



## Four new species of the family Diptilomiopidae (Acari: Eriophyoidea) from China

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### Abstract

Four new species of eriophyoid mites are described and illustrated from China. Three of these species are in the subfamily Rhyncaphyoptinae: *Hyborhinus linderæ* **sp. nov.** infesting *Lindera obtusiloba* Blume (Lauraceae); *Neocatarhinus dendrocalamus* **sp. nov.** infesting *Dendrocalamus latiflorus* Munro (Poaceae) and *Rhynchophytoptus tremæ* **sp. nov.** infesting *Trema cannabina* Lour. (Ulmaceae); and one in the subfamily Diptilomiopinae: *Vimola emarginata* **sp. nov.** infesting *Terminalia* sp. (Combretaceae).

**Key words:** new species, taxonomy, Rhyncaphyoptinae, Diptilomiopinae, Oriental China

### Introduction

The family Diptilomiopidae Keifer, 1944 is differentiated from the other two families of the Eriophyoidea by its large gnathosoma compared to the body, chelicerae abruptly curved and bent down near the base, the long-form oral stylet and attenuate pedipalps. The Diptilomiopidae has two subfamilies, Diptilomiopinae Keifer, 1944 and Rhyncaphyoptinae Roivainen, 1953 that are easily differentiated by the tarsal empodium divided (Diptilomiopinae) or entire (Rhyncaphyoptinae) (Amrine *et al.* 2003). So far, 183 species of Diptilomiopidae have been recorded in China and more than 80% of species from the family occur in the Oriental region (Huang 1992, 2001a, b, c, d, 2005, 2006; Huang & Cheng 2005; Huang *et al.* 1989; Huang & Wang 2009; Kuang 1995; Kuang, Luo & Wang, 2005; Song *et al.* 2007a, b, 2008, 2009; Wang *et al.* 2007, 2009a, b, c; Wei *et al.* 2009a, b; Xue & Hong 2005; Xue *et al.* 2006a, b, 2009a, b). Herein, four new species in the Diptilomiopidae are described from Oriental China.

### Materials and methods

Specimens were located with the aid of a hand-held magnifying glass on plant material in the field, and were preserved in a sucrose-ethanol solution (75%). The mites were cleared in Nesbitt's solution and mounted in Heinze medium on glass slides at room temperature according to Kuang (1986a). The morphological terminology and the generic classification follow Amrine *et al.* (2003).

Type specimens are deposited in the Department of Plant Protection, Guangxi University, Nanning. All specimens were examined with an Olympus CX41 (Japan) microscope with phase contrast and semi-schematic illustrations were prepared with ACDSee6.0 software. All measurements are given in micrometers ( $\mu\text{m}$ ) and rounded off to the nearest full number, and are lengths when not otherwise specified. The number of measured specimens (n) is given, and the measurements are given as the mean followed by the range in parentheses.