



Species of *Elaphropeza* Macquart from Vietnam
(Diptera: Empididae)

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ABSTRACT

Previously only three species of *Elaphropeza* Macquart were known to occur in Vietnam. Here the following seven species are described as new to science: *Elaphropeza biseta* sp. nov., *E. lamdongensis* sp. nov., *E. melinhana* sp. nov., *E. parva* sp. nov., *E. postica* sp. nov., *E. singularis* sp. nov., and *E. xingyuei* sp. nov. A key to the species of the genus from Vietnam is provided.

Key words. Diptera, Empididae, *Elaphropeza*, new species, Vietnam

INTRODUCTION

Elaphropeza is very similar to *Drapetis*. It was considered as a separate genus, or as a subgenus of *Drapetis*. *Elaphropeza* can be separated from *Drapetis* by the following features: occiput more convex; antenna not upturned; first flagellomere conical with lower margin as straight as upper margin; hind tibia usually with 1-2 antero-dorsal setae (Collin 1961; Chvála 1975; Yang & Gaimari 2005; Shamshev & Grootaet 2007). It is distributed worldwide with 148 known species (Yang et al. 2007). The Chinese species are reviewed by Yang & Gaimar (2005), and the Oriental species were reviewed by Shamshev & Grootaet (2007). Grootaet & Shamshev (2009) firstly reported three *Elaphropeza* species from Vietnam. Here seven new species are added to the fauna of Vietnam. A key to the species of the genus from Vietnam is provided.

MATERIALS AND METHODS

The types are deposited in Entomological Museum of China Agricultural University (CAU),

Beijing. Terms used for adult structures and male genitalia follow those of McAlpine (1981) and Sinclair & Cumming (2006), respectively. The following abbreviations for setae are used: *a*—anterior, *acr*—acrostichal, *ad*—anterodorsal, *av*—anteroventral, *dc*—dorsocentral, *h*—humeral, *npl*—notopleural, *oc*—ocellar, *psa*—postalar, *pv*—posteroventral, *sc*—scutellar, *v*—ventral, *vt*—vertical.

TAXONOMY

Key to species of *Elaphropeza* from Vietnam

- 1 Head yellow 2
- Head black 3
- 2 Hind femur entirely yellow, with row of short spine-like *av* *E. singularis* sp. nov.
- Hind femur dark brown apically, with row of weak *av* *E. melinhana* sp. nov.
- 3 Mesoscutum with pair of lateral spots 4
- Mesoscutum without spots 7

- 4 Mesoscutum with pair of large lateral spot . . . 5
 — Mesoscutum with pair of small lateral spot bordered with lateral margin of mesoscutum *E. xingyuei* sp. nov.
- 5 Thoracic pleuron mostly yellow 6
 — Thoracic pleuron blackish except anterior 1/3 yellow *E. lamdongensis* sp. nov.
- 6 Hind tibia without ad at middle; antenna entirely dark brown *E. parva* sp. nov.
 — Hind tibia with 2 ad at middle; antenna dark brown except scape and pedicel yellow *E. biseta* sp. nov.
- 7 Halter entirely yellow; abdomen with gland-like structure between tergites 3 and 4 8
 — Halter with dark knob; abdomen without gland-like structure *E. postica* sp. nov.
- 8 Abdominal tergites 3-5 with squamiform setulae; gland-like structure present between tergites 3-4 and 4-5 9
 — Abdominal tergites 3-4 with squamiform setulae; modified structure present between tergites 3-4 . . . *E. hirsutiterga* Grootaert et Shamshev
- 9 Abdominal segment 8 with hardly prominent projection bearing several long strong setae *E. cattiensis* Grootaert et Shamshev
 — Abdominal segment 8 with short broad projection bearing several marginal spinules *E. vietnamensis* Grootaert et Shamshev

Elaphropeza biseta sp. nov.

Figs. 1-3

urn:lsid:zoobank.org:act:CF974EB9-E7D0-4339-8858-8D6D90A76F86

Diagnosis – Mesoscutum with a large triangular black lateral spot; scutellum brownish, metanotum black. Mid tibia with 1 ad at middle. Hind tibia with 2 ad.

Description – Male. Body length 2.5 mm, wing length 2.4 mm.

Head black with pale grey pollen; setulae and setae blackish; eyes contiguous on face; ocellar tubercle with 2 oc and 2 short posterior setulae; 1

vt curved inward, slightly longer than oc. Antenna dark brown except scape and pedicel yellow; scape bare, shorter than pedicel; pedicel with circlet of blackish apical setulae; 1st flagellomere rather long, conical, 3.8 times longer than wide, short pubescent; arista long (2.6 times longer than 1st flagellomere), blackish, short pubescent. Proboscis dark brownish yellow with blackish setulae; palpus yellow with blackish setulae and 1 blackish apical seta.

Thorax yellow with thin pale grey pollen; pronotum dark brown medially; mesoscutum with a moderately large, triangular black lateral spot; scutellum brownish, metanotum black; sternopleuron with a black ventral spot; meron black at lower portion, metapleuron black. Setulae and setae on thorax blackish, *h* absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*, biseriate *acr*, uniseriate *dc* and 1 long strong posteriormost *dc*; scutellum with two pairs of *sc* (basal pair very short, about 1/3 as long as apical pair). Legs yellow, but mid tibia tinged brownish, tip of hind tibia brown, tarsomere 5 dark brown. Setulae and setae on legs blackish; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin. Fore femur as thick as mid femur, 1.1 times as thick as hind femur. Fore and mid femora each with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 3 *ad* at base. Fore tibia apically with 1 *av* and 1 *pv*; mid tibia with 1 *ad* near middle and row of short spine-like black *v*, apically with 1 *av* and 1 *pv*; hind tibia with 2 *ad*, apically with 1 *av*. Hind tarsomere 1 with 5 short *av* and 2 short *pv*. Wing hyaline, veins dark brown, crossvein *m-cu* vertical. Calypter brown with blackish setulae. Halter dark yellowish.

Abdomen dark brown with pale grey pollen. Setulae and setae blackish. Tergite 1 without transversely strip-like sclerite; tergites 2-3 with pair of small subtriangular lateral sclerites interrupted at middle; tergite 4 rather large, with short black lateral spines; tergite 5 anteriorly with pair of sclerites hidden within tergite 4, posteriorly with transverse, narrow sclerite bearing short black lateral spines. Male genitalia (Figs. 1-3): Left tergal lobe rather narrow, with surstylus long, finger-like, and curved inward apically; right tergal lobe rather large, fused with apically widened surstylus, the latter with

a short thin lateral process; left cercus short and slightly thick, right cercus long finger-like.

Female. Unknown.

Type material – Holotype male, Vietnam, Lam Dong, Lac Duong, Bidoup Nui Ba National Park, Giang Ly Station, 1500 m, 2011. IX. 23, Xingyue Liu (CAU).

Etymology – The specific name refers to the hind tibia with 2 setae.

Remarks – The new species is similar to *E. lancangensis* (Yang et Yang) from Yunnan of China, but may be separated from the latter by the arista short pubescent, scutellum brownish and mid tibia with 1 *ad*. In *E. lancangensis*, the arista has the long dense pubescence, the scutellum is yellow with the brown basal margin, and the mid tibia has no *ad* (Yang & Gaimari 2005).

***Elaphropeza lamdongensis* sp. nov.**

Figs. 4–6

urn:lsid:zoobank.org:act:88AA006B-8900-4FD3-92FA-A04D3DDF950F

Diagnosis – Thoracic pleuron black with anterior 1/3 yellow. Mid femur with two rows of close *av*; mid tibia with two rows of short spine-like *v*. Hind tibia with 1 *ad* at middle.

Description – Male. Body length 2.1 mm, wing length 2.2 mm.

Head black with pale grey pollen; setulae and setae blackish; eyes contiguous on face; ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna yellow except 1st flagellomere brown; scape bare, shorter than pedicel; pedicel with cirlet of blackish apical setulae; 1st flagellomere moderately long, conical, 2.5 times longer than wide, short pubescent; arista rather long (3.1 times longer than 1st flagellomere), blackish, short pubescent. Proboscis dark brownish yellow with blackish setulae; palpus yellow with blackish setulae and 1 blackish apical seta.

Thorax yellow with thin pale grey pollen; mesoscutum with moderately large black lateral spot; scutellum and metanotum black; pleuron black except anterior 1/3 yellow. Setulae on thorax yellow, setae dark brownish yellow; *h* absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*, biseriate *acr*, uniseriate *dc* and 1 long strong posteriormost

dc; scutellum with two pairs of *sc* (basal pair very short, about 1/4 as long as apical pair). Legs yellow, but fore tibia brownish and tarsomere 5 dark brown. Setulae on legs blackish, setae black; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin; fore femur 1.1 times as thick as mid femur, 1.2 times as thick as hind femur. Fore femur with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta and two rows of close *av*; hind femur with 3 *ad* at base. Fore tibia apically with 1 *av* and 1 *pv*; mid tibia with two rows of short spine-like black *v*, apically with 1 *av* and 1 *pv*; hind tibia with 1 *ad* at middle, apically with 1 *av*. Hind tarsomere 1 with 3–4 short *av* and 1 short *v*. Wing hyaline, veins dark brown, crossvein *m-cu* vertical. Calypter brown with blackish setulae. Halter dark yellow.

Abdomen blackish with thin pale grey pollen. Setulae and setae blackish. Tergite 1 transversely strip-like, interrupted at middle; tergites 2–3 with pair of large lateral sclerites interrupted at middle; tergite 4 rather large, with group of short black lateral spines; tergite 5 anteriorly with pair of sclerites hidden within tergite 4, posteriorly with strap-like transverse sclerite; tergites 6–7 normal. Male genitalia (Figs. 4–6): Left tergal lobe rather narrow in dorsal view, with surstylus large and broad in lateral view; right tergal lobe rather large, fused with apically narrowed surstylus; left cercus rather thick, right cercus narrow and bent.

Female. Body length 2.1–2.2 mm, wing length 2.1–2.2 mm.

Type material – Holotype male, Vietnam, Lam Dong, Lac Duong, Bidoup Nui Ba National Park, Giang Ly Station, 1500 m, 2011. IX. 24, Xingyue Liu (CAU). Paratypes 3 females, Vietnam, Vinhphuc, Tamdao, 2011. VI. 23, Guoquan Wang (CAU).

Etymology – The species is named after the type locality Lam Dong.

Remarks – The new species is unique in the marking pattern of the thorax. It can be easily separated from other known species of the genus by the thoracic pleuron black with anterior 1/3 yellow (Yang & Gaimari 2005; Shamshev & Grootaert 2007).

Elaphropeza melinhana sp. nov.

Fig. 7

urn:lsid:zoobank.org:act:23D3B190-104E-4311-948D-4D0717CFB7FE

Diagnosis – Head yellow. Hind femur dark brown apically, with row of short thin *av*. Hind tibia with 1 *ad* at middle. Hind tarsomere 1 with 2 *v*. Scutellum and metanotum dark brown. Thoracic pleuron with meron and upper metapleuron blackish.

Description – Female. Body length 2.1 mm, wing length 2.1 mm.

Head yellow with thin grey pollen; setulae and setae blackish; eyes contiguous on face; ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna yellow except 1st flagellomere blackish; scape bare, shorter than pedicel; pedicel with circlet of blackish apical setulae; 1st flagellomere rather long, conical, 4.0 times longer than wide, short pubescent; arista relatively short (1.5 times longer than 1st flagellomere), blackish, short pubescent. Proboscis brownish yellow with blackish setulae; palpus yellow with blackish setulae and 1 black apical seta.

Thorax yellow with thin pale grey pollen; mesoscutum entirely yellow; scutellum black, metanotum blackish; meron blackish, metapleuron blackish at upper portion. Setulae on thorax yellow, setae blackish; *h* absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*, more or less quadriseriate *acr*, uniseriate *dc* and 1 long strong posteriormost *dc*; scutellum with two pairs of *sc* (basal pair very short, about 1/3 as long as apical pair). Legs yellow, but hind femur dark brown apically except extreme tip (Fig. 7); fore tibia brownish, tip of hind tibia brown, and tarsomere 5 dark brown. Setulae and setae blackish; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin; fore femur 1.1 times as thick as mid femur, mid and hind femora subequal in thickness; fore femur with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 5 *ad* at base, and with row of short weak *av*; fore tibia apically with 1 *av* and 1 *pv*; mid tibia with row of blackish *v*, apically with 1 *av* and 1 *pv*; hind tibia with 1 *ad* at middle, apically with 1 *av*. Hind tarsomere 1 with 2 *v* at basal half. Wing

hyaline, veins dark brown, crossvein *m-cu* vertical. Calypter brown with blackish setulae. Halter brown.

Abdomen yellow with grey pollen; setulae and setae blackish; tergites 1-3 membranous except tergites 2-3 each with pair of small subtriangular brown lateral sclerites interrupted at middle; tergite 4 rather large, black, with group of short black lateral spines; tergite 5 like a transverse strip, brown.

Male. Unknown.

Type material. – Holotype female, Vietnam, Vinh Phue, Me Linh Station, 2011. X. 2, Xingyue Liu (CAU).

Etymology – The species is named after the type locality Me Linh.

Remarks – The new species is similar to *E. singularis* sp. nov., but may be separated from the latter by the hind femur dark brown apically with row of weak hair-like *av*. In *E. singularis*, the hind femur is entirely yellow with one row of short spine-like *av*.

Elaphropeza parva sp. nov.

Figs. 8–10

urn:lsid:zoobank.org:act:C1331BAE-4053-49A8-B16B-F3430E753607

Diagnosis – Antenna entirely dark brown. Mesoscutum with a large triangular lateral spot. Hind tibia without *ad* at middle. Hind femur with 4 *av* apically.

Description – Male. Body length 1.8 mm, wing length 1.6 mm.

Head black with pale grey pollen; setulae and setae yellow; eyes contiguous on face; ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna dark brown; scape bare, shorter than pedicel; pedicel with circlet of blackish apical setulae; 1st flagellomere rather long, conical, 3.7 times longer than wide, short pubescent; arista relatively long (2.1 times longer than 1st flagellomere), blackish, short pubescent. Proboscis brownish yellow with blackish setulae; palpus yellow with blackish setulae and 1 blackish apical seta.

Thorax yellow with thin pale grey pollen; mesoscutum with a moderately large triangular lateral spot anteriorly extended to lateral margin of mesoscutum; scutellum and metanotum black;

sternopleuron with a small blackish ventral spot; meron blackish at narrow lower portion, metapleuron blackish. Setulae and setae on thorax yellow, h absent, 2 npl (posterior npl longer), 1 sa, 1 short psa, acr and dc uniformly short and not separated; scutellum with two pairs of sc (basal pair very short, about 1/4 as long as apical pair). Legs yellow, but fore tibia tinged brownish. Setulae and setae brown; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin. Fore femur 1.1 times as thick as mid femur, mid and hind femora subequal in thickness. Fore femur with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 4 short *ad* basally and 4 *av* apically. Fore tibia apically with 1 *av* and 1 *pv*; mid tibia with row of blackish short spine-like *v*, apically with 1 *av* and 1 *pv*; hind tibia without *ad* at middle, apically with 1 *av*. Wing hyaline, veins dark brown, crossvein *m-cu* oblique. Calypter brown with blackish setulae. Halter brown.

Abdomen dark brown with pale grey pollen. Setulae and setae blackish. Tergite 1 nearly linear, tergite 2 with a large trapezoid anterior incision; tergites 3-5 blackish with short black spines. Male genitalia (Figs. 8-10): Left tergal lobe rather narrow, with surstylus finger-like and slightly curved inward apically; right tergal lobe rather large, fused with apically distinctly widened surstylus; left cercus very long and apically strongly curved incurved, right cercus thin and finger-like.

Female. Unknown.

Type material – Holotype male, Vietnam, Vinh Phue, Me Linh Station, 2011. X. 2, Xingyue Liu (CAU).

Etymology – The specific name refers to the hind tibia with small dorsal setulae, but without distinct setae.

Remarks – The new species is somewhat similar to *E. obliquinervis* de Meijere, but may be separated from the latter by the scutum without median vitta in the anterior part. In *E. obliquinervis*, the scutum has the median vitta in the anterior part (Shamshev & Grootaert 2007).

Elaphropeza postica sp. nov.

Figs. 11–13

urn:lsid:zoobank.org:act:6E756ABF-E2C0-4C35-9B2F-BEC4BA647AAB

Diagnosis – Mesoscutum entirely yellow; scutellum and metanotum black. Thoracic pleuron with only one black postero-upper spot. Hind tibia with 1 short weak *ad* near middle.

Description – Male. Body length 2.1 mm, wing length 1.7 mm.

Head black with pale grey pollen. Eyes contiguous on face. Setulae on head yellow, setae brownish yellow. Ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna dark brown except scape and pedicel yellow; scape bare, shorter than pedicel; pedicel with cirlet of blackish apical setulae; 1st flagellomere moderately long, conical, 2.5 times longer than wide, short pubescent; arista long (3.2 times longer than 1st flagellomere), dark brown, short pubescent. Proboscis brownish yellow with blackish setulae; palpus yellow with blackish setulae and 1 blackish apical seta.

Thorax yellow with thin pale grey pollen; mesoscutum without spot; scutellum and metanotum black; pleuron with only one black poster-upper spot on upper hypopleuron and entire metapleuron. Setulae on thorax yellow, setae dark yellow, h absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*; *acr* and *dc* multiseriate, uniformly short, not separated; scutellum with two pairs of *sc* (basal pair very short, about 1/4 as long as apical pair). Legs yellow. Setulae and setae on legs yellow; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin. Fore femur 1.2 times as thick as mid femur, 1.1 times as thick as hind femur. Fore femur with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 4 *ad* at base. Fore tibia apically with 1 *av* and 1 *pv*; mid tibia with row of brown short spine-like *v*, apically with 1 *av* and 1 *pv*; hind tibia with 1 short weak *ad* near middle, apically with 1 *av*. Hind tarsomere 1 without *v*. Wing hyaline, veins dark brown, crossvein *m-cu* oblique. Calypter brown with blackish setulae. Halter dark yellowish.

Abdomen yellow or dark yellow except tergites

2-5 dark brown, with pale grey pollen. Setulae and setae blackish. Tergite 1 wholly membranous, without transversely strip-like sclerite; tergite 2 distinct, band-like; tergites 3-5 with group of short black lateral spines. Male genitalia (Figs. 11-13): Left tergal lobe rather narrow and short, with surstylus short finger-like and curved inward apically; right tergal lobe rather large, fused with apically narrowed surstylus; left cercus very long and finger-like, right cercus short finger-like.

Female. Unknown.

Type material – Holotype male, Vietnam, Vinh Phue, Me Linh Station, 2011. X. 2, Xingyue Liu (CAU).

Etymology – The specific name refers to the thoracic pleuron with only one black poster-upper spot.

Remarks – The new species is similar to *E. melanura* Bezzi from Taiwan of China, but may be separated from the latter by the thoracic pleuron with one black postero-upper spot, hind tibia with 1 short weak *ad* near middle and crossvein *m-cu* oblique. In *E. melanura*, the thoracic pleuron is entirely yellow, the hind tibia has 1 distinct *ad*, crossvein *m-cu* is transverse (Shamshev & Grootaert 2007).

***Elaphropeza singularis* sp. nov.**

Figs. 14–16

urn:lsid:zoobank.org:act:321052E1-6D75-4056-850D-9DBC08BD942A

Diagnosis — Head yellow. Hind femur entirely yellow, with row of short spine-like *av*. Hind tibia with 1 *ad* at middle. Hind tarsomere 1 with 3 *v*. Scutellum and metanotum dark brown. Thoracic pleuron only with meron mostly blackish.

Description — Male. Body length 2.3 mm, wing length 2.2 mm.

Head yellow with thin grey pollen; setulae and setae brownish yellow; eyes contiguous on face; ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna yellow except 1st flagellomere blackish; scape bare, shorter than pedicel; pedicel with circlet of blackish apical setulae; 1st flagellomere rather long, conical, 5.0 times longer than wide, short pubescent; arista relatively short (1.3 times longer than 1st flagellomere), blackish, short pubescent.

Proboscis brownish yellow with blackish setulae; palpus yellow with blackish setulae.

Thorax yellow with thin pale grey pollen; mesoscutum entirely yellow; scutellum black, metanotum blackish except small lateral area brownish yellow; meron mostly blackish. Setulae on thorax yellow, setae blackish; *h* absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*, more or less quadriseriate *acr*, uniseriate *dc* and 1 long strong posteriormost *dc*; scutellum with two pairs of *sc* (basal pair very short, about 1/3 as long as apical pair). Legs yellow, fore tibia brownish, tip of hind tibia dark brown, and tarsomere 5 dark brown. Setulae and setae blackish; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin; fore femur 1.1 times as thick as mid femur, mid and hind femora subequal in thickness; fore femur with 1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 6 *ad* at base, and with row of short spine-like *av*; fore tibia apically with 1 *av* and 1 *pv*; mid tibia with row of short spine-like black *v*, apically with 1 *av*; hind tibia with 1 *ad* at middle, apically with 1 *av*. Hind tarsomere 1 with 3 *v* at basal half. Wing hyaline, veins dark brown, crossvein *m-cu* nearly vertical. Calypter brown with blackish setulae. Halter brown.

Abdomen yellow with grey pollen; setulae and setae blackish; tergites 1-3 nearly membranous except tergites 2-3 brown, each with pair of small subtriangular lateral sclerites interrupted at middle; tergite 4 rather large, black, with group of short black lateral spines; tergite 5 like a transverse strip, brown. Male genitalia (Figs. 14-16): Left tergal lobe rather narrow in dorsal view, with surstylus large and broad in lateral view; right tergal lobe rather large, fused with apically narrowed surstylus; left and right cerci short and finger-like.

Female. Unknown.

Type material — Holotype male, Vietnam, Vinh Phue, Me Linh Station, 2011. X. 2, Xingyue Liu (CAU).

Etymology — The specific name refers to the hind tibia with a single *ad* at middle.

Remarks — The new species is somewhat similar to *E. xanthocephala* Bezzi from Taiwan of China, but may be separated from the latter by the thoracic meron entirely blackish and metapleuron

yellow. In *E. xanthocephala*, the thoracic meron is yellow, and the metapleuron is black (Shamshev & Grootaert 2007).

Elaphropeza xingyuei sp. nov.

Figs. 17–19

urn:lsid:zoobank.org:act:AF0403DF-1CBC-41CD-BB53-CDB3298B5DA5

Diagnosis — Mesoscutum with a small narrow lateral spot bordered with lateral margin of mesoscutum; scutellum black at middle; metanotum entirely yellow. Pleuron brownish at narrow lower portions of both mesopleuron and hypopleuron and dark brown at upper portion of metapleuron.

Description — Male. Body length 2.1 mm, wing length 2.2 mm.

Head black with grey pollen; setulae and setae blackish; eyes contiguous on face; ocellar tubercle with 2 *oc* and 2 short posterior setulae; 1 *vt* curved inward, slightly longer than *oc*. Antenna brownish yellow with 1st flagellomere dark brown; scape bare, shorter than pedicel; pedicel with circlet of apical setulae; 1st flagellomere moderately long, conical, 3.6 times longer than wide, short pubescent; arista long (2.9 times longer than 1st flagellomere), dark brown, short pubescent. Proboscis brownish yellow with black setulae; palpus yellow with blackish setulae and 1 blackish apical seta.

Thorax yellow with thin pale grey pollen; pronotum dark brown medially; mesoscutum with a small narrow black lateral spot bordered with lateral margin of mesoscutum; scutellum black at middle; metanotum entirely yellow. Pleuron brownish at narrow lower portions of both mesopleuron and hypopleuron and dark brown at upper portion of metapleuron. Setulae and setae on thorax blackish, *h* absent, 2 *npl* (posterior *npl* longer), 1 *sa*, 1 short *psa*; biseriate *acr*, uniseriate *dc* and 1 long strong posteriormost *dc*; scutellum with two pairs of *sc* (basal pair very short, about 1/4 as long as apical pair). Legs yellow except fore and mid tibiae and tarsi brown, hind tibia and tarsus brownish yellow with tarsomere 5 brown. Setulae and setae blackish; fore coxa with 2 *a* at base, apically with 2 *a*; mid coxa apically with 3 *a*; hind coxa with 1 outer seta at apical margin. Fore femur as thick as mid femur, 1.1 times as thick as hind femur. Fore femur with

1 long thin *pv* at extreme base; mid femur with 1 preapical anterior seta; hind femur with 3–4 *ad* at base. Fore tibia apically with 1 *av* and 1 *pv*; mid tibia with row of blackish short spine-like *v*, apically with 1 *av*, 1 *pv* and 1 short thick black ventral spine; hind tibia with 2 *ad* at middle, apically with 1 *av*. Hind tarsomere 1 with 2 short *av* and 2 short *pv* at base. Wing hyaline, veins dark brown, crossvein nearly vertical. Calypter brown with blackish setulae. Halter brown.

Abdomen yellow to dark yellow with grey pollen; setulae and setae blackish; tergites 1–3 membranous except tergites 2–3 each with one small trapezoid lateral sclerite dark brown; tergites 4–5 blackish, each with one group of short black lateral spines. Tergite 4 rather large; tergite 5 anteriorly with a separated posterior transverse strip. Male genitalia (Figs. 17–19): Left tergal lobe rather wide in dorsal view, with surstylus large and broad in lateral view; right tergal lobe rather large, fused with apically narrowed and truncated surstylus; left cercus short and rather thick, right cercus short and rather narrow.

Female. Body length 2.0–2.2 mm, wing length 2.1–2.2 mm. Similar to male.

Type material — Holotype male, Vietnam, Dong Nai, Tan Phu, Cat Tien National Park 2011. IX. 19, Xingyue Liu (CAU). Paratypes 3 females, same data as holotype.

Etymology — The species is named after the collector Dr. Xingyue Liu.

Remarks — The new species is somewhat similar to *E. anae* Yang et Gaimari from Guangxi of China, but can be separated from the latter by a small black lateral spot bordered with the lateral margin of the mesoscutum and scutellum black at middle. But in *E. anae*, the mesoscutum has a brown lateral spot separated from the lateral margin of the mesoscutum, and the scutellum is entirely yellow (Yang & Gaimari 2005).

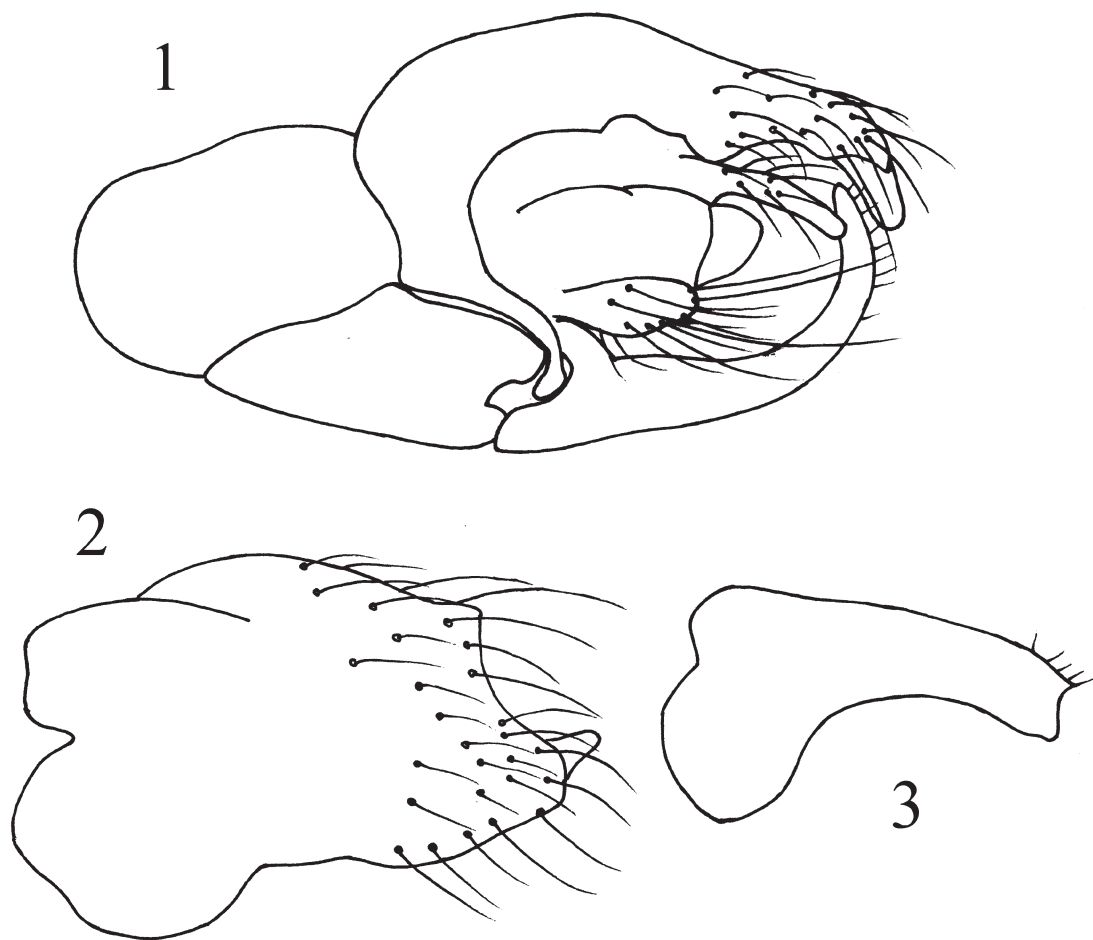
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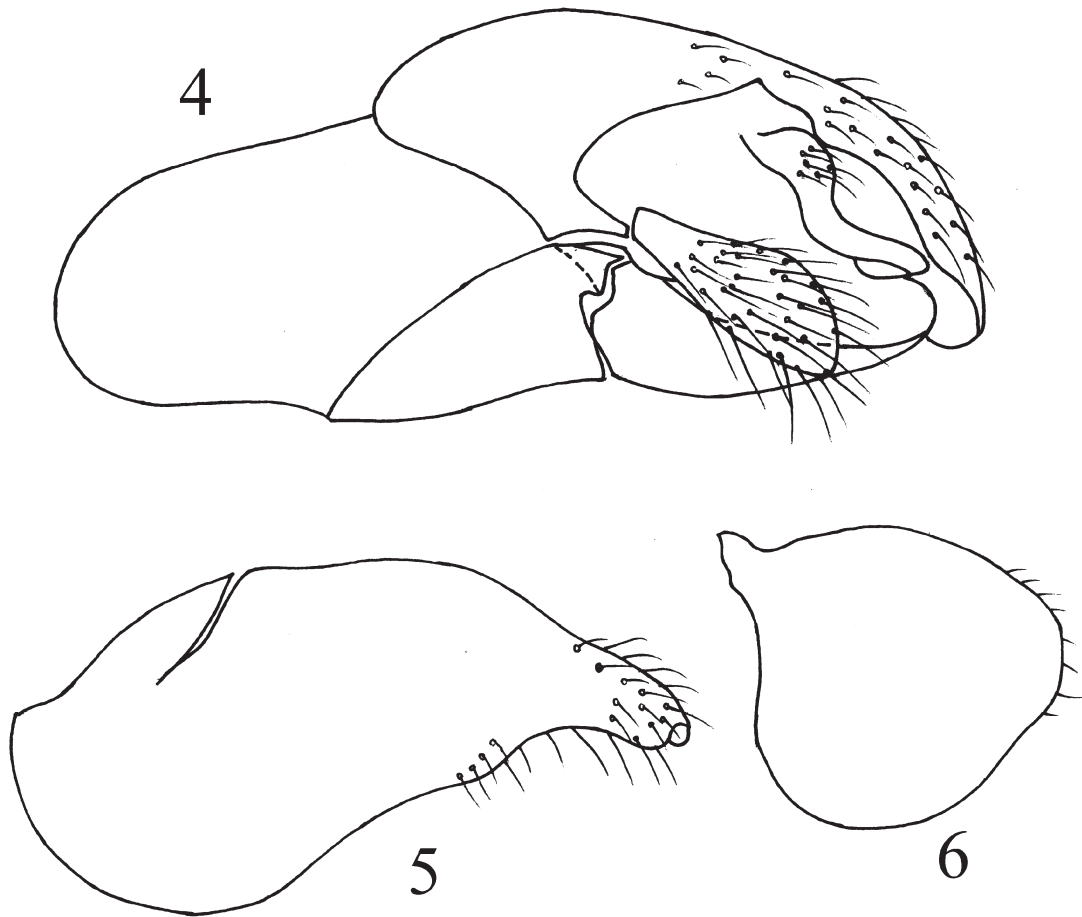
(31272354), the Ministry of Science and Technology of the Republic of China (MOST Grant 2012FY111100, 2011FY120200).

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Figs. 1–3. *Elaphropeza biseta* sp. nov. 1. Male genitalia, dorsal view; 2. right tergal lobe; 3. left surstylus.



Figs. 4–6. *Elaphropeza lamdongensis* sp. nov. 4. Male genitalia, dorsal view; 5. right tergal lobe; 6. left surstylus.

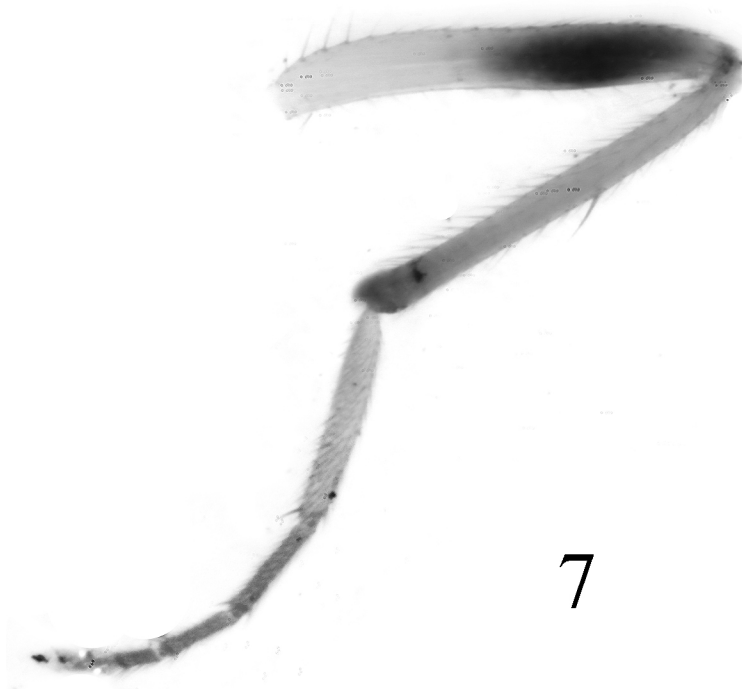
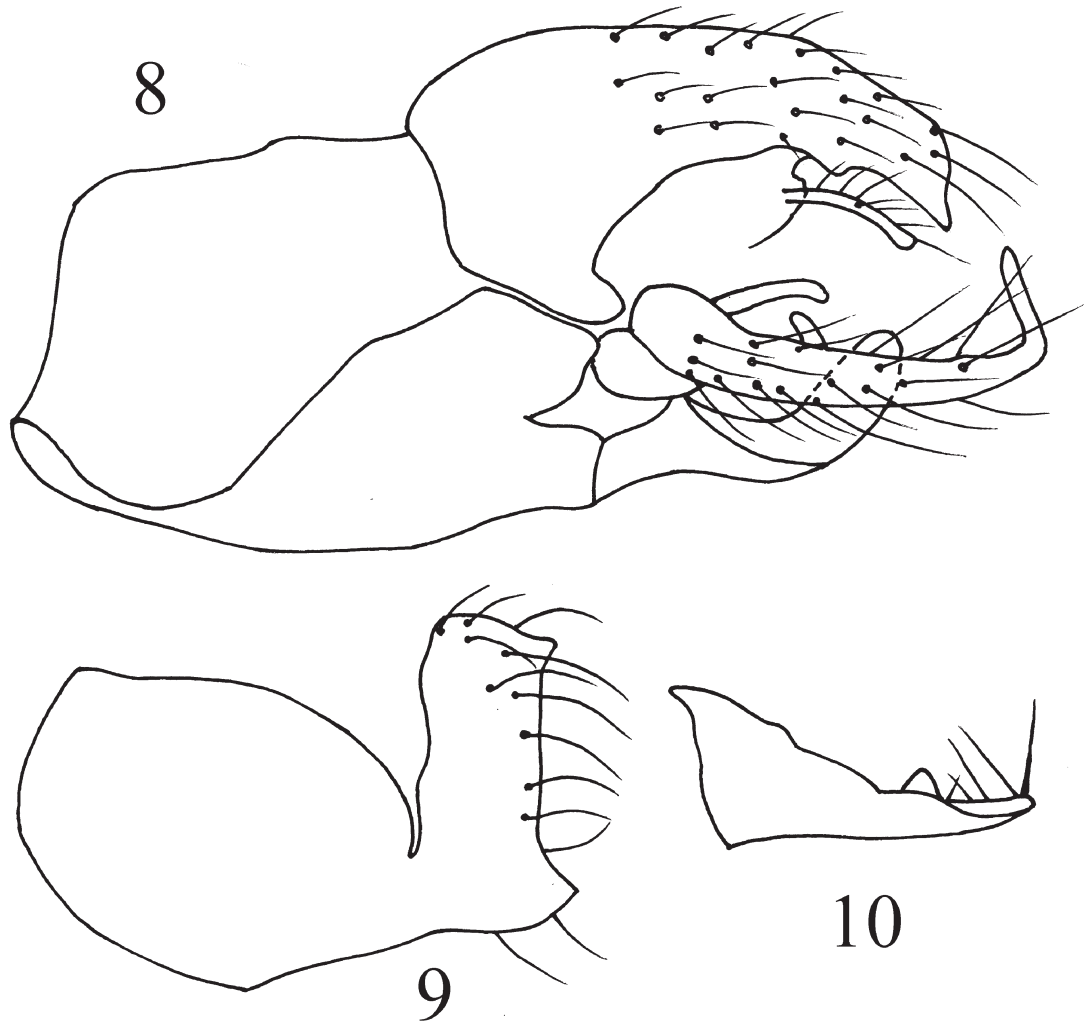
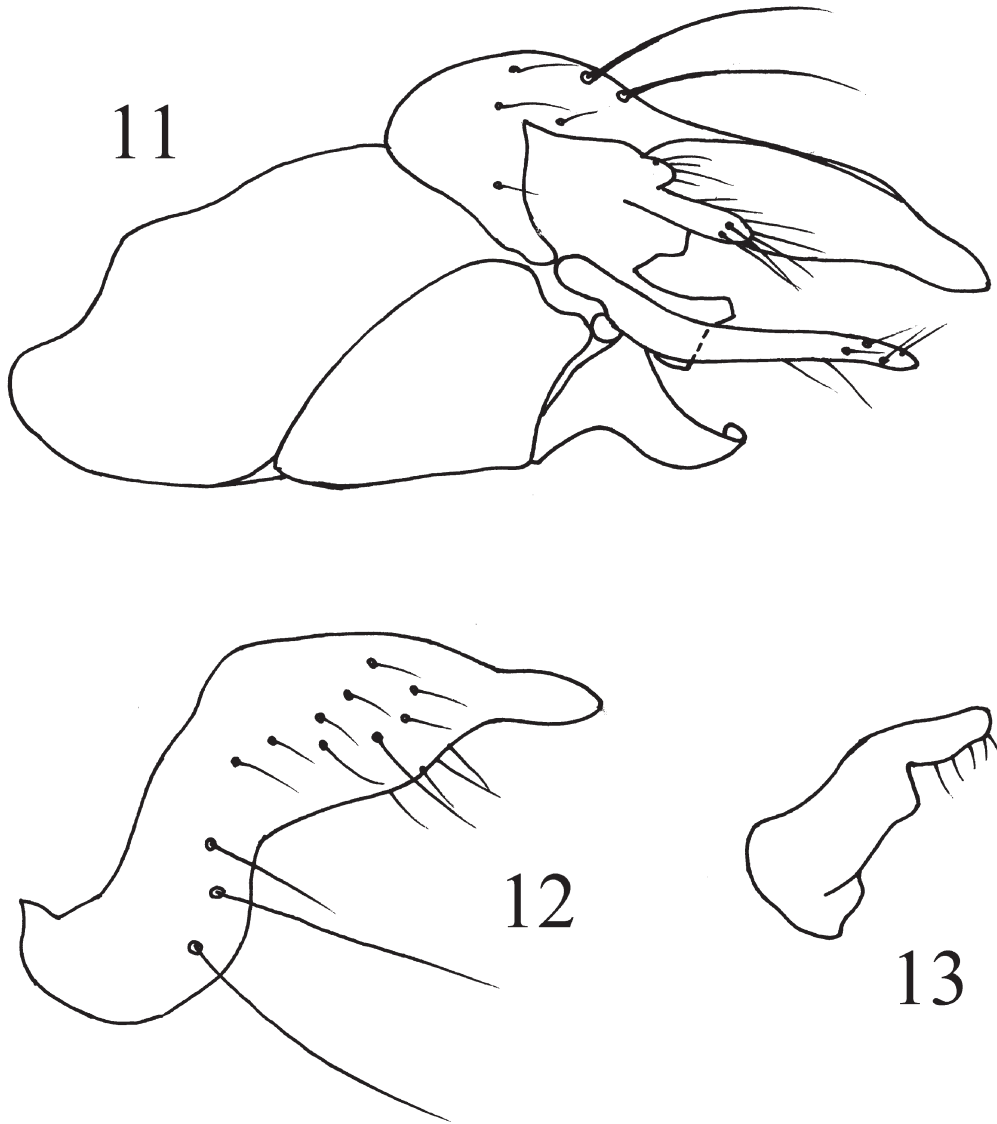


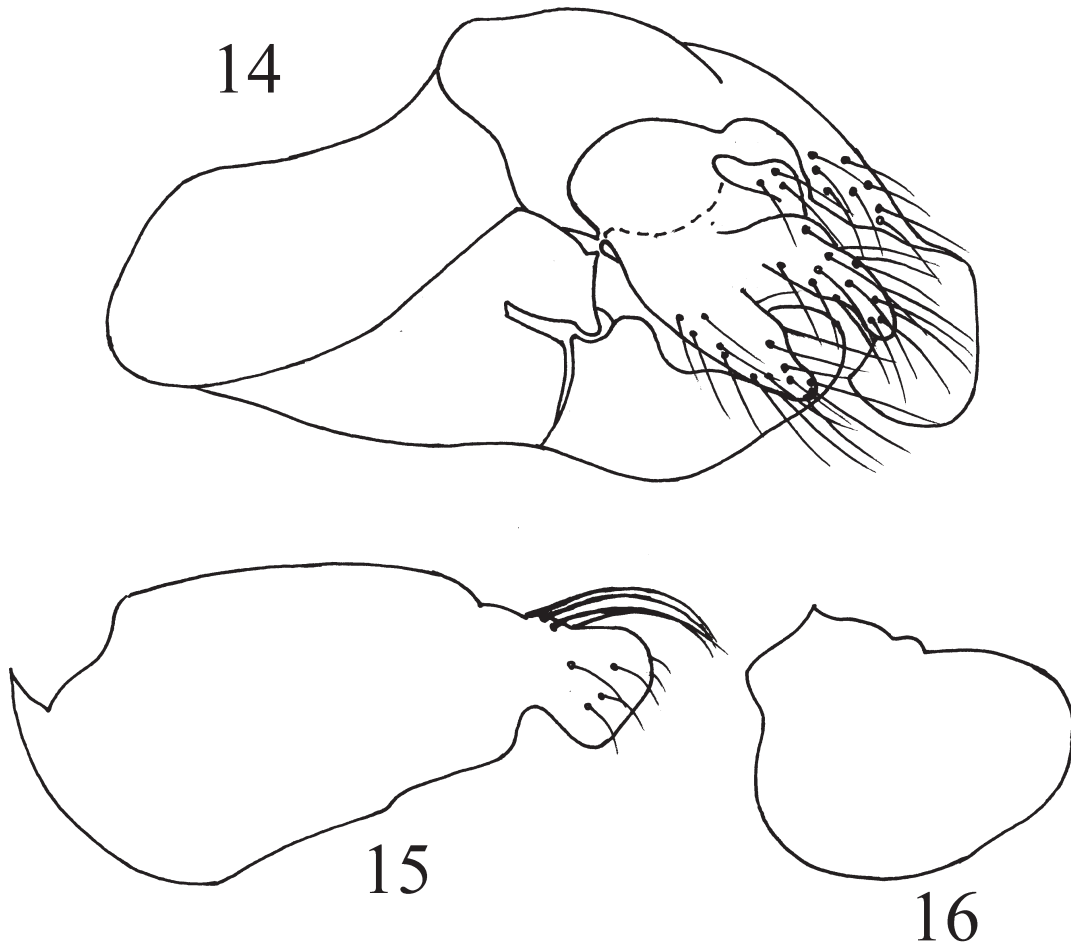
Fig. 7. *Elaphropeza melinhana* sp. nov. 7. Hind leg, anterior view.



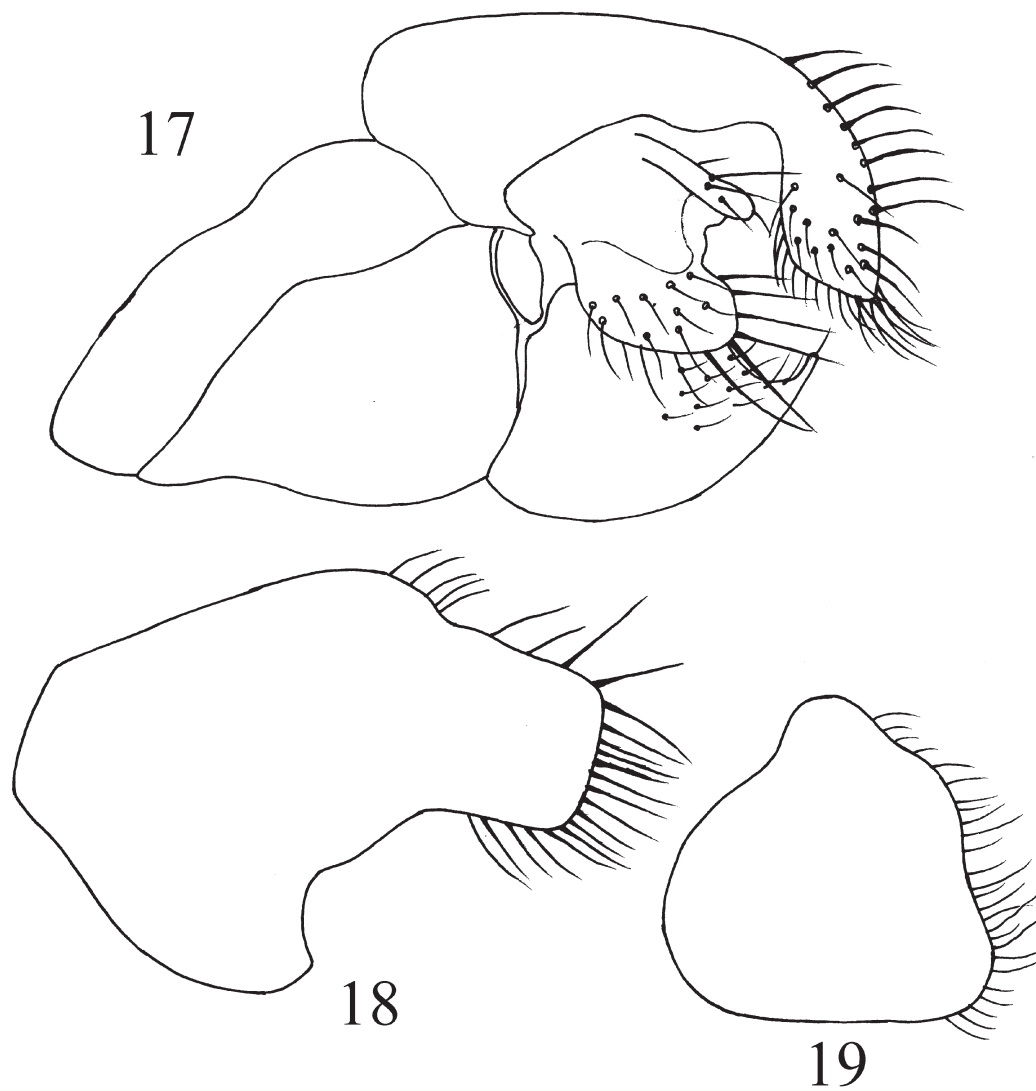
Figs. 8–10. *Elaphropeza parva* sp. nov. 8. Male genitalia, dorsal view; 9. right tergal lobe; 10. left surstylus.



Figs. 11–13. *Elaphropeza postica* sp. nov. 11. Male genitalia, dorsal view; 12. right tergal lobe; 13. left surstylus.



Figs. 14–16. *Elaphropeza singularis* sp. nov. 14. Male genitalia, dorsal view; 15. right tergal lobe; 16. left surstylus.



Figs. 17–19. *Elaphropeza xingyuei* sp. nov. 17. Male genitalia, dorsal view; 18. right tergal lobe; 19. left surstylus.