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A new eriophyoid mite species infesting *Schefflera odorata* (Araliaceae) in Yunnan Province, southwestern China (Acari: Eriophyoidea)

XIAO-FENG XUE[1], JIA LUO[2], YUN XU[2] & XIAO-YUE HONG[1,3]

[1]*Department of Entomology, Nanjing Agricultural University, Nanjing, Jiangsu 210095, China*
[2]*Key Laboratory of Biopesticide and Chemical Biology, Ministry of Education; College of Plant Protection, Fujian Agriculture and Forestry University, Fuzhou, Fujian 350002, China.*
[3]*Corresponding author E-mail: xyhong@njau.edu.cn*

Abstract

A new mite species belonging to the Eriophyidae (Acari: Eriophyoidea) from Kunming, Yunnan Province, southwestern China, is described and illustrated. *Calepitrimerus kunmingensis* **sp. nov.** causes erineum on its host plant, *Schefflera odorata* (Blanco) Merr. & Rolfe (Araliaceae), commonly known as the umbrella tree.

Key words: *Calepitrimerus kunmingensis*, new species, taxonomy

Introduction

The genus *Schefflera* includes nearly 600 accepted species, some of which are commonly known as the umbrella plant, and is the largest genus in the Araliaceae. It is widely distributed in the tropics, where it is best represented in the elevated areas of south-eastern Asia, Malesia, New Caledonia and western and northern South America (Wen *et al*. 2001; Fiaschi 2004). *Schefflera* plants are trees, shrubs or lianas, growing from 1 to 30 metres tall. Some species in the genus *Schefflera* are grown as ornamental plants or used to produce herbal medicines. In China, *Schefflera* is distributed from the southwest to east, but mainly in Yunnan Province. To date, three other eriophyoid species were known to occur on *Schefflera* spp. in China, namely *Abacarus eminens* Huang 2001 and *Calepitrimerus octophyllaus* Huang & Wang 2004 on *Schefflera octophylla* (Araliaceae) from Taiwan Island and *Epitrimerus schefflerae* Wei, Wang & Li 2009 (Wei *et al*. 2009) on *Schefflera* sp. (Araliaceae) from Guangxi Zhuang Autonomous Region.

The genus *Calepitrimerus* was established by Keifer (1938) based on the type species *Calepitrimerus caryniferus* Keifer 1938. It is characterized by having a gnathosoma usually small in comparison to the body; legs with usual segments; coxal plates with three pairs of setae; empodium simple; opisthosoma with three dorsal ridges; mid-dorsal ridge short and ending in a broad furrow. As of 2003, the genus contained 62 species from Asia, Africa, Europe and the Americas (Amrine *et al*. 2003). To date, there are 33 species of *Calepitrimerus* known to occur in China (Hong *et al*. 2010).

At present, no effective control measures for this new eriophyoid mite species are known. It induces large erineum on the leaf surfaces of the host plant which damages development. Local people, who believed the symptoms were caused by a plant disease, often remove the infested leaves and branches.

Material and Methods

The morphological terminology used herein follows that of Lindquist (1996) and the generic classification was made according to Amrine *et al*. (2003). This new species was described by the first author. Specimens were slide-mounted and measured based on the methods outlined by de Lillo *et al*. (2010). These were later examined with the

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