



## Six new *Stenus* species of the *cirrus* group (Coleoptera, Staphylinidae) from China with a key to species of the group

TANG LIANG<sup>1</sup>, YUN-LONG ZHAO<sup>1,3</sup> & VOLKER PUTHZ<sup>2,4</sup>

## **Abstract**

Six new *Stenus* species of the *cirrus* group are described from China: *S. zhulilongi* Tang & Puthz, **sp. nov.**, *S. jiulongshanus* Tang & Puthz, **sp. nov.** and *S. shenshanjiai* Tang & Puthz, **sp. nov.** from Zhejiang Prov., *S. lijinweni* Tang & Puthz, **sp. nov.** from Zhejiang and Jiangxi Prov., *S. flammeus* Tang & Puthz, **sp. nov.** and *S. bostrychus* Tang & Puthz, **sp. nov.** from Sichuan Prov., and their diagnostic characters are illustrated. The male of *S. cirrus* L. Benick, 1940 was found and illustrated for the first time. A key to species of the *cirrus* group is provided. All six new species have diagnostic characters of the subgenus *Hypostenus*. Some species of this group, including *S. cirrus*, fit the concept of the subgenus *Hemistenus*.

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

## Introduction

Stenus Latreille (1797) is a large genus of the subfamily Steninae of the family Staphylinidae. Up to the present, at least 2319 species of the genus have been described, including 149 from China. The Stenus cirrus group has been defined by Puthz (2003). The most conspicuous character of this group is long suberect to erect setae on the abdomen (see also Naomi 1997). Most species of the group have oval paraglossae. As shown in this paper some species of this group have coniform paraglossae (S. flammeus sp. nov., S. bostrychus sp. nov.), therefore Puthz's (2003) definition of the group has to be modified. Together with some undescribed species, the two species with coniform paraglossae probably represent a discrete complex within the Stenus cirrus group, for which we tentatively propose the name "flammeus complex". Up to the present, 32 species of the group have been described worldwide, of which 15 are from China, 13 from Japan, 3 from Vietnam and 1 from North India.

Traditionally, the genus *Stenus* 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 *cirrus* group. *Stenus cirrus* L. Benick, 1940 fits the concept of the subgenus *Hemistenus*. At the same time, the six new species described in this paper have the

<sup>&</sup>lt;sup>1</sup>Department of Biology, East China Normal University, Shanghai, 3663 North Zhongshan Road, Shanghai, 200062 P. R. China. E-mail: monkey\_zzz1980@163.com

<sup>&</sup>lt;sup>2</sup>Burgmuseum Schlitz, Naturwissenschaftliche Abteilung, Vorderburg 1, D-36110 Schlitz, Germany

<sup>&</sup>lt;sup>3</sup>Corresponding author

<sup>&</sup>lt;sup>4</sup>301<sup>st</sup> Contribution to the knowledge of Steninae