



The genus *Plotina* Lewis (Coleoptera: Coccinellidae), with descriptions of four new species from China

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Abstract

The genus *Plotina* Lewis from China is reviewed and four new species are described: *P. octomaculata* Wang et Ren, **sp. nov.**, *P. menghaiensis* Wang, Ren et Chen, **sp. nov.**, *P. daweshanensis* Wang et Ren, **sp. nov.**, *P. signatella* Wang et Ren, **sp. nov.** *Plotinia quadrioculata* Kovář, 1995 is reported from China for the first time. All species are described and illustrated, and a key to the known species is given.

Key words: Coleoptera, Coccinellidae, Sticholotidinae, *Plotina*, new species, China

Introduction

The genus *Plotina* Lewis (Coleoptera: Coccinellidae: Sticholotidinae) was proposed by Lewis (1896) for the placement of one species from Japan, *P. versicolor* Lewis, which is anomalous and has a striking combination of three colors on its dorsal surface. Mader (1931) examined a cotype of *P. versicolor* and referred the species to the tribe Coelopterini (=Pharini), and Korschefsky (1931) also listed the genus in the same tribe in his catalogue. Mader (1955a) described *P. muelleri* from Fujian, China, and Kovář (1995) added the third species, *P. quadrioculata* from Thailand. The genus *Plotina* and related genera (*Sphaerplotina* Miyatake, 1969, *Haemoplotina* Miyatake, 1969, *Palaeoneis* Crotch, 1874 (= *Ballida* Mulsant, 1850), *Paraplotina* Miyatake, 1969 and *Buprestodera* Sicard, 1911) were studied by Miyatake (1969). Later Miyatake (1994) proposed the tribe Plotinini for the genus *Plotina* and related genera originally placed in the tribe Sticholotidini.

In this paper, *Plotina* from China is reviewed, with descriptions of four new species. A key to known species is provided.

Material and methods

The specimens examined were collected from China. All materials were preserved in 85% ethanol. External morphology was observed with a dissecting stereoscope (Zeiss Stemi 2000–cs). The following measurements were made with an ocular micrometer: length from apical margin of clypeus to apex of elytra (TL); width across both elytra at widest part (TW); height at highest elytral part (TH); head width at widest part (HW); pronotal length at longest part (PL); pronotal width at widest part (PW); elytral length at longest part (EL); elytral width across both elytra at widest part (EW). Male and female genitalia were dissected, cleared in 10% solution of NaOH by boiling for several minutes, and examined with an Olympus BX51 compound microscope.

Images were photographed with digital cameras (Qimagin 5.0 RTV and Coolsnap–Procf & CRI Micro*Color), connected to the dissecting microscope. The software Image–Pro Plus 5.1 was used to capture images from both cameras, and photos were cleaned up and laid out in plates with Adobe Photoshop CS 8.0.