



Seven new species of *Phyllocoptes* Nalepa from Tibet Autonomous Region, China (Acari: Eriophyidae: Phyllocoptinae)

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Abstract

In this paper, seven new species of *Phyllocoptes* from China are described and illustrated. They are *Phyllocoptes cunninghamiae* **sp. nov.** on *Cunninghamia* sp. (Taxodiaceae); *Phyllocoptes stephanocarpace* **sp. nov.** on *Lonicera stephanocarpa* Franch. (Caprifoliaceae); *Phyllocoptes webbiana* **sp. nov.** on *Lonicera webbiana* Wall. ex DC. (Caprifoliaceae); *Phyllocoptes bayisis* **sp. nov.** and *Phyllocoptes myrtilloidea* **sp. nov.** on *Spiraea myrtilloides* Rehd. (Rosaceae); *Phyllocoptes graminis* **sp. nov.** on *Berberis graminea* Ahrendt (Berberidaceae); and *Phyllocoptes piceanis* **sp. nov.** on *Picea asperata* Mast. (Pinaceae). All the eriophyoid mite species described here are vagrants on the undersurface of host leaves. A key to the species of Chinese *Phyllocoptes* is provided herein.

Key words: eriophyoid mites, plant feeding, taxonomy, Phyllocoptini, host relationship

Introduction

The genus *Phyllocoptes* was established by Nalepa (1887) based on the type species *Phyllocoptes carpini* Nalepa, 1887. The genus *Phyllocoptes* included 165 species world-wide up to 2003 (Amrine *et al.* 2003). To date, 40 *Phyllocoptes* species are known to occur in China (Xue *et al.* 2009) and a key to the species of Chinese *Phyllocoptes* is provided herein. During August 2007, field surveys were conducted in Tibet Autonomous Region, southwestern China, and seven new species of *Phyllocoptes* were found. This is the fourth paper on eriophyoid mites from Tibet Autonomous Region.

Material and methods

The morphological terminology used here follows Lindquist (1996) and the generic classification is made according to Amrine *et al.* (2003). Measurements of mites were made according to Amrine and Manson (1996). Specimens were examined with a Leica DMR (Germany) research microscope with phase contrast and semi-schematic drawings were made. For each species, the holotype female measurement precedes the corresponding range for paratypes (given in parentheses). All measurements are in micrometers (µm), and are lengths when not otherwise specified. All type specimens are deposited as slide mounted specimens in the Arthropod/Mite Collection of the Department of Entomology, Nanjing Agricultural University, Jiangsu Province, China.

Key to the species of *Phyllocoptes* from China

Chinese records of previously described species are in brackets.

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|---|--|----|
| 1 | Dorsal annuli smooth..... | 2 |
| - | Dorsal annuli with microtubercles..... | 16 |