



Three new *Stenus* species of the *indubius* group (Coleoptera, Staphylinidae) from China

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Abstract

Three new *Stenus* species of the *indubius* group from Sichuan Province, West-Central China, are described: *S. zhuxiaoyui* Tang, **sp. nov.**, *S. pectorifossatus* Tang, **sp. nov.** and *S. erlangshanus* Tang, **sp. nov.** Diagnostic characters are illustrated and a key to Chinese species of this group is provided. The conflict between classifications of *Stenus* based on subgenera and species groups is briefly discussed. All three new species have diagnostic characters of the subgenus *Hemistenus*.

Key words: Coleoptera, Staphylinidae, *Stenus indubius* group, identification key, new species, China

Introduction

Up to the present, 28 *Stenus* species of the *indubius* group have been described. Most of them (26 species) are known from Japan and only 2 species have been previously reported from China (Anhui province): *S. guni-jiangense* Tang & Li, 2005 and *S. paradecens* Tang & Li, 2005.

Generally, species of the *indubius* group can be defined by the following exterior characters: body usually blackish or brownish without elytral spot; surface with large, coarse and dense punctures; paraglossa oval; elytra distinctly widened posteriorly; abdomen very cylindrical. However, the most conspicuous character of this group is a particular structure of the sclerotized spermatheca, which is composed in apical portion of two swollen chambers (capsule and apical chamber) connected to each other by a constricted collum. A detailed taxonomic definition of this species group has been given by Naomi (2006) in his excellent revisional work on the Japanese species.

Traditionally, the genus *Stenus* Latreille (1797) is divided into several subgenera, including *Hemistenus* Motschulsky (1860) and *Hypostenus* Rey (1884). The two subgenera differ, respectively, in presence/absence of abdominal paratergites, the presence presumably being the plesiomorphic state. Species groups currently recognized by *Stenus* scholars are believed to be monophyletic, and normally can be unambiguously placed in one of the traditional subgenera. However, some species groups do not fit entirely a single subgenus: based on diagnostic characters of subgenera some species fall in one subgenus, while other species of the same species group better fit another subgenus. This appears to be the case with *indubius* group. *Stenus indubius* Sharp, 1889 fits the concept of the subgenus *Hypostenus*. At the same time, the three new species described in this paper, as well as *S. inimitabilis* Puthz, 1993, *S. autumnalis* Naomi, 1997 and *S. unzenmontis* Naomi & Puthz, 1996) have the diagnostic characters of *Hemistenus*. Facing this dilemma, Naomi (2006) preferred to exclude the three last species from the *indubius* group. In this paper we consider them members of the *indubius* group, because they possess all diagnostic characters of that group. To avoid the contradiction between classifica-