



## Five new species of the genus *Tegolophus* Keifer (Acari: Eriophyidae: Phyllocoptinae: Anthocoptini) from China

XIAO-FENG XUE, ZI-WEI SONG & XIAO-YUE HONG<sup>1</sup>

Department of Entomology, Nanjing Agricultural University, Nanjing, Jiangsu 210095, China

<sup>1</sup>Correspondent author. E-mail: xyhong@njau.edu.cn

### Abstract

In this paper, five new species of the genus *Tegolophus* Keifer from China are described and illustrated, namely *Tegolophus changbais* **sp. nov.** on *Ulmus* sp. (Ulmaceae); *Tegolophus floridumis* **sp. nov.** on *Jasminum floridum* Bunge (Oleaceae); *Tegolophus picrasmae* **sp. nov.** on *Picrasma quassioides* (D. Don) Benn. (Simarubaceae); *Tegolophus suffruticosae* **sp. nov.** on *Securinega suffruticosa* (Pall.) Rehd. (Euphorbiaceae); *Tegolophus triarrhenae* **sp. nov.** on *Triarrhena sacchariflora* (Maxim.) Nakai (Gramineae). A key to the species of *Tegolophus* in China is provided. The eriophyoid mite species described here are vagrants on the undersurface of host leaves.

**Key words:** eriophyoid mites, key, taxonomy, Changbai Mountain, Cuihua Mountain, Jingbo Lake, Baiyun Mountain

### Introduction

The genus *Tegolophus* was established by Keifer (Keifer 1961) based on the type species *Epitrimerus califraxini* Keifer, 1938 and characterized as: body fusiform, often flattened; gnathosoma projecting obliquely down; prodorsal shield with frontal lobe, with scapular tubercles on or near rear margin, and prominent scapular setae, directed straight backward or diverging posteriorly; opisthosoma with three ridges; all coxal setae present; legs with usual series of setae; all standard setae on the opisthosoma present.

As of 2003, the genus *Tegolophus* included 52 species worldwide (Amrine *et al.* 2003). To date, there are 24 species known to occur in China (Huang 2001; Huang & Wang 2004; Kuang 1995; Kuang & Hong 1991; Kuang & Lin 2001; Kuang *et al.* 2005; Lin *et al.* 1997; Lin & Kuang 2001a, b & c; Wei & Qin 2002; Xue *et al.* 2006; Zhao & Kuang 2000). From 2004 to 2006, field surveys were conducted in the provinces of Jilin (northeastern China), Shaanxi (northwestern China), Heilongjiang (northeastern China) and Henan (central China), and five new *Tegolophus* species were found. These new species are here described and a key to the Chinese *Tegolophus* species is provided. All the new species are vagrants on the undersurface of host leaves. No damage to the host was observed.

The morphological terminology used here follows Lindquist (1996) and the generic classification is made according to Amrine *et al.* (2003). All specimens were examined with a Leica DMR (Germany) microscope having the function of phase contrast (PH) and semi-schematic drawings were made. Measurements are given as a mean followed by the range in brackets, and all are in micrometers ( $\mu\text{m}$ ), and are lengths when not specified. All type specimens are deposited as slide mounted specimens in the Arthropod/Mite Collection of the Department of Entomology, Nanjing Agricultural University, Jiangsu Province, China.