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A taxonomic review of the genus *Neptosternus* Sharp of China with the description of a new species (Coleoptera: Dytiscidae: Laccophilinae)

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Abstract

Chinese species of *Neptosternus* Sharp, 1882 are reviewed. *Neptosternus punctatus* sp. nov. from Guangdong is described and illustrated. *Neptosternus yanbini* Bian & Ji, 2009, described from Hainan, is shown to be a junior subjective synonym of the widely distributed Oriental *Neptosternus hydaticoides* (Régimbart, 1877) (syn. nov.). *Neptosternus strnadi* Hendrich & Balke, 1997 and *N. maculatus* Hendrich & Balke, 1997 are recorded from China for the first time. Another species—*Neptosternus wewalkai* Balke, Hendrich & Yang, 1997, known previously only from a single female from northern Vietnam—is re-described based on male and female specimens from Guangxi, and also recorded from China for the first time. *Neptosternus pocsi* Satô, 1972 is removed from the Chinese fauna. A key to the six *Neptosternus* occurring in mainland China is presented.

Key words: Dytiscidae, Laccophilinae, *Neptosternus*, Palaearctic Region, Oriental Region, China, new species, new synonymy, new records

Introduction

The genus *Neptosternus* Sharp, 1882, characterised by a tridentate prosternal apophysis, currently comprises 99 species, of which seven species occur in Madagascar (Guignot 1959, 1960; Pederzani & Rocchi 2008), 18 species are distributed in Sub-Saharan Africa (Omer-Cooper 1970, Bilardo & Rocchi 2010) and 71 species occur in south-eastern Asia from India to the Philippines and Sulawesi (Holmen & Vazirani 1990; Hendrich & Balke 1997, 1999, 2000a,b, 2001, 2003; Balke *et al.* 1997; Balke & Hendrich 1998, 1999; Bian & Ji 2009). Only few *Neptosternus* reach the border with the Palaearctic zoogeographical region, e.g., the Algerian species *N. rotroui* (Pic, 1924) (Omer-Cooper 1970) and the Indian *N. circumductus* Régimbart, 1899 in Iran (Hájek 2006).

Neptosternus was reported from China for the first time by Hong Zeng in her unpublished PhD thesis, where she mentioned *N. coomani* Peschet, 1923 and *N. pocsi* Satô, 1972. These data were subsequently uncritically repeated by Nilsson (1995), and Bian & Ji (2009), and with a question mark from southern China by Hendrich & Balke (1997). Hendrich & Balke (1997) also described one new species from Taiwan, and published the first Chinese record of an additional species—*N. hydaticoides* (Régimbart, 1877)—together with additional records of other species. Most recently, Bian & Ji (2009) described a new *Neptosternus* from Hainan, which is however synonymised in the present paper.

The study of extensive material of Chinese *Neptosternus* housed in the Biological Museum of Sun Yat-sen University revealed one additional new species described below, and three species not previously recorded from China, which raises the number of *Neptosternus* in China mainland to six species.

Material and methods

The morphological terminology and the descriptions largely follow the revision of Hendrich & Balke (1997). Habitus and male genitalia photographs were taken using an Olympus SZX7 binocular microscope and a Zeiss