Xenoschesis Förster (Hymenoptera: Ichneumonidae) parasitizing webspinning and leafrolling sawflies with descriptions of four new species and a key to Chinese species

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Abstract

Seven species of Xenoschesis Förster, 1869, are reported from China. Four species, X. (Polycinetis) inareolata Sheng & Sun, sp. n. from Liaoning Province, X. (Polycinetis) truncata Sheng & Sun, sp. n. from Liaoning, Jilin and Henan Provinces, X. (Xenoschesis) tianzhuensis Sheng & Sun, sp. n. and X. (Xenoschesis) weii Sheng & Sun, sp. n. collected in Anhui Province are new to science. One, X. (Xenoschesis) fulvipes (Gravenhorst) was reared from Acantholyda parki Shiokura & Byun and A. posticalis Matsumura, is new record for China. Xenoschesis (Xenoschesis) crassicornis Uchida was reared from A. erythrocephala (L.) and A. parki Shiokura & Byun. A key to species of Xenoschesis Förster known in China is provided.

Key words: Ctenopelmatinae, Polycinetis, taxonomy, host record

Introduction

Xenoschesis Förster, 1869, belonging to the tribe Ctenopelmatini of the subfamily Ctenopelmatinae (Hymenoptera: Ichneumonidae), comprises 14 species, separated into two subgenera, Xenoschesis Förster, 1869 and Polycinetis Förster, 1869, of which seven are from the Palearctic Region (Sheng et al. 2009, Yu et al. 2012), seven are from the Nearctic Region (Yu et al. 2012). Hitherto, no Xenoschesis has been recorded from the Oriental Region. The diagnostic characters of the genus was elucidated by Townes (1969) and expanded upon by Sheng and Sun (2009). Two species of Xenoschesis known from the southern border of the Eastern Palearctic part of China (Chen & Sheng 2007, Sheng & Sun 2009). Here we report seven species of Xenoschesis from China, including four new species and one new record, one from the Oriental part of China.

Material and methods

Insects for this study were collected using the following techniques:

Rearing parasitoids. The “pupation chamber” with mature larvae of webspinning and leafrolling sawflies were collected under the naturally heavily infested trees and reared in the laboratory at room temperature, and misted with distilled water one to two times per week in order to prevent desiccation. The emerged insects were collected daily.

Direct collection. Parasitoid adults were collected using sweep nets mainly in the National Natural Reserve in Anhui, Henan, Heilongjiang, Jilin, Liaoning Provinces and Beijing (CHINA).

Examined material. The specimens of Xenoschesis Förster deposited in the Department of Life Sciences, the Natural History Museum, London, UK (NHM), and in the Zoologische Staatssammlung München, Germany (ZSM), were examined.