Zootaxa 1817: 18–26 (2008)
www.mapress.com/zootaxa/

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

The leafhopper subgenus *Empoasca* (*Matsumurasca*) from China (Hemiptera: Cicadellidae: Typhlocybinae: Empoascini), with descriptions of three new species

DAO-ZHENG QIN[1], YA-LIN ZHANG[2]

Key Laboratory of Plant Protection Resources and Pest Management of Ministry of Education, Entomological Museum, Northwest A & F University, Yangling, Shaanxi Province, 712100, China. E-mail: [1]qindaozh0426@yahoo.com.cn; [2]yalinzh@yahoo.com.cn; [2]corresponding author

Abstract

The empoascine leafhopper subgenus *Empoasca* (*Matsumurasca*) Anufriev is redescribed. Four species, including three new species from China are reported: *E*. (*M*.) *clypeata* **sp. nov.**, *E*. (*M*.) *biloba* **sp. nov.** and *E*. (*M*.) *quadrifida* **sp. nov.** New distributional records for *E*. (*M*.) *onukii* Matsuda are provided. A key to distinguish all species of the subgenus worldwide is also provided.

Key words: Homoptera, *Empoasca* (*Matsumurasca*), distribution, taxonomy, China

Introduction

The empoascine subgenus *Matsumurasca* of the genus *Empoasca* Walsh was established by Anufriev (1973), with *E. diversa* Vilbaste (1968) as the type species, and including some allied species in the *Empoasca aino* Matsumura (1931) group mentioned by Dworakowska (1971). The subgenus is among the 12 subgenera of *Empoasca* and is characterized mainly by the stalked or triangular third apical cell of the forewing, subgenital plate being prominently broad at the base and aedeagus often with paired processes (Anufriev, 1973). *Empoasca* (*Matsumurasca*) currently contains 9 described species widely distributed in the Palaearctic and Oriental regions: *E*. (*M*.) *aino* Matsumura, *E*. (*M*.) *onukii* Matsuda, *E*. (*M*.) *dolichi* Paoli, *E*. (*M*.) *conifera* Dworakowska, *E*. (*M*.) *latissima* Dworakowska, *E*. (*M*.) *parvifacia* Dworakowska, *E*. (*M*.) *thapae* Dworakowska, *E*. (*M*.) *schima* Thapa, and the type species. *Empoasca* (*M*.) *onukii* reported earlier from Hangzhou, Zhejiang Province, China was studied by Dworakowska (1971, 1982).

In the present paper, the subgenus is redescribed. Four species known to occur to China, including three species new to science are described and illustrated along with new distributional records for *E*. (*M*.) *onukii.*

Material and methods

Except for the nomenclature of the wing, for which we follow Dworakowska (1993), the methods and terminology used in this work follow Zhang (1990). The specimens used in this study are deposited in the Entomological Museum, Northwest A & F University, Yangling, Shaanxi, China (NWAFU) and Institute of Zoology, Chinese Academy of Science, Beijing, China (IZCAS).

 Accepted by C. Dietrich: 29 May 2008; published: 7 Jul. 2008