Studies of True Bugs of Xinjiang, Western China. II. Cimicomorpha: Lace Bugs (Hemiptera: Heteroptera: Tingidae: Tinginae)

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Abstract

34 species from 12 genera of lace bugs occur in the fauna of Western China; of them, 11 and 10 species are recorded for the first time from China and Xinjiang, respectively. Kalama wangi sp. n. is described. Kalama aridula (Jakovlev, 1902) is closely related to K. tricornis (Schrank, 1801), and is restored as a good species; morphological differences between these two species are discussed. A key to Central Asian species of the genus Catoplatus Spinola, 1837 is constructed.

Key words: Tingidae, fauna, new species, Central Asia, China, Xinjiang

Introduction

The family Tingidae, or lace bugs, represents a worldwide group of principally host-specific phytophagous insects with 2124 species worldwide and 473 species in the Palearctic Region (Henry, 2009). Of these, more than 280 species are known from China; the majority is widespread in the south of the country and only about 60 species are known from the north (Péricart and Golub, 1996; Hua, 2001).

Lace bugs of Xinjiang remain poorly studied. Only 11 species from 5 genera are known from this extensive territory (Jing, 1981; Qi and Zhou, 1994; Hua, 2001; Li and Zheng, 2006). Some of them are widespread in a greater part of the Palearctic: Derephysia foliacea foliacea (Fallén, 1807), Dictyla echii (Schrank, 1782), D. platyoma (Fieber, 1861), and Physatocheila smreczynskii China, 1952. Other species occupy the arid zone of the East Palearctic: Galeatus cellularis Jakovlev, 1884, G. inermis (Jakovlev, 1874), Dictyla subdola (Horváth, 1905), G. scrophicus Saunders, 1876, Monosteira discoidalis (Jakovlev, 1883), M. unicolor (Mulsant and Rey, 1852), and Tingis (Tingis) pusilla (Jakovlev, 1873). Among the last species, the recently described Galeatus trevius Li and Zheng, 2006 is presumably endemic to South Xinjiang.

The paper contains data on 34 species of lace bugs from Xinjiang, belonging to 12 genera of the subfamily Tinginae Laporte, 1832 distributed in Western China.

Material and methods

This paper is based on the collection material of the China Agricultural University (Beijing) and recent fieldwork of the Zhaohui Luo and Nikolai Vinokurov in Xinjiang Province, China (2010–2011).

All taxa mentioned in this paper are listed in alphabetical order. Most of the specimens examined are retained at the China Agricultural University (Beijing—CAU); part of the material is also retained at the Xinjiang Institute...