

# One new species in the genus *Elaphropeza* (Diptera: Empididae) from Chongqing, China

Renhui WU<sup>1</sup>, Chunmin ZHANG<sup>2</sup>, Naizhong CHEN<sup>3</sup>, Ding YANG<sup>1</sup> <sup>①</sup>

1. Department of Entomology, College of Plant Protection, China Agricultural University, Beijing 100193, China

2. Tongliao Plant Protection and Quarantine Center, Tongliao, Inner Mongolia 028000, China

3. Chinese Academy of Inspection and Quarantine, Beijing 100123, China

**Abstract:** *Elaphropeza* is distributed worldwide with over 220 known species, of which 61 species were known to occur in China. Two species of *Elaphropeza* are reported from Chongqing for the first time. One species, *Elaphropeza chongqingana* sp. nov., is described as new to science. A key to the species of *Elaphropeza* from Chongqing is presented.

**Key words:** dance fly; taxonomy; key

中国重庆黄隐肩舞虻属 *Elaphropeza* 一新种 (双翅目: 舞虻科)

巫仁辉<sup>1</sup>, 张春敏<sup>2</sup>, 陈乃中<sup>3</sup>, 杨定<sup>1①</sup>

1. 中国农业大学植物保护学院昆虫学系, 北京 100193; 2. 通辽市植保植检中心, 内蒙古 通辽 028000;

3. 中国检验检疫科学研究院, 北京 100123

**摘要:** 黄隐肩舞虻属 *Elaphropeza* 已知 220 余种, 分布世界各地, 我国已知 61 种。本文首次报道重庆隐肩舞虻属 2 种, 其中包括 1 新种: 重庆黄隐肩舞虻 *Elaphropeza chongqingana* sp. nov., 并编制了重庆黄隐肩舞虻属的分种检索表。

**关键词:** 舞虻; 分类; 检索表

## Introduction

*Elaphropeza* Macquart is the second largest genus in the subfamily Tachydromiinae with over 220 known species known worldwide (Yang *et al.* 2007; Shamshev & Grootaert 2007; Grootaert 2019). It can be identified by the combination of the following features: occiput convex; antenna not upturned; arista apical; mesopleuron bare; wing with shortened basal cells; and abdominal intersegmental modifications usually present between tergites 3–5 or 4–5 (Shamshev & Grootaert 2007).

The Oriental species of *Elaphropeza* were reviewed by Shamshev & Grootaert (2007). The species from the Chinese mainland were reviewed by Yang & Gaimari (2005). Yang *et al.* (2006) revised species of *Elaphropeza* from Guangdong. 14 species were recorded from Taiwan by Wang *et al.* (2012). Grootaert (2019) revised species of *Elaphropeza* from Hong

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① Corresponding author, E-mail: dyangcau@126.com

Kong. Up to now, 61 species have been known to occur in China (Yang *et al.* 2018; Luo *et al.* 2023). Here two species including a new one are recorded from Chongqing for the first time, based on the specimens collected by Mr. Xulong CHEN in Yingtiaoling National Nature Reserve. A key to the species of *Elaphropeza* from Chongqing is provided.

## Material and methods

The specimens were examined and illustrated with ZEISS Stemi 2000-c. Genitalic preparations were made by macerating the apical portion of the abdomen in cold 10% NaOH for about 6 hours. Type specimens are deposited in the Entomological Museum of China Agricultural University, Beijing (CAU). The following abbreviations are used: acr — acrostichal bristle(s); ad — anterodorsal bristle(s); av — anteroventral bristle(s); dc — dorsocentral bristle(s); h — humeral bristle(s); npl — notopleural bristle(s); oc — ocellar bristle(s); prsc — prescutellar bristle(s); psa — postalar bristle(s); pv — posteroventral bristle(s); sa — supraalar bristle(s); sc — scutellar bristle(s); vt — vertical bristle(s).

## Taxonomy

### Key to species of *Elaphropeza* from Chongqing

1. First flagellomere elongated with nearly straight ventral margin, 3.0 times longer than wide; apical 1/2 of hind femur black; hind tibia black ..... *E. apiciniger*
- . First flagellomere short with more or less convex ventral margin, 2.0 times longer than wide; apical 2/5 of hind femur black; hind tibia yellow ..... *E. chongqingana* **sp. nov.**

#### 1. *Elaphropeza apiciniger* (Yang, An & Gao, 2002)

*Drapetis apiciniger* Yang, An & Gao 2002: 33. Type locality: China: Henan, Baotianman.

**Specimens examined.** 2♂, China, Chongqing, Wuxi, Yingtiaoling, Nanning, Huangcaoping, 2,104 m, 30-VI-2022, Xulong CHEN (CAU).

**Diagnosis.** First flagellomere long, 3 times longer than wide. Apical half of hind femur blackish. Hind tibia blackish. Hairs on mesonotum short and dense. Palpus dark brown.

**Distribution.** China (Chongqing, Hubei, Henan).

#### 2. *Elaphropeza chongqingana* **sp. nov.** (Fig. 1)

Male. Body length 2.1–2.2 mm, wing length 2.3–2.4 mm.

Head black with pale gray pollinosity. Setulae and setae on head blackish. Eyes very narrowly separated on face, face linear. Ocellar tubercle with 2 rather long oc and 2 short posterior setulae; 1 rather long vt curved inward. Antenna brownish yellow except first flagellomere and arista dark brown; scape bare, shorter than pedicel; pedicel with circlet of blackish apical setulae; first flagellomere short with convex ventral margin, 2.0 times longer than wide, short blackish pubescent; arista very long (4.5 times longer than 1st flagellomere), short blackish pubescent. Proboscis brown with dark brown setulae; palpus somewhat oval, brown with dark brown setulae and 1 long dark brown apical seta.

Thorax black with thin pale gray pollinosity. Setulae and setae on thorax blackish; setulae on mesoscutum dense; acr and dc not separated; h absent, 2 npl, 1 sa, 1 psa, 1 prsc;

scutellum with two pairs of sc (basal pair very short and weak, about 1/5 as long as very long apical pair). Legs yellow except apical 2/5 of hind femur black; all of tarsomere 5 brown. Setulae and setae on legs brown to dark brown; fore coxa with several anterior setae; mid coxa apically with 3 long anterior setae; hind coxa with 2 outer setae. Fore femur 1.1 times as thick as mid femur, mid and hind femora subequal in thickness. Fore and mid femora each with 1 long pv at extreme base; mid femur with 1 preapical anterior seta; hind femur with 5 erect dorsal setae at base, apically with row of 8 av. Fore tibia apically with 1 long pv. Mid tibia with row of short spine-like blackish ventral setae, apically with 1 av and 1 pv. Hind tibia without ad, apically with 1 av; apical inner projection very short and obtuse with dense dark brown pubescence. Hind tarsomere 1 with several irregular, short av. Wing nearly hyaline, veins brown to dark brown; R and M somewhat divergent apically, crossvein m-cu somewhat oblique. Calypter brownish with brown setulae. Halter brown.

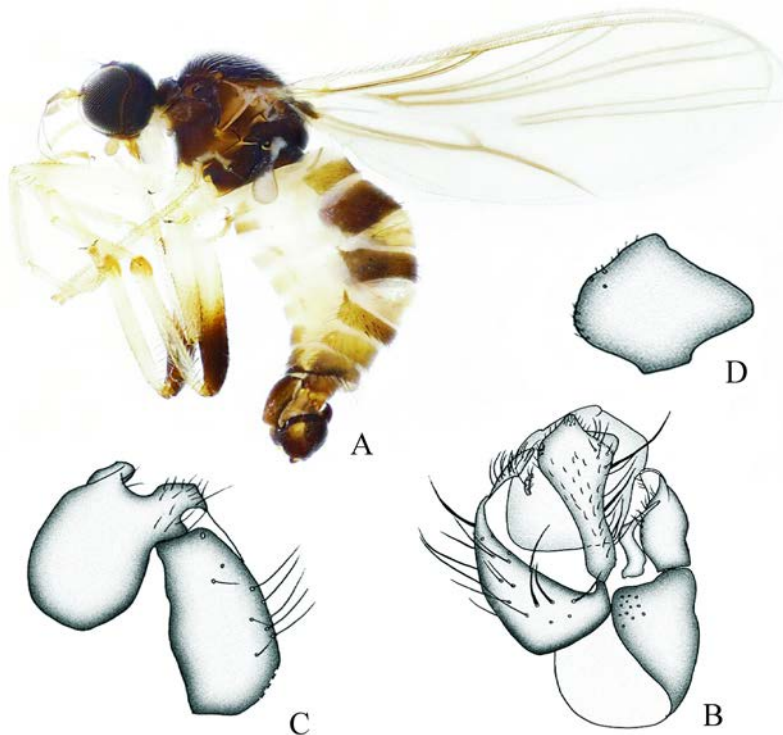


Figure 1. *Elaphropeza chongqingana* sp. nov. A. Male habitus, lateral view; B. Male genitalia, dorsal view; C. Right epandrial lamella; D. Left surstylus.

Abdomen nearly straight, dark brown with thin pale gray pollinosity except sternites 3–5 brownish yellow. Tergite 1 stripe-like, not interrupted at middle. Setulae and setae on abdomen dark brown; tergites 3–5 with short black spine-like bristles laterally, tergites 4–5 each with wide brownish anterior band brownish pubescent. Hypopygium swollen, nearly as thick as pregenital segments.

Male genitalia (Fig. 1). Left surstylus short wide, wider than long, apically somewhat acute. Right epandrial lobe rather long, somewhat broad; right surstylus partly separated, very large and broad, somewhat quadrate with weak apical incision and distinct lateral incision.

Left cercus very long, apically distinctly widened, short finger-like at extreme tip; right cercus very short, finger-like, about 1/10 as long as left cercus.

Female. Body length 1.9–2.1 mm, wing length 2.2–2.3 mm. Similar to male.

**Holotype.** ♂, **China**, Chongqing, Wuxi, Yingtiaoling, Naning, Huangcaoping, 2,104 m, 30-VI-2022, Xulong CHEN (CAU). **Paratypes.** 1♂2♀, Chongqing, Wuxi, Yingtiaoling, Nanying, Qingcaoping, 1,843 m, 15-VIII-2022, Xulong CHEN (CAU).

Etymology. The specific epithet refers to the type locality Chongqing.

Diagnosis. Thorax entirely black; hind tibia yellow; apical 2/5 of hind femur black; first flagellomere short, 2.0 times longer than wide; palpus dark brown.

Remarks. This species is somewhat similar to *Elaphropeza apiciniger* (Yang, An & Gao, 2002), but may be separated from the latter by the following features: first flagellomere short with more or less convex ventral margin, 2.0 times longer than wide; apical 2/5 of hind femur black; hind tibia yellow. In *E. apiciniger*, the first flagellomere is relatively long with the nearly straight ventral margin 3.0 times longer than wide; the hind femur is black at apical 1/2; and the hind tibia is black (Yang *et al.* 2002).

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