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Description of seven new species in the genus *Diptacus* Keifer (Acari: Eriophyoidea: Diptilomiopidae: Diptilomiopinae) from northwestern China

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Abstract

Seven new species of the genus *Diptacus* Keifer from northwestern China are described: *Diptacus abelis* **sp. nov.** on *Abelia biflora* Turcz. (Caprifoliaceae); *Diptacus zhouzhisis* **sp. nov.** on *Carpinus* sp. L. (Betulaceae); *Diptacus maddenis* **sp. nov.** on *Maddenia hypoleuca* Koehne (Rosaceae); *Diptacus wenisis* **sp. nov.** on *Viburnum* sp. L. (Caprifoliaceae); *Diptacus serrulatis* **sp. nov.** on *Photinia serrulata* Lindl. (Rosaceae); *Diptacus mercuriasis* **sp. nov.** on *Mercurialis leio-carpa* Sieb. et Zucc. (Euphorbiaceae) and *Diptacus sorbusis* **sp. nov.** on *Sorbus* sp. L. (Rosaceae). All species described here are vagrant on the undersurface of host leaves.

Key words: taxonomy, leaf vagrants, identification key

Introduction

The genus *Diptacus* was established by Keifer (1951) based on the type species *Diptilomiopus sacramentae* (Keifer, 1939). It can be differentiated from other genera in the Diptilomiopinae by scapular setae present, sometimes may be minute; tibiae not longer in comparison with *Dialox* spp.; if with frontal lobe, the lobe without filament and not bent over proximal gnathosoma; coxae with three setae; basiventral femoral setae *bv* absent from both legs, tibial setae present and genual setae present on both legs; dorsum of opisthosoma evenly rounded or opisthosoma with a weak central ridge; all standard setae on the opisthosoma present.

Prior to this study, *Diptacus* included 43 species world-wide (Amrine *et al.* 2003) of which 24 species were known from China (Chen *et al.* 2003 & 2004; Hong & Zhang 1997; Huang 2001; Huang *et al.* 1989; Kuang 1995; Kuang *et al.* 2005; Xin & Dong 1983; Xue & Hong 2005; Xue *et al.* 2006). During field surveys conducted during 2004 and 2005 in northwestern China, seven new *Diptacus* species were found in Shaanxi and Gansu Provinces. These new species are here described and a key to *Diptacus* species is provided.

The morphological terminology used 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 and semi-schematic drawings were made. Measurements are given as a mean followed by the range in brackets, all are in micrometers (μ m), and are length 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.