



## *Cymbiodyta lishizheni* sp. nov., the second species of the genus from China

FENGLONG JIA<sup>1</sup> & RENCHAO LIN

*Institute of Entomology, Sun Yat-sen University, Guangzhou, 510275, Guangdong, China.*

*E-mail: lssjfl@mail.sysu.edu.cn?linrenc@163.com*

<sup>1</sup>*Corresponding author*

The water scavenger beetle genus *Cymbiodyta* Bedel contains 30 species (Jia & Short 2010, Short & Fikáček 2011), most of which are distributed in North America. Only one species (*Cymbiodyta orientalis* Jia & Short, 2010) has been described since the worldwide revision of the genus by Smetana (1974). This taxon was the second species of the genus known from the Old World and the first species known from the Oriental Region. Subsequently, Jia (2014) described the male of *C. orientalis* Jia & Short and provided photographs of the aedeagus.

In 2014, the second author collected 50 specimens of *Cymbiodyta* from Jiangxi Province in southeastern China. Upon comparing it with *Cymbiodyta orientalis* Jia & Short, we determined it was not conspecific, and represented a new undescribed species. We here describe this species as *Cymbiodyta lishizheni* sp. nov.

Some of the male specimens of the new species were dissected and their genitalia removed. After 8–10 hours in 10% KOH at room temperature, the male genitalia were transferred to a drop of pure alcohol and the remaining membrane was removed under a compound microscope after which they were mounted in a drop of glycerin on a piece of transparent plastic attached below the specimens. Male genitalia and morphological characters were examined using a Nikon SMZ800 compound microscope. Photographs were taken using a Zeiss Axioskop 40 compound microscope and a Leica M205C stereomicroscope combined with AutoMontage software.

Terminology largely follows Smetana (1974) and Hansen (1991).

Examined specimens are deposited in the following collections: Snow Entomological Collection, Biodiversity Institute, University of Kansas, Lawrence, USA (SEMC), Czech National Museum, Prague, Czech Republic (NMPC); Collection of Insects, Biological Museum, Sun Yat-sen University, Guangzhou, China (SYSU).

We wish to thank Dr. Robert Angus, an English hydrophiloid specialist, who improved the English of the manuscript. This study was supported by the National Natural Science Foundation of China awarded to F.-L. Jia (grant no. 31272266) and The Special Program of Basic Work in Science and Technology, China (2013FY111500).

### *Cymbiodyta lishizheni* Jia & Lin sp. nov.

(Figs. 1–11, 15, 18)

**Type material:** **Holotype** ♂ (SYSU), CHINA: Jiangxi Province, Jing'an County, Guanyinyan, 20.vii.2014, 29.04°N, 115.14°E, 690 m, Ren-Chao Lin lgt. (Labeled in both Chinese and English). **Paratypes (49):** 41 specs. (SYSU, SEMC, NMPC) same data as holotype; 8 specs., CHINA: Jiangxi Province, Jing'an County, Sanzhaolun town, Baishuidong (translation: labeled in Chinese), 22.vii.2014, 29.04°N, 115.11°E, 660 m, Ren-Chao Lin lgt.

**Diagnosis.** The species is easily distinguished from *C. marginella* (Fabricius), the only Old World known species outside of China, by the coarsely punctate striae on the elytra (Figs. 1, 2, 6). It can be separated from the other known Chinese species of the genus, *C. orientalis* Jia & Short, 2010, by (1) its smaller size (3.2–3.3 mm), (2) its broader and more extensive paler elytral margins (Figs. 1–2), (3) the more extensive femoral pubescence, and (4) the aedeagus with median lobe bottle-shaped, more strongly narrowed towards apex (Fig. 15); in *C. orientalis* Jia & Short, the median lobe is not so strongly narrowed towards the apex (Figs. 16–17).

**Description.** Body length 3.2–3.3 mm, body width 2.3 mm. Dorsum blackish brown, with margins of pronotum and elytra broadly paler (Figs. 1–2), occasionally dark brown; anterior margin of pronotum usually with narrow paler band (Fig. 2), sometimes without such paler band (Fig. 5); posterior quarter of elytra paler (Figs. 1–2) or dark brown (Fig. 6). Body oval, convex. Head black with narrow reddish yellow clypeal spots in front of eyes (Fig. 2) or completely black.