



Three new species of Phyllocoptinae (Acari: Eriophyidae) from South China

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Abstract

Three new species of eriophyid mites from Longlin and Heng Counties, Guangxi Zhuang Autonomous Region, South China are described and illustrated: *Calacarus cinerascens* sp. nov. infesting *Cipadessa cinerascens* (Pellegr.) Hand.-Mazz. (Meliaceae); *Calacarus smilax* sp. nov. infesting *Smilax* sp. (Liliaceae) and *Tetra guangxiensis* sp. nov. infesting *Derris* sp. (Leguminosae).

Key words: taxonomy, eriophyid mite, *Calacarus*, *Tetra*, China

Introduction

A series of surveys of plant-inhabiting mites in Guangxi Zhuang Autonomous Region, China, resulted in the discovery of three new Phyllocoptinae: *Calacarus cinerascens* sp. nov., *Calacarus smilax* sp. nov. and *Tetra guangxiensis* sp. nov. The genus *Calacarus* Keifer, 1940 was established on the type species *Calacarus pulviferus* Keifer, 1940. Keifer regarded *Calacarus* as a distinctive genus of purple mites that usually have five longitudinal ridges producing white wax stripes, scapular setae absent and genu II setae absent (Amrine *et al.* 2003). The genus *Tetra* Keifer, 1944 was established on the type species *Tetra concava* (Keifer, 1939). *Tetra* is distinguished by: body spindleform; gnathosoma projecting obliquely down; prodorsal shield with frontal lobe, scapular tubercles on rear margin with prominent scapular setae; opisthosoma with a wide mid-dorsal longitudinal furrow; all coxal setae present; and legs with the usual series of setae.

Calacarus comprised 41 species and *Tetra* contained 87 species distributed in Asia, Africa, Europe, New Zealand and the Americas (Amrine *et al.* 2003). To date, 5 *Calacarus* species and 40 *Tetra* species occur in China (Kuang & Hong 1989; Kuang & Zhuo 1989; Kuang 1991, 1995; Hong & Zhang 1996; Lin *et al.* 1997; Liu & Kuang 1998; Kuang & Zhang 1999; Huang 2001; Wei & Feng 2002; Wei *et al.* 2003; Huang & Wang 2004; Wang & Lu 2004; Kuang *et al.* 2005; Xue & Hong 2005; Hong *et al.* 2006; Li *et al.* 2006; Xue *et al.* 2006, 2007).

Materials and methods

Specimens were prepared and mounted on microscopic slides according to Kuang (1986). All specimens were examined with an Olympus CX41 microscope and figures were drawn by Adobe Photoshop CS programme in PC. All measurements are given in micrometers (µm). The morphological terminology used here follows Lindquist (1996) and the generic classification is made according to Amrine *et al.* (2003). All type specimens are deposited in the College of Agriculture, Guangxi University, Guangxi Zhuang Autonomic Region, China.