

Article



Two new species of *Parosmylus* Needham (Neuroptera, Osmylidae) from China, with a key to Chinese species

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Abstract

Two new species of the genus *Parosmylus* are described: they are *Parosmylus liupanshanensis* sp. nov., *Parosmylus brevicornis* sp. nov. A key to species in China is given.

Key words: Parosmylus, Osmylinae, new species, China

Introduction

The genus Parosmylus was erected by Needham in 1909, which belongs to the subfamily Osmylinae (Krüger 1914). Including the new species described herein, there are 7 extant species in the world that are unambiguously attributed to this genus: Parosmylus liupanshanensis sp. nov., Parosmylus brevicornis sp. nov., Parosmylus prominens Needham, 1909, Parosmylus belaae Ghosh & Sen, 1968, Parosmylus jombai Yang, 1987, Parosmylus tibetanus Yang, 1987, and Parosmylus yadonganus Yang, 1987. Two additional species previously placed in *Parosmylus* have been moved to other genera: Karaosmylus latus (Panfilov, 1980) (fossil species), Paryphosmylus ornatus (Krüger, 1913). Although Needham described the genus in detail, he mistook the gender of the type (Banks 1913, Nakahara 1914). Unfortunately, Ghosh (1968) accepted this inaccuracy and described another species based on a female. Therefore there have not been any detailed male genitalia studies published previously. The generic validity has been doubted, and some taxonomists regarded Parosmylus as a synonym of Osmylus Latreille (Banks 1913, Nakahara 1914). In our opinion we consider the genus to be valid based on species in China. The genus can be identified by the following combination of characters: in the forewing, costal cross-veins forked distally; cross-veins in radial sector numerous and irregular in arrangement, only the outer gradate cross-veins integrated, or gradate cross-veins hardly differentiated; scent glands generally present, and occasionally protrude from the integument; in the male genitalia: gonarcus strongly sclerotized distally, to form a pair of up-turned ventral processes and cone-shaped lateral projections; parameres resemble Osmylus, curved in middle and fused dorsally; in female genitalia, subgenital plate commonly absent, gonapophysis lateralis boat-shaped, and spermathecae generally oval.

Herein two new species are described, and a key to species in China is given. Terminology of wings follows New (1983), and the genitalia follow Tjeder (1957). All the described specimens are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.