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

DE-WEI LI1,2, GUO-QUAN WANG3 & SUI-GAI WEI1,4
1College of Agriculture, Guangxi University, Nanning, Guangxi 530005, China
2Guangxi Forestry Research Institute, Nanning, Guangxi 530001, China,
3Department of Entomology, College of Agriculture and Biotechnology, China Agricultural University, Beijing, 100094, China
4Corresponding author. E-mail: weisuigai@tom.com

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 middorsal longitudinal furrow; all coxal setae present; and legs with the usual series of setae.


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 Autonomous Region, China.