

One new species of Tachinidae (Diptera: Calyptratae) from Chongqing, China

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Abstract: *Medina* Robineau-Desvoidy, 1830 (Diptera: Tachinidae) belongs to the tribe Blondeliini in the Exoristinae. One new species of the genus from the Yintiaoling National Nature Reserve, Wuxi County, Chongqing, China was found and is described: *Medina wuxiensis* Zhang & Dong **sp. nov.**

Key words: Tachinid fly; Exoristinae; Blondeliini; taxonomy

中国重庆寄蝇科一新种（双翅目：有瓣蝇类）

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摘要：麦寄蝇属（双翅目：寄蝇科）隶属追寄蝇亚科卷蛾寄蝇族。本文记述中国重庆巫溪县阴条岭国家自然保护区该属1新种：巫溪麦寄蝇 *Medina wuxiensis* Zhang & Dong **sp. nov.**。

关键词：寄蝇；追寄蝇亚科；卷蛾寄蝇族；分类

Introduction

The genus *Medina* Robineau-Desvoidy, 1830 (Diptera: Tachinidae) is a group of Blondeliini, Exoristinae which includes 35 species and is distributed in five Zoogeographical Regions except for the Australasian Region (O'Hara and Henderson 2020). Crosskey (1976) recorded 3 Oriental species. Herting (1984) reported 7 Palaeartic species. Tschorsnig and Herting (1994) noted 5 species of Central Europe. Chao *et al.* (1998, 2002) separately reported 4 Chinese species of *Medina*.

During our Invertebrate Resource Survey of Yintiaoling National Nature Reserve, Wuxi County, Chongqing, China organized by Prof. Zhisheng ZHANG, Southwest University in Summer, 2022, more than 1000 tachinid specimens (Diptera: Tachinidae) were collected and examined. One species of *Medina* from this survey is described and illustrated as new to science.

Material and methods

The specimens were examined with Zeiss Stemi SV11 stereomicroscopes. Measurements

follow Tschorsnig and Richter (1998). Images were taken with a Leica 205A stereomicroscope equipped with a Leica CCD camera and images were blended with Leica Application Suiter Version 4.12.0. Dissections of male terminalia were carried out following the method described by O'Hara (2002), and dissected terminalia were placed in glycerine in a small plastic tube pinned together with the source specimens. The morphological terminology used in the descriptions follows Cumming & Wood (2017). The type specimens were deposited in the Insect Collection of Shenyang Normal University (SYNU).

Taxonomy

Medina wuxiensis Zhang & Dong sp. nov. (Figs 1–8)

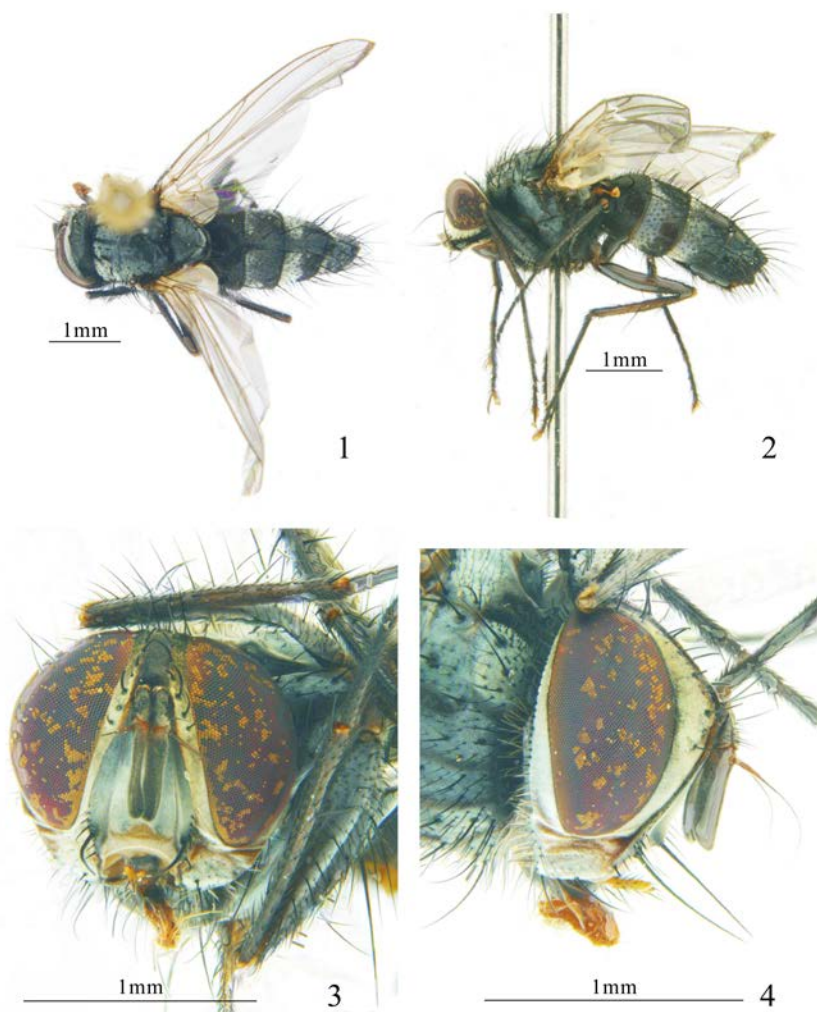
Description. Body length 6.3 mm.

Male. Head (Figs 1, 2). Black, with grayish white pruinosity, antenna black, arista dark brown, palpi reddish yellow. Eye bare, frons about 1/6 head width or 0.4 of eye width in dorsal view, frontal vitta slightly widened anteriorly, about 1.2–1.3 times of fronto-orbital plate width, fronto-orbital plate and parafacial bare, parafacial at narrowest point slightly longer than base of palpi width, gena about 1/4 eye height, Facial ridge with decumbent setae on lower one-fifth. Vibrissa usually arising at level of lower facial margin. Gena with black hairs, occiput mostly with pale yellow hairs except a row of sparsely irregular black hairs below postocular setae. Nine frontal setae, upper two reclinate, lowest frontal setae nearly level with lower margin of pedicel, a pair of smaller postocellar setae outward, outer vertical seta hair-like, slightly longer than postocular seta. Antenna with postpedicel about 4 times as long as pedicel. Arista bare, thickened on basal of 1/4. 2nd aristomere at most two times as long as its diameter. Palpi about as long as postpedicel, prementum 3 times as long as wide.

Thorax. (Figs 3, 4). Black in ground color, with grayish white pruinosity on presutural scutum, scutellum black. Thoracic dorsum with 4 dark longitudinal vittae, 2 inner postsutural vittae merged to form black transverse marking. Prosternum hairy, proepisternum bare. 2 presutural and 3 postsutural acrostichal setae, 3 presutural and 3 postsutural dorsocentral setae, 1 presutural and 3 postsutural intra-alar setae, scutellum with 3 pairs of marginal setae and a pair of discal setae, apical scutellar seta absent, lateral scutellar seta as long as basal scutellar seta. 3 katepisternal setae, katepimeron bare or with 2 to 3 hairs on its anterior portion. Wing. Hyaline, tinged with brownish, tegula and basicosta black, lower calypter yellowish white. Halteres yellow. Wing bend of M blunt, reaching wing margin, not appearing as a continuation of M. Base of R_{4+5} with 2–3 short setae dorsally and ventrally, 2nd costal section about as long as 4th section, cell R_5 narrowly opened. Legs. Slender, black. Fore tibia with a posterior seta, fore claws and pulvilli longer than 5th tarsomere. Mid tibia with 1 anterodorsal and 1 ventral setae. Hind coxa bare on posterodorsal margin, hind tibia with 5–6 anterodorsal setae of irregular length, 2–3 posterodorsal and 2–3 ventral setae, 2 preapical dorsal setae, posteroventral seta distinctly shorter than preapical anteroventral seta.

Abdomen. Long, cylindrical, dark brownish in ground color, with dark markings on lateral surface, a black median longitudinal vitta on tergites, tergite 3 and 4 covered with grayish white pruinosity on basal 1/2–1/3 and dark brown on posterior 1/2, tergite 5 with grayish white pruinosity on basal 1/4–1/3. Syntergite 1+2 nearly excavate to hind margin, tergite 3 with 2 pairs of median discal setae, a pair of lateral marginal and 2 median marginal setae,

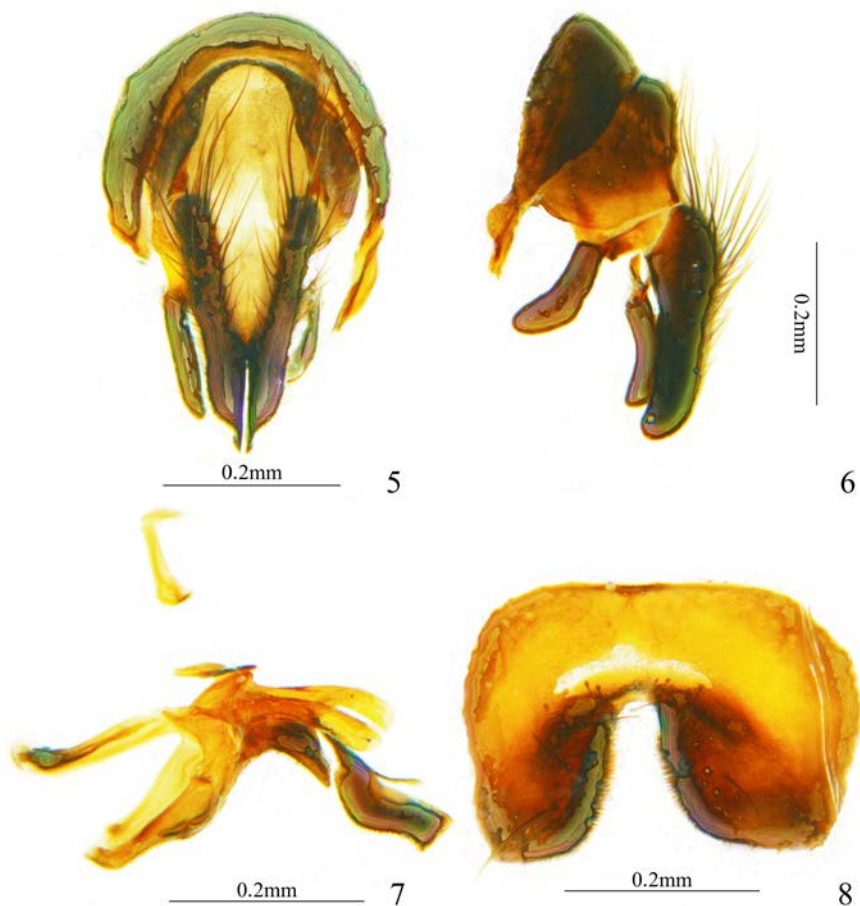
tergite 4 with a row of marginal setae, a pair of median discal and lateral discal setae, tergites 5 with a row of marginal and discal setae, tergites without patches of appressed hair. Sternite 5 and male terminalia as the figure (Figs 5–8). V-shaped median cleft of sternite 5 of male deep, about $3/5$ depth of the sternite, lateral lobe bluntly round at apex, with sparse setae, without a pair of tufts of curved setae, visible in lateral view. In caudal view cerci long, distinctly narrowed and pointed apically, surstyli narrow, longer compared with the other species of *Medina*. In lateral view, cerci wider, its apex slightly bent posteriorly. Surstylus blunt apically. Phallus: Postgonite pointed apically, pregonite longer and wider, bluntly round at apex. Basiphallus slight shorter than pregonite. Distiphallus with short membranous dorsal portion and long sclerotized ventral portion.



Figures 1–4. *Medina wuxiensis* Zhang & Dong **sp. nov.** 1, 2. ♂. Bodies, dorsal and lateral views; 3, 4. ♂. Heads, anterior and lateral views.

Female. Unknown.

Holotype. ♂, **China**, Chongqing, Wuxi County, Yintiaoling National Natural Reserve, Lanying to Huangcaoping, 31.24°N, 109.53°E, 1780–2070 m, 15-VIII-2022, Chuntian ZHANG leg (SYNU). **Paratype.** 1♂, **China**, Chongqing, Wuxi County, Yintiaoling National Nature Reserve, Guanshan Forestry Station, Linkouzi, 31.48°N, 109.91°E, 1460 m, 17-VIII-2022, Yue LI leg (SYNU).



Figures 5–8. *Medina wuxiensis* Zhang & Dong **sp. nov.** 5, 6. Cerci, surstyli and epandrium of male, caudal and lateral views; 7. Phallus (ejaculatory apodeme, aedeagal apodeme, hypandrium, pregonite, postgonite, basiphallus and distiphallus) of male, lateral view. 8. Sternite 5, ventral view.

Etymology. Specific epithet is taken from the type locality of this species, Wuxi, Chongqing, China.

Diagnosis. Frons about 0.4 of eye width, facial ridge with decumbent setae on lower one-fifth, lower calypter yellowish white, fore claw longer than 5th tarsomere, fore tibia with a posterior seta, surstyli long.

Remarks. This species is similar to *Medina collaria* (Fallén) in appearance, but it is distinguished from the latter in having wider frons of male, reddish yellow palpi, facial ridge

with decumbent setae on lower one-fifth, 3 presutural dorsocentral setae, 3 katepisternal setae, fore claw of male longer than 5th tarsomere.

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