



Four new cavernicolous species of the millipede genus *Eutrichodesmus* Silvestri, 1910 from southern China (Diplopoda: Polydesmida: Haplodesmidae)

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Abstract

Four new species of the large oriental genus *Eutrichodesmus* Silvestri, 1910 are described from caves in southern China: *E. digitatus* sp. n. (Guangdong), *E. simplex* sp. n. (Jiangxi), *E. spinatus* sp. n. (Hunan) and *E. planatus* sp. n. (Guangxi).

Key words: Haplodesmidae, *Eutrichodesmus*, new species, cave, China

Introduction

Eutrichodesmus Silvestri, 1910 is by far the largest and most common genus in the basically oriental millipede family Haplodesmidae. It currently comprises 36 species ranging from southern Japan in the North, through southern China and Indochina, to Vanuatu, Melanesia in the South (Golovatch *et al.* 2009a, 2009b, 2010). The present paper adds four new *Eutrichodesmus* species to the 15 which have already been reported from China, including 11 known solely from caves in southern China. In addition, two new cave localities are presented for the presumed troglobitic congener, *E. similis* Golovatch, Geoffroy, Mauriès & VandenSpiegel, 2009.

Material

The holotypes and a number of paratypes are deposited in the zoological collection of the South China Agricultural University, Guangzhou, China (SCAU), with some material also to be housed in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZAS) and the Zoological Museum, State University of Moscow, Russia (ZMUM).

Taxonomic part

Eutrichodesmus digitatus sp. n.

Figs 1–2

Material: Holotype male (SCAU), China, Guangdong Prov., Qingyuan City, Jintan Town, Mi Dong, 05.2011, leg. Tian Mingyi (CHIgd11-LWX01). Paratypes: 1 male, 2 females (SCAU), same locality, together with holotype.

Name: To emphasize the gonopod telopodite having a conspicuous, bifid, digitiform, distofemoral process at about midway.

Diagnosis: Differs from other congeners by metaterga 2-13 supporting four transverse mixostictic rows of tubercles, and the gonopod telopodite with a conspicuous, bifid, digitiform, distofemoral process (**dp**) at about midway while the acropodite has several differentiated lobes.

Description: Length of adults of both sexes ca 8.0-8.5 mm, width 1.5-1.8 mm. Holotype ca 8.5 mm long and 1.8 mm wide. Coloration uniformly pallid (Fig. 1).

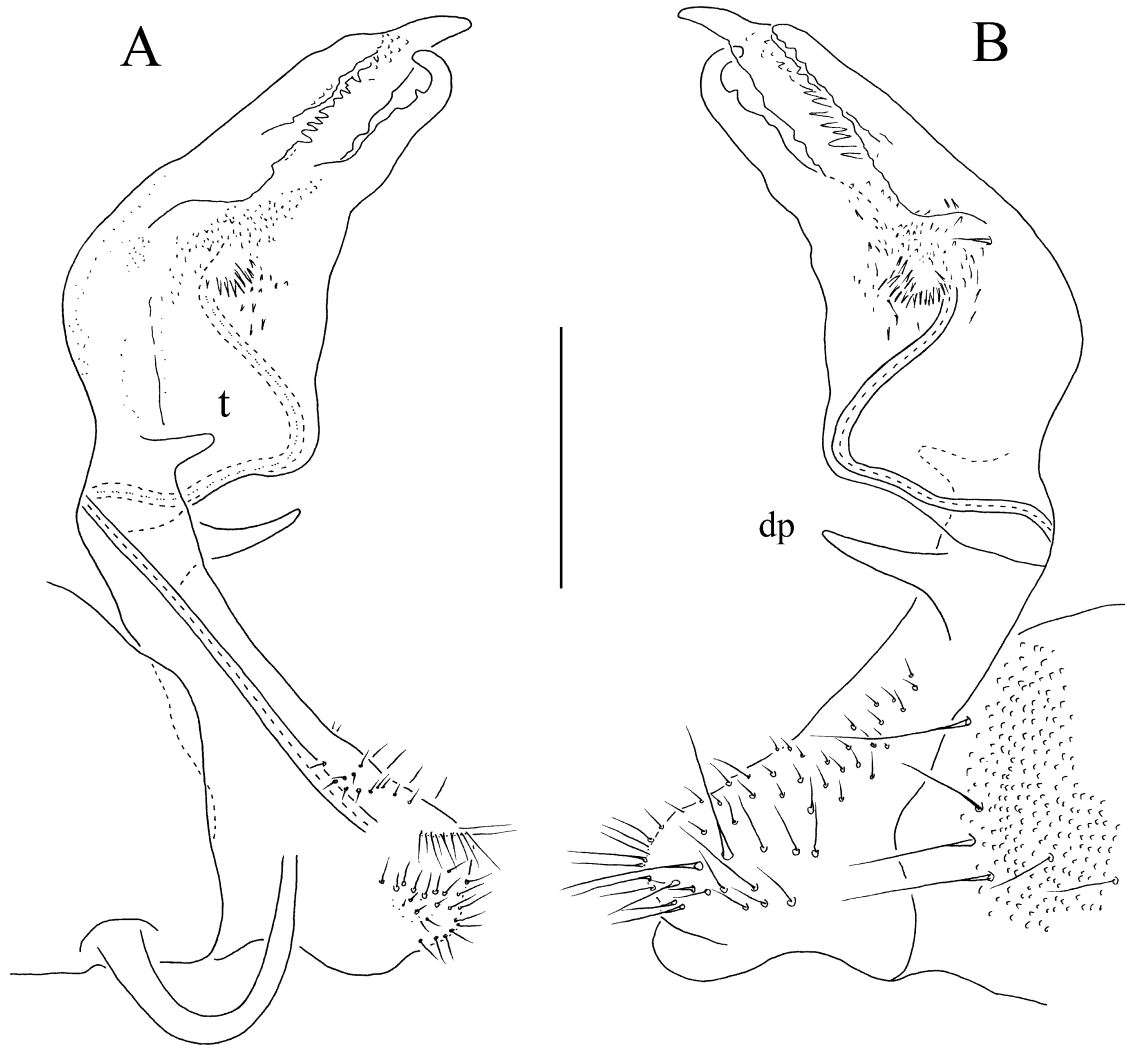


FIGURE 11. *Eutrichodesmus planatus* sp. n., male holotype. A-B. left gonopod, mesal and lateral view, respectively. Scale bar: 0.2 mm.

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