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Description of a new species of *Terminalichus* (Acari: Trombidiformes: Tenuipalpidae) from China

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Abstract

A new species *Terminalichus sanya* Xu & Fan **sp. nov.** (Acari: Tenuipalpidae) on *Terminalia catappa* L. (Combretaceae) from China is described and illustrated. The ontogenetic changes in ventral and leg chaetotaxy on the female, deutonymph, protonymph and larva are presented. The generic definition of *Terminalichus* is updated and a key to the world species is provided.

Key words: Flat mite, false spider mite, Combretaceae, *Terminalia catappa*, ontogenetic changes

Introduction

The genus *Terminalichus* was erected by Anwarullah & Khan (1973) with the type species *T. karachiensis* collected on *Terminalia catappa* (Combretaceae) from West Pakistan. To date, six species have been described, with their distribution restricted to South Asia, five from India and one from Pakistan; all species were found on Combretaceae and Myrtaceae (Anwarullah & Khan 1973; Maninder & Ghai 1978; Nassar & Ghai 1981; Sadana & Sidhu 1989; Mohanasundram 1983). *Terminalichus* is easily distinguished from other genera by having a three-segmented palp, five to six pairs of hysterosomal dorsal setae—four pairs of dorsolateral setae and none or one pair of dorsocentral setae (c_1 present in *T. panajiensis*), and setae d_3 and e_3 considerably longer than h_1 and h_2 (Mesa *et al.* 2009; Beard *et al.* 2012).

To date the family Tenuipalpidae of China consists of a total of 58 species in nine genera, representing approximately 6.5% of the total number of species of the world (Zhang 2010; Xu & Fan 2010). Recently, a new species of the genus *Terminalichus*, which is a new record for the Chinese fauna, was collected from *T. catappa* (Combretaceae) in Sanya city, Hainan province. The ontogenetic development of this species was studied and herein we describe all the life stages and discuss variation in the chaetotaxy of the idiosoma and legs. A key to the genus is also provided.

Material and methods

Mites were cleared in Nesbitt's fluid, mounted in Hoyer's medium and examined at 1000x magnification by using a Leica DM5000B microscope. All measurements were made from slide-mounted specimens using stage-calibrated ocular micrometers and are given in micrometers (μm) (Zhang & Fan 2004), presented as a range followed by holotype in brackets. Body length was measured from the tip of the rostral shield to h_1 , the greatest width between leg I and II was measured as body width. Setae were measured from the centre of the setal base to the tip of the seta; distances between setae were measured from the centre of one setal base to that of the other. Legs were measured from the basal end of the trochanter to the distal end of tarsus. Terminology follows that of Lindquist (1985).

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