

Three new species of *Epitrimerus* Nalepa from China (Acari: Eriophyidae: Phyllocoptinae)

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Abstract

Three new species of the genus *Epitrimerus* from China are described and illustrated. They are *Epitrimerus sessiliflorensis* **sp. n.** on *Eleutherococcus sessiliflorus* (Rupr. et Maxim.) S. Y. Hu. (Araliaceae), *Epitrimerus syzygicuminus* **sp. n.** on *Syzygium cumini* (Lin.) Skeels (Myrtaceae), *Epitrimerus verrucoser* **sp. n.** on *Euonymus verrucosus* Scop. (Celastraceae). All the new species described herein are vagrants on the respective host plant.

Key words: Eriophyid mites, key, Heilongjiang Province, Jilin Province, Hainan Province

Introduction

The genus *Epitrimerus* was established by Nalepa (1898) based on the type species *Tegonotus piri* (Nalepa 1891) and characterized as: body fusiform, often flattened; prodorsal shield with frontal lobe and prominent scapular setae; shield with scapular setae ahead of rear margin; setae usually directed centrad; dorsum of opisthosoma with three ridges, middorsal ridge fading simultaneously with subdorsal ridges; all coxal setae present; legs with usual series of setae.

As of 2003, the genus *Epitrimerus* included 151 species world-wide (Amrine *et al.* 2003). To date, there are 36 species known to occur in China (Cheng *et al.* 2009; Hong & Zhang 1996; Huang 2001a, 2001b, 2001c; Huang & Wang 2004; Kuang 1995; Kuang & Hong 1989; Kuang *et al.* 1994, 2005; Song *et al.* 2008; Wei *et al.* 1999, 2004, 2006, 2009; Xue & Hong 2005; Xue *et al.* 2007) (Table 1). During 2006 and 2008, field surveys were conducted in Heilongjiang, Jilin and Hainan Provinces, and three new species in the genus *Epitrimerus* were discovered. A key to species in the genus *Epitrimerus* in China is listed herein. All the new species have been classified as vagrants on the leaf surface of their host plants and no damage to the host was observed.

TABLE 1. List of the *Epitrimerus* species in China.

Taxon	Host plant	Distribution
<i>E. abietis</i> Keifer, 1952; Hong & Zhang, 1996	<i>Abies concolor</i> (Pinaceae)	China (Beijing), USA (California)
<i>E. acersis</i> Huang, 2001b	<i>Acer albopurpurascens</i> (Aceraceae)	China (Taiwan)
<i>E. amomi</i> Kuang & Hong, 1989	<i>Amomum villosum</i> (Zingiberaceae)	China (Yunnan)
<i>E. amygdali</i> Xue & Hong, 2005	<i>Amygdalus triloba</i> (Rosaceae)	China (Henan, Gansu)
<i>E. argyris</i> Xue, Song & Hong, 2007	<i>Artemisia argyri</i> (Compositae)	China (Shaanxi, Gansu)
<i>E. armeniaca</i> Kuang, Luo & Wang, 2005	<i>Prunus armeniaca</i> (Rosaceae)	China (Gansu, Jilin)