



Two new species of *Satonius* Endrödy-Younga from China and notes on the wing polymorphism of *S. kurosawai* Satô (Coleoptera: Myxophaga: Torridincolidae)

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Abstract

Two new species of Torridincolidae from China, *Satonius fui* **sp. nov.** (Hubei) and *S. jaechi* **sp. nov.** (Fujian) are described, illustrated and compared with other species of the genus. The polymorphism of metathoracic wings was studied in the Japanese *S. kurosawai* (Satô, 1982), which macropterous form is presented here for the first time. In addition, new records of *S. stysi* Hájek & Fikáček, 2008 in China are also briefly mentioned.

Key words: taxonomy, new species, wing polymorphism, hygropetric habitats, China, Japan, Palearctic region

Introduction

The genus *Satonius* Endrödy-Younga, 1997 originally described to accommodate a single Japanese species (*Delevea kurosawai* Satô, 1982), belongs to the family Torridincolidae. Members of the family are known predominantly from the Neotropical and southern Afrotropical zoogeographical regions (Beutel & Vanin 2005). Together with *Sphaerius* Waltl, 1838 (Sphaeriusidae) and *Hydroscapha* LeConte, 1874 (Hydroscaphidae), they represent the only representatives of the suborder Myxophaga in the eastern Palearctic and Oriental regions (Hájek & Fikáček 2008, Fikáček & Šípková 2009, Falamarzi *et al.* 2010). Apart of the fact that the larvae and adults of *Satonius* live in hygropetric habitats (e.g. on the wet surface of rocks or on seepages) and that adults of several species possessed reduced metathoracic wings, the biology of *Satonius* remains largely unknown. The genus was revised by Hájek & Fikáček (2008) who described three new species from China, compared larval morphology of two species, illustrated the structure of metathoracic wing of the macropterous *S. stysi* Hájek & Fikáček, 2008, and discussed briefly adaptations of the genus for hygropetric habitats.

Recent extensive findings of *Satonius* in south-eastern China enable us to describe two additional species of the genus (both mentioned as unidentified species by Hájek & Fikáček (2008)) and provide additional data on the occurrence of *S. stysi* Hájek & Fikáček, 2008 previously known from the type locality only. The revision of the available material of the Japanese *S. kurosawai* (Satô, 1982) revealed the co-existence of macropterous and micropterous forms in this species. The macropterous form of *S. kurosawai* is recorded here for the first time and the observed patterns in the occurrence of both forms are briefly summarized.