

# A new species in the mesosine genus *Eurymesosa* Breuning, 1939 (Coleoptera: Cerambycidae: Lamiinae) from China

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**Abstract:** A new species, *Eurymesosa ziranzhiyi* sp. nov., is described from Shaanxi and Hubei, China. The genus *Eurymesosa* Breuning, 1939 is recorded from China for the first time.

**Key words:** Chrysomeloidea; Mesosini; taxonomy

中国真象天牛属一新种（鞘翅目：天牛科：沟胫天牛亚科）

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**摘要：**记述中国象天牛族 1 新种：自然之翼真象天牛 *Eurymesosa ziranzhiyi* sp. nov.。真象天牛属 *Eurymesosa* Breuning, 1939 是中国新纪录属。

**关键词：**叶甲总科；象天牛族；分类

## Introduction

The genus *Eurymesosa* Breuning, 1939 is a small genus in the tribe Mesosini Mulsant, 1839 and now comprises four species distributed from Indochina to Indonesia (Breuning 1939, 1962, 1970, 1974): *E. ventralis* (Pascoe, 1865), *E. albostictica* Breuning, 1962, *E. affinis* Breuning, 1970 and *E. multinigromaculata* Breuning, 1974. However, no species have been known from China so far. Herein we describe a new species, making this the first record of this the genus from China. It is the 21st genus and 105th species of the tribe Mesosini known from China (Lin *et al.* 2014, Yamasako & Lin 2015).

## Material and methods

This study is based on three dried specimens deposited in the IZAS (Institute of Zoology, Chinese Academy of Sciences, Beijing, China). The observational method follows Yamasako & Ohbayashi (2011). The abbreviations for endophallic structures are as follows: APH—apical

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phallomer; AS—apical sclerite; BPH—basal phallomer; CS: crescent shaped sclerites; CT—central trunk; ED—ejaculatory duct; LSp—large spicules; MPH—median phallomer; MT—medial tube; MSp—micro spicules; PB—pre-apical bulb; and SSp—small spicules.

## Taxonomy

### *Eurymesosa* Breuning, 1939

*Eurymesosa* Breuning, 1939: 391. Type species: *Ereis ventralis* Pascoe, 1865, by original designation.

Diagnosis. The genus *Eurymesosa* is characterized mainly by the following features (Breuning, 1939): eye deeply emarginate; lower eye lobe slightly long vertically; antennomere III longer than scape and antennomere IV respectively; elytra without long suberect setae; prosternal process not truncated in lateral view; and mesosternal process truncated in lateral view.

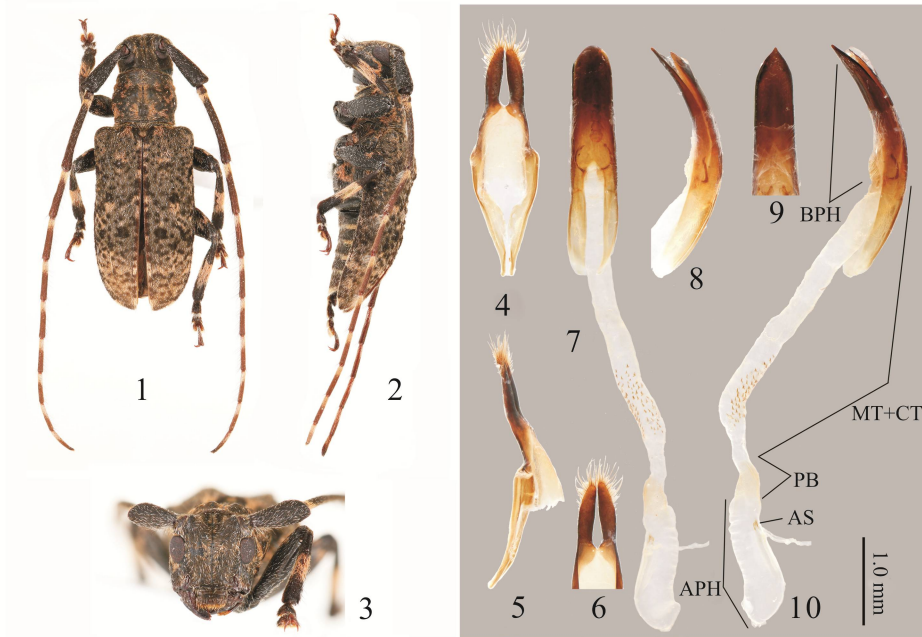
Distribution. China (new country record); Vietnam; Laos; Cambodia; Malaysia.

### *Eurymesosa ziranzhiyi* sp. nov. (Figs. 1–10)

Description. Male (Figs. 1–3,  $n = 3$ ). Body length from the tip of occiput to elytral apex: 13.8–14.4 mm, body width across elytral humeri: 4.6–5.4 mm.

Body black, dominantly with dark brown pubescence mingled with sparse white pubescence. Head with sparse small spots of light brown pubescence. Pronotum mottled with light brown pubescence forming several irregular spots on disk. Antenna with sparse suberect setae beneath; scape with dark brown pubescence mingled with sparse light brown and white pubescence; pedicel with dark and light brown pubescence; antennomeres III–XI with annulation of light brown pubescence on each base and the remainders with dark brown pubescence mingled with sparse white pubescence. Elytra scattered with small spots of light brown and black pubescence of which light ones forming indistinct transverse bands on base and apex, with several spots of short black bristles in the following manner: one on each basal swelling, one before each middle, and some arranged transversally behind middle. Legs with femora scattered with a few small spots of light brown pubescence; tibiae with annulation of same pubescence near each middle. Ventral surface with mingled dark brown, light brown and sparse white pubescence.

Head with frons provided with a few fine punctures. Eyes strongly emarginated, almost subdivided into upper and lower lobes, but narrowly connected posteriorly by 1–2 rows of ommatidia; lower eye lobe large, slightly long vertically, 1.1 times as long as width, 0.8 times as long as gena. Antennal tubercle well elevated. Antenna 1.5–1.7 times as long as body; scape well thickened apically, with opened cicatrix on apex, roundly projected outwardly at apex; antennomere 11 gently curved; relative length of each segment as follows: 1.2 : 0.2 : 1.6–1.7 : 1.1–1.2 : 1.0 : 0.9 : 0.9 : 0.8 : 0.7 : 0.7 : 0.7. Pronotum 0.8 times as long as wide, 0.7 times as wide as the conjoint width of elytra across humeri, constricted at base, roundly dilated laterally before middle, with several granules on dorsal surface, three obtuse tubercles on disk and obtuse tubercle on lateral side before apex. Elytra 1.8 times as long as the conjoint width at humeri, with several granules on base, weakly swollen longitudinally behind base near the middle of each elytron; sides weakly constricted behind humeri, slightly dilated toward apical 1/3, arcuately narrowed toward rounded elytral apex. Legs with middle tibia without distinct notch on lateral margin.



Figures 1–10. *Eurymesosa ziranzhiyi* sp. nov. 1–3. Holotype, male; 4–10. Male genitalia (holotype): 4, 5. Tegmen; 6. Lateral lobes; 7, 8. Median lobe; 9. Apex of median lobe; 10. Median lobe with endophallus. 1, 4, 7. Dorsal view; 2, 5, 8, 10. Lateral view; 3. Frontal view; 6, 9. Ventral view. Scale bars = 1.0 mm (Figs. 4–10).

Male genitalia (Figs. 4–10,  $n = 2$ ). Tegmen in dorsal view rhombic, widest near middle, gently curved in lateral view. Lateral lobe about 1/4 of the total length of tegmen, gently constricted at base, slightly dilated toward middle, then narrowed toward roundly pointed apex, with mingled long and short setae in apical half. Median lobe gently curved in lateral view; basal struts dehiscent from the middle of median lobe; dorsal plate shorter than ventral plate, with rounded apex; ventral plate with apex pointed. Endophallus with inflation, without eversion about triple length of median lobe, subdivided into BPH, MPH (MT+CT and PB) and APH, but MPH and APH indistinctly delimited. BPH subequal to a half length of median lobe, with pair of CS; MPH with MT+CT long, about 1.5 time as long as median lobe, gently curved dorsally behind base; PB short, dilated basally; APH well swollen in clubbed shape, with a pair of AS on dorsal side, with a single ED on dorsal side near apex. MSp indistinct, sparsely distributed in apical 1/3 of MT+CT (= almost coincided with MT); LSp distributed in basal 1/3 of dorsal side of MT+CT (= almost coincided with CT), arranged in two lines, mostly unidentate but mingled with a few multidentate ones; SSp small, unidentate, dominantly covered PB. AS plate-like shape, indistinct, weakly sclerotized.

Type locality. China, Shaanxi, Yangxian, Huayangzhen.

**Holotype.** ♂, China, Shaanxi, Yangxian, Huayangzhen, Yangjiahe, 02–07-VI-2014, Weiwei ZHANG leg., IOZ (E) 1905367, Ceram-82 (two legs in alcohol for further molecular research). **Paratypes.** 1♂, Shaanxi, Foping, 950 m, 23-VII-1998, Jian YAO leg., IOZ (E) 1905366; 1♂, Hubei, Shennongjia, Muyuzhen, 05-III-1993, Yanyan ZAN leg., IOZ (E) 1905365.

Diagnosis. This new species fits well with the definition of the genus and well congeneric

with the other members, but is differentiated by the following characters: body dominantly covered with dark brown pubescence; eye more strongly emarginated than the other congeners, of which upper and lower lobes are connected by a row of 1–2 ommatidia. Among the mesosine species recorded from China, this new species is very similar to *Mesosa* (*Perimesosa*) *atrostigma* Gressitt, 1942 in general appearances, but is easily distinguishable from the latter not only by the generic features described above, but also by the following features: pronotum with granules on dorsal surface and elytra with granules on base.

**Etymology.** The species epithet is named after a students' organization of the Affiliated High School of Peking University, "Ziranzhiyi" (= 自然之翼), which means "the wings of nature". The members of the organization love nature and enter the Nature Reserve area every year to observe and study biology. They also propose suggestion for nature conservation. The holotype was collected during their summer camp in the Qinling Mountains in 2014.

**Distribution.** China (Shaanxi, Hubei).

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