

***Primagistemus* gen. nov. (Acari: Prostigmata: Stigmaeidae)**

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Abstract

Primagistemus **gen. nov.** (Acari: Stigmaeidae) is described and its taxonomic position discussed. Adult females of this new genus are distinguished from those of *Agistemus* by having four pairs of setae on the propodosomal shield, by lacking postocular bodies, by having three pairs of aggenital setae and by having two setae on genu II. They are also distinguished from those of *Stigmaeus* by the terminal eupathidia on the palptarsus mostly fused and subterminally separated into three minute prongs, by both subcapitular setae posterolaterad of the pharynx, by having only one seta on coxa II, and by lacking endopodal shields around coxae III-IV. A new species, *Primagistemus wuyiensis*, from leaves of *Araucaria* sp. in Fujian Province of China, is described and illustrated. This new species is distinguished from the other species of the genus from New Zealand, *Primagistemus loadmani* (Wood) **comb. nov.** (transferred from *Stigmaeus*), by the distally truncated dorsal body setae and by setal lengths.

Key words: Acari, Prostigmata, Stigmaeidae, *Stigmaeus*, *Primagistemus*, new genus, *Primagistemus wuyiensis*, new species.

Introduction

Mites of the family Stigmaeidae are considered to be important biological control agents (Gerson & Smiley 1990). However, there is a lack of a satisfactory taxonomic system for the family. The distinctions between genera are mainly based on the patterns of dorsal shields on the hysterosoma (Gonzalez 1965; Summers 1966), which can hardly reveal the phylogenetic relationships among genera. In this family, the genus *Stigmaeus* Koch is probably the most problematic one, because it is one of the three oldest genera originally included in the Raphignathidae and the type specimens of the type species were lost.

Wood (1981) noticed the unusual feature of *Stigmaeus loadmani* Wood: larva having fragmented median plate and adult female having 1 seta on coxa II, 1 seta on trochanter III