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A study on the genus *Compsidolon* Reuter, 1899 from China (Hemiptera: Heteroptera: Miridae: Phylinae), with descriptions of three new species

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Abstract

Compsidolon Reuter from China with eleven species is reviewed here. Three of them, *C. ailaoshanensis*, *C. flavidum*, and *C. pilosum* are described as new to science. *C. eximium* (Reuter) is recorded from China for the first time. *Compsidolon punctulatum* Qi and Nonnaizab, 1995 is treated as a junior synonym of *Compsidolon nebulosum* (Reuter, 1878). A key to Chinese species of *Compsidolon* Reuter is given. Photographs of dorsal habitus, scanning electron micrographs of metathoracic scent-gland, and illustrations of male genitalia are also provided. All type specimens are deposited in the Institute of Entomology, Nankai University, Tianjin, China.

Key words: Heteroptera, Miridae, *Compsidolon*, new species, new synonymy, China

Introduction

Reuter (1899) erected the monotypic genus *Compsidolon* to accommodate the type species, *C. elegantulum* from Syria. It was characterized by the dorsum covered with dark spots. Wagner (1965, 1975) presented keys to subgenera and species, and illustrated the male genitalia. His works were focused on the European fauna. Linnavuori (1992, 1993, 2010) recorded species from Greece, Middle East, and Africa. Yasunaga (1999) described new species from Japan.

Nonnaizab and Yang (1994) recorded two species, *C. kerzhneri* Kulik and *C. pumilus* (Jakovlev), from China. Qi and Nonnaizab (1995) described *C. punctulatum* as new and recorded *C. absinthii* (Scott) from China. Li and Liu (2007) described additional new species, *C. uncum* and *C. furcillatum*, and recorded *C. salicellum* (Herrich-Schaeffer) from China. Up to present, 57 species of the genus have been described worldwide and 7 species have been recorded in China (Schuh, 2002–2013).

The present paper deals with eleven species of genus *Compsidolon* from China, including three new species and one newly recorded from China, and proposes a new synonymy: *Compsidolon punctulatum* Qi and Nonnaizab, 1995 = *Compsidolon nebulosum* (Reuter, 1878). The key for identification of the Chinese species, the digital photographs, the scanning electron micrographs of metathoracic scent-gland (new species), and the illustrations of male genitalia are given. Detailed information is provided for most material examined, including number and sex of specimens.

Material and methods

All male genitalic illustrations were made from temporary slide mounts, using an Olympus SZ-ST stereomicroscop after treatment with 10% NaOH solution for about two to five hours. Dorsal habitus photographs were made with a Nikon SMZ1000 apparatus; which specimens photographed were indicated in the "Type specimens", the "Type material examined" and the "Specimens examined" sections. Scanning electron micrographs were prepared using a

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***Compsidolon uncum* Li and Liu, 2007**
(Figs. 19–20, 60–63)

Compsidolon uncum Li and Liu, 2007: 769.

Type material examined. Holotype: Male (photographed), **CHINA:** Yadong (27°31'N, 88°58'E), Xizang Autonomous Region, alt. 2600-2900m, 27.VIII.2003, Huai-Jun XUE and Xin-Bu WANG leg.. **Paratypes:** 20 males, 12 females (one of them photographed), same data as holotype. (The type specimens are deposited in the Institute of Entomology, Nankai University, Tianjin, China)

Diagnosis. Moderately large size, total length 4.47–4.51 (male), 4.01–4.12 (female); general coloration of dorsum orange-yellow, somewhat reddish; hemelytra (except cuneus), pronotum and scutellum with dark spots; frons slightly projecting with dark radial stripes; a transverse row of black roundish spots near the posterior margin of vertex; antennal segments I and II with black rings at base, segments III and IV brown; apex of clypeus black; labium reaching hind coxae; exposed part of mesoscutum orange-red; apex of scutellum black; membrane fumose, with pale marks, veins pale; legs usually yellow, hind femora suffused red, femora with black spots; tibial spines black with black spots at base, hind tibiae with some rows of black spinules, all tibiae darkened at base; tarsal segment III and claw darkened; abdominal venter reddish yellow with dark marks, gential capsule sometimes entirely brown. Male genitalia (Figs. 60–63): Endosoma, including apical spicule sigmoid, body relatively heavy, base falling well bellow level of secondary, endosoma with two apical spicula, one slender and straight, the other shorter, unciform.

Distribution. China (Xizang).

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