

Five new species of Diptilomiopidae from China (Acari: Eriophyoidea)

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Abstract

Five new species of diptilomipid eriophyoid mites from China are described and illustrated: *Rhyncaphytoptus longipalpis* sp. nov. on *Bambusa* sp. (Gramineae); *Rhyncaphytoptus taihangensis* sp. nov. on *Morus alba* L. (Moraceae); *Rhyncaphytoptus papyriferae* sp. nov. on *Broussonetia papyrifera* (L.) Vent. (Moraceae); *Diptacus songxianensis* sp. nov. on *Ulmus* sp. (Ulmaceae) and *Trimeroptes luanchuanensis* sp. nov. on *Rubus* sp. (Rosaceae). All species described here are vagrant on leaves.

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

Introduction

The family Diptilomiopidae was established by Keifer (1944) and consists of two subfamilies Diptilomiopinae and Rhyncaphytoptinae. The subfamily Diptilomiopinae includes more than 35 genera and 184 species, and more than 18 genera and 141 species belong to the other subfamily Rhyncaphytoptinae (Amrine, Stasny & Flechtmann, 2003). To date, ninety-seven species of Diptilomiopidae are known to occur in China.

This study is based on a series of specimens collected by Xiao-Feng Xue in Hebei and Henan Provinces in north China and Shaanxi Province in northwestern China. Previous taxonomic study on eriophyoid mites had concentrated in the Oriental region in China. The Palearctic region had been neglected for more than two decades due to the fact that the Oriental China is much richer in plant and animal resources than the Palearctic China. In the Diptilomiopidae, more than 90% of the species have been reported from Oriental China. The aim of this study is to investigate the fauna of Eriophyoidea in the Palearctic region and compare it with that in the Oriental region. All type specimens are deposited at