Six new species of Rhyncaphytoptinae from northwestern China (Acari: Eriophyoidea: Diptilomiopidae)

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Abstract

Six new species of diptilomipid eriophyoid mites from northwestern China are described and illustrated: Rhyncaphytoptus fargesis sp. nov. on Abies fargesii Frnach. (Pinaceae); Rhyncaphytoptus cotoneasteri sp. nov. on Cotoneaster sp. (Rosaceae); Rhyncaphytoptus abiesis sp. nov. and Rhyncaphytoptus fabris sp. nov. on Abies fabri (Mast.) Craib (Pinaceae); Rhinophytoptus cunninghamiae sp. nov. on Cunninghamia lanceolata (Lamb.) Hook. (Taxodiaceae) and Rhinophytoptus roxburghis sp. nov. on Rosa roxburghii Tratt. (Rosaceae). All species are vagrant on leaf surfaces. No damage to their host plants was observed.

Key words: eriophyoid mites, new species, Acari, Diptilomiopidae, Rhyncaphytoptinae, taxonomy, Shaanxi and Gansu Provinces

Introduction

The subfamily Rhyncaphytoptinae was established by Roivainen (1953). Up to now, the subfamily Rhyncaphytoptinae consisted of 18 genera and 141 species (Amrine et al. 2003), among which 45 species in 12 genera are known to occur in China. During 2004 and 2005, a field investigation was conducted in northwestern China and six new species from the Rhyncaphytoptinae were found in Shaanxi and Gansu Provinces. Four new species belong to the genus Rhyncaphytoptus and two new species belong to the genus Rhinophytoptus.

The genus Rhyncaphytoptus was established by Keifer (1939) based on the type species Rhyncaphytoptus ficifoliae Keifer, 1939 and characterized as: gnathosoma large in comparison to body, chelicerae abruptly curved and bent down near base; all coxal setae present; legs with usual series of setae; opisthosoma typically divided into broad and uniform dorsal annuli and narrow ventral annuli; empodium entire. The genus holds 22