



One new genus and five new species of Rhyncaphytoptinae from China (Acari: Eriophyoidea: Diptilomiopidae)

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Abstract

One new genus and five new species of the Rhyncaphytoptinae (Acari: Eriophyoidea: Diptilomiopidae) from China are described and illustrated. They are *Brevulacus jilinensis* **sp. nov.** on *Quercus* sp. (Fagaceae), *Cuihuacarus longituberis* **gen. nov. & sp. nov.** on *Cotoneaster* sp. (Rosaceae), *Rhinophytoptus sericeaomeiensis* **sp. nov.** on *Rosa sericea* spp. *omeiensis* (Rosaceae), *Rhinotergum shaoguanense* **sp. nov.** on *Ulmus* sp. (Ulmaceae) and *Rhyncaphytoptus funali* **sp. nov.** on *Salix* sp. (Salicaceae). All the eriophyoid mite species described here are vagrants on the undersurface of host leaves.

Key words: plant feeding, taxonomy, Jilin Province, Shaanxi Province, Guangdong Province

Introduction

The subfamily Rhyncaphytoptinae was established by Roivainen (1953). In 2003, the subfamily Rhyncaphytoptinae consisted of 18 genera and 141 species (Amrine *et al.* 2003). Up to now, 63 species in 13 genera in the Rhyncaphytoptinae were known to occur in China (Table 1) (Chen *et al.* 2004; Hong *et al.* 2005; Hong & Zhang 1996; Huang 2001a & b; Huang & Cheng 2005; Kuang 1980, 1983, 1986, 1995, 1998, 2001; Kuang & Feng 1990; Kuang *et al.* 1990, 1991, 2005; Kuang & Hong 1990; Kuang & Zhao 1987; Liu & Kuang 1998; Song *et al.* 2007 & 2008; Wang *et al.* 2007; Wei & Feng 1999; Xin & Dong 1981 & 1983; Xue & Hong 2005; Xue *et al.* 2006; Zhao & Kuang 1998). From 2004 to 2006, field surveys were conducted in China. One new genus and five new species from the Rhyncaphytoptinae were found in Jilin Province (northeast China), Shaanxi Province (northwest China) and Guangdong Province (south China).

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.