

A new species in the genus *Azpeytia* Walker (Diptera: Syrphidae) from China

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Abstract: One new species in the genus *Azpeytia* (Diptera: Syrphidae) from Shaanxi, China, *A. brunneteryla* sp. nov., is described. The new species differs from other species of *Azpeytia* by yellow brown wings and abdominal tergites 2 to 4 with an inverse V-shaped narrow gray-white pollinose strip medially. A species list and key to Chinese species in this genus are provided.

Key words: Eumerini; *Azpeytia brunneteryla*; taxonomy; key

中国直腿蚜蝇属一新种记述（双翅目：蚜蝇科）

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摘要: 记述来自中国陕西平颜蚜蝇族直腿蚜蝇属 1 新种: 褐翅直腿蚜蝇 *Azpeytia brunneteryla* sp. nov.。新种以翅黄褐色, 第 2~4 背板近中部具倒“V”形灰白色粉被狭条纹而区别于本属的其他种。文中附有中国直腿蚜蝇属种类名录和分种检索表。

关键词: 平颜蚜蝇族; 褐翅直腿蚜蝇; 分类; 检索表

Introduction

The genus *Azpeytia* (Diptera: Syrphidae), with *Azpeytia scutellaris* Walker, 1865 as its type species, belongs to the tribe Eumerini, subfamily Eristalinae. It is a small genus with 7 species distributed in the Oriental and Australian regions (Knutson *et al.* 1975; Thompson & Vockeroth 1989). The diagnosis of this genus is as follows: head as broad as thorax, compound eyes covered densely with hairs, male eye contiguity short, female dichoptic. Basoflagellomere oblong or oval, arista bare. Scutellum wide, short, with posterior margin. Hind femur rarely thickened, with or without short setae apically. Vein M_1 recessive anteriorly, crossvein r-m oblique, located beyond the middle of cell dm (Huang & Cheng 2012).

Three species of *Azpeytia* have been previously recorded in China (Kertész 1913; Shiraki 1930; Huo *et al.* 2007; Huang & Cheng 2012). In field investigations of Syrphidae during 2017–2020, a new species in the genus *Azpeytia* was found from Shaanxi Province, namely *Azpeytia brunneteryla* sp. nov. So far 4 species of this genus have now been recorded from China. The description and illustration of this new species, including a key to species and checklist of species in this genus from China are provided here.

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Material and methods

Specimens were collected by netting. External morphology was observed under an Olympus SZX7 and BX43 microscopes. Habitus images of adults were obtained with a Canon EOS 550D camera attached to an Olympus SZX7 microscope.

The terminology mainly follows McAlpine (1981) as specifically applied to Syrphidae by Thompson (1999). Holotype and paratypes are deposited in Shaanxi University of Technology, Hanzhong, China.

Taxonomy

Azpeytia brunneteryla sp. nov. (Figs 1–12)

Male. Compound eyes holoptic, eye contiguity long, with densely white hairs. Vertex triangular, elongate, narrow, black, decorated with black hairs, distance between anterior and lateral ocelli about twice as long as that between lateral ocelli. Occiput broad, black, with white hairs, silvery white pollinosity on the lower parts laterally, along with the posterior margins of eyes with black pile bending forward. Frons nearly convex basally at the middle, circular tuberculate anteriorly. Frons black, decorated with black hairs and gray-white pollinosity laterally. In lateral view face retracted backwards, with anterior oral margin projecting forwards. Face black, with black hairs and a triangular silvery-white pollinose spot lateromedially near the eye. Cheeks black, with gray-white pollinosity and hairs. Antennae black, the basal two segments with black hairs, basoflagellomere long triangular, arista bare, black, yellow basally.

Mesonotum black, punctate, with marginal stripes of gray-white pollinosity laterally, in the middle a pair of sublateral stripes of gray white pollinosity nearly disappearing beyond transverse suture. Mesonotum covered with yellow-brown hairs before transverse suture except yellowish brown pollinosity anteriorly, black hairs beyond transverse suture. Scutellum broad, about 3 times as wide as long, yellowish brown, rugose broadly marginate, with yellow hairs, but black hairs basally and laterally. Subscutellar fringe black, located laterally on the subscutellar posterior margin. Pleuron black, covered with gray yellow pile, black pile on posterior anepisternum, anterior anepimeron and posterior katepisternum. Upper and lower patches of pile on katepisternum widely separated, the lower patches small. Metasternum with yellowish hairs.

Hind femora slightly thickened, with anteroventral spinose ridges apically, the outer one more developed. Basal 2/3 of hind tibiae slightly thicker. Legs black, knees black-brown to dark brown, covered with black hairs, all trochanters and hind coxae with light yellow-brown hairs. Pile on hind tibiae apically and tarsi dorsally light yellow-brown. Hind tibiae with ventral ridge basally.

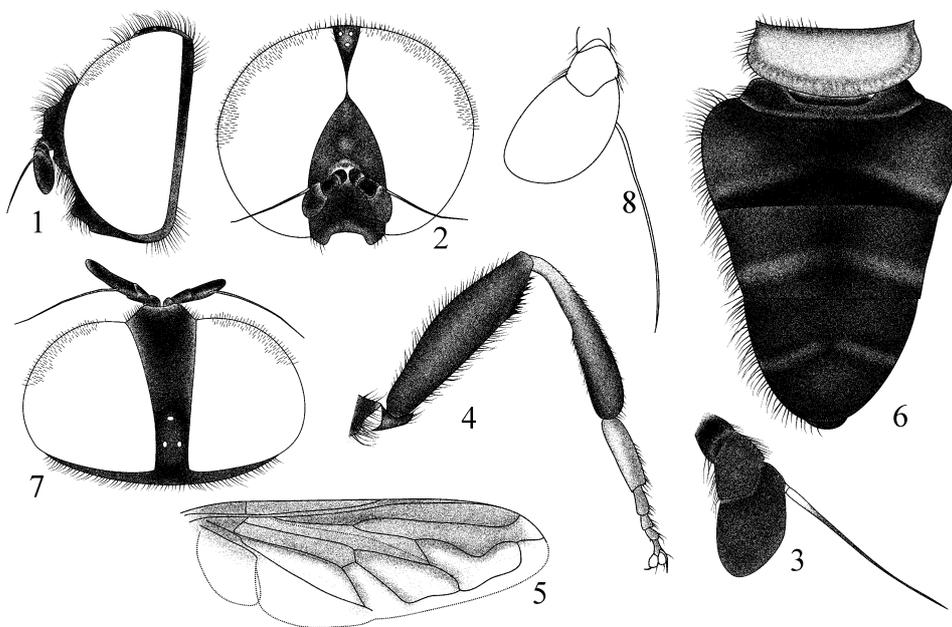
Wing yellowish-brown, slightly transparent on the posterior portion, stigmal crossvein present. Wing membrane microtrichose entirely. Cell r_1 open, vein R_{4+5} deeply looping into cell r_5 , crossvein r-m oblique, located beyond the middle of cell dm. The middle of Vein M_1 slightly concave and recessive anteriorly. Calypters brown slightly. Halteres brown.

Abdomen subtriangular, wider basally, pointed apically. Tergites black, covered unevenly with gray pollinosity. Tergites 2 to 4 with inverse V-shaped gray-white pollen narrow strips nearly in middle, separated apically. Tergites with whitish hairs, black hairs on tergite 2 laterally and posteriorly, 3rd tergite anteriorly, laterally and posteriorly, tergite 4

entirely. There are large membranous areas between tergites and sternites. Sternite smaller, nearly square, black, with light yellow long hairs.

Female. Compound eyes covered with densely white hairs. Vertex narrow, vertex and frons with gray-white pollinosity, with the sides gradually widening forward. Lunule dull brown. Face mainly yellow hairs. Basoflagellomere larger than in the male. Postpronotal lobe black brown, mesonotum with yellow hairs except black hairs between the base of wings behind transverse suture. Scutellum entirely with yellow hairs, subscutellar fringe long and dense laterally. Femora yellow-brown apically, tibiae yellowish brown to yellow, but dark brown on tibiae of anterior and middle legs, black on apical half of tibiae of hind legs. Legs with yellow hairs except black hairs on middle femora anteriorly and hind femora ventrally. The posterior abdomen broadly rounded, decorated with yellow hairs, except the posterior of tergite 4 with a triangular area of black hairs.

Body length, ♂ 12 mm, ♀ 13 mm; wing length, ♂ 11 mm, ♀ 11 mm.



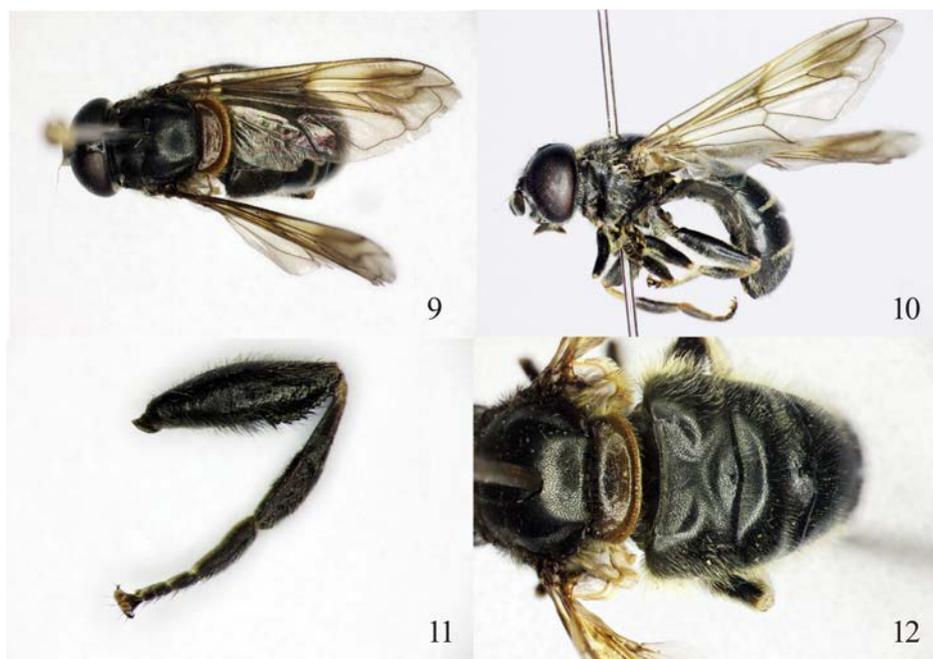
Figures 1–8. *Azpeytia brunneteryla* sp. nov. 1. Male head, lateral view; 2. Male head, anterior view; 3. Male antenna; 4. Male hind leg, anterior view; 5. Wing; 6. Male scutellum and abdomen, dorsal view; 7. Female head, anterior view; 8. Female antenna.

Holotype. ♂, China, Shaanxi, Hanzhong, Tiantai Mountain, 25-VI-2017, Fei LAN.

Paratypes. 1♀, Shaanxi, Foping, Liangfengya Protection Station, 02-VIII-2017, Fei LAN. 2♂, Shaanxi, Yangxian County, Huayang Town, 26-VII-2019, Yan BAI; 14♀, Shaanxi, Fuxian County, Ziwuling Protection Station, 19–20-VII-2020, by Hanyue LIU.

Etymology. The specific epithet is derived from the Latin *brunneus* (brown) and Greek *pteron* (wing), referring to the brown wings.

Remarks. This new species differs from other species of the genus *Azpeytia* by yellow brown wings and abdominal tergites 2 to 4 with an inverse V-shaped narrow gray-white pollinose strip medially.



Figures 9–12. *Azpeytia brunneteryla* sp. nov. ♂. 9. Habitus, dorsal view; 10. Habitus, lateral view; 11. Hind leg, anterior view; 12. Scutellum and abdomen, dorsal view.

List of species in genus *Azpeytia* from China

1. *Azpeytia flavoscutellata* Kertész, 1913

Azpeytia flavoscutellata Kertész, 1913: 284. Type locality: China (Taiwan, Kosempo and Mt. Hoozan). Shiraki 1930: 209; Knutson, Thompson & Vockeroth 1975: 340.

Distribution. China (Taiwan).

2. *Azpeytia maculata* Shiraki, 1930

Azpeytia aculate Shiraki, 1930: 209. Type locality: China (Taiwan, Karenko District); Myanmar (Tenasserim). Knutson, Thompson & Vockeroth 1975: 340; Huang & Cheng 2012: 556.

Distribution. Chian (Sichuan; Yunnan; Taiwan).

3. *Azpeytia shirakii* Hurkmans, 1993

Merodon scutellaris Shiraki, 1968 3: 200. Type locality: Japan (Nikko). Huo, Ren & Zheng 2007: 330. Hurkmans 1993: 208 (n. n. *scutellaris* Shiraki).

Distribution. Chian (Shaanxi); Japan.

4. *Azpeytia brunneteryla* sp. nov.

Distribution. Chian (Shaanxi).

Key to the Chinese species of *Azpeytia*

(*Azpeytia maculata* Shiraki, 1930 was not included)

1. Wing transparent, stigma dull brown 2
- Wing yellow brown, stigma dark brown. Abdomen black, tergites 2 to 4 with an inverse V-shaped narrow gray-white pollinose strip medially. Tergites with whitish hairs, black hairs on tergite 2 laterally and posteriorly, 3rd tergite anteriorly, laterally and posteriorly, tergite 4 entirely *A. brunneteryla* sp. nov.

2. Abdomen black to dark brown, tergite 2 yellowish brown laterally, covered with yellowish white hairs. The abdomen dorsum with linear gray-white longitudinal stripe in the center, tergites 2 to 4 each with a pair of oblique inversely V-shaped gray-white stripes..... *A. shirakii*
- . Abdomen black, with black hairs, tergites 2 and 3 with narrow yellow pollinose transverse band intermediately *A. maculata*

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