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Four new species of Diptilomiopinae from China (Acari: Eriophyoidea: Diptilomiopidae)

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Abstract

Four new species of diptilomiopid eriophyoid mites from China are described and illustrated: *Trimeroptes quercus* sp. nov. on *Quercus glauca* Thunb. (Fagaceae); *Diptacus luanchuanensis* sp. nov. on *Carpinus turczaninowii* Hance (Betulaceae); *Diptacus persicae* sp. nov. on *Prunus persica* (L.) Batsch (Rosaceae) and *P. davidiana* (Carrière.) Franch. (Rosaceae), and *Diptacus platyphyllae* sp. nov. on *Betula platyphylla* Suk. (Betulaceae). All species described here were found as vagrants on leaf surface. No damage to the host was observed. All type specimens are deposited at the Department of Entomology, Nanjing Agricultural University, Jiangsu Province, China.

Key words: Diptilomiopidae, Diptilomiopinae, eriophyid mites, taxonomy, new species, China

Introduction

The subfamily Diptilomiopinae was established by Keifer (1944) and can be differentiated from another subfamily Rhyncaphytoptinae in the Diptilomiopidae by tarsal empodium divided. The subfamily consists of more than 35 genera and 184 species (Amrine *et al.*, 2003), among which 66 species are known to occur in China (Chen *et al.*, 2003 & 2004; Huang *et al.*, 1989; Huang, 1992, 2001a, b, c, d & 2005; Kuang, 1983, 1988, 1995, 1998a, b & 2001a, b; Kuang & Feng, 1987; Kuang & Hong, 1990a, b; Kuang & Huang, 1991; Kuang *et al.*, 2005; Lin & Kuang, 1997; Liu & Kuang, 1998; Wei & Feng, 1999; Wei & Kuang, 1996; Xin & Dong, 1983; Xue & Hong, 2005; Zhao & Kuang, 1998). During field surveys conducted between 2004 and 2005 in north and northwestern China, four new species of the subfamily Diptilomiopinae were found in Henan, Shaanxi and Gansu Provinces. All type specimens are deposited in the Arthropod/Mite Collection of the Department of Entomology, Nanjing Agricultural University, Jiangsu Province, China. The morphological terminology used here follows Lindquist (1996) and the generic