



Eriophyoid mites from Hainan Province, China III: Descriptions of three new genera and three new species of Colomerini (Acari: Eriophyoidea)

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Abstract

Three new genera and three new species in the tribe Colomerini of the Eriophyidae (Acari: Eriophyoidea) from China's Hainan Island are described and illustrated. They are *Paraisoannulus machiles* **gen. nov.** and **sp. nov.** on *Machilus gamblei* King ex Hook. f. (Lauraceae), *Pentacecidophyes xinglongis* **gen. nov.** and **sp. nov.** on *Litchi chinensis* Sonn. (Sapindaceae) and *Paracaridilophus retusus* **gen. nov.** and **sp. nov.** on *Fissistigma retusum* (Lévl.) Rehd. (Annonaceae). All the new species described herein are vagrants on their respective host plant.

Key words: Eriophyoids, taxonomy, plant feeding, vagrants, Lauraceae, Sapindaceae, Annonaceae

Introduction

The tribe Colomerini was established by Newkirk & Keifer (1975) based on the type genus *Colomerus* Newkirk & Keifer, 1971 and is characterized as gnathosoma usually small in comparison to the body, scapular tubercles and setae present, legs with usual segments, female genital coverflap appressed to coxal plates, empodium entire. During 2008, field surveys were conducted by Xiao-Feng Xue, Li-Sheng Cheng and Zi-Wei Song in Hainan Province, China. Three new genera and species were found. All the new species described herein are vagrants on their respective host plant. Information about Hainan Province and its eriophyoid mite fauna can be found in our previous papers (Cheng *et al.* 2009; Xue *et al.* 2009).

Material and methods

The morphological terminology used herein follows Lindquist (1996) and the generic classification is made according to Amrine *et al.* (2003). Specimens were mounted on microscope slides and measured following de Lillo *et al.* (2010). The specimens were examined with the aid of a Zeiss A2 (Germany) research microscope with phase contrast. Semi-schematic drawings were made but it was not possible to provide illustrations of lateral views for all of the species described here. In addition, the female genital apodemes were not visible. For each species, the holotype female measurement precedes the corresponding range for paratypes (given in parentheses). Only one male specimen was available for measurement. 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 (NJAU), Jiangsu Province, China.