

Article



http://dx.doi.org/10.11646/zootaxa.3722.4.8 http://zoobank.org/urn:lsid:zoobank.org:pub:2337B116-46B8-41E5-BFC4-47C66929CAB2

Taxonomic study of Central Asian species of the genus *Macropsis* Lewis, 1836 (Homoptera: Auchenorrhyncha: Cicadellidae: Macropsinae). I: Redescriptions of willow-dwelling species from West Tien Shan Mountains

DMITRI YU. TISHECHKIN

Department of Entomology, Faculty of Biology, M.V. Lomonosov Moscow State University, Vorobyevy Gory, Moscow, 119991 Russia. E-mail: macropsis@yandex.ru

Abstract

Macropsis abdullaevi Dubovskiy, 1966 = *M. arslanbobica* Dlabola, 1967 **syn. nov.**, *M. ibragimovi* Dubovskiy, 1966 and *M. asiatica* Dubovskiy, 1966 from West Tien Shan Mts. (Kyrgyzstan) are redescribed and illustrated based on material from type localities or/and adjacent territories. *M. tarbagataica* Mityaev, 1971 from Kazakhstan is recorded from West Tien Shan for the first time. Data on host plants and male vibrational calling signals for all species considered are provided.

Key words: Auchenorrhyncha, Cicadellidae, Macropsis, taxonomy, Central Asia, acoustic signals, host plants

Introduction

The genus *Macropsis* Lewis, 1836 (Homoptera: Auchenorrhyncha: Cicadellidae: Macropsinae) is one of the most taxonomically difficult groups of Palaearctic leafhoppers. Uniform morphology of male genitalia together with colour polymorphism in this genus resulted in a great variety of similar forms of uncertain taxonomic status. Wagner (1950, 1964) was the first to use the shape of the 2nd valvulae of the ovipositor, nymph morphology and data on host plants in addition to male genitalia structure for distinguishing closely related West European species of this genus. Later Hamilton (1983) demonstrated that the shape of 2nd abdominal apodemes in males also could be used in *Macropsis* taxonomy. All above-mentioned characters in combination with male calling signal analysis were used in revision of *Macropsis* of Russia (Tishechkin, 1999, 2002).

In contrast to the thorough studies of *Macropsis* in the territory of Western Europe and Russia, species of the genus from adjacent regions including Central Asia have been poorly investigated.

The majority of Central-Asiatic *Macropsis* species were described from West Tien Shan Mts. by G.K. Dubovskiy working at the Andijon (= Andijan) Pedagogical Institute, Uzbekistan (Dubovskiy, 1966). A part of his material was sent to J. Dlabola, who also described several species from this genus (Dlabola, 1961, 1963, 1967). A total of 20 species of *Macropsis* from West Tien Shan were described by these authors. Seven of them belong to the willow-dwelling group, including *M. abdullaevi* Dubovsky, 1966, *M. sattibaevi* Dubovsky, 1966, *M. viridobrunnea* Dlabola, 1961 and *M. arslanbobica* Dlabola, 1967. In addition, two green willow-dwelling species, *M. iliensis* Mitjaev, 1971 and *M. tarbagataica* Mitjaev, 1971, were described from Southern Kazakhstan (Mityaev, 1971). Most of representatives of this group are cryptic species hardly distinguishable by morphology (Tishechkin, 1999, 2002), Therefore evaluating the described forms and verifying the species status appear to be difficult tasks. Recently, some synonyms were established, *M. persimilis* Dubovsky, 1966 = *M. viridobrunnea* Dlabola, 1961 and *M. ocellata* Provancher, 1872 = *M. sattibaevi* Dubovsky, 1966, and supported with data from host plants and calling signals (Tishechkin, 2011). In this paper, data on the other four willow-dwelling forms from West Tien Shan Mts. with one new synonym are given below.