A new species of *Valgothrombium* Willmann, 1940, with additional taxonomic data for Valgothrombiinae genera known as larvae (Acari: Prostigmata: Microtrombidiidae)

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Abstract

*Valgothrombium mariae* sp. nov. is described based on larvae collected in Norway. The generic diagnosis for larvae of *Valgothrombium* is modified and the taxonomy of Valgothrombiinae genera known as larvae discussed. *Boletitrombium* Saboori, Ueckermann & van Harten, 2007 is considered a junior synonym of *Valgothrombium*. Genera currently assigned to *Valgothrombiinae* and species belonging to genera known as larvae are listed. A key to world species of *Valgothrombiinae* known from larvae is provided.

Key words: Acarology, Parasitengona, taxonomy, *Valgothrombium mariae*, new species, larvae, key

Introduction

Valgothrombiinae Gabryś, 1999, constitutes a taxon of worldwide distribution. The membership of the subfamily has been changed over the past ten years and according to the most recent data, Valgothrombiinae comprises 10 genera, however larvae are known only for *Valgothrombium* Willmann, 1940, *Cienerythraeus* Berlese, 1918 and *Enemothrombium* Berlese, 1910 (Wohltmann & Gabryś 2006).

*Valgothrombium* comprises 30 species distributed in the Palaearctic, Neotropical, Indomalayan and Afrotopical regions. Of them, 17 species are known exclusively from postlarval forms, ten from larvae, whereas only three from both (Baker 1999; Gabryś 1999; Haitlinger 2003, 2005, 2008, 2009; Wohltmann & Wendt 1996; Wohltmann & Gabryś 2006; Wohltmann *et al*. 2007). Active postlarval forms and larvae are known for two European species, i.e. *V. tarnavense* (Feider, 1950) and *V. valgum* (George, 1909), and also for *V. fluminis* (Michener, 1946), described from Panama. In the case of the European species, larvae were obtained by experimental rearing from field-collected females (Feider 1955; Wohltmann & Wendt 1996), whereas for *V. fluminis* a correlation between forms was made based on field data.

The present paper contains the description of *Valgothrombium mariae* sp. nov., based on larvae collected in Norway. Due to the discovery of a reticulate pattern in this newly described member of *Valgothrombium*, the generic diagnosis applying to larvae is modified to accommodate this character state. The taxonomy of genera of Valgothrombiinae known as larvae is reviewed. The monotypic genus *Boletitrombium* Saboori, Ueckermann & van Harten, 2007, is considered a junior synonym of *Valgothrombium*. Based on studies of the type material, complementary morphological data are given for *V. mallorcensis* (Haitlinger, 2003), *V. avae* Haitlinger, 2005, *V. natani* Haitlinger, 2005, *V. melindae* Haitlinger, 2008 and *V. paroense* Haitlinger, 2009. All genera currently assigned to Valgothrombiinae and species of those known as larvae are listed, and a key to all members of *Valgothrombium*, known from larvae is provided.