



## Five new species and a new record of the genus *Aculops* Keifer (Acari: Eriophyidae: Phyllocoptinae) from China

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### Abstract

Five new species and a new record in the genus *Aculops* Keifer from China are described and illustrated, namely *Aculops baligouis* **sp. nov.** on *Acer* sp. L. (Aceraceae); *Aculops tianchis* **sp. nov.** on *Betula* sp. L. (Betulaceae); *Aculops sienses* **sp. nov.** on *Ligustrum siense* Lour. (Oleaceae); *Aculops salixis* **sp. nov.** on *Salix* sp. L. (Salicaceae); *Aculops yangxianensis* **sp. nov.** on *Sophora japonica* L. (Leguminosae) and *Aculops chinonei* Huang, on *Rhus chinensis* Mill. (Anacardiaceae). A key to the species of *Aculops* in China is provided.

**Key words:** eriophyid mites, *Aculops*, new species, new record, key, China

### Introduction

The genus *Aculops* was established by Keifer (Keifer, 1966) based on the type species *Vasates populivagrans* (Keifer, 1953) and characterized as: body fusiform, often flattened; prodorsal shield with frontal lobe and prominent scapular setae; shield with scapular setae on rear margin; setae usually directed divergently posterior; opisthosoma typically divided into broad and stout dorsal annuli, and narrow, microtuberculate ventral annuli; all coxal setae present; legs with usual series of setae. As of 2003, the genus holds 158 species from Asia, Africa, Europe and Americas (Amrine *et al.*, 2003). To date, there are 27 species known to occur in China (Xin & Ding 1982; Kuang 1983, 1989, 1995, 1998, & 2000; Kuang & Hong 1989 & 1991; Lin *et al.* 1997; Huang 2001a & b; Hong & Xue 2005; Kuang *et al.* 2005; Song *et al.* 2006; Xue & Hong 2006). During 2004 and 2005, field surveys were conducted in Henan and Shaanxi Provinces, and five new species and a new record in the genus *Aculops* were discovered. A key to species in the genus *Aculops* in China is listed herein.

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 Arthropod/Mite Collection of the Department of Entomology, Nanjing Agricultural University, Jiangsu Province, China. All measurements are given in micrometers (µm) and are lengths when not specified. All specimens were examined and drawn with a Leica DMR (Germany) microscope.

### Key to the species of *Aculops* in China

- 1 Coxal area smooth ..... 2
- Coxal area with short lines or granules..... 8