New species and new records of Plant Bugs (Hemiptera: Heteroptera: Miridae) from Northwestern China

FEDOR V. KONSTANTINOV1,3 & NIKOLAY N. VINOKUROV2
1Department of Entomology, Faculty of Biology and Soil Sciences, St. Petersburg State University, Universitetskaya nab 7/9, St. Petersburg 190934, Russia. E-mail: fkonstantinov@gmail.com
2Institute for Biological Problems of Cryolithozone, SD RAS, Institute for Biological Problems of Cryolithozone, SD RAS, prosp. Lenina 41, Yakutsk 677980, Russia, E-mail: vinok@ibpc.ysn.ru
3Corresponding author

Abstract

Two new species of Phylini, Glaucopterum alborubrum sp. nov. and Compsidolon schrenkianum sp. nov., are described from Xinjiang province of China. Illustrations of the male genitalia, tarsus and pretarsus, photographs of the dorsal habitus, known hosts, and distributional records are provided for each species. The following 13 species of Miridae are recorded for the first time from China: Anonychiella brevicornis (Reuter, 1879), Atomophora mongolica Konstantinov, 2000, Blepharidopterus angulatus (Fallén, 1807), Compsidolon eximium (Reuter, 1879), Dichrooscytus consobrinus Horváth, 1904, Dichrooscytus kerzhneri Josifov, 1974, Halodapus montandoni Reuter, 1895, Orthotylus nassatus (Fabricius, 1878), Orthotylus (Melanotrichus) schoberiae Reuter, 1876, Phaeochiton ebulum Putshkov, 1977, Pilophorus confusus (Kirschbaum, 1856), Tuponia (Chlorotuponia) prasina (Fieber, 1864), Tuponia (Tuponia) soongorica Drapolyuk, 1980. Also, the following nine species of plant bugs are new records for Xinjiang Province: Atomoscelis onusta (Fieber, 1861), Blepharidopterus diaphanus (Kirschbaum, 1856), Campylomma verbasci (Meyer-Dür, 1843), Europiella alpina (Reuter, 1875), Lygocoris rugicollis (Fallén, 1807), Orthops mutans (Stål, 1858), Phaeochiton caraganae (Kerzhner, 1964), Pilophorus clavatus (Linnaeus, 1767), Psallopsis kirgistica (Becker, 1864). Distributional areas and distinctive features of Tuponia roseipennis (Reuter, 1878) and T. soongorica Drapolyuk, 1980 are briefly discussed.

Key words: Phylini, taxonomy, new species, new records, Xinjiang, China

Introduction

The family Miridae, or plant bugs, represents a large, diverse, world wide group of principally host-specific phytophagous insects with more than 10 500 species worldwide or one-fourth of all Heteroptera (Schuh 1995). Although several groups have been subject of revision (e.g. Zheng et al. 2004), most of the plant bug fauna of China remains poorly known. The literature on plant bugs known from China has been summarized by Zheng (1995). His list of plant bugs described or recorded from China was updated twice by Qi et al. (2003; 2007) and currently contains 840 species, although some nomenclatural changes are missing in these updates. The number of plant bug species known from China increased by more than 40 percent during the last 15 years and subsequent studies of this rich fauna will evidently result in large numbers of new species and new records of previously described species.

The present paper based on the recent fieldwork of the junior author and Zhaohui Luo in Xinjiang Province, China. Xinjiang is the largest of China’s provinces, representing about one-sixth of the total territory of the country and bordering Russia, Mongolia, Kazakhstan, Tajikistan, Afghanistan, Pakistan, and India. It is an extremely large and species-rich landlocked region of varied geography, including high plateaus and mountains, vast deserts, semi-deserts and saline lands. Over the last decades, comparatively little attention has been paid to the plant bug fauna of Xinjiang and our study represents a contribution to existing knowledge.