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Three New and Two New Record Species of the Genus *Dichaetomyia* Malloch (Diptera: Muscidae) from China †

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Abstract: The genus *Dichaetomyia* Malloch, 1921 of Muscidae from China is recorded, and an updated identification key to Chinese species based on males is provided. Three new species, namely *Dichaetomyia villscutellata* **sp. n.**, *Dichaetomyia bimaculata* **sp. n.**, and *Dichaetomyia maculiventra* **sp. n.**, are described, along with two new country records, *Dichaetomyia varicauda* Emden, 1965, and *Dichaetomyia latistriata* Malloch, 1924. Photographs of the habitus and male genitalia, as well as illustrations of the male genitalia of the new species and new records, are provided.

Keywords: taxonomy; new species; key; distribution

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1. Introduction

The genus *Dichaetomyia* was established by Malloch (1921), with *Dichaetomyia polita* Malloch, 1921, designated as the type species [1]. Subsequent taxonomic revisions have led to the transfer of numerous species from other genera into *Dichaetomyia* Malloch, 1921. Regional catalogs by Pont recorded the genus' diversity in the Oriental (87 species) [2,3], Ethiopian (33 species) [4], and Australian (74 species) Regions [2–4]. Shinonaga and Kano recorded six species from the Palaearctic Region [5]. Recent contributions to the Oriental Region fauna include works by Shinonaga and Singh [6], Shinonaga and Thinh [7], Shinonaga [8–10], and Pont and Evenhuis [11]. Zielke's comprehensive studies on Madagascar's fauna, including revisions and redescriptions of existing species, have greatly enhanced the genus' taxonomy [12–18]. Currently, 366 species of *Dichaetomyia* are recognized globally [19].

In the Ethiopian Region, the genus is divided into two subgenera: *Dichaetomyia* s.str. and *Panaga* Curran, with most species endemic to Madagascar. A total of 70 species of the region have been described, with 38 species classified under the subgenus *Dichaetomyia* and 32 under *Panaga* [12,13,18,20]. These two subgenera can be distinguished by the presence of setulae or stiff hairs on the greater ampulla (infra-alar bulla) in *Panaga*, whereas these structures are absent in *Dichaetomyia*. The metallic green, blue, or violet species of the subgenus *Dichaetomyia* were primarily described by Zielke under the genus *Annaria* Zielke, 1972, which was based solely on their metallic coloration [21–23]. Pont later synonymized *Annaria* with *Dichaetomyia* [4]. Notably, except for the 70 species in the Ethiopian Region, no other species in this genus have been placed in the subgenus.

Research on Chinese *Dichaetomyia* commenced relatively recently. Fan [24] recorded 16 species, and Xue and Zhao [25] identified 24 species of this genus. Subsequent contributions include descriptions of two new species by Feng et al. [26,27] and five new species by Xue and Liu [28]. To date, a total of 34 species are known in China, with 3 species distributed in the Palearctic Region and 31 species in the Oriental Region [29–32].

This genus is diagnosed by the following characteristics: the lower margin of the posterior spiracle has at least a row of setae; the prosternum has setae on the sides; the anepimeron is setulose; the radial node and ventral face of the basal R_{4+5} have setula; vein M_1 is only slightly curved forwards before the apex; the lower calypter lacks a lobe (*Phaonia* type); the anterior part of the metepisternum has short hairs; and the anatergite has short hairs or is bare [1,24,25].

Adults are most frequently collected through two primary methods: direct collection from leaves or sweep-netting of vegetation. They have been trapped in multiple trap types, such as carrion-baited blowfly traps, Malaise traps, and light traps. Some species exhibit anthropophilic tendencies, with collection records from human feces and indoor environments. Adults may pose limited hygienic significance due to their potential role as mechanical vectors for pathogens associated with fecal matter and decomposing organic substrates. The larvae are typically saprophagous, often found in decaying organic matter [33].

This study describes three new species and report two new records of the genus from China. An updated identification key to all known Chinese species in the genus and additional distribution information are provided.

2. Materials and Methods

All materials were collected between 2013 and 2023 using sweep netting and Malaise traps, comprising over a thousand specimens. These specimens are deposited in the Insect Collection of Henan University of Science and Technology, Luoyang, China (HAUST). The data collection for this study was conducted between September 2022 and February 2025. This study focused on 38 specimens selected based on morphological characteristics, with particular attention to terminalia.

External morphological characters were examined using a Zeiss Stemi 305 stereomicroscope. Habitus photographs were captured with a Canon EOS 5DsR camera (Tokyo, Japan) fitted with a Laowa FF 100mm F2.8 CA-Dreamer Macro 2× lens (Hefei, China), and photographs stacks were processed using Helicon Focus 7 software. Male genitalia were photographed with the same camera system coupled to a Mitutoyo M Plan Apo 10× objective (Tokyo, Japan) and illustrated using SAI Ver.2 software. All photographs were edited in Adobe Photoshop CC 2017.

For genitalic preparations, the abdominal apex was softened in warm lactic acid for 5 min, rinsed in distilled water, and examined in glycerin. Cleared genitalia were preserved in glycerin within microvials pinned below specimens. For alcohol-preserved specimens, genitalia were stored in separate alcohol-filled tubes within the same vial as the specimen.

The morphological nomenclature follows that of Cumming and Wood [34]. Body length was measured in millimeters (mm) from the anterior margin of the head without the antenna to the apex of the abdomen. The following abbreviations are used in the text: *ad*—anterodorsal seta; *av*—anteroventral seta; *d*—dorsal seta; *dc*—dorsocentral seta; *fr*—frontal seta; *h*—humeral seta; *ial*—intra-alar seta; M_1—branch of vein M; R_{4+5}—branches of 4th and 5th ridial vein; m-m, medial crossvein; *npl*—notopleural seta; *kepst*—katepisternal seta; *orb*—orbital seta; *p*—posterior seta; *pal*—postalar seta; *pd*—posterodorsal seta; *ph*—posthumeral seta; *pv*—posteroventral seta; r-m—radial-medial crossvein; *sa*—supra-alar seta; Sc—subcostal.

3. Results

3.1. Taxonomy

Treatment of Species

Dichaetomyia villscutellata **sp. n.**

(Figures 1a–e and 2a–f)

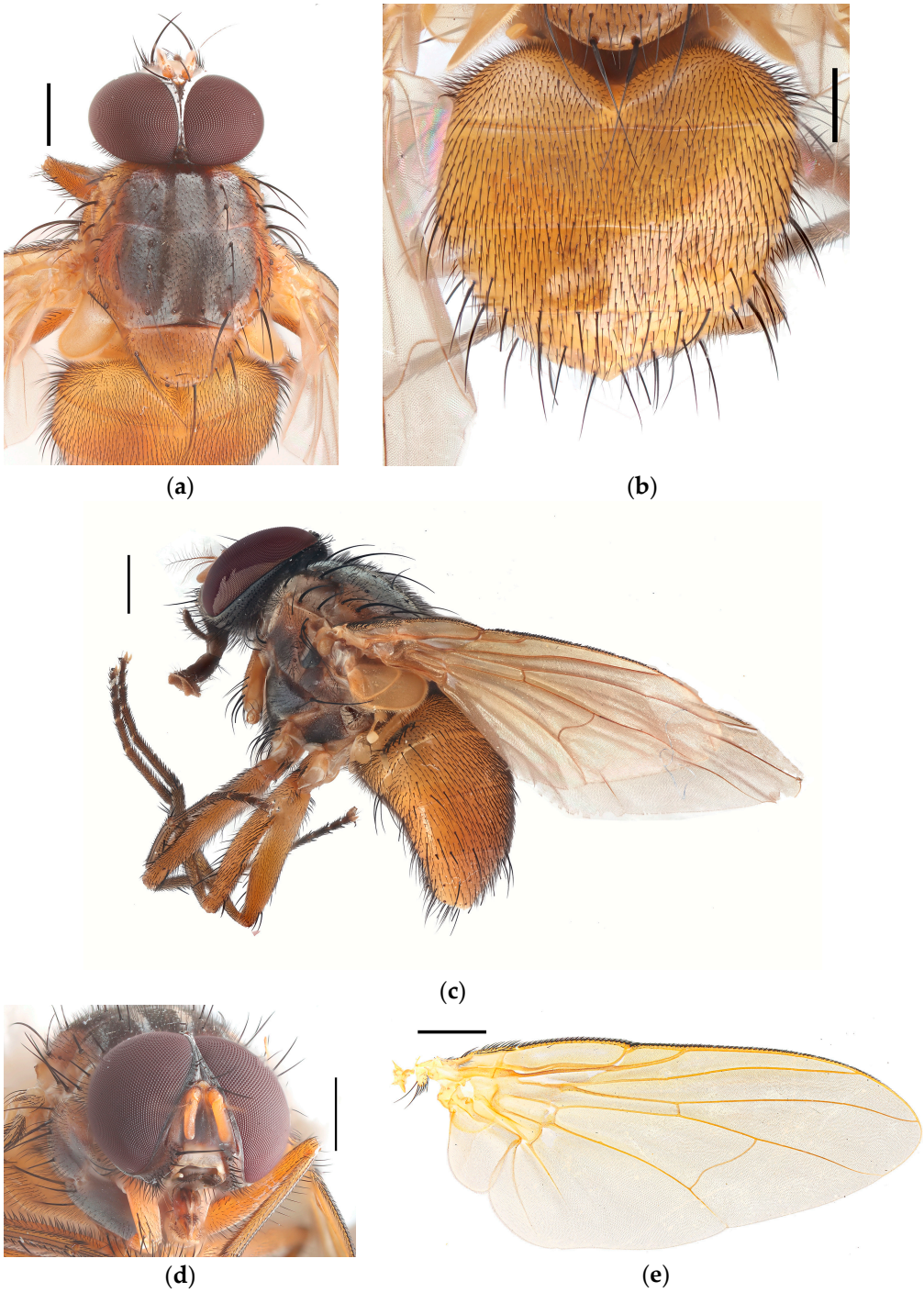


Figure 1. *Dichaetomyia villscutellata* **sp. n.** male. (**a**) Head and thorax, dorsal view; (**b**) abdomen, dorsal view; (**c**) habitus (without forelegs), lateral view; (**d**) head, anterior view; (**e**) wing. Scale: 1 mm.

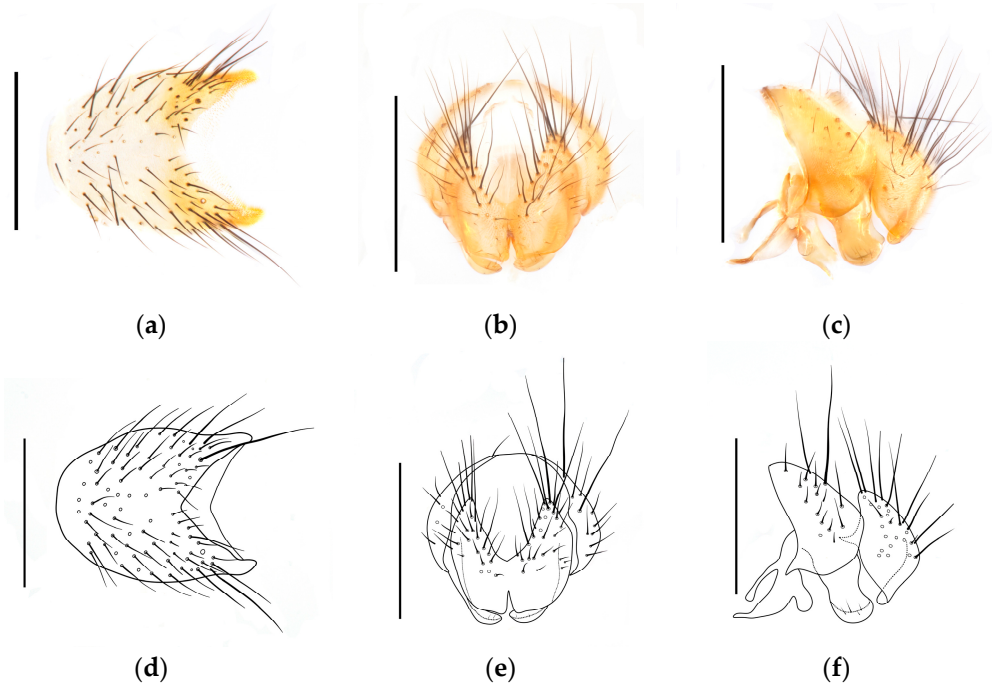


Figure 2. *Dichaetomyia villscutellata* **sp. n**. male terminalia. (**a**,**d**) Sternite V, ventral view; (**b**,**e**) cerci, surstylus and epandrium, posterior view; (**c**,**f**) cerci, surstylus, epandrium, and aedeagal complex, lateral view. Scale: 0.5 mm.

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Type locality. China (Guangdong).

Type series. Holotype male (HAUST); CHINA: Gongdong Province, Guangzhou City, Haizhu National Wetland Park, 23°3′16.83″ N, 113°21′21.93″ E, 11. VIII-11. IX. 2021, 4m, *MT-6*. Paratype, one male (HAUST), same data as holotype.

Other specimens studied. One male and one female (HAUST), Gongdong Province, Guangzhou City, Haizhu National Wetland Park, 23°4′32.36″ N, 113°18′23.76″ E, 17. XI-17. XII. 2021, 7m, *MT–1*. One female (HAUST), Gongdong Province, Guangzhou City, Haizhu National Wetland Park, 23°4′12.16″ N, 113°19′41.94″ E, 11. VIII-11. IX. 2021, 8m, *MT–7*. One female (HAUST), Gongdong Province, Guangzhou City, Haizhu National Wetland Park, 23°9′48.15″ N, 113°18′23.62″ E, 27. V-11. VI. 2021, 8m, *MT–3*.

Diagnosis. Eyes are bare; antennae are yellow, palpi are dark brown; thorax has a black ground color; the scutellum is entirely yellow; the sides and lower margins feature small setulae; the ventral surface is bare; the postalar wall features a distinct group of long, black hairs; *dc* 2+4; all posterior dc are strong; the lower margin of the posterior spiracle features two rows of setulae; the subalar area near the posterior spiracle has small but distinct hairs; the ventral surface of the radial node and R4+5 have hairs; the legs are entirely yellow except for brownish tarsi; the fore femur is without av; the hind tibia is without pd, but with one ad and one av; the abdomen are entirely yellow and heart-shaped.

Description. Male. Body length: 7.8 mm; wing length: 7.5 mm. **Head**: Figure 1d, slightly flattened; eyes are bare; upper frontal facets are slightly enlarged; frons are slightly wider than the width of the anterior ocellus; fronto-orbital plural is touching in the upper half, frontal vitta is black with silvery pruinosity; *fr* 5; three of the upper pairs are shortened and situated on the lower half of the frons, without an *orb*; the parafacial is narrow, about half the width of postpedicel; the antennae are yellow, and the postpedicel is mostly brownish-yellow and 4 times as long as it is wide; the arista is plumose, and the longest arista hair is about 3 times the width of the antenna; the vibrissal angle is situated behind the frontal angle in profile; the occiput hairs are black, the palpi are dark brown, with the

labella approximately equal in length to the palpi; the proboscis is short, about half the length of the palpi. **Thorax:** Figure 1a,c, ground color is black, sides of the thorax are yellow; scutum is silvery pruinosity, slightly shiny, with two black vitta that are dense and connect before the scutoscutellar suture and extend to the suture; the scutellum is entirely yellow; the sides and lower margins feature small setae; the ventral surface is bare; *h* 2; *ac* 0+1; *dc* 2+4, all developed; *ial* 0+2; *sa* 3; *pal* 2; *npl* 2; *kepst* 1+2; basisternum of prosternum, notopleuron, and anepimeron have hairs; the postalar wall features distinct hairs; there is no anterior parasquamal tuft; katepimeron bare; the posterior spiracles are yellowish-white, with two rows of setae in the lower margin; the meron with small but distinct hairs below the spiracle. **Wings:** Figure 1e, pale yellow; the basicosta and tegula are yellow; the Sc is bow-shaped; the ventral surface of the radial node and R_{4+5} have hairs; the M_1 is slightly curved upward at the apex; 2/3 of the m-m is curved; the lower calypter is tongue-shaped; the halter is brownish-yellow. **Legs:** Figure 1c, yellow except the tarsi are brownish; the fore femur does not feature an *av* at the apex; the fore tibia does not feature a median *p*; the mid femur has rows of *pv* on the basal half and three subapical *p*s; the mid tibia has two *pd*s; the hind femur features complete rows of *ad*; the apex has a row of *av*, with rows of *pd* on the basal half; the hind tibia does not have a *pd*, but features one *av* and two *ad*s. **Abdomen**: Figure 1b, yellow, heart-shaped, without pruinosity; the postmarginal and lateral setae on tergites 4 and 5 are distinct, and sternite 1 features hairs. **Terminalia:** Figure 2a–f, ground yellow. The cerci are short, and the tip is blunt and rounded; the terminal margin is flat; the medial process is slightly protruding and inwardly concave in the posterior view; the cerci are broad and short in the lateral view, with medial process being distinct; the surstylus are broad and short, rectangular in lateral view, and slightly concave medially.

Female. The frons' width is about 1/3 the width of the head; the postpedicel is brownish; the other characteristics are the same as the male.

Comparative notes. This species is similar to *D. luteiventris* (Rondani, 1873) in general body coloration and the presence of lateral scutellar setae [35]. It can be distinguished by the following characteristics: in *D. villscutellata* **sp. n**., *dc* 2+4, the scutellum is yellow; the legs are entirely yellow except for the brown tarsi; the apical part of the medial process on cercus is not prominently protruding. By contrast, in *D. luteiventris*, *dc* 2+3, the scutellum and legs are more intensely pigmented; and a prominently protruding apical part of the medial process on the cercus is present.

Etymology. The species was named after the scutellum with small setae in the sides and lower margins. Chinese name of the species: "毛盾重毫蝇", derived from the morphological characteristics reflected in its scientific name.

Distribution. China (Guangdong).

Dichaetomyia bimaculata **sp. n**.

(Figures 3a–e and 4a–f)

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Type locality. China (Hunan).

Type series. Holotype male (HAUST); CHINA: Hunan Province, Chenzhou City, Mangshan National Forest Park, 21. VI. 2020. Paratype, one male (HAUST), same data as holotype.

Diagnosis. Eyes are bare; the postpedicel is yellow at the base, mostly dark brown; the palpi are yellow and brown at the base; the thorax has a black ground color; the scutellum is yellowish, the central area is dark brown, and the sides and ventral surface of the scutellum are bare; the lower margin of the posterior spiracle has two rows of setulae; the legs are yellow, with the tarsi being brownish; the fore femur does not have a row of *av*s at the apex, and the hind tibia has two *av*s and one *ad*; the abdomen with the syntergite 1 and 2 are yellowish-transparent and slightly darker at the apical margin; tergite 3 is yellow

except for a slightly darker apical margin bearing a median longitudinal stripe; tergites 4 is all black, and tergite 5 has a pair of small yellow spots on the lower margin.

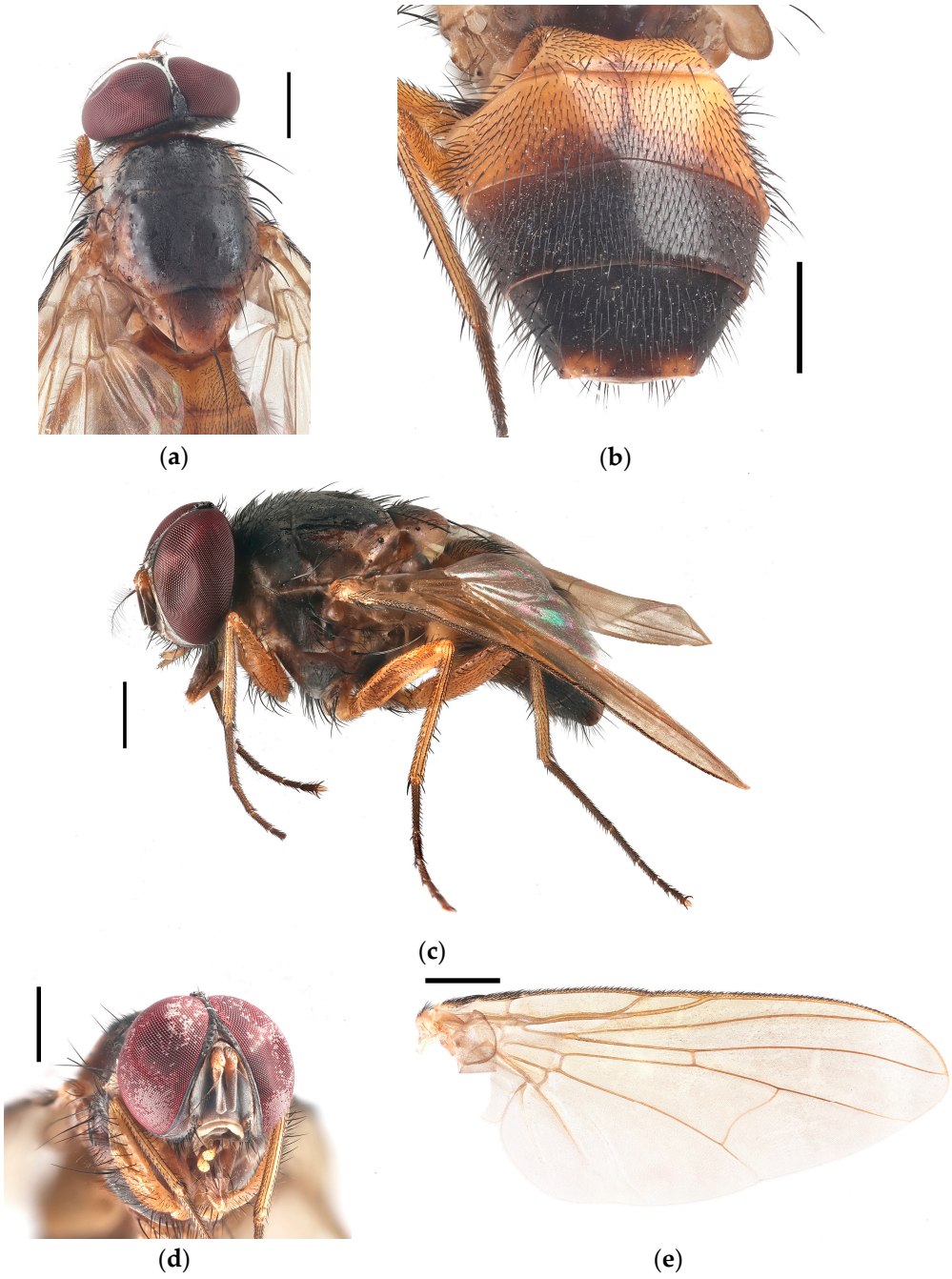


Figure 3. *Dichaetomyia bimaculata* **sp. n**. male. (**a**) Head and thorax, dorsal view; (**b**) abdomen, dorsal view; (**c**) habitus, lateral view; (**d**) head, anterior view; (**e**) wing. Scale: 1 mm.

Description. Male. Body length 7.3 mm; wing length 7.2 mm. **Head**: Figure 3d, slightly flattened; the eyes are bare; the frons width is less than or equal to the width of the anterior ocellus; the fronto-orbital plural is touching in the upper half; the interfrontal area is black with a silvery pruinosity; *fr* 6 is situated on the lower half of the frons, with one small *orb*; the parafacial is narrow, about 1/3 the width of postpedicel; the pedicel is yellow, and the postpedicel I syellow at the base, mostly dark brown, and 4 times as long as it is wide; the arista is plumose, and the longest arista hairs are about 3 times the width of the antenna; the vibrissal angle is situated behind the frontal angle in the profile view; the occiput hairs are black; the palpi are yellow and brown at the base; the labella

are relatively short, about 2/3 the length of the palpi; the proboscis is short, about half the length of the palpi. **Thorax:** Figure 3a,c, ground color black, and the margins of the thorax are yellow; the scutum features a pale pruinosity and four black, dense vitta; the dorsal view of scutellum is mostly dark brown, except for the yellow margins; the sides and ventral surface of the scutellum are bare; an anterior parasquamal tuft is present; the proepisternum is yellow, concave, and hairy; *h* 2; *ac* 0+1; *dc* 2+3; *ial* 0+2; *pal* 2; *npl* 2; *kepst* 1+2; the basisternum of prosternum, anepimeron, and notopleuron have hairs; the postalar wall and meron are bare; the posterior spiracles are yellowish-white, with two rows of setae in the lower margin.

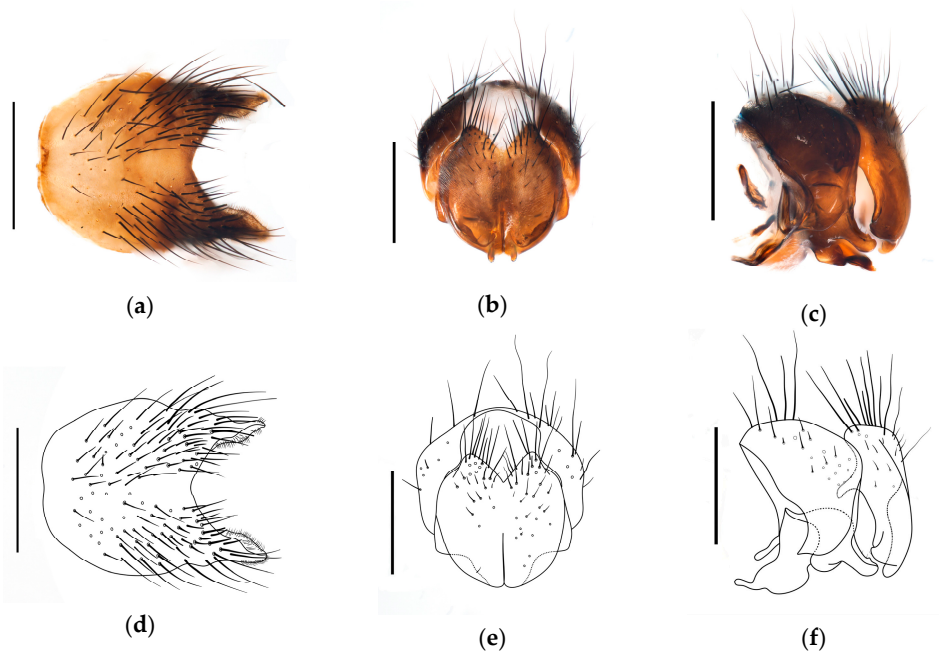


Figure 4. *Dichaetomyia bimaculata* **sp. n**. male terminalia. (**a**,**d**) Sternite V, ventral view; (**b**,**e**) cerci, surstylus and epandrium, posterior view; (**c**,**f**) cerci, surstylus, epandrium, and aedeagal complex, lateral view. Scale: 0.5 mm.

Wings: Figure 3e, pale yellow; the basicosta and tegula are yellow; the Sc is bow-shaped; the ventral surface of the radial node and R_{4+5} feature 3–4 hairs; the end of the M_1 is straight; the m–m is slightly S-shaped; the lower calypter is tongue shaped, light brown, and with a brownish margin; the halter is brownish-yellow. **Legs**: Figure 3e, yellow except the tarsi are brownish; the fore femur is without rows of *av* at the apex, with five *pv*s on basal half and complete rows of *pd*s; the fore tibia is without a median p; the mid femur features three *pv*s at the apex; the mid tibia features two *pd*s; the hind femur features complete rows of *ad*s, with four *av*s on the basal half; the hind tibia is without *pd*s but with two *av*s and one *ad*. **Abdomen:** Figure 3b, elongate-oval, with a sparse pruinosity and slightly shiny; syntergite 1 and 2 are yellowish-transparent and slightly darker at the apical margin; tergite 3 is yellow except for a slightly darker apical margin, bearing a median longitudinal vittae; tergites 4 is black; tergite 5 has a pair of small yellow spots on the lower margin; all tergites feature strong marginal and lateral setae. **Terminalia**: Figure 4a–f, the cerci taper gently, with the margin arched in the posterior view; both the medial and lateral process are present, with the medial process fused in the posterior view; the cerci are flattened; the medial process is distinct in the lateral view; the surstylus is narrow in the lateral view.

Female. Unknown.

Comparative notes. This species is similar to *D. biangulata* Xue, 1998, in terms of abdominal coloration and the presence of a distinctive color patch on tergite 5. It can be

distinguished by the following points: in *D. bimaculata* **sp. n.**, the postpedicel is mostly dark brown with yellow at the base; the legs are yellow except for the brownish tarsi; the occiput hairs are black; the fore femur is without rows of *av*s at the apex; the hind tibia is without *pd*s. By contrast, the *D. biangulata* antennae are yellow; the occiput hairs are yellow; the legs are dark brown except for the tibiae which are yellow; the fore femur features rows of *av*s at the apex; the hind tibia has one small *pd* [25].

Etymology. This species is named based on the tergite 5 with a pair of small yellow spots on the lower margin. Chinese name of the species: "双斑重毫蝇", derived from the morphological characteristics reflected in its scientific name.

Distribution. China (Hunan).

Dichaetomyia maculiventra **sp. n.**

(Figures 5a–e and 6a–f)

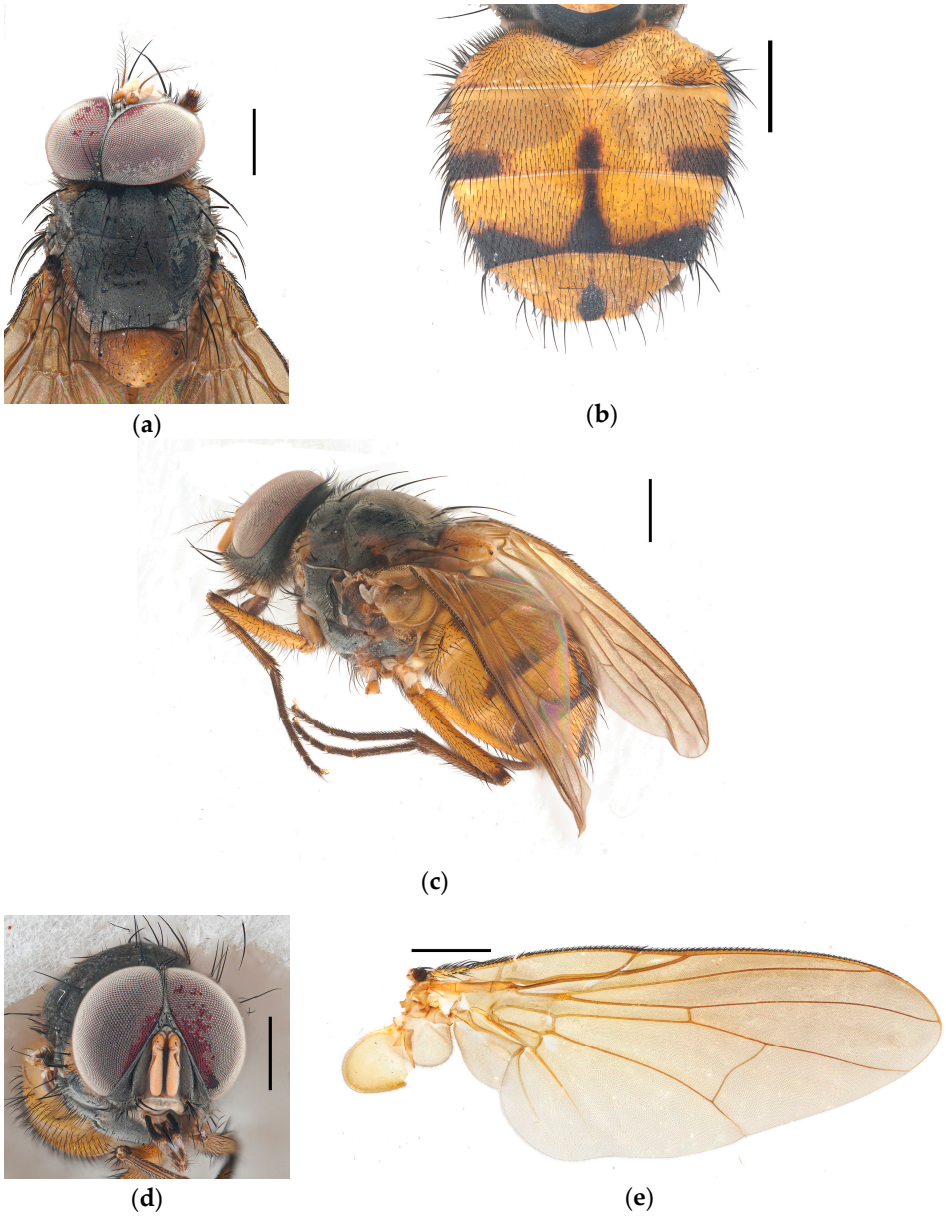


Figure 5. *Dichaetomyia maculiventra* **sp. n.** male. (**a**) Head and thorax, dorsal view; (**b**) abdomen, dorsal view; (**c**) habitus (without midlegs), lateral view; (**d**) head, anterior view; (**e**) wing. Scale: 1 mm.

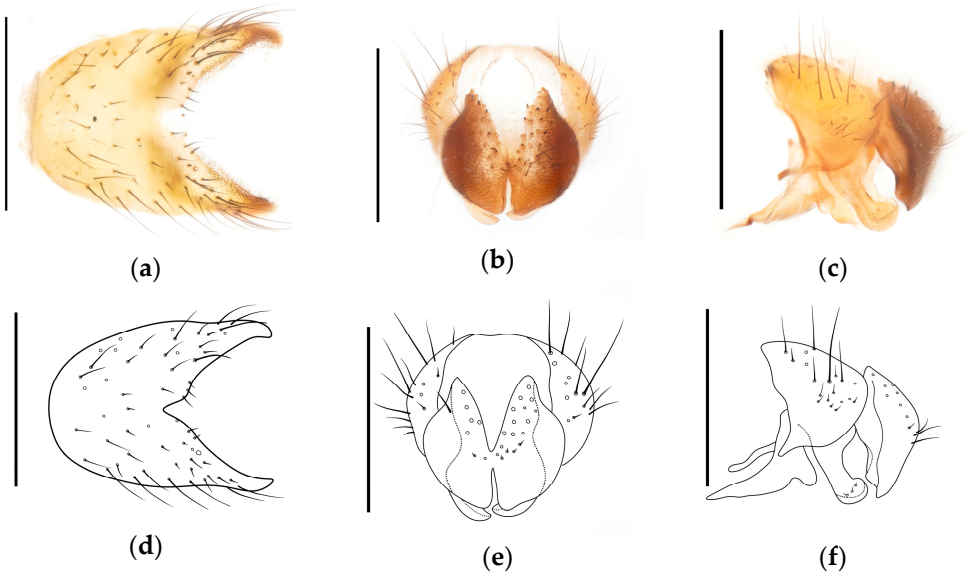


Figure 6. *Dichaetomyia maculiventra* **sp. n**. male terminalia. (**a**,**d**) Sternite V, ventral view; (**b**,**e**) cerci, surstylus, and epandrium, posterior view; (**c**,**f**) cerci, surstylus, epandrium, and aedeagal complex, lateral view. Scale: 0.5 mm.

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Type locality. China (Fujian).

Type series. Holotype male (HAUST); CHINA: Fujian Province, Wuyishan City, Tongmu County, Tianchan Mountain Spring Water Factory, 27°42′3″ N, 117°45′2″ E, 23.VII.2022, leg. Wenqiang Cao. Paratypes, three males (HAUST), same data as holotype.

Diagnosis. Compound eyes are bare and slightly ciliated; the antennae are yellowish-brown; the maxillary palps are dark brown, with yellow tips; the thorax is mostly black, with yellow areas on the postpronotum, supra-alar bristles, and post-alar bristles; the scutellum is brown and bare on the sides, with lower margins and a ventral surface with 3–4 small setae on the horizontal margin; the post-scutellum is slightly pubescent; a row of setae are featured on the lower margin of the posterior spiracle; the radial node and R_{4+5} are bare on the ventral side; the M_1 vein is almost straight at the end; the femora is yellow, and the tibiae are brown, while the tarsi are black; the fore femur is without avs; the hind tibia features two *av*s, one *ad*, and one *pd*; the abdomen are entirely yellow, oval-shaped, and slightly dusted, with long triangular median stripes on tergites 3, 4, and 5 and semicircular spots on the lateral margins of tergites 3 and 4.

Description. Male. Body length: 6.5 mm; wing length: 6.8 mm. **Head**: Figure 5d, slightly flattened; the eyes are bare, slightly ciliated, and with the upper frontal facets slightly enlarged; the frons width is less than or equal to the width of the anterior ocellus, with the fronto-orbital plural touching in the upper half; the frontal vitta is black, linear, and with a silvery dusting; *fr* 3 is situated on the lower half of the frons, with one small *arb*; the parafacial is narrow, about 1/4 the width of the postpedicel; the antennae are yellowish-brown, with their length 5 times their width; the arista is plumose, with the longest arista hairs being about three times the width of the antenna; the vibrissal angle is approximately at the same level as the frontal angle in the profile view; the occiput hairs are black; the palpi are dark brown, with yellow tips; the labella is relatively short, about half the length of the palpi; the proboscis length is equal to the palpi. **Thorax:** Figure 5a,c, entirely black, except for the postpronotum and the sides of the thorax which are yellow; the scutum is densely covered with a silvery pruinosity, with the vitta being indistinct; the scutellum is brown, with the lateral and ventral face bare; the postalar wall features a few hairs; *h* 2; *ph* 2; *ac* 0+1; *dc* 2+3; *ial* 0+2; *pal* 2; *npl* 2; *kepst* 1+2; the basisternum of prosternum,

notopleuron, and anepimeron feature hairs; the anterior parasquamal tuft is absent; the katepimeron and meron are bare; the posterior spiracles are yellow, with a row of setae on the lower margin. **Wings:** Figure 5e, pale yellow; the basicosta and tegula are black; the Sc is bow-shaped; the radial vein base has hairs; the radial node and R_{4+5} are bare on the ventral side; the M_1 and m-m are straight; the lower calypter is tongue-shaped and light brown with the margin brown; the halter is yellowish-brown. **Legs:** Figure 5c; the femora are yellow, the tibiae are brown, and the tarsi are black; the fore femur is without *av*s but features complete rows of *ad*s, *pd*s, and *pv*s; the fore tibia is without a median *p*; the mid femur has two proximal *p*s; the mid tibia has two *pd*s; the hind femur features rows of *av*s and *pv*s on the distal half, with complete rows of *ad*s; the hind tibia has two *av*s, one *ad*, and one *pd*. **Abdomen:** Figure 5b, yellow, oval-shaped, and slightly dusted; tergites 3, 4, and 5 feature long triangular median vittae; tergites 3 and 4 have semicircular spots on the lateral margins; tergite 4 has posterior marginal setae that are interrupted in the middle; tergite 5 features posterior marginal and lateral setae distinctly. **Terminalia:** Figure 6a–f, the distal half of the cerci taper gently; the posterior view of the medial process is separated; the cerci reveals a terminal margin that is concave in the lateral view; the surstylus is distally bulbous in the lateral view, with tip rounded and slightly upturned.

Female. Unknown.

Remark. This species can be easily distinguished from others by the following characteristics: the abdomen is entirely yellow; tergites 3, 4, and 5 possess long median vittae; tergites 3 and 4 have semicircular spots on the lateral margins, while tergite 5 is without spots.

Etymology. This species is named based on the abdomen with semicircular spots on the lateral margins of tergites 3 and 4. Chinese name of the species: "斑腹重毫蝇", derived from the morphological characteristics reflected in its scientific name.

Distribution. China (Fujian).

Dichaetomyia varicauda **Emden, 1965**

(Figures 7a–e and 8a–f)

Dichaetomyia varicauda Emden, 1965. Fauna of India and the Adjacent Countries. Diptera 7, Muscidae I: 400. **Type locality**: Burma: Kambaiti; India: Siruvani-Muthikolam [29].

Material studied. CHINA: one male (HAUST), Chongqing, Jiangjin, Taihe, Heishen Temple, 836 m, 28°48′9.21″ N, 106°15′46.04″ E, 30.VII.2022, leg. Xulong Chen. Four males and two females (HAUST), Chongqing, Jiangjin, Dayuandong, Liubudeng, 728 m, 28°52′54.45″ N, 106°15′14.53″ E, 23. VII. 2022, leg. Xulong Chen; four males and four females (HAUST), Chongqing, Jiangjin, Zhuyang Town, Yunwuping, Dashibao, 542 m, 29°9′6.99″ N, 105°57′34.51″ E, 23. VII. 2022, leg. Xulong Chen. One female (HAUST), Chongqing, Jiangjin, Dayuandong, Confucius Temple Management Station, 709 m, 28°53′9.68″ N, 106°15′24.28″ E, 13. VIII. 2022, leg. Xulong Chen. One female (HAUST), Fujian Province, Wuyishan National Park, Huanggangshan Daoban, 1803 m, 27°50′17.29″ N, 117°45′28.28″ E, 27. VIII. 2023, leg. Wenliang Li. One male (HAUST), Guangdong Province, Shaoguan, Nanling National Forest Nature Reserve, 1247 m, 23°3′16.83″ N, 113°21′21.93″ E, 17. XI-17. XII. 2021, *MT-6*. Two males (HAUST), Guangdong Province, Shaoguan city, Nanling National Forest Nature Reserve, 834 m, 24°54′45.81″ N, 113°2′33.64″ E, 28. IX. 2022-7. I. 2023, *MT-15*. Two males and one female (HAUST), Yunnan Province, Gongshan city, Dulongjiang, 1542m, 1. VII. 2013, leg. Weiwei Zhang.

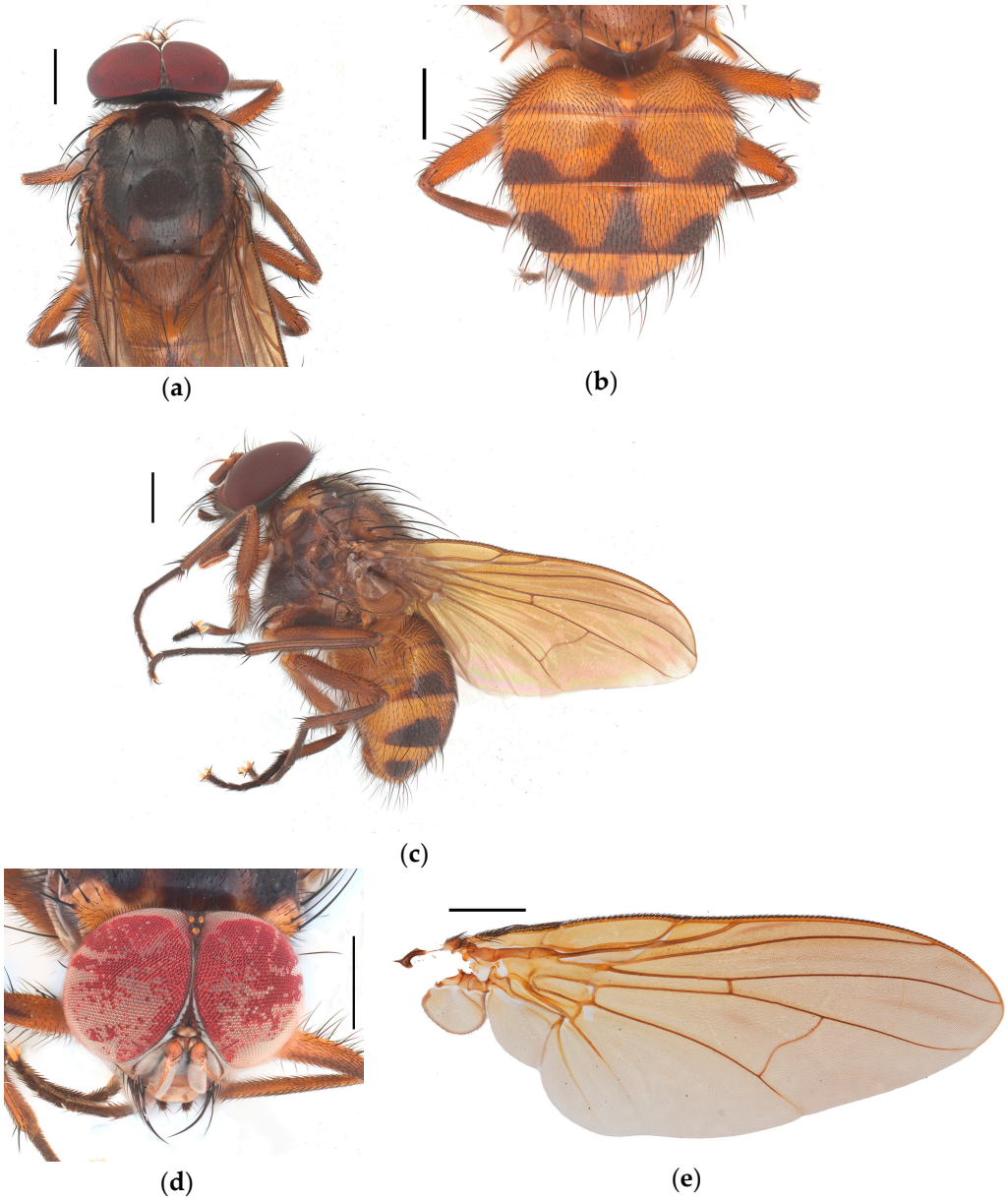


Figure 7. *Dichaetomyia varicauda* Emden, 1965**.** Male. (**a**) Head and thorax, dorsal view; (**b**) abdomen, dorsal view; (**c**) habitus, lateral view; (**d**) head, anterior view; (**e**) wing. Scale: 1 mm.

Diagnosis. Figure 7a–e, antennae are yellowish-brown; the palps are entirely fuscous; *dc* 2+3, with three strong posterior dc; the scutellum are yellow, with the ventral surface and lower lateral margins bare; the M_1 is distinctly curved upward; the femora and coxae are entirely pale yellowish-brown; the hind tibiae feature one median *ad*, one weak *pd*, and two *av*s; the abdomen are pale yellowish-brown; tergites 3, 4, and 5 each bear a black median longitudinal vittae and lateral spots, and the spots potentially merge with the vittae [29].

Comments. This species was assigned the Chinese name "异尾重毫蝇", derived from the morphological characteristics reflected in its scientific name [29].

Distribution. Burma (Kambaiti); India (Siruvani-Muthikolam); China (Chongqing, Fujian, Guangdong, Yunnan).

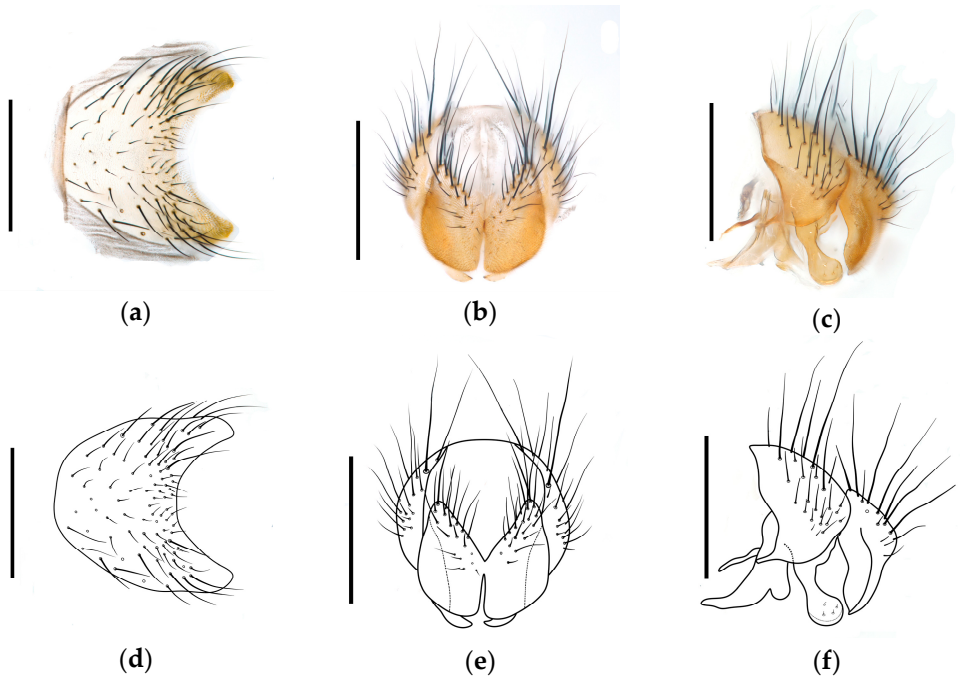


Figure 8. *Dichaetomyia varicauda* Emden, 1965. Male terminalia. (**a**,**d**) Sternite V, ventral view; (**b**,**e**) cerci, surstylus, and epandrium, posterior view; (**c**,**f**) cerci, surstylus, epandrium, and aedeagal complex, lateral view. Scale: 0.5 mm.

Dichaetomyia latistriata **Malloch, 1924**

(Figures 9a–e and 10a–f)

Dichaetomyia latistriata Malloch, 1924. Ann. Mag. n. H., (9) XV, p. 136, ♂. **Type-locality**: Malaya: Kuala Tahan, Pahang [1].

Dichaetomyia latistriata Malloch, 1924. Fauna of India and the Adjacent Countries. Diptera 7, Muscidae I: 419. **Type-locality**: Malaya: Kuala Tahan, Pahang; Borneo: Sandakan [29].

Material studied. CHINA: Three males (HAUST), Hunan Province, Chenzhou City, Mangshan National Forest Park, 21. VI. 2020.

Diagnosis. Figure 9a–e, pale yellowish-brown; the antennae are yellow-orange; the maxillary palps are yellow; the scutellum is brown with yellow margins; anterior spiracle tufts are present; a katepisternum with pale hairs is featured above the coxae and below the spiracle; the R_{4+5} vein is posteriorly curved and slightly wavy; the M_1 vein is distinctly upturned at the apex; syntergite 1 and 2 are yellow; tergites 3 and 4 feature a median longitudinal stripe, and tergite 4 is posteriorly dark brown, merging with the median stripe; tergite 5 is dark brown and posteriorly orange-yellow; the hind tibia is slightly brownish; the tarsi are black; the fore femur has a row of short, robust, comb-like *av*s; the hind tibia has 1 small *pd*, 1 *ad*, and 2–3 *av*s [1,29].

Comments. Following its redescription by Emden (1965), this species was assigned the Chinese name “宽条重毫蝇”, derived from the morphological characteristics reflected in its scientific name [29].

Distribution. Malaya (Kuala Tahan, Pahang); Borneo (Sandakan); China (Hunan).

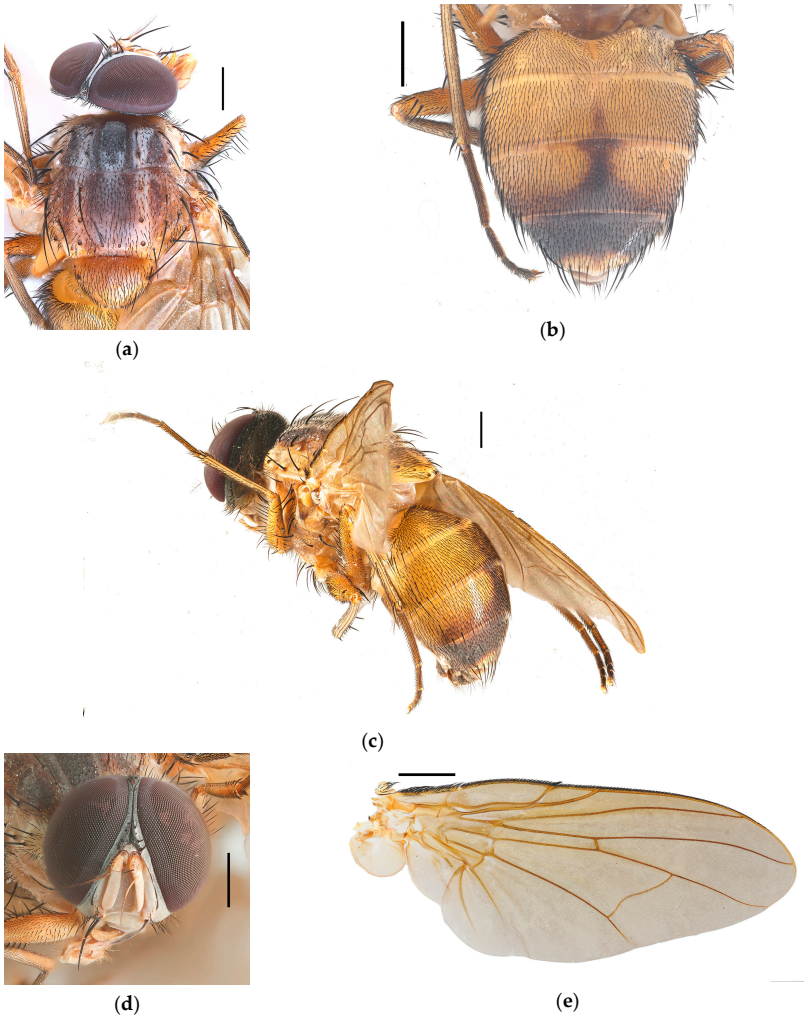


Figure 9. *Dichaetomyia latistriata* Malloch, 1924. Male. (**a**) Head and thorax, dorsal view; (**b**) abdomen, dorsal view; (**c**) habitus, lateral view; (**d**) head, anterior view; I wing. Scale: 1 mm.

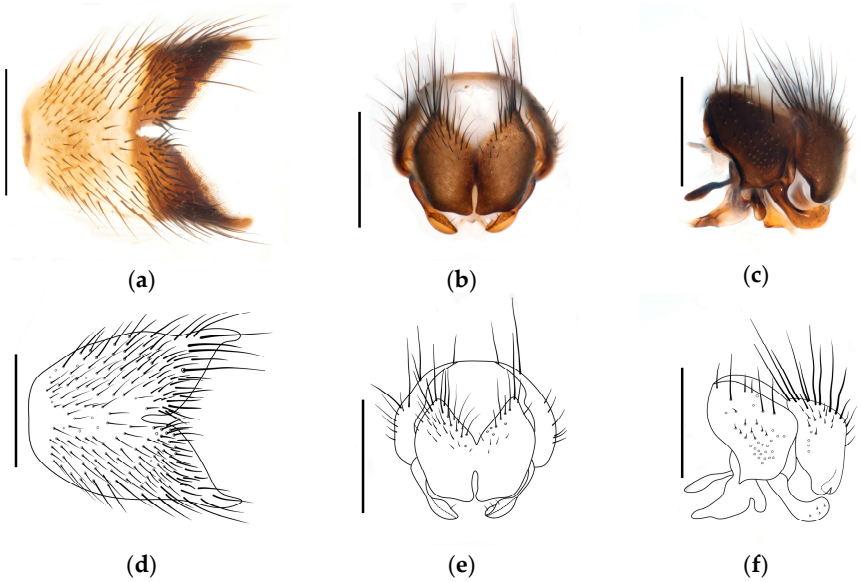


Figure 10. *Dichaetomyia latistriata* Malloch, 1924, male terminalia. (**a**,**d**) Sternite V, ventral view; (**b**,**e**) cerci, surstylus, and epandrium, posterior view; (**c**,**f**) cerci, surstylus, epandrium, and aedeagal complex, lateral view. Scale: 0.5 mm.

3.2. Key to the Species

Key to Chinese species of genus *Dichaetomyia* Malloch, 1921 (males)

The key is modified from Xue and Liu [28] and Xue and Zhao [25], with some important diagnostic characters being re-selected and modified [24,26–29,31].

1. Post-*dc* 4 2
- Post-*dc* 3 6
2. Margin of lower lateral scutellum with flat hairs or ventral surface of scutellum with hairs.....3
- Margin of lower lateral scutellum without flat hairs; ventral surface of scutellum bare.....5
3. Abdomen entirely yellow; antennae brownish-yellow and palpi dark brown.....
.....*D. villscutellata* **sp. n**.
- Abdomen base black.....4
4. Lower *stpl* markedly closer to posterior than to anterior *stpl*; meron with hairs nearby the posterior spiracle; both post pronotal lobe and halter tawny; leg entirely yellow except black-brown tarsi; fore tibia without median p; hind tibia without pd; thorax with thick grey-brown pruinosity.....*D. keiseri* Emden 1965
- Lower *stpl* equidistant from anterior and posterior ones; meron without hairs; post pronotal lobe yellow; halter brown; at least basal part of femur dark; tibia and tarsi yellow; fore tibia with one median *p*; hind tibia with 1–3 *pd*; thorax with thin greyish-brown pruinosity.....*D. pallitarsis* (Stein,1909)
5. Tergites 4 and 5 dark brown, slightly darker than the ones before; tergite 5 with thin pruinosity ..... *D. quadrata* (Wiedemann, 1824)
- Tergite 5 and posterior part of tergite 4 black, shining, and without pruinosity.....
..... *D. monticola* Emden, 1965
6. Postpedicel about 8 times as long as pedicel, exceeding upper half of eyes; light yellow, exceeding lower margin of eyes; legs yellow except tarsi brown.....
..... *D. antennata* (Stein, 1918)
- Postpedicel almost 5 times as long as pedicel, not exceeding lower margin of eyes 7
7. Scutellum with lower margin laterally with flat or curved black hairs, ventrally with upright cilia 8
- Scutellum with its lower margin bare 12
8. Scutellum ventrally with yellow upright hairs distally; its lower margin laterally with pale thin hairs (sometimes only a few) 9
- Scutellum without upright hairs distally; its lower margin laterally with many flat or curved, black hairs 10
9. Body dark black; abdomen always olive, with metallic luster; more yellowish in the lower areas, sometimes with femur yellow; palpus dark brown; end of M_1 upcurved distinctly; coxae brown; hind tibia with two strong *ad* ..... *D. bibax* (Wiedemann, 1830)

- Body brownish yellow mostly; abdomen reddish brown or orange; middle part of scutum dark; palpus yellow; end of M_1 straight; coxae greyish white; hind tibia only with one *ad* .....*D. flavipalpis* (Stein, 1915)

10. Katepimeron with hairs; frons as wide as anterior ocellus; hind femur *pv* longer than the maximum breadth of the femur; tergites 4 and 5 black, but tergite 5 with orange margin .....*D. aureomarginata* Emden, 1965

- Katepimeron bare.....11

11. Frons narrow, only 0.5 as wide as antenna at the most; hind femur *pv* equal to the longest diameter of femur; abdomen entirely yellowish brown ....*D. luteiventris* (Rondani, 1873)

-Frons broad, about 2 times as wide as antenna; hind femur pv less than half as broad as femur; syntergite 1 and 2 brownish yellow; tergite 3 dark brown; tergites 4 and 5 black ....*D. latiorbitalis* Xue and Wei, 1998

12. Eyes with long, dense hairs; antenna dark brown; postgena with a few pale hairs; anatergite bare..... *D. dasiomma* Xue and Kano, 1994

- Eyes bare or with few short and scattered hairs.....13

13. Palpus orange or yellow at least at apex 14

- Palpus entirely dark.....26

14. Palpus yellow at apex.....15

- Palpus entirely orange or yellow to light yellow.....18

15. Antenna dark brown; postalar wall bare or with fine hairs; lower occiput hairs entirely black; mid femur basal 3/5 with dense *pv*; longest shorter than segment width; subapical *ad* usually 1; hind tibia without *pd*….....….*D. fulvoapicata* Emden, 1965

- Antenna yellow; postalar wall with hairs…….....…16

16. Lower occiput hairs black; abdomen yellow; tergites 3, 4, and 5 with long triangular median vittae; tergites 3 and 4 with semicircular lateral spots..... .....*D. maculiventra* **sp. n.**

- Lower occiput hairs yellow; abdomen mostly dark brown with yellow base……...17

17. Katepimeron with hairs; scutum with two black vittae (inner ones inconspicuous); median vitta with brown pruinosity; the part under marginal scutellar setae with a row of small hairs; hind tibia with two *av*s….....*D. declivityata* Xue and Lin, 1996

- Katepimeron bare; scutum with four black vittae; median vitta dark brown; the part under marginal scutellar setae bare; hind tibia with three *av*s….....*D. albiceps* (Van der Wulp, 1881)

18. Fore femur anteroventrally with a row of pectinate setae…….....19

- Fore femur anteroventrally without pectinate setae…….....….....23

19. Mid femur anteroventrally with a row of pectinate setae; anterior margin of wing with costal spine; most of abdomen blackish except apices of tergite 4 orange..... .....*D. setifemur* Malloch, 1928

- Mid femur anteroventrally without pectinate setae…….....….....20

20. Postalar wall bare; costa ventral surface bare; abdomen except tergites 3, 4, and 5 brownish-black, rest orange-yellow translucent.....*D. palpiaurantia* Feng, 1999

- Postalar wall with hairs…..…….....….....21
21. Hind tibia with one small *pd*…….....*D. latistriata* Malloch.1924
- Hind tibia without *pd*…….....22
22. Lower occiput hairs yellow; anatergite with hairs; costa ventral surface bare; thorax with four distinct black vittae; tarsi black…….....……. *D. pahangensis* Malloch, 1925
- Lower occiput hairs black; anatergite bare; hind femur mostly brown, and tarsi dark brown; abdomen mostly pitch black…….....*D. nigricauda* Emden, 1965
23. Antenna entirely yellow; thorax dark brown; scutum with four brown stripes; scutellum brownish-yellow, with anterior and posterior spiracles yellow…….....
.....*D. corrugicerca* Xue and Liu, 1996
- Postpedicel entirely or mostly brown….....…….....24
24. Anatergite bare; ommatidia on anterior upper part of eyes distinctly enlarged; postalar wall with a few pale hairs; thorax with vittae only up to scutoscutellar suture; abdomen shiny, with thin pruinosity……..... *D. heteromma* Emden, 1965
- Anatergite with hairs.....….....25
25. Antenna dark brown; thorax yellow except first half of scutum, katepisternum and meron black; postalar wall with hairs…….....…….....… *D. sinica* Feng, 2003
- Antenna mostly dark brown; base yellow; thorax mostly black; postalar wall bare....
.....……..... *D. bimaculata* **sp. n.**
26. Fore femur anteroventrally with a row of pectinate setae…….....….....27
- Fore femur anteroventrally without pectinate setae…….....…..…….....30
27. Mid femur anteroventrally with a row of pectinate setae; each tergite with brown posterior margin; posterior part of tergite 5 with two yellow spots; all tibiae yellow; rest of legs dark brown.....*D. biangulata* Xue, 1996
- Mid femur anteroventrally without pectinate setae…….....….....……..……28
28. Hind tibia without pd; thorax brownish yellow; scutum dark brown, with four dark vittae; postpronotal lobe and scutellum yellow; metepisternum bare; radial node and ventral face of basal R_{4+5} with short setula; sternite 5 slender; legs yellow.....
.....*D. jianfenglingensis* Xue and Liu, 2011
- Hind tibia with pd 29
29. Hind femur with three pds; legs yellow except tarsi black; postpronotal lobe and scutum not yellow..... *D. femorata* (Stein, 1915)
- Hind femur with one pd; legs yellow except hind tibia dark; postpronotal lobe and scutum yellow..... *D. pectinipes* (Stein, 1909)
30. Dorsal surface of abdomen densely and evenly pruinose, nearer to hair roots pale, with distinct fish-like scales; ommatidia not enlarged; palpus dark brown; vittae of thorax approaching scutoscutellar suture; postalar wall bare.....*D. scabipollinosa* Xue, 1996
- Dorsal surface of abdomen without or with uneven pruinosity, without any distinct fish-like scales.....31
31. Postpedicel entirely or mostly brown…….....32
- Antenna entirely pale yellow, yellow, or yellowish-brown……..…….....…….……35

32. Postalar wall with hairs; costa ventral surface posterior margin with a few fine pale hairs (different from usual short pubescence); thorax mainly orange, without distinct stripes; hind tibia with small pd; tarsi brown…….....*D. apicallis* (Stein, 1904)
- Postalar wall bare…….…….....….....……33
33. Tegula blackish brown; thorax brown to dark brown; abdomen without distinct pruinosity, slightly shining; tergites 4 and 5 entirely black..... *D. yunnanensis* Xue and Liu, 2011
- Tegula yellow…….....……34
34. Thorax with dense greyish-yellow pruinosity; coxa, trochanter, and base of femur brown; tibia, tarsi, and most of femur brownish-yellow; abdomen cordiform in dorsal view, with dense brownish-grey pruinosity, not shining .....
.....*D. wuzhishanensis* Xue and Liu, 2011
- Thorax with thin pale grey pruinosity, slightly shining; legs brownish-yellow except coxa dark brown; abdomen rounded in dorsal view, with thin pale grey pruinosity, shining..... *D. hainanensis* Xue and Liu, 2011
35. At least basal part of midsurface and hind femur dark 36
- At least middle and hind femur yellow.....37
36. Scutellum mostly yellow, only postpronotal lobe on scutum yellow; fore femur brown; tibiae yellow..... *D. alterna* (Stein, 1915)
- Scutellum black; fore femur black; only fore tibia dark brown.....
.....*D. flavocaudata* Malloch, 1925
37. Mid femur anteroventrally with a row of pectinate setae; hind tibia with one small pd; abdomen tergites middle section with a complete broad median vittae and large transverse spots on posterior margin; the spots more or less fused with the median stripe…….....*D. varicauda*, Emden, 1965
- Mid femur anteroventrally without pectinate setae; hind tibia without *pd*.....38
38. Anterior margin of wing with costal spine; thorax brown to dark brown, with grey pruinosity; calypter brown; halter with its apex brown .....*D. nigrifolia* Xue and Liu, 2011
- Anterior margin of wing without costal spine; most of thorax yellow with thin pruinosity, slightly shining; calypter pale yellow; halter with apex yellow.....
..... *D. pallicornis* (Stein, 1915)

4. Discussion

The taxonomic study of this genus remains challenging, as only a subset of species from the Ethiopian Region have been categorized into two subgenera based on their distinct diagnostic characteristics [20–23]. However, most species within this genus, including those distributed in China, have not yet been classified at the subgeneric level and remain unassigned to any subgenus. Future investigations should employ integrated morphological and molecular analyses to elucidate phylogenetic relationships within the genus, which would establish a more substantiated framework for subgeneric delineation.

This taxonomic ambiguity likely reflects both the genus' remarkable morphological diversity and the limitations of current classification systems in establishing clear subgeneric boundaries. Although research on this genus in China remains relatively limited, the country's complex topography and climatic conditions suggest that further systematic investigations are likely to reveal the existence of additional new species. This study describes three new species and reports two new records of the genus from China. An updated identification key to all known Chinese species in the genus and additional distribution information are provided. The discovery and description of these new species will not only enrich the taxonomic framework of the genus but also provide critical re-

search materials for exploring its phylogenetic relationships, biogeographic distribution, and adaptive evolution.

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References

1. Malloch, J.R. Exotic Muscaridae (Diptera). *Ann. Mag. Nat. Hist.* **1921**, *9*, 161–173.
2. Pont, A.C. The Type-Material of Oriental and Australasian Muscidae (Diptera) in the Zoological Museum, Amsterdam. *Beaufortia* **1970**, *18*, 77–111.
3. Pont, A.C. Family Muscidae. In *Catalog of the Diptera of the Australasian and Oceanian Regions*; Evenhuis, N.L., Ed.; Bishop Museum Special Publication 86; Bishop Museum: Honolulu, HI, USA, 1989; pp. 820–831.
4. Pont, A.C. Genus *Dichaetomyia*. In *Catalogue of the Diptera of the AEFO Tropical Region*; Crosskey, R.W., Ed.; British Museum: London, UK, 1980; pp. 738–740.
5. Shinonaga, S.; Kano, R. Genus *Dichaetomyia*. In *Fauna Japonica, Muscidae (Insecta: Diptera)*; Academic Press: Tokyo, Japan, 1971; pp. 92–103.
6. Shinonaga, S.; Singh, M.M. Muscidae of Nepal (Diptera). I. Muscinae, Stomoxyinae and Phaoniinae. *Jpn. J. Sanit. Zool.* **1994**, *45*, 99–177.
7. Shinonaga, S.; Thinh, T.H. Muscidae of Vietnam. 2. Phaoniinae. *Jpn. J. Syst. Entomol.* **2000**, *6*, 37–58.
8. Shinonaga, S. Eleven New *Dichaetomyia* Species from Indonesia (Diptera: Muscidae). *Med. Entomol. Zool.* **2004**, *55*, 67–76.
9. Shinonaga, S. Notes on the Genus *Dichaetomyia* Malloch from Papua New Guinea and Solomon Islands (Diptera: Muscidae). *Jpn. J. Syst. Entomol.* **2014**, *20*, 119–143.
10. Shinonaga, S. Thirteen New Species of the Genus *Dichaetomyia* Malloch (Diptera: Muscidae) from the Oriental Region. *Jpn. J. Syst. Entomol.* **2023**, *29*, 185–194.
11. Pont, A.C.; Evenhuis, N. A New Species of *Dichaetomyia* Malloch (Diptera: Muscidae) from the Fijian Islands. In *Fiji Arthropods VI*; Evenhuis, N.L., Bickel, D.J., Eds.; Bishop Museum Occasional Papers 90; Bishop Museum: Honolulu, HI, USA, 2006; pp. 3–7.
12. Zielke, E. Resurrection of a Madagascan *Dichaetomyia* Species (Diptera: Muscidae) and Proposal of a New Replacement Name. *Contrib. Entomol.* **2016**, *66*, 153–155.
13. Zielke, E. Proposed Corrections for Some Previously Identified Madagascan Species of *Dichaetomyia*, and Descriptions of Six New Species for the Genus (Diptera: Muscidae). *Entomol. Mon. Mag.* **2020**, *156*, 209–241.
14. Zielke, E. Five New Species of *Dichaetomyia* from the Malagasy Subregion (Diptera: Muscidae). *Hist. Nat. Bulg.* **2021**, *42*, 65–78.
15. Zielke, E. Descriptions of Five New Shiny *Dichaetomyia* Species from Madagascar (Diptera: Muscidae). *Entomol. Mon. Mag.* **2021**, *157*, 81–103.
16. Zielke, E. On Madagascan *Dichaetomyia* Species (Diptera: Muscidae): Descriptions of Four New Species. *J. Entomol. Zool. Stud.* **2022**, *10*, 18–30. [CrossRef]
17. Zielke, E. About Wrongly Assigned Afrotropical *Dichaetomyia* Specimens Resembling *Dichaetomyia ovata* (Stein) (Diptera: Muscidae), with Descriptions of Four New Species. *Integr. Syst.* **2023**, *6*, 59–80. [CrossRef]
18. Zielke, E. Proposals for Replacement Names for Two Afrotropical Species of the Subfamily Phaoniinae and Resurrection of a *Phaonia* Species (Diptera: Muscidae). *Hist. Nat. Bulg.* **2023**, *44*, 117–118. [CrossRef]
19. Evenhuis, N.L.; Pape, T. Systema Dipterorum. In *Catalogue of Life*; Bánki, O., Roskov, Y., Döring, M., Ower, G., Robles, D.R.H., Corredor, C.A.P., Jeppesen, T.S., Örn, A., Pape, T., Hobern, D., et al., Eds.; Version 5.6; Catalogue of Life: Amsterdam, The Netherlands, 2025. [CrossRef]

20. Couri, M.; Pont, A.C.; Penny, N.D. Muscidae (Diptera) from Madagascar: Identification Keys, Descriptions of New Species, and New Records. *Proc. Calif. Acad. Sci. USA* **2006**, *57*, 799–923.
21. Zielke, E. New Muscidae Species from Madagascar (Diptera). *Verh. Naturforsch. Ges. Basel* **1972**, *82*, 145–163.
22. Zielke, E. *Limnophora paraapicalis* n. sp. und *Annaria rangeri* n. sp., zwei neue Musciden von Afrika (Diptera, Muscidae). *Zool. Anz.* **1973**, *190*, 205–207.
23. Zielke, E. Beitrag zur Kenntnis der Verbreitung afrikanischer Musciden (Diptera: Muscidae). Teil III: Sammlung der California Academy of Sciences. *Z. Angew. Zool.* **1974**, *61*, 1–44.
24. Fan, Z.D. *Key to the Common Flies of China*, 2nd ed.; Science Press: Beijing, China, 1992; pp. 335–348.
25. Xue, W.Q.; Zhao, J.M. Dichaetomyia. In *Flies of China*; Xue, W.Q., Chao, C.M., Eds.; Liaoning Science and Technology Press: Shenyang, China, 1996; Volume 1, pp. 1102–1116.
26. Feng, Y. Three New Species of Calyptratae (Diptera: Sarcophagoidea, Muscoidea) from Sichuan, China. *Entomotaxonomia* **1999**, *21*, 138–142.
27. Feng, Y. Four New Species of the Calyptratae (Diptera: Fanniidae, Muscidae, Calliphoridae) from Sichuan, China. *Entomol. J. East China* **2003**, *12*, 1–6.
28. Xue, W.Q.; Liu, Y.N. *Dichaetomyia* (Diptera: Muscidae) from China, with Description of Five New Species. *Orient. Insects* **2011**, *45*, 162–175.
29. Emden, F.I. Muscidae. In *The Fauna of India and the Adjacent Countries, Diptera*; Seymour, R.B., Roonwal, M.L., Eds.; Baptist Mission Press: Serampore, India, 1965; Volume 7, pp. 493–540.
30. Ji, S.H.; Deng, Y.H.; Huang, H.M. A New Record of Muscidae in Shanghai Area and the Biology and Geographic Distribution of Genus *Dichaetomyia* (Diptera: Muscidae). *Chin. J. Vector Biol. Control* **2009**, *20*, 140–141.
31. Xue, W.Q.; Zhu, W.; Zhao, Y.H.; Bian, D.J. Studies of Calyptratae from Guangxi Region, China (Diptera). *J. Shenyang Norm. Univ. (Nat. Sci.)* **2003**, *21*, 52–55.
32. Xue, W.Q.; Li, W.L.; Liu, X.Y. Muscidae. In *Species Catalogue of China*; Yang, D., Wang, M.Q., Li, W.L., Eds.; Volume 2: Animals INSECTA (VI). Diptera (3). Cyclorrhaphous Brachycera; Science Press: Beijing, China, 2020; pp. 590–726.
33. Pont, A.C. *Studies on Australian Muscidae (Diptera) II. A revision of the tribe Dichaetomyiini Emden*; Bulletin of the British Museum (Natural History) Entomology; The Museum: London, UK, 1969; Volume 23, pp. 191–286.
34. Cumming, J.M.; Wood, D.M. Adult Morphology and Terminology. In *Manual of Afrotropical Diptera*; Kirk-Springs, A.H., Sinclair, B.J., Eds.; Suricata 4; South African National Biodiversity Institute: Pretoria, South Africa, 2017; Volume 1, pp. 89–133.
35. Rondani, C. Muscidae (Diptera). In *Annali del Museo Civico di Storia Naturale di Genova*; Museo Civico di Storia Naturale di Genova: Genoa, Italy, 1873; Volume 4, pp. 287–290.

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