



## Description of *Eutetrappa weni* n. sp. from Guizhou, China (Coleoptera: Cerambycidae: Lamiinae: Saperdini)

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### Abstract

*Eutetrappa weni* n. sp. is described from Leigongshan, Guizhou, China.

**Key words:** new species, genitalia, taxonomy, Indomalayan region

### Introduction

During the course of a revision of the genus *Eutetrappa* Bates, a new species was discovered. A comprehensive introduction to the genus will be provided soon (Lin, Bi & Yang, in preparation).

The first specimen of the new species was collected in August 2011 and transferred to the second author through Mr. Dong Wen. It was thought to be a new species of Saperdini but the genus could not be determined due to the lack of male specimens.

One picture of a male specimen was shown to the second author in 2013 by Petr Viktora, but the genus could not be identified only through pictures. Fortunately, two males and three females were collected by local people in 2014 and kindly sent to the second author by the first author. These specimens matched the definition of *Eutetrappa* Bates, 1884 and is described as *E. weni* n. sp. herein.

### Materials

Types are deposited in the following collections:

CGQH	Collection of Gui-Qiang Huang, Chongqing, China
CPV	Collection of Petr Viktora, Kutná Hora, Czech Republic
CWD	Collection of Dong Wen, Qingdao, Shandong, China
IZAS	Institute of Zoology, Chinese Academy of Sciences, Beijing, China
KLUC	School of Environment and Life Science, Kai-Li University, Kaili, Guizhou, China

### Results

#### *Eutetrappa weni* n. sp.

(Figs. 1–23)

**Description:** Male: length: 20.6–23.0 mm, humeral width: 6.1–6.9 mm. Female: length: 25.0–27.5 mm, humeral

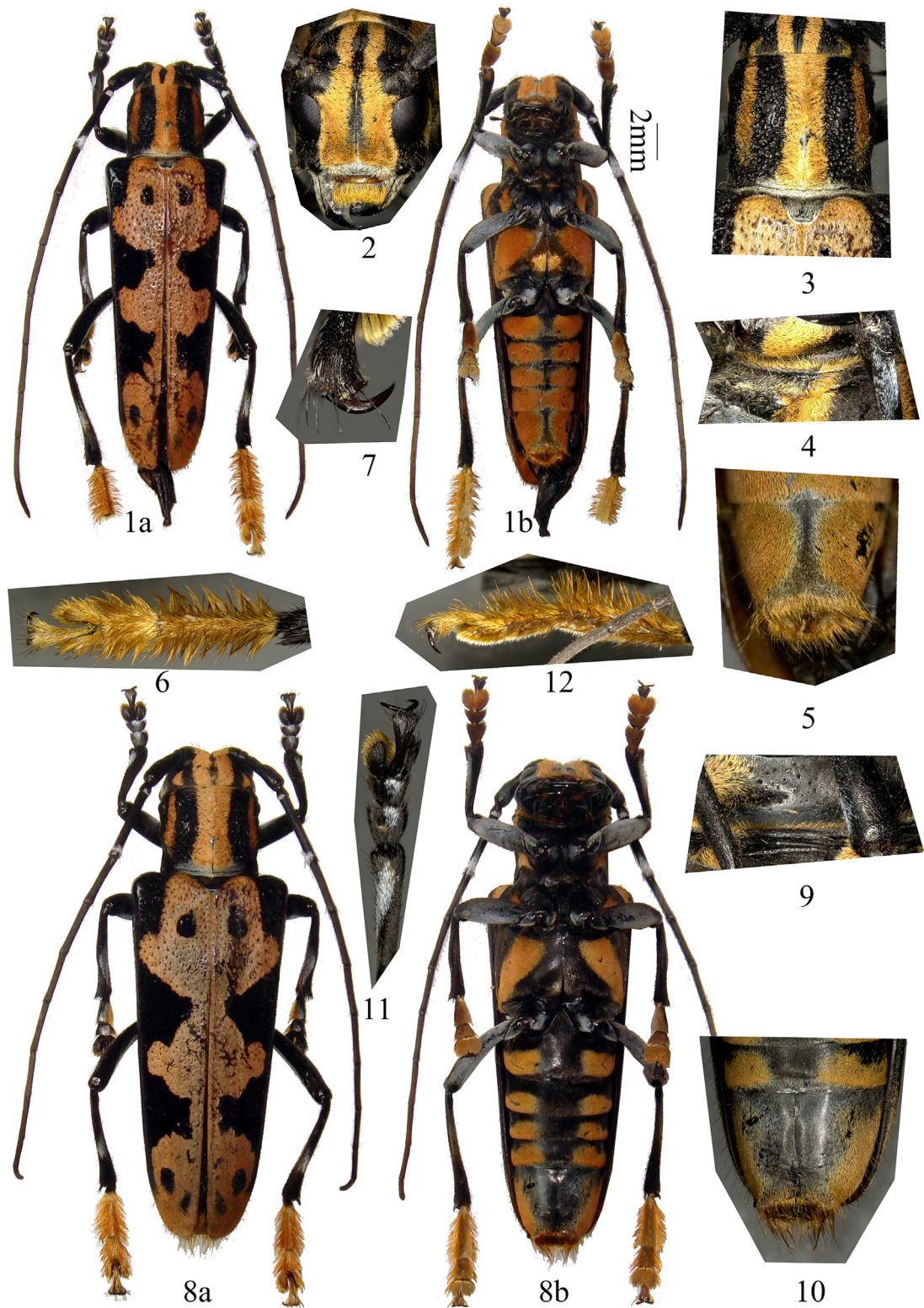
width: 7.5–8.5 mm. Body black. Head black, with two golden yellow to brick red brown pubescent stripes on occiput, which extend around antennal tubercles and inferior eye lobes to clypeus, sometimes meeting at base of frons (especially in males, Fig. 2); labrum and a small vitta behind superior eye lobe (usually under scape) and lateral side of inferior eye lobe (Fig. 4) covered with same golden yellow to brick red brown pubescence; base of clypeus, upper and outer sides of basal half of mandibles with whitish pubescence (Fig. 2). Antennae black, apices of antennomeres II and III ringed with white pubescence (usually more developed on ventral and inner sides), sparsely fringed with short hairs on ventral sides of basal six or seven antennomeres. Prothorax dark black with five golden yellow to brick red brown pubescent stripes, one median and two on each side (first stripe not attaining basal margin (Figs. 1a, 3, 8a), the second stripe extending to coxa (Figs. 1b, 8b)). Basal margin of pronotum and scutellum with grayish white pubescence (Fig. 3). Elytron dark black, with a large brick red brown pubescent marking along suture, and with three expanded patches (Figs. 1a, 8a): the first one at basal third, looking somewhat like a stylized monkey face (having two black eyes and two expanded ears, the ear attach to first lateral carina); the second one at middle, not reaching lateral carina; the third one at apex, with two black eyes, basal half not reaching lateral carina and apical half extending to lateral margin. Ventral surface mostly covered with golden yellow to brick red brown pubescence (Figs. 1b, 8b), except the middle line (larger in female than in male) and metepisternum which is black and sparsely covered with grayish short pubescence; males with a golden yellow sexual patch on middle of metasternum, and sternite VI without a middle black line (Fig. 1b). Femora and tibiae black with grayish pubescence, more developed on some parts of tibiae (such as outer side of protibial apex, inner side of apical half of mesotibiae, dorsal side of middle of metatibiae); pro- and mesotarsi with dorsal side black with grayish pubescence, ventral side yellow brown; metatarsi golden brown with long golden brown hairs on dorsal and lateral sides (Figs. 6, 12).

Head slightly narrower than prothorax (Fig. 3). Eyes medially emarginate, inferior eye lobes ca. 1.5 times as high as (male, Fig. 2) or subequal to (female) genae. Antennae relative slender, longer than body (10<sup>th</sup> (male) or 11<sup>th</sup> (female) antennomere reaching elytral apex); antennomeres ratio: male: 23:5:36:27:28:27:27:25:24:23:28; female: 26:6:37:27:28:26:25:24:23:21:23. Prothorax densely punctured, with one glabrous callus near middle of each black pronotal stripe (Fig. 3), before apex with a carina on each side (Figs. 4, 9), narrower from carina to apex (Fig. 3). Elytron densely and coarsely punctured, gradually narrower apically, with 2 lateral carinae, neither from base nor reaching apex; apex rounded, without tooth or spine at inner and outer angle. Sternite VII of male (Fig. 5) without a middle groove, with dense golden yellow apical hairs; sternite VII of female (Fig. 10) with a middle groove, with longer apical hairs. Legs slender, mesotibiae slightly grooved, metafemora reaching fourth or fifth abdominal segment, first metatarsal segment longer than following two segments combined (Figs. 6, 12). Anterior claw of pro- and mesotarsal claws of male with a small tooth (Fig. 7), female tarsal claws and metatarsal claws of male simple.

Male genitalia (Figs. 15–22): Tergite VIII (Figs. 15a, 15c) much broader than long, apex almost rounded with a small nick in middle, with moderate long setae at sides, setae in the middle shorter and sparser. Spiculum gastrale subequal to ringed part of tegmen in length, spiculum relictum about one fourth of spiculum gastrale in length. Tegmen (Figs. 16a–c) length about 4.5 mm; lateral lobes stout, each about 1.0 mm long and 0.4 mm wide, with a finely setose ridge at ventral base (Fig. 17); apex with fine setae longer than half of lateral lobes; basal piece well-developed and bifurcated (Fig. 16c); median lobe plus median struts slightly curved (Fig. 18b), distinctly longer than tegmen (19:15); median struts about half of whole median lobe in length (Fig. 20); dorsal plate shorter than ventral plate; apex of ventral plate (Fig. 19) pointed (apex slightly blunt); median foramen slightly elongated; internal sac about three times as long as median lobe plus median struts, with four or five pieces of basal armature (located behind apex of median struts), two bands of supporting armature (Fig. 21), and three rods of endophallus (Fig. 22), two longer rods each about 4.0 mm, slightly shorter than tegmen, the short rod about 3.6 mm. Female genitalia: spermathecal capsule (Fig. 23) composed of an apical orb and a curved stalk, stalk only a little longer than apical orb. Spiculum ventrale longer than abdomen. (spiculum ventrale measured 13.5 and 14.2 mm for two adults, compared with abdomens which measured 11.0 and 12.5 mm in ventral view, respectively).

**Diagnosis.** This species can be separated from congeners by the unique brick red brown pubescence and unique elytral markings, larger body size, and unique golden brown metatarsi.

**Etymology.** The species is named after Mr. Dong Wen (Shandong, China), who brought the first specimen to the second author. Wen is his family name.



**FIGURES 1–12.** *Eutetrappa weni* n. sp. habitus. 1–7. Holotype, male, from Guizhou; 2. Frontal view of head. 3. Dorsal view of pronotum and elytral base, showing the punctures. 4. Lateral view of prothorax, showing the ridge before apical margin. 5. Ventral view of sternite VII, showing the middle marking (not groove) and apex. 6. Dorsal view of right metatarsus, showing the long golden yellow hairs. 7. Dorsolateral view of claw of right mesotarsus, showing the appendiculate tooth. 8–12. Paratype, female, from Guizhou. 9. Lateral view of prothorax, showing the ridge before apical margin. 10. Ventral view of sternite VII, showing the middle groove and apex. 11. Dorsal view of protarsus, showing the white spots on tarsomeres and simple claw. 12. Lateral view of right metatarsus, showing the long golden yellow hairs. a. Dorsal view, b. Ventral view. 1 and 8 scale 2 mm, others not to scale.



**FIGURES 13–14.** Ecological pictures of *Eutetrappa weni* n. sp., taken by Yang Li. 13. A male on dry bamboo, taken in 2014.VI.21, 12:50–13:00 (Beijing local time); 14. A female on a leaf of *Pilea pumila* (L.) A. Gray (Urticaceae), taken in 2014.VI.21, 12:40–12:50 (Beijing local time)..

**Remarks.** The species is identified in the genus *Eutetrappa* for the following two key characters, which were emphasized recently (Chou, Chung & Lin, 2010; Lin, Li & Yang, 2006): 1) male claws with anterior claw of pro- and mesotarsi appendiculate with small teeth, female claws simple; 2) elytra with two distinct lateral carinae, rounded apically.

The Chinese name of this species is 猴直脊天牛 (= Hou Zhi Ji Tian Niu), which means “monkey *Eutetrappa*.” This name was chosen because the elytral markings form what appear to be stylized monkey faces; also, the year of publication (2016) is the year of the monkey in China.

**Biological and ecological notes.** The specimens studied were collected from Guizhou, China during June to August. In June, the beetles were observed on plants near a road at midday (Figs. 13–14, personal communication with collector Yang Li), which may indicate that this is a diurnal species. In August, a dead specimen was found on the road (personal communication with collectors Jian-Yue Qiu and Hao Xu). One female (Fig. 14) was observed on a leaf of *Pilea pumila* (L.) A. Gray [Urticaceae, plant identified by Yang Li and confirmed by a botanist (Ying Liu) based on the picture]. However, the specimen was not observed feeding and the host plant remains unconfirmed.

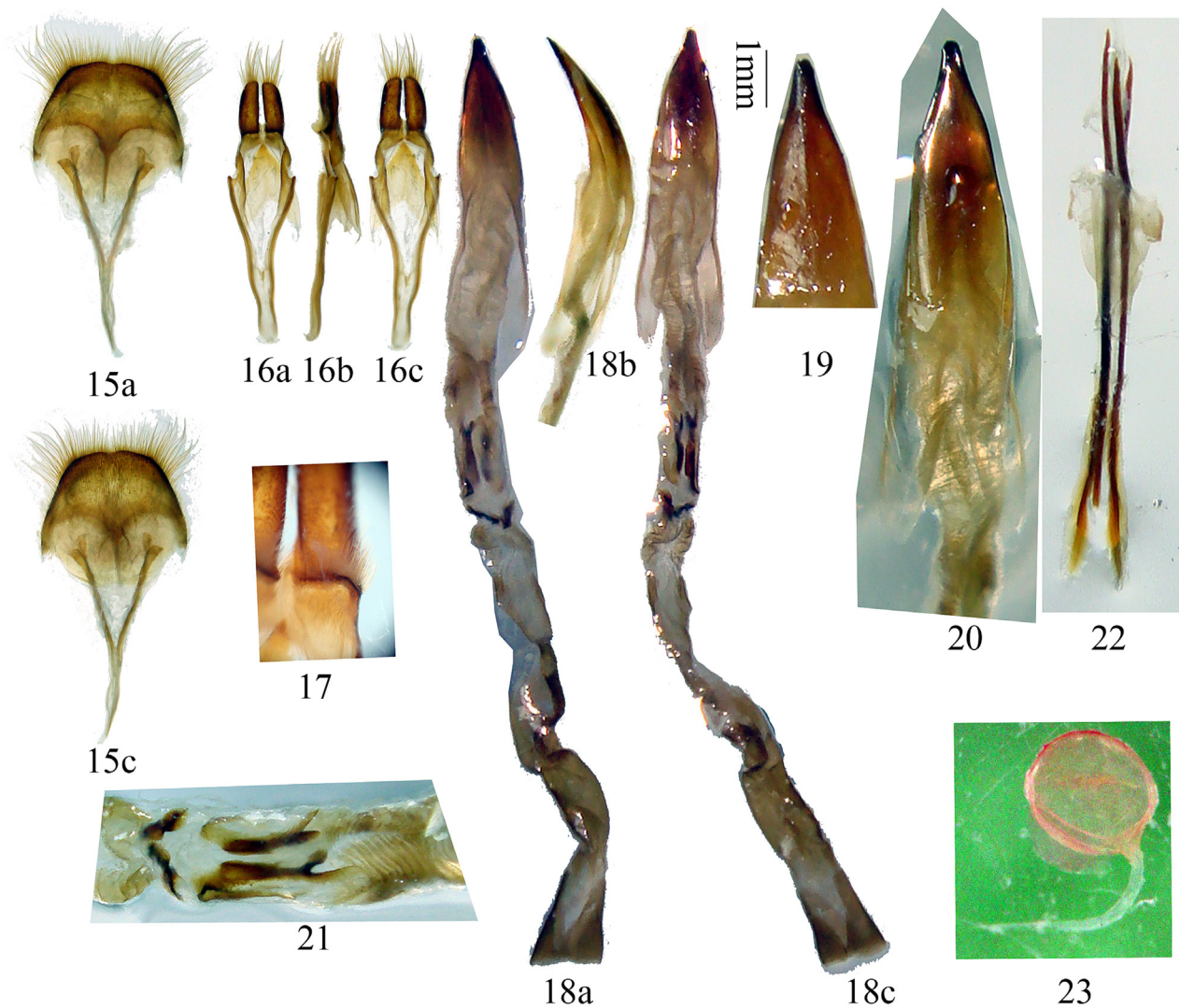
**Distribution.** China: Guizhou.

**Material examined.** Holotype, male (Figs. 1a, 1b), China, Guizhou, Leishan, Mt. Leigongshan, Lianhuaping, N26°22', E108°12', alt. 1631m, 2014.VI.18, leg. Jing Yang (IZAS, IOZ(E) 1905306, ex KLUC). Paratypes: 1 female, same data to holotype but deposited in (KLUC); 1 female, same data to holotype but 2014.VI.16 and deposited in (KLUC); 1 male (Fig. 13) 1 female (Figs. 8a, 8b, 14), same data to holotype but 2014.VI.21, leg. Yang Li (IZAS, IOZ(E) 1905304-05); 1 female, same data to holotype but, 2011.VIII.11, leg. Jian-Yue Qiu & Hao Xu (CWD); 1 female, same data to holotype, but 2015.VII.12, leg. Bo-Yan Li (CGQH); 1 male, S. China, SE. Guizhou, Dushan County, Gengdingshan env., N25°52.5', E107°38', alt. 1445m, 2009.VI, leg. Sehna et Hackel (CPV).

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transferors Ping Zhao (KLUC), Dong Wen (CWD) and Petr Viktora (CPV). We wish to express our sincere thanks to Laurence Livermore (The Natural History Museum, London, England, UK), and Eugenio H. Nearn (Purdue University, West Lafayette, IN, USA) for improving this manuscript. This research was supported by a grant (No. O529YX5105) from the Key Laboratory of the Zoological Systematics and Evolution of the Chinese Academy of Sciences, and by NSFC program J1210002 and 31472029.



**FIGURES 15–23.** Terminalia of *Eutetrappa weni* n. sp. 15–22. Male genitalia. 15. Male terminalia, showing tergite VIII and sternite VIII, and spiculum gastrale and spiculum relictum. 16. Tegmen. 17. Setose ridge on the ventral base of lateral lobes. 18. Median lobe with median struts, and internal sac (not including rods). 19. Apex of ventral plate. 20. Apex of dorsal plate, and median struts. 21. Basal armature and two bands of supporting armature. 22. Rods of endophallus. 23. Spermathecal capsule. a. Ventral view, b. Lateral view, c. Dorsal view. 15, 16 and 18: Scale 1 mm, others not to scale.

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