



***Ephedraphis* Hille Ris Lambers (Hemiptera: Aphididae), with a key to species and one new species from Mongolia**

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Abstract

The aphid genus *Ephedraphis* Hille Ris Lambers is reviewed. The genus is represented by four species, including *Ephedraphis mongolica* sp. n. on *Ephedra* sp. from Umnogovi Province, Mongolia. A key to the known species of *Ephedraphis* is provided. Diagnostic characters of all species are given. All specimens studied, including type specimens are deposited in the National Zoological Museum of China, Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

Key words: *Ephedraphis*, Aphididae, taxonomy, new species, key, distribution

Introduction

The aphid genus *Ephedraphis* Hille Ris Lambers is a small genus in Aphidini (Aphididae), comprising three species and one subspecies, *E. ephedrae* (Nevsky), *E. gobica* Szelegiewicz, *E. haloxylon* Qiao, Jiang & Zhang and *E. gobica xinjiangica* Kadyrbekov, Ren & Shao. Most individuals are dark brown or almost black in life, and feed on Chenopodiaceae and Ephedraceae. They are distributed in the Palearctic region, mainly in the Middle East, Central Asia and Europe.

Ephedraphis was erected by Hille Ris Lambers (1959) with *Anuraphis ephedrae* Nevsky as type species. Subsequently, Szelegiewicz (1963) described the second species, *E. gobica* from Dornogovi, Mongolia. Mamontova-Solukha (1963) described a subspecies, *E. ephedrae taurica* on *Ephedra* sp. from Ukraine, but variation in some morphological characters is within the range of *E. ephedrae* (Blackman and Eastop 2006). Qiao & Zhang (2002) recorded this genus and *E. gobica* for the first time in China. Kadyrbekov *et al.* (2002) described a new subspecies of *Ephedraphis*, *E. gobica xinjiangica* on *Ephedra* sp. from Xinjiang-Uygur Autonomous Region, China. Qiao *et al.* (2006) reviewed the genus and described the third species, *E. haloxylon* on *Haloxylon ammodendron* from Ningxia Autonomous Region, China, and provided a key to all known species.

Here, a new species, *E. mongolica* is described on *Ephedra* sp. from southwest Mongolia. The other three species, *E. ephedrae* (Nevsky), *E. gobica* Szelegiewicz and *E. haloxylon* Qiao, Jiang & Zhang are re-illustrated, and a key is provided to apterous viviparous females.

Material and methods

Specimen depositories: the holotype and paratypes of the new species and other specimens examined are deposited in the National Zoological Museum of China, Institute of Zoology, Chinese Academy of Sciences, Beijing. Collectors of specimens are mentioned in the content.

Aphid terminology in this paper generally follows Szelegiewicz (1963) and Qiao, Jiang & Zhang (2006). The unit of measurements in this paper is millimeters (mm).