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Authors: Li, Wenliang, Qi, Ling, and Yang, Ding

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First Chinese record and the second species of the genus *Pleurigona* Malloch, 1929 (Diptera: Lauxaniidae)

Wenliang Li^{1,*}, Ling Qi¹ & Ding Yang²

¹ College of Forestry, Henan University of Science and Technology, Luoyang 471023, China

² Department of Entomology, China Agricultural University, Beijing 100193, China

Corresponding author: laughonce@126.com; wenliangli@haust.edu.cn

Abstract: The genus *Pleurigona* Malloch, 1929 is newly recorded in China with the description of one new species, *Pleurigona bicolor* sp. nov. Photographs and illustrations are provided for the species.

Keywords: Lauxaniidae - *Pleurigona* - first record - new species - China.

INTRODUCTION

The genus *Pleurigona* Malloch, 1929 (Diptera: Lauxaniidae) was introduced for *P. curvinervis* Malloch, 1929 from Luzon, Philippines. This genus can be recognized by the following characteristics: face convex; frons bare, strongly inclined and on the same plane with the face; the thorax is pronouncedly arched, with strong dorsocentrals and acrostichals; the preapical ad of fore and hind tibiae quite long, the preapical ad mid tibia short; the vein R1 sinuous and roundly curved forward at apex; M1 conspicuously arched down to wing margin. The genus *Pleurigona* Malloch, 1929 is here newly recorded from China with the description of *Pleurigona bicolor* sp. nov. With this new species, the genus now contains two species, distributed in the Oriental Region.

MATERIAL AND METHODS

Genitalia preparations were made by removing and macerating the apical portion of the abdomen in cold saturated NaOH for 6 hours. After examination, they were transferred to fresh glycerine and stored in a microvial on the pin below the specimen or moved to an ethanol tube together with the wet specimens. The examined specimens have been deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

The general terminology follows Gaimari & Silva (2010). According to Shi & Yang (2014), the “protandrium” in the previous paper are replaced with “syntergosternite”. The following abbreviations are used: *a* – anterior seta,

acr – acrostichal seta, *ad* – anterior dorsal seta, *anepst* – anepisternal seta, *app* – apical posterior seta, *apv* – apical ventral seta, *av* – anterior ventral seta, *CuA₁* – cubital vein, *cua₁* – anterior cubital cell, *dc* – dorsocentral seta, *dp* – dorsal preapical seta, *kepst* – katepisternal seta, *M* – medial vein, *oc* – ocellar seta, *or* – fronto-orbital seta, *pd* – posterior dorsal seta, *prsc* – prescutellar seta, *p_v* – posterior ventral seta, *R* – radial vein, *r* – radial cell, *2m₂* – apical fifth radial cell.

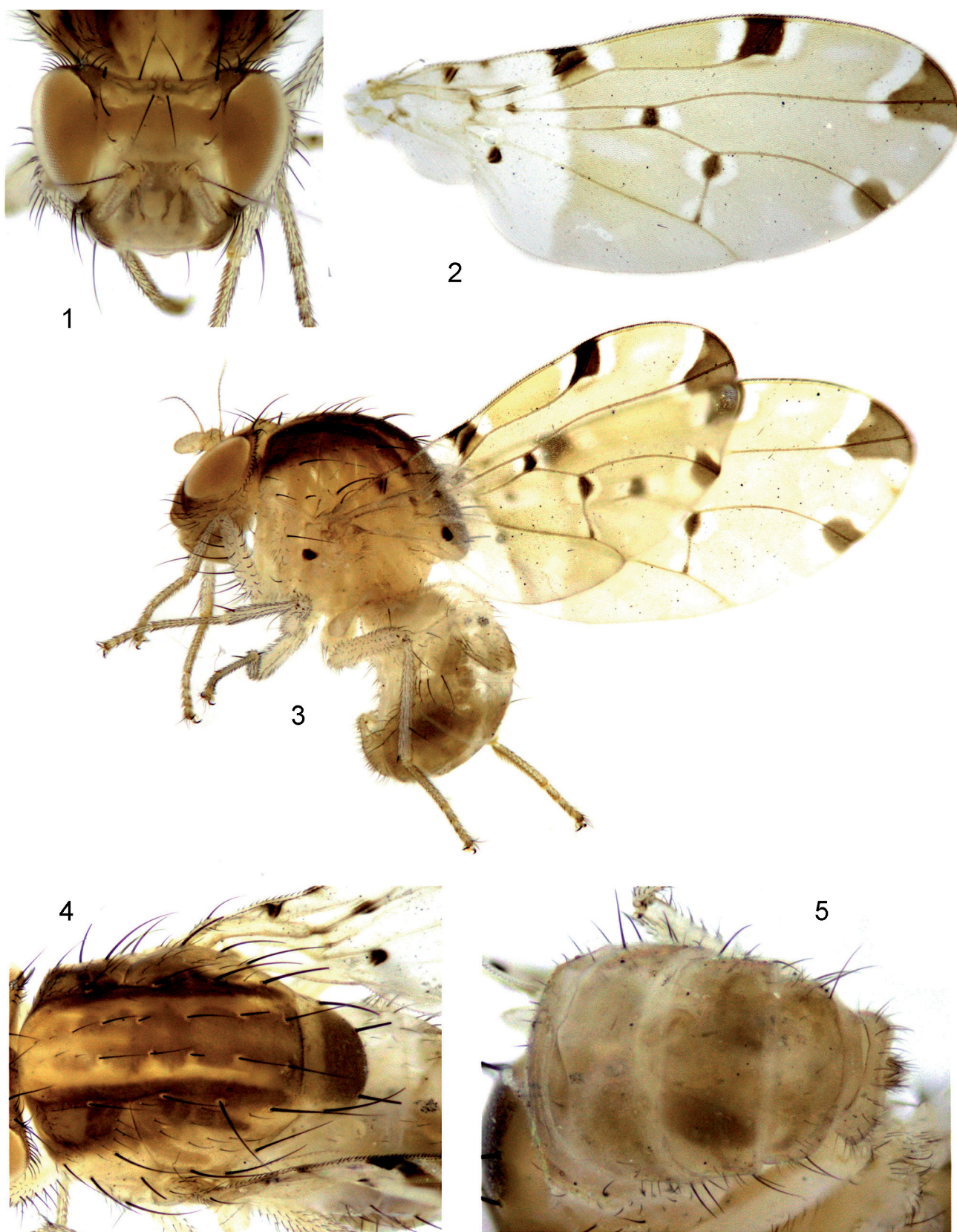
TAXONOMIC PART

Pleurigona bicolor sp. nov.

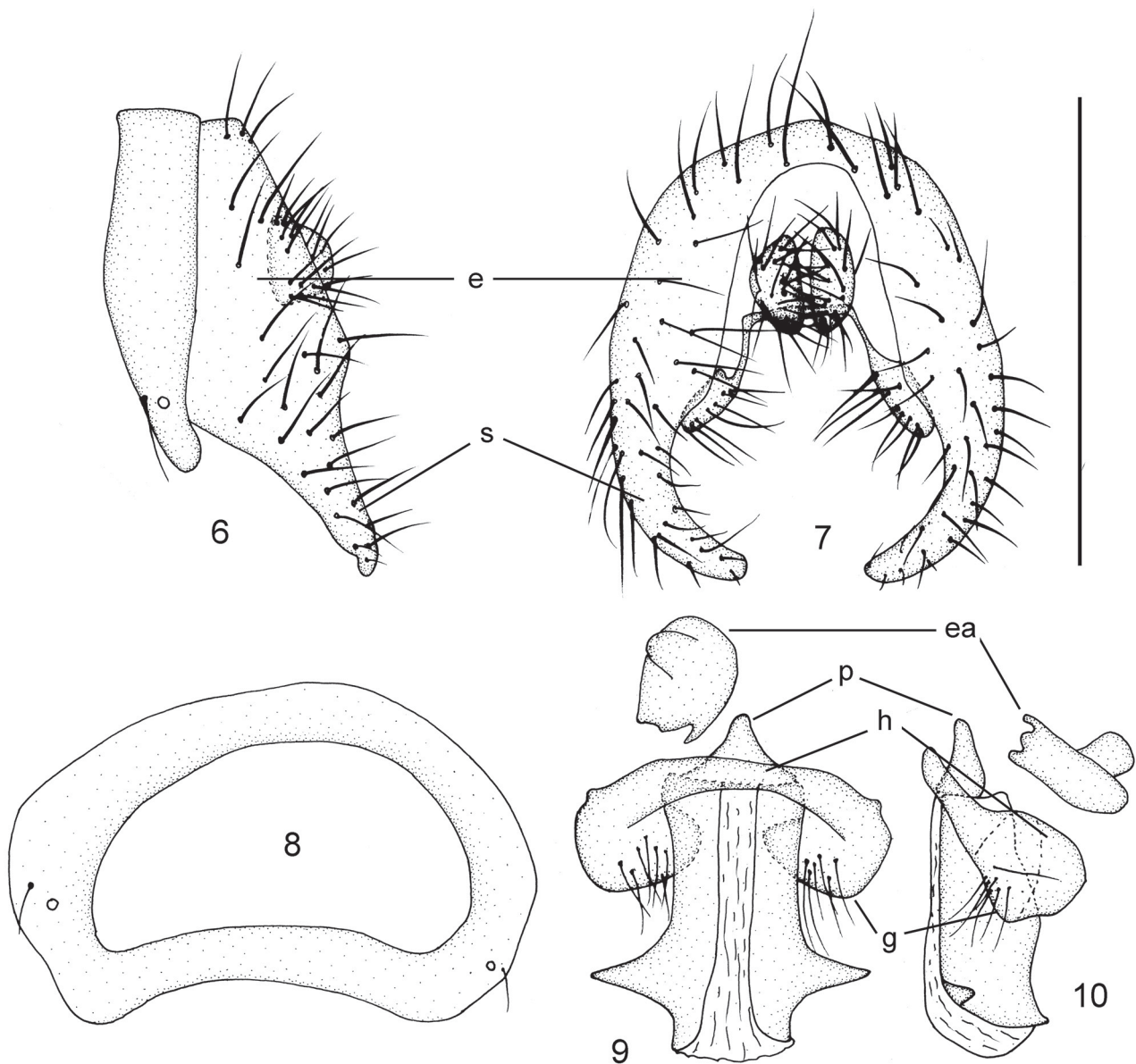
Figs 1-10

Type material: Holotype, male; CHINA, Guizhou Province, Suiyang, Kuankuoshui reserve, Zhongxinzhan, 28.2076°N 107.1726°E, 1449 m; collected 15.08.2010; collector Guoquan Wang (CAU). – Paratypes, 1 male, 1 female; otherwise same data as holotype (CAU).

Diagnosis: Head (Fig. 1) pale yellow, with brown lateral band; face slightly convex; frons inclined strongly, face and anterior mesoscutum on same plane. Mesoscutum (Fig. 4) with 1 pair of wide brown lateral bands, 1 wide brown median band composed of 5-6 brown oval spots which get brighter from poasterior to anterior; wing (Fig. 2) with basal third hyaline, with some brown spots at cross points of veins; costal cell *R₂₊₃*, *R₄₊₅*, *M₁* each with 1 square apical spot, except apical spot of *R₄₊₅* nearly flabelliform; a brown spot



Figs 1-5. *Pleurigona bicolor* sp. nov. Male. (1) Body, lateral view. (2) Wing. (3) Head, dorsal view. (4) Mesoscutum, dorsal view. (5) Abdomen, dorsal view.



Figs 6-10. *Pleurigona bicolor* sp. nov. Male. (6) Protandrium and epandrium, lateral view. (7) Epandrial complex, posterior view. (8) Protandrium, anterior view. (9) Phallic complex, ventral view. (10) Phallic complex, lateral view. Scale 0.5 mm. e: epandrium; s: surstylus; ea: ejaculatory apodeme; p: phallapodeme; h: hypandrium; g: gonopod.

each on r-m and anterior apex of *dm-cu*; all brown spots on brownish area surrounded with hyaline margin. Abdomen (Fig. 5) brownish; anterior margin of tergites 1-2 pale yellow.

Etymology: Latin, *bicolor*, meaning bicolour, referring to wing hyaline basally and brown apically.

Description of male: Body length 3.3-3.5 mm, wing length 4.3-4.5 mm.

Head (Fig. 1): Pale yellow, with brown lateral band, covering frons partly above eye, gena, ventral corner of face, and lateral clypeus below eye. Face slightly convex. Frons yellow, about as long as wide and parallel-sided,

inclined strongly, with face and anterior mesoscutum on same plane. Ocellar triangle yellow; *oc* strong, longer than posterior *or*, anterior *or* reclinated and shorter than posterior *or*. Gena about 1/3 height of eye. Antenna yellowish, 1st flagellomere 1.4 times longer than high; arista short pubescent, brown except yellow base, with longest hairs as long as 1/2 width of 1st flagellomere. Proboscis yellowish with margin black partly, with yellowish and blackish hairs; palpus pale yellow with black hairs.

Thorax (Fig. 4): Yellow with grayish white pruinescence. Mesoscutum with 1 pair of wide brown lateral bands, 1 wide brown median band composed of 5-6 brown

oval spots which get brighter from posterior to anterior. Scutellum brown largely except base and lateral margin yellow. Anepimeron with 1 brown spot at ventral corner. Propleuroseta present, 1+3 *dc*, 1+3 strong *acr* in 2 rows, 1 pair strong *prsc* as long as 1st post-sutural *dc*, 1 *ia*, 1 *anepst*, 2 *kepst*. Legs pale yellow. Fore femur with 6 strong *pv*, 7 *pd* and 5 *p*; fore tibia with 1 long preapical *ad* and 1 short *apv*. Mid femur with weak *a*; mid tibia with 1 short preapical *ad* and 1 strong *apv*. Hind tibia with 1 long preapical *ad* and 2 *apv*. Wing (Fig. 2) slightly brown, basal third hyaline with some small brown spots at cross points of veins; costal cell, R_{2+3} , R_{4+5} , M_1 each with 1 square apical spot, except R_{4+5} nearly flabelliform; brown spot each on *r-m* and anterior apex of *dm-cu*; all brown spots in brownish area surrounded with hyaline margin; costa with 2nd (between R_1 and R_{2+3}), 3rd (between R_{2+3} and R_{4+5}) and 4th (between R_{4+5} and M_1) sections in proportion of 5.8 : 6.5 : 4.2; *r-m* behind middle of discal cell; ultimate and penultimate sections of M_1 in proportion of 5.7 : 2.4; ultimate section of CuA_1 about 1/4 of penultimate. Halter pale yellow.

Abdomen (Fig. 5): Brownish, anterior margin of tergites 1-2 pale yellow, syntergosternite circular, with setae near spiracle. Male genitalia (Figs 6-10): epandrium nearly trapezoidal in lateral view; surstylus long with many bristles, tapered apically with incision at preapical anterior margin; hypandrium narrow without distinct hypandrial apodeme; gonopod short with many bristles, and combined with hypandrium; phallus with pair of acute lateral processes but without apical incision; phallapodeme short; ejaculatory apodeme large.

Description of female: Body length 3.3 mm, wing length 4.3 mm. Bands on mesoscutum darker than male; scutellum blackish brown. Abdomen brown; median region of tergite 2 blackish brown.

Distribution: China (Guizhou).

Remarks: This genus resembles somewhat the genus *Xangelina* Walker, 1856 in the following characters: frons inclined and on the same plane with face and anterior mesoscutum; mesoscutum arched strongly. But it can be separated from the latter by the trait " R_{2+3} roundly curved forward at apex". *Pleurigona bicolor* also can be separated from *Pleurigona curvinervis* by the wing pattern.

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