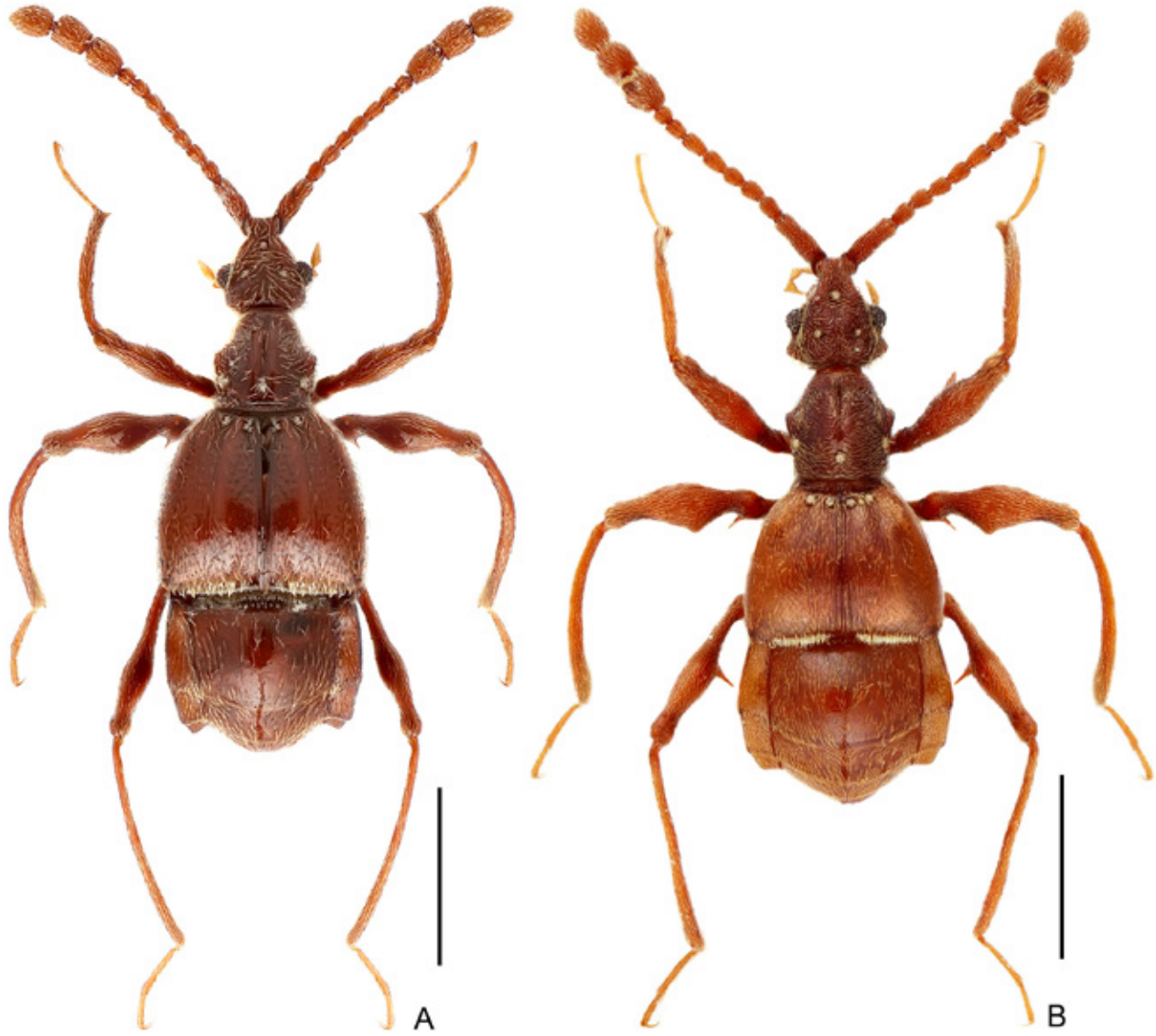


Fig 16. Dorsal habitus of *Pselaphodes* males. (A) *P. rotundatus* sp. nov. (B) *P. sagephorus sp.* nov. Scale bars: 1 mm.

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Diagnosis of males: Length 3.10-3.13 mm. Antennomeres 9 with large disc-shaped process at apex, antennomeres 10 with small projection at base. Metaventral processes broad, forked at apex. Profemora with triangular ventral spine, protibiae with distinct spine at apex; mesotrochanters with slender ventral spine, mesotibiae with small projection at apex; metacoxae with short ventral projection. Median lobe of aedeagus broad and asymmetric at apex; parameres short.

Description: Male (Fig. 16A). Body reddish brown, BL 3.10-3.13 mm. Head longer than wide, HL 0.61-0.62 mm, HW 0.53-0.56 mm; each eye composed of about 43 facets. Antennomeres (Fig. 17A) 9-11 forming distinct club, antennomeres 9 with large disc-shaped process at apex, antennomeres 10 with small projection

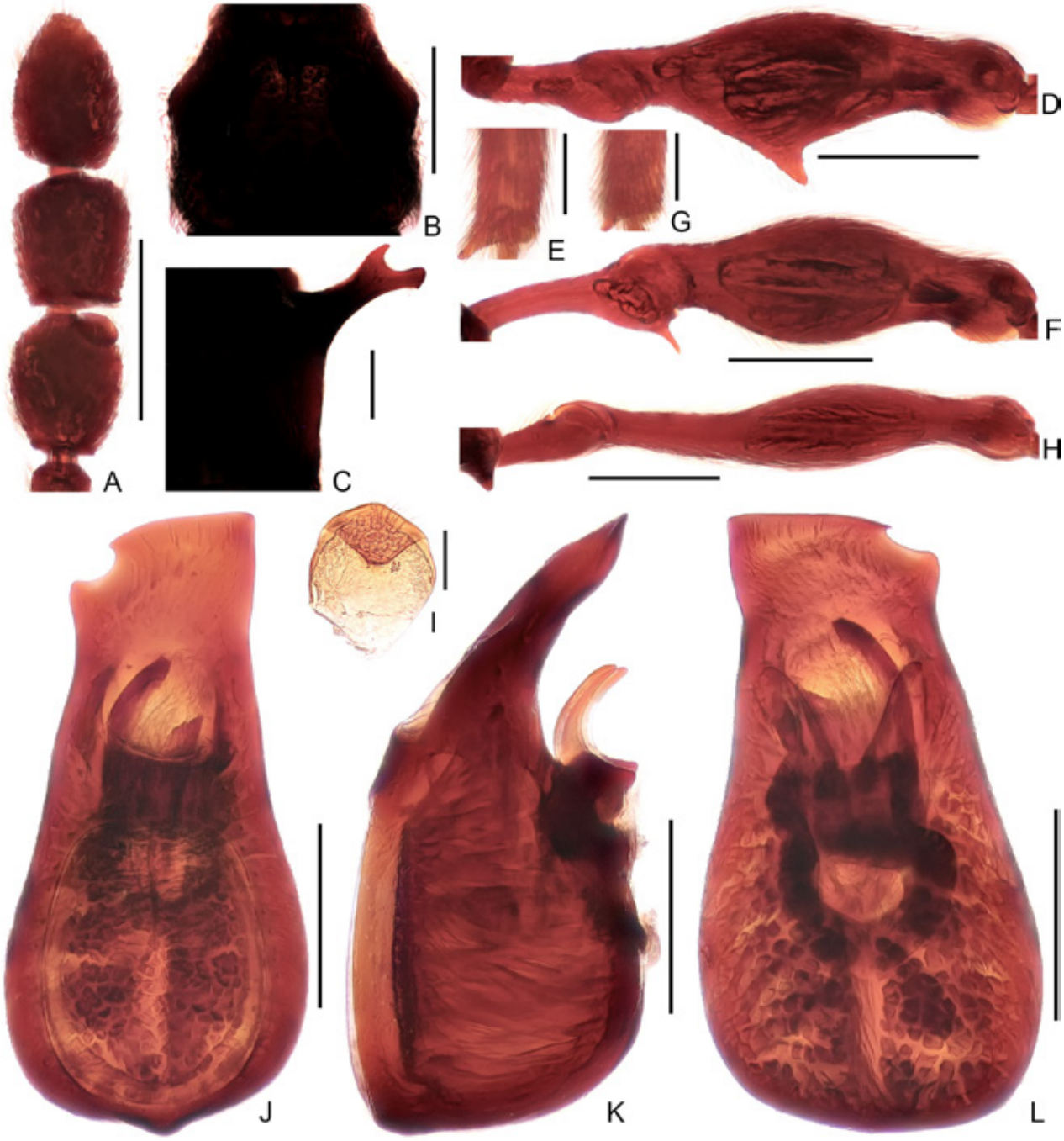


Fig 17. Male diagnostic features of *Pselaphodes rotundatus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

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at base. Pronotum (Fig. 17B) slightly longer than wide, PL 0.61-0.62 mm, PW 0.58-0.59 mm, angularly expanded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.88-0.94 mm, EW 1.12-1.19 mm. Metaventral processes (Fig. 17C) broad, apically forked, anterior branch shorter than posterior branch. Profemora (Fig. 17D) with triangular ventral spine, protibiae (Fig. 17E) with distinct spine at apex; mesotrochanters (Fig. 17F) with acute ventral spine; mesotibiae (Fig. 17G) with small tubercle at apex; metacoxa (Fig. 17H) with short ventral projection. Abdomen broad at base and narrowing apically, AL 0.96-0.99 mm, AW 1.12-1.14 mm. Sternite IX semi-membranous, shape as in Fig. 17I. Length of aedeagus (Figs 17J-L) 0.65 mm; median lobe broad and asymmetric; parameres short, almost symmetric; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 35 facets; antennae simple. Measurements: BL 3.06-3.12 mm, HL 0.65-0.67 mm, HW 0.56-0.59 mm, PL 0.61-0.62 mm, PW 0.58-0.61 mm, EL 0.79-0.81 mm, EW 1.20-1.25 mm, AL 0.97-1.06 mm, AW 1.29-1.32 mm.

Distribution: Nepal: Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and can be readily separated from all other members of the group based on the relatively long elytra and forked metaventral processes of the male, as well as the unique form of the aedeagus.

Etymology: The specific epithet refers to the large disc-shaped process of the male antennomeres 9 of the new species.

***Pselaphodes sagephorus* sp. nov.**

Figs 16B, 18A-K

Type material (10 specimens)**:** Holotype; MHNG-ENTO-44068; ♂; NEPAL, 'NEPAL: distr. Kathmandu: Phulcoki, 2500 m, 28-29.IV.84, Löbl - Smetana' (MHNG). – Paratypes; MHNG-ENTO-44069 & 44070; 1 ♂, 1 ♀; NEAPL, same label data as holotype. – MHNG-ENTO-44071 to 44072; 1 ♂, 1 ♀; NEAPAL, 'NEPAL (Prov. Bagmati), Pokhare NE Barahbise, 2700 m, 7.V.81, Löbl & Smetana'. – MHNG-ENTO-44073; 1 ♂; NEPAL, 'NEPAL (Prov. Bagmati), Malemchi, 2800 m, 14.IV.81, Löbl & Smetana'. – MHNG-ENTO-44074; 1 ♂; NEPAL, 'NEPAL (Prov. Bagmati), Gul Bhanjyang, 2600 m, 6.IV.81, Löbl & Smetana'. – MHNG-ENTO-44075; 1 ♂; NEPAL, 'NEPAL: Bagmati, Pokhare NE Barahbise, 2800 m, 3.5.81, Löbl - Smetana'. – MHNG-ENTO-44076; 1 ♂; NEPAL, 'NEPAL (Prov. Bagmati), Phulchauki nr. Kathmandu, 2500 m, 10.V.81, l. Löbl'. – MHNG-ENTO-44077; 1 ♂; NEPAL, 'NEPAL, Lalitpur Distr., Phulcoki, 2550 m, 15.X.83, Smetana & Löbl' (all paratypes in MHNG).

Type locality: Nepal, Kathmandu District, Phulchoki Hill, 2500 m alt.

Diagnosis of males: Length 3.41-3.42 mm. Antennomeres 9 with distinct projection and cavity at apex and mesal margin, with tuft of gold-colored setae inside cavity, antennomeres 10 with large projection at base. Metaventral processes long, apically narrowed, with pair of small projection in addition to long processes. Protrochanters with small ventral spine, profemora with large ventral spine, protibiae with blunt projection at apex; mesotrochanters with slender ventral spine; metafemora with large ventral spine. Median lobe of aedeagus slightly asymmetric at apex; parameres broad.

Description: Male (Fig. 16B). Body reddish brown, BL 3.41-3.42 mm. Head slightly longer than wide, HL 0.64-0.68 mm, HW 0.64-0.67 mm; each eye composed of about 45 facets; with well-developed ocular canthus. Antennomeres (Fig. 18A) 9-11 forming distinct club, antennomeres 9 with distinct projection and cavity at apex and mesal margin, with tuft of gold-colored setae inside cavity, antennomeres 10 with large, sharp projection at base. Pronotum (Fig. 18B) longer than wide, PL 0.72-0.74 mm, PW 0.68-0.69 mm, angularly expanded at anterolateral margins. Elytra wider than long, EL 0.84-0.95 mm, EW 1.32-1.41 mm. Metaventral processes (Fig. 18C) long and broad, narrowed at apex, with pair of small projection in addition to long processes. Protrochanters (Fig. 18D) with tiny spine, profemora with large ventral spine, protibiae (Fig. 18E) with blunt projection at apex; mesotrochanters (Fig. 18F) with long, slender ventral spine; metatrochanters simple, metafemora (Fig. 18G) with large, sharp ventral spine. Abdomen broad at base and narrowing apically, AL 1.06-1.20 mm, AW 1.40-1.43 mm. Sternite IX semi-membranous, shape as in Fig. 18H. Length of aedeagus (Figs 18I-K) 0.59 mm; median lobe slightly asymmetric, narrowed at apex; parameres broad dorso-ventrally; endophallus composed of one long and one short sclerites.

Female. Each eye composed of about 35 facets; antennae simple. Measurements: BL 3.34 mm, HL 0.72 mm, HW 0.63 mm, PL 0.71 mm, PW 0.67 mm, EL 0.72 mm, EW 1.29 mm, AL 1.19 mm, AW 1.49 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and can be readily separated from all other members of the group based on the expanded postgenae, strongly modified antennal clubs, long and broad metaventral processes, the long metafemoral spine of the male, and the unique configuration of the aedeagus.

Etymology: The specific epithet '*Sagephorus*' means

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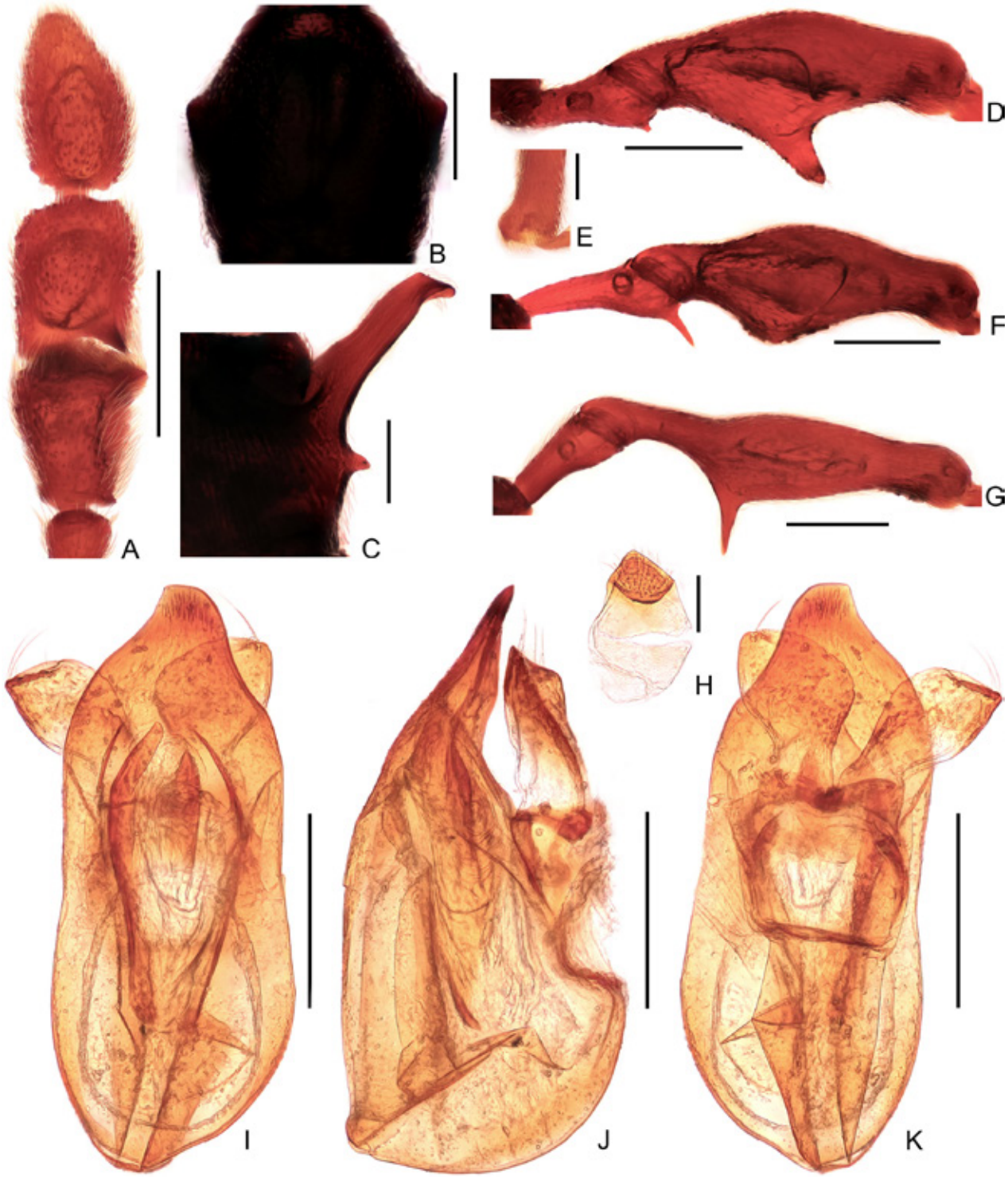


Fig 18. Male diagnostic features of *Pselaphodes sagephorus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Metatrochanter and metafemur. (H) Sternite IX. (I-K) Aedeagus, in dorsal (I), lateral (J), and ventral (K) view. Scale bars: 0.3 mm in A-B, D, F-G; 0.2 mm in C, I-K; 0.1 mm in E, H.

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'well-armed', referring to the strongly modified head, antennae, and legs in the male of the new species.

***Pselaphodes smetanai* sp. nov.**
Figs 19A, 20A-K

Type material (1 specimen)**:** Holotype; MHNG-ENTO-44078; ♂; NEPAL, 'NEPAL: Bagmati, Pokhare NE Barahbise, 2800 m, 3.5.81, Löbl - Smetana' (MHNG).

Type locality: Nepal, Sindhupalchok District, Pokhare NE Barahbise, 2800 m alt.

Diagnosis of males: Length 2.90 mm. Antennomeres 9 with round projection at apex, antennomeres 10 with small projection at base. Metaventral processes long, with pair of small triangular projection in addition to long processes. Protrochanters with acute ventral spine, profemora with blunt ventral spine, protibiae with distinct spine at apex; mesotrochanters with two ventral spines, mesotibiae with small projection at apex. Median lobe of aedeagus slightly asymmetric and extending at apex; parameres elongate, narrowed at base and broadened at apex.

Description: Male (Fig. 19A). Body reddish brown, BL 2.90 mm. Head slightly longer than wide, HL 0.62 mm, HW 0.61 mm; each eye composed of about 35 facets; with well-developed ocular canthus. Antennomeres (Fig. 20A) 9-11 forming distinct club, antennomeres 9 with round projection at apex, antennomeres 10 with small tubercle at base. Pronotum (Fig. 20B) longer than wide, PL 0.73 mm, PW 0.67 mm, rounded



Fig 19. Dorsal habitus of *Pselaphodes* males. (A) *P. smetanai* sp. nov. (B) *P. symmetricus* sp. nov. Scale bars: 1 mm.

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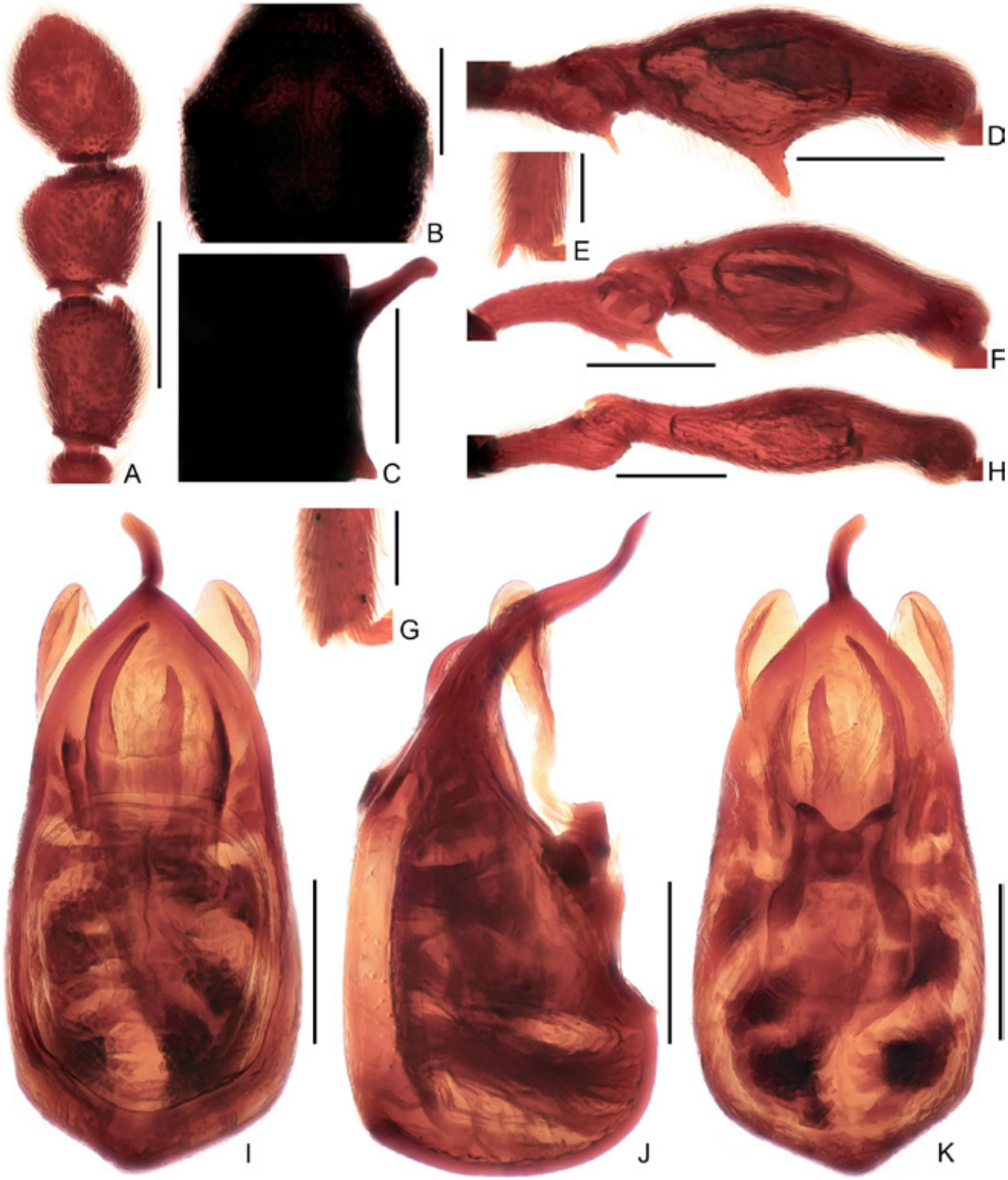


Fig 20. Male diagnostic features of *Pselaphodes smetanai* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I-K) Aedeagus, in dorsal (I), lateral (J), and ventral (K) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, I-K; 0.1 mm in E, G.

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at anterolateral margins, constricted at apical third. Elytra wider than long, EL 0.61 mm, EW 1.25 mm. Metaventral processes (Fig. 20C) long, with pair of small triangular projection in addition to long processes. Protrochanters with acute ventral spine, profemora with large, blunt ventral spine (Fig. 20D), protibiae (Fig. 20E) with distinct spine at apex; mesotrochanters with two ventral spines (Fig. 20F), mesotibiae with small projection at apex (Fig. 20G); metatrochanters and metafemora (Fig. 20H) simple. Abdomen broad at base and narrowing apically, AL 0.94 mm, AW 1.32 mm. Length of aedeagus (Figs 20I-K) 0.83 mm; median lobe distinctly narrowed and slightly asymmetric at apex; parameres elongate, almost symmetric, apically broadened; endophallus composed of one long and one short sclerite.
Female. Unknown.

Distribution: Nepal, Bagmati.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and is most similar to *P. psomus* described above in sharing similar forms of the antennal clubs, and the median lobe of the aedeagus being strongly extending apically. These two species can be separated only based on the slightly different position of the apical process of antennomeres 9, the relatively shorter metaventral processes with a different form of the apex, and the shorter ventral spine of the profemora of the new species.

Etymology: The new species is named after Ales Smetana, co-collector of the holotype.

Pselaphodes symmetricus sp. nov.
Figs 19B, 21A-L

Type material (3 specimens)**:** Holotype; MHNG-ENTO-44079; ♂; NEPAL, 'NEPAL: distr. Kathmandu: Phulcoki, 2500 m, 30.IV.84, Löbl - Smetana'. – Paratypes; MHNG-ENTO-44080; 1 ♀; NEPAL, same label data as holotype. – MHNG-ENTO-44081; 1 ♂; NEPAL, 'NEPAL (Prov. Bagmati), Gul Bhanjyang, 2600 m, 6.IV.81, Löbl & Smetana' (both paratypes in MHNG).

Type locality: Nepal, Kathmandu District, Phulchoki Hill, 2500 m alt.

Diagnosis of males: Length 3.01-3.15 mm. Antennomeres 9 slightly concave on mesal surface, antennomeres 10 with large projection at base. Metaventral processes moderately long, with pair of small triangular projection in addition to elongate processes. Protrochanters with slender ventral spine, profemora with blunt ventral spine, protibiae with large spine at apex; mesotrochanters with acute ventral spine, mesotibiae with small projection at apex. Median lobe of aedeagus symmetric, narrowed at apex; parameres short and symmetric.

Description: Male (Fig. 19B). Body reddish brown, BL 3.01-3.15 mm. Head longer than wide, HL 0.62-0.65 mm, HW 0.55-0.59 mm; each eye composed of about 40 facets. Antennomeres (Fig. 21A) 9-11 forming distinct club, antennomeres 10 with large projection at base. Pronotum (Fig. 21B) longer than wide, PL 0.61-0.64 mm, PW 0.56-0.61 mm, rounded at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.82-0.87 mm, EW 1.14-1.22 mm. Metaventral processes (Fig. 21C) moderately elongate, with pair of small triangular projection in addition to long processes. Protrochanters with slender ventral spine, profemora with blunt ventral spine (Fig. 21D), protibiae (Fig. 21E) with distinct spine at apex; mesotrochanters with acute ventral spine (Fig. 21F); mesotibiae with small projection at apex (Fig. 21G); metatrochanters and metafemora (Fig. 21H) simple. Abdomen broad at base and narrowing apically, AL 0.96-0.99 mm, AW 1.23-1.31 mm. Sternite IX semi-membranous, shape as in Fig. 21I. Length of aedeagus (Figs 21J-L) 0.59 mm; median lobe symmetric and stout, apex abruptly narrowed; parameres short, almost symmetric; endophallus composed of one long and one short sclerites.
Female. Each eye composed of about 22 facets; antennae simple. Measurements: BL 2.92 mm, HL 0.59 mm, HW 0.56 mm, PL 0.67 mm, PW 0.64 mm, EL 0.70 mm, EW 1.37 mm, AL 0.96 mm, AW 1.44 mm.

Distribution: Nepal, Bagmati.

Comparative notes: The new species is a member of the *P. bagmatius* species-group, and can be readily separated from all other congeners based on the more elongate antennomeres and elytra, the large basal projection of antennomeres 10 of the male, and the stout and symmetric median lobe of the aedeagus.

Etymology: The specific epithet refers to the symmetric form of the aedeagus of the new species.

Pselaphodes tmesisternus sp. nov.
Figs 22A, 23A-K

Type material (8 specimens)**:** Holotype; MHNG-ENTO-44082; ♂; NEPAL, 'E. NEPAL: KOSI Forêt S. Mangsingma, 2200-2600 m, 11-13.IV.1984, Löbl - Smetana' (MHNG). – Paratypes; MHNG-ENTO-44083 to 44086;2 ♂♂, 2 ♀♀; NEPAL, same label data as holotype. – MHNG-ENTO-44087; 1 ♂; NEPAL, same label data as holotype, except '2300 m, 13.IV.84'. – MHNG-ENTO-44088 & 44089; 1 ♂, 1 ♀; NEPAL, 'E. NEPAL: KOSI Col N-E Mangmaya, 2300 m, 6.IV.84, Löbl - Smetana' (all paratypes in MHNG).

Type locality: Nepal, Khandbari District, forest south of Mangsingma, 2200-2600 m alt.

Diagnosis of males: Length 2.93-3.01 mm; antennomeres 9 with disc-shaped process at apex, antennomeres

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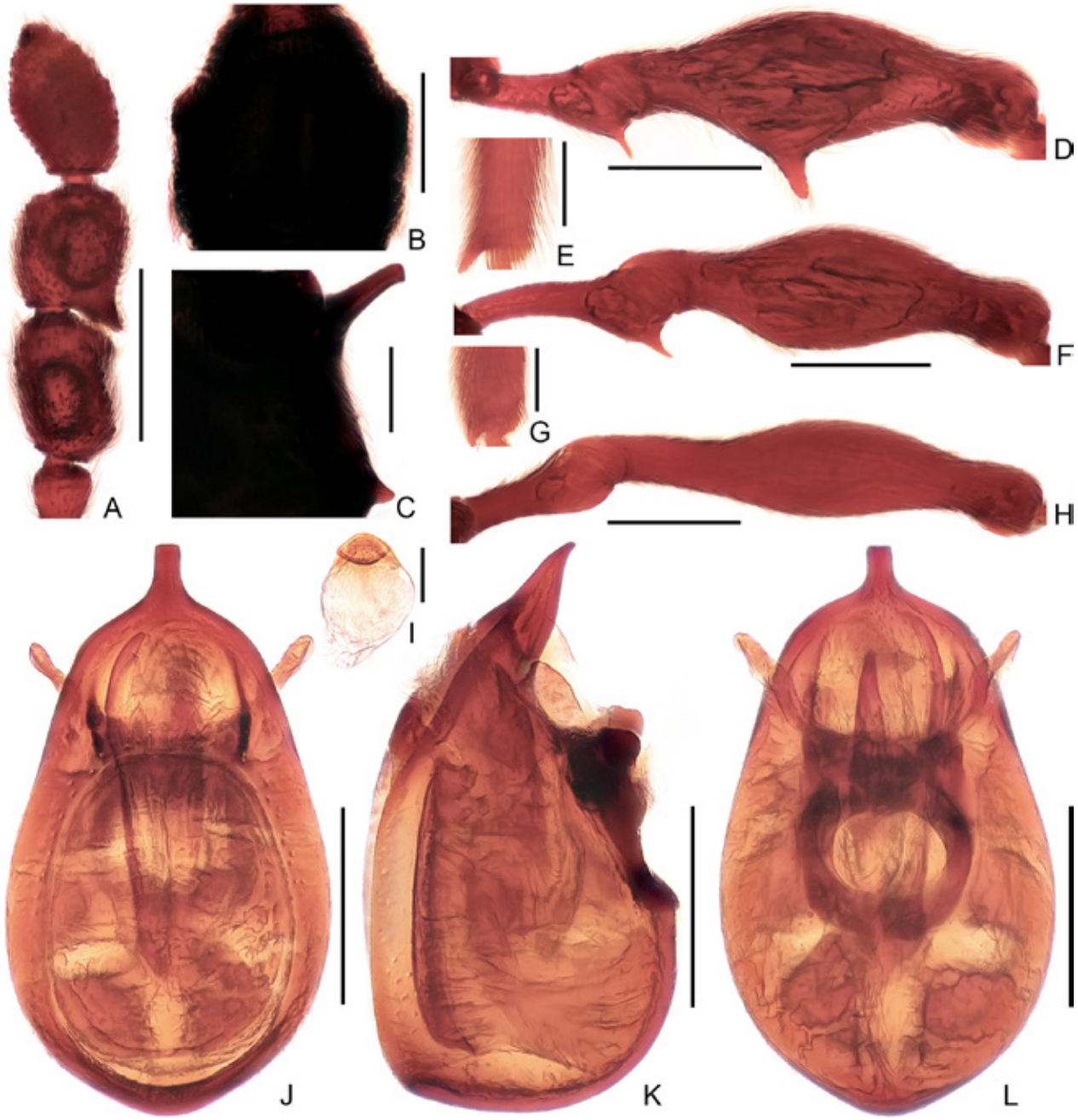


Fig 21. Male diagnostic features of *Pselaphodes symmetricus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Apex of mesotibia. (H) Metatrochanter and metafemur. (I) Sternite IX. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A-B, D, F, H; 0.2 mm in C, J-L; 0.1 mm in E, G, I.

10 strongly constricted at apex and slightly constricted at base, antennomeres 10 slightly constricted at base; metaventral processes long; profemora with large blunt ventral spine, protibiae with small spine at apex; mesotrochanters with three ventral spines. Median lobe of aedeagus broad at apex, asymmetric; parameres short, broadened apically.

Description: Male (Fig. 22A). Body reddish brown, BL 2.93-3.01 mm. Head as long as wide, HL 0.59-0.60 mm, HW 0.59-0.60 mm; each eye composed of about 30 facets; with well-developed ocular canthus. Antennomeres (Fig. 23A) 9-11 forming distinct club, antennomeres 9 with disc-shaped process at apex, antennomeres 10 oblique, strongly constricted at apex and slightly constricted at base, antennomeres 11 constricted at base. Pronotum (Fig. 23B) about as long as wide, PL 0.67-0.69 mm, PW 0.66-0.67 mm, roundly

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angulate at anterolateral margins, strongly constricted at apical third. Elytra wider than long, EL 0.70-0.71 mm, EW 1.20-1.22 mm. Metaventral processes (Fig. 23C) long, narrowing apically. Protrochanters with small spine, profemora with large blunt ventral spine (Fig. 23D), protibiae (Fig. 23E) with small spine at apex; mesotrochanters (Fig. 23F) with three ventral spines; metatrochanters and metafemora (Fig. 23G) simple. Abdomen broad at base and narrowing apically, AL 0.96-1.02 mm, AW 1.34-1.38 mm. Sternite IX semi-membranous, composed of three sclerites, shape as in Fig. 23H. Length of aedeagus (Figs 23I-K) 0.70 mm; median lobe broad and asymmetric; parameres short and broad apically, endophallus composed of two one long and one short sclerites.

Female. Each eye composed of about 25 facets; antennae simple. Measurements: BL 2.98-3.30 mm, HL 0.63-0.76 mm, HW 0.58-0.66 mm, PL 0.63-0.72 mm, PW 0.66-0.74 mm, EL 0.66-0.82 mm, EW 1.18-1.29 mm, AL 1.00-1.06 mm, AW 1.43-1.50 mm.

Distribution: Nepal, Koshi.

Comparative notes: The new species belongs to the *P. bagmatius* species-group, and can be readily separated from all other congeners based on the unique form of the male antennal clubs, the divided male sternite IX, and the configuration of the aedeagus.

Etymology: The specific epithet refers to the divided male sternite IX of the new species.



Fig 22. Dorsal habitus of *Pselaphodes* males. (A) *P. tmesisternus* sp. nov. (B) *P. unicornis*. Scale bars: 1 mm.

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New records

***Pselaphodes spinosus* Champion, 1925**

Pselaphodes spinosus Champion, 1925: 261.
Labomimus championi Jeannel, 1960: 454.
Pselaphodes championi. – Yin & Li, 2015: 340, **comb. & syn. n**.

Type material examined: Lectotype; ♂; INDIA, see Yin & Li (2015: 340).

Other material examined (9 specimens)**:** 4 ♂♂, 1 ♀; 'NEPAL, distr. Kathmandu, Godwari, 1600 m, Löbl, 31.III.84' (MHNG, SNUC). – 1 ♂; 'Népal, 24.III.82, Sheopuri, 2700 m, near Kathmandu, Rougemont' (MHNG). – 1 ♂; 'NEPAL, Khandbari, District, Dunge Dara N of Tumlingtarm, 23.III.82, 1100 m, A. & Z. Smetana' (MHNG). – 1 ♂; 'NEPAL, NEPAL (Prov. Bagmati), Burlang Bhanjyang, 2600 m, 5.IV.81, Löbl & Smetana' (MHNG). – 1 ♂; 'NEPAL, Lalitpur, Distr. Phulcoki, 2650 m, 13.X.83, Smetana & Löbl' (MHNG).

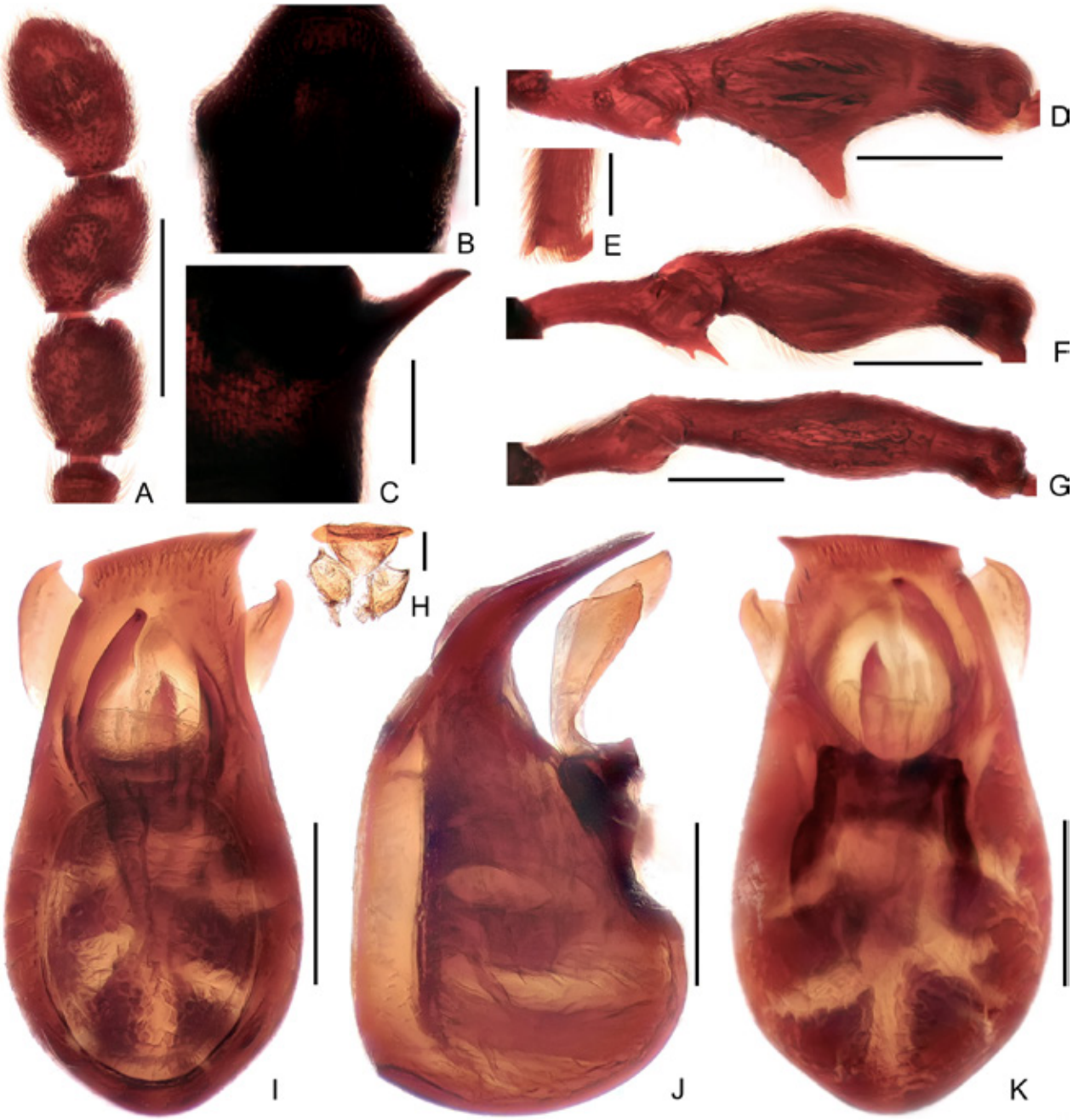


Fig 23. Male diagnostic features of *Pselaphodes tmesisternus* sp. nov. (A) Antennal club. (B) Pronotum. (C) Metaventral process, in lateral view. (D) Protrochanter and profemur. (E) Apex of protibia. (F) Mesotrochanter and mesofemur. (G) Metatrochanter and metafemur. (H) Sternite IX. (I-K) Aedeagus, in dorsal (I), lateral (J), and ventral (K) view. Scale bars: 0.3 mm in A-B, D, F-G; 0.2 mm in C, I-K; 0.1 mm in E, H.

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Comments: This species was originally known from northern India, later recorded from Xizang, China, and is here reported for the first time from Nepal. Males are easily recognizable based on the unique forms of the antennal club and aedeagus (see Yin & Li 2015; Huang *et al.*, 2018). The populations of Nepal show little variation in all diagnostic features, and thus can be easily identified.

Distribution: China: Xizang; India: Uttarakhand; Nepal: Bagmati, Koshi (**New County Record**).

***Pselaphodes unicornis* Bekchiev & Hlaváč, 2013**
Figs 22B, 24A-L

Pselaphodes unicornis Bekchiev & Hlaváč, 2013: 497.

Type material examined: Holotype; ♂; NEPAL, 'Nepal, Parbat, Ghorepani, *Rhodendron* forest, 2860 m, 13.10.2006, leg. D. Bechev / HOLOTYPUS *Lasinus unicornis* sp. n. det. Bekchiev & Hlaváč 2013 / collection NMNH-Sofia, Bulgaria' (NMNHS). – Paratype; 1 ♀; NEPAL, 'Nepal, Langtang Valley. Lama longe, 2500-2800 m, 25.10.1984, leg. P. Beron / HOLOTYPUS *Lasinus unicornis* sp. n. det. Bekchiev

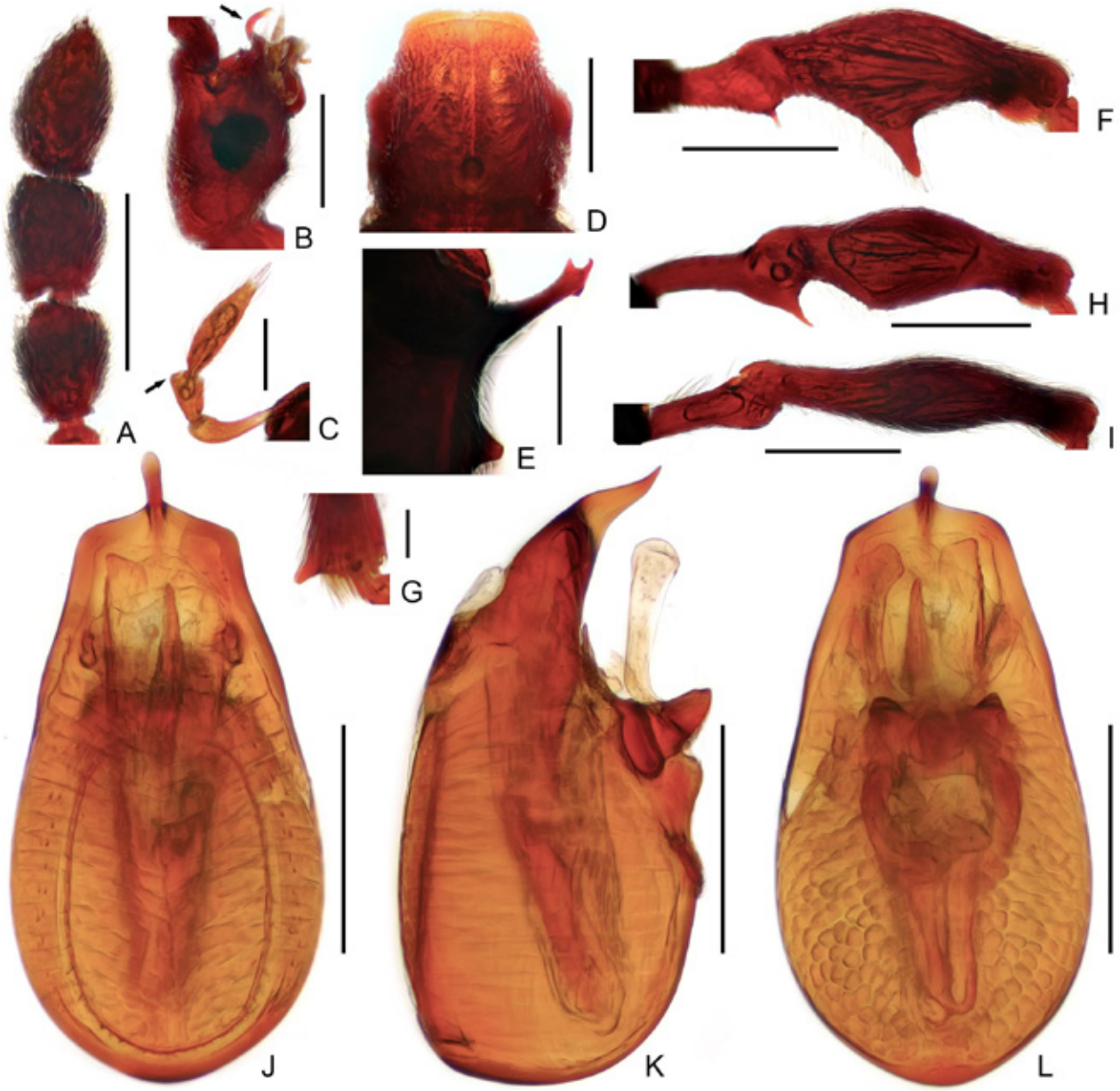


Fig 24. Male diagnostic features of *Pselaphodes unicornis*. (A) Antennal club. (B) Head, in lateral view. (C) maxillary palpus. (D) Pronotum. (E) Metaventral process. (F) Protrochanter and profemur. (G) Apex of protibia. (H) Mesotrochanter and mesofemur. (I) Metatrochanter and metafemur. (J-L) Aedeagus, in dorsal (J), lateral (K), and ventral (L) view. Scale bars: 0.3 mm in A, B, D, F, H, I; 0.2 mm in E, J-L; 0.1 mm in C; 0.05 mm in G.

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& Hlaváč 2013 / collection NMNH-Sofia, Bulgaria' (NMNHS).

Other material examined (21 specimens)**:** 1 ♂, 1 ♀; 'NEPAL, Parbat Distr. Ghoropani, Pass N slope, 2700 m, 6.X.1983, Smetana & Löbl' (MHNG). – 1 ♂; same data as for precedent, except '2750 m, 6.X.1983' (MHNG). – 1 ♂; same data as for precedent, except '2850 m, 9.X.1983' (MHNG). – 1 ♀; same data as for precedent, except '3100 m, 7.X.1983' (MHNG). – 2 ♀♀; same data as for precedent, except '3050-3100 m, 8.X.1983' (MHNG). – 6 ♂♂, 3 ♀♀; 'NEPAL, Khandbari District, above Tashigaon, 3600 m, 6.IV.1982, A. & Z. Smetana' (MHNG). – 1 ♂; 'NEPAL, Khandbari District, "Bakan" W of Tashigaon, 3200 m, 3.IV.1982, A. & Z. Smetana' (MHNG). – 1 ♂, 1 ♀; 'NEPAL, Mustang Distr., Lete, 2550 m, 2.X.83, Smetana & Löbl' (MHNG). – 2 ♀♀; 'NEPAL, Mustang Distr., 2 km N Kalopani, 2550 m, 1.X.83, Smetana & Löbl' (MHNG).

Comments: This species is a member of the *P. bagmatius* species-group, and widely distributed in Nepal. Males can be readily identified based on the unique sexual characters, and the aedeagus. The females can be recognized only by an association with a male.

Distribution: Nepal: Dhaulagiri, Bagmati, Koshi.

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REFERENCES

Bekchiev R., Hlaváč P. 2013. Description of a new unusual *Pselaphodes* Westwood, 1870 (Coleoptera: Staphylinidae: Pselaphinae) from Nepal. *Zootaxa* 3700: 495-498.

Champion G. C. 1925. Some Indian (and Tibetan) Coleoptera (18). *Entomologist's Monthly Magazine* 61: 260-273.

Hlaváč P. 2003. A taxonomic revision of the Tyrini of the Oriental Region. II. – Systematic study on the genus *Pselaphodes* and its allied genera (Coleoptera: Staphylinidae: Pselaphinae). *Annales de la Société Entomologique de France* 38: 283-297.

Huang M.-C., Li L.-Z., Yin Z.-W. 2018a. Four new species of *Pselaphodes* Westwood (Coleoptera: Staphylinidae: Pselaphinae) from Thailand, Laos, and China. *Zootaxa* 4472: 100-110.

Huang M.-C., Li L.-Z., Yin Z.-W. 2018b. Eleven new species and a new country record of *Pselaphodes* (Coleoptera: Staphylinidae: Pselaphinae) from China, with a revised checklist of world species. *Acta Entomologica Musei Nationalis Pragae* 58(2): 457-478.

Jeannel R. 1960. Sur les Psélaphides (Coleoptera) de l'Inde septentrionale. *Bulletin of the British Museum (Natural History). Entomology* 9: 403-456.

Westwood J. O. 1870. Descriptions of twelve new exotic species of the coleopterous family Pselaphidae. *Transactions of the Entomological Society of London* 1870: 125-132.

Yin Z.-W., Li L.-Z. 2012. Notes on Michael Schülke's pselaphine collections from China. Tyrini. I. genera *Labomimus* Sharp, *Linan* Hlaváč and *Pselaphodes* Westwood (Coleoptera, Staphylinidae, Pselaphinae). *ZooKeys* 251: 83-118.

Yin Z.-W., Li L.-Z. 2013. On the identity of *Pselaphodes walkeri* (Sharp, 1892) (Coleoptera: Staphylinidae: Pselaphinae), with description of a new related species. *Zootaxa* 3609: 327-334.

Yin Z.-W., Li L.-Z. 2015. Review of some species in the genera *Pselaphodes* Westwood and *Labomimus* Sharp (Coleoptera: Staphylinidae: Pselaphinae). *Zootaxa* 4040: 331-344.

Yin Z.-W., Li L.-Z., Zhao M.-J. 2010. Taxonomical study on the genus *Pselaphodes* Westwood (Coleoptera: Staphylinidae: Pselaphinae) from China. Part I. *Zootaxa* 2512: 1-25.

Yin Z.-W., Li L.-Z., Zhao M.-J. 2011. Taxonomical study on the genus *Pselaphodes* Westwood (Coleoptera: Staphylinidae: Pselaphinae) from China. Part II. *Annales Zoologici* 61: 463-481.

Yin Z.-W., Li L.-Z., Gu F.-K. 2012a. Taxonomic study on the genus *Pselaphodes* Westwood (Coleoptera, Staphylinidae, Pselaphinae) from China. Part III. *Zootaxa* 3189: 29-38.

Yin Z.-W., Li L.-Z., Zhao M.-J. 2012b. Two new species of *Pselaphodes* Westwood and new record of *Taiwanophodes minor* Hlaváč from South China (Coleoptera, Staphylinidae, Pselaphinae). *ZooKeys* 175: 75-86.

Yin Z.-W., Hlaváč P., Li L.-Z. 2013a. Further studies on the *Pselaphodes* complex of genera from China (Coleoptera, Staphylinidae, Pselaphinae). *ZooKeys* 275: 23-65.

Yin Z.-W., Nomura S., Li L.-Z. 2013b. New species and new records of the *Pselaphodes* complex of genera (Staphylinidae: Pselaphinae: Tyrini) from China. *Annales Zoologici* 63: 343-356.

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