

A New Species of the Genus *Bonetrura* from Yunnan, Southwest China (Collembola: Isotomidae)

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ABSTRACT A new collembolan species, *Bonetrura dabeiensis* sp. nov. is described from Dabei, Gaoilingonshan, Yunnan, southwest China, belonging to the family Isotomidae. The species is characterized by PAO 1.4 times as long as the nearest eye.

KEY WORDS Collembola / Isotomidae / China

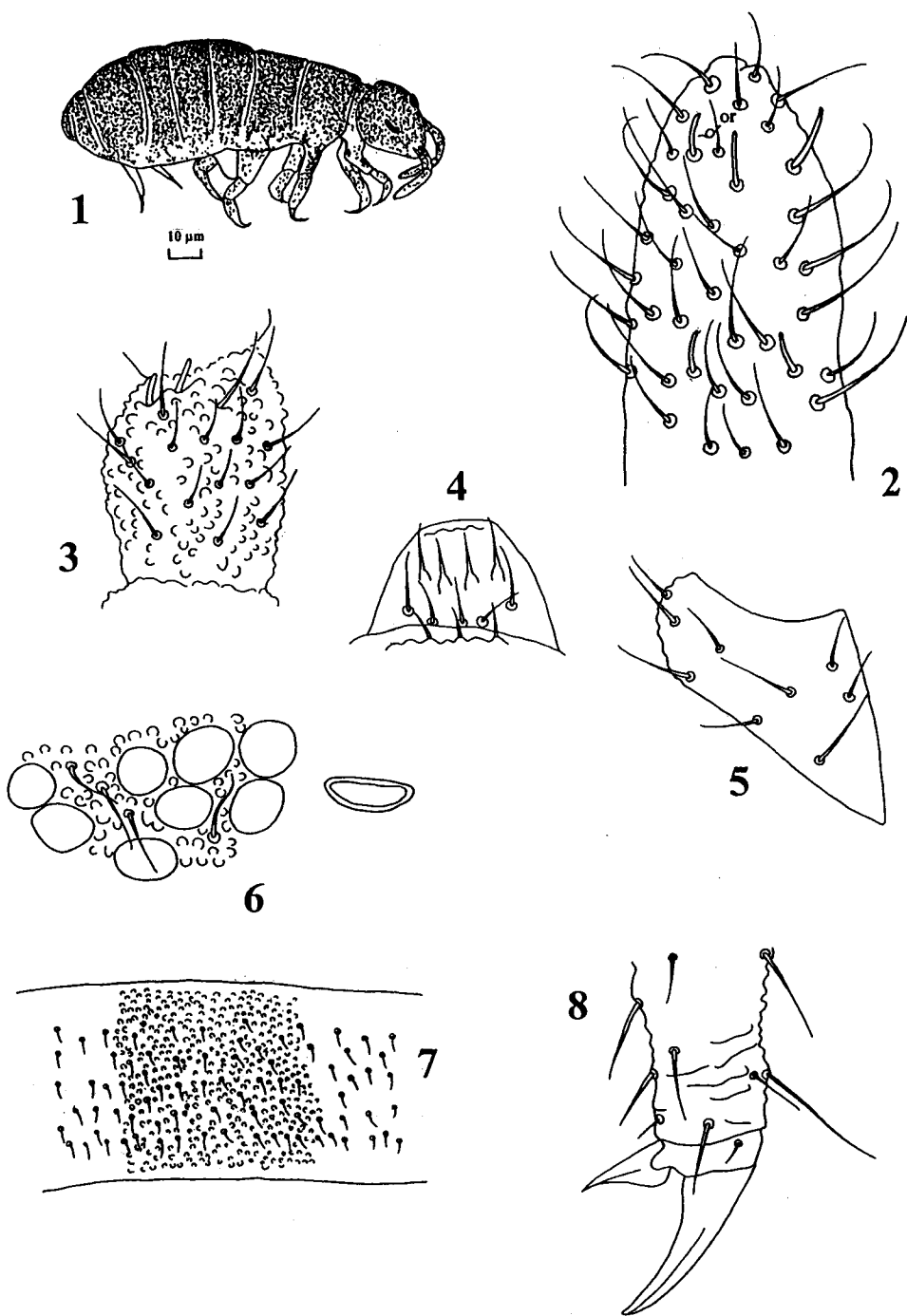
Introduction

An undescribed collembolan species of the genus *Bonetrura* Christiansen and Bellinger, 1980, belonging to the family Isotomidae was found from Dabei, Gaoligonshan, Yunnan, southwest China. This is the first record of the genus from China (cf. Zhao *et al.*, 1997).

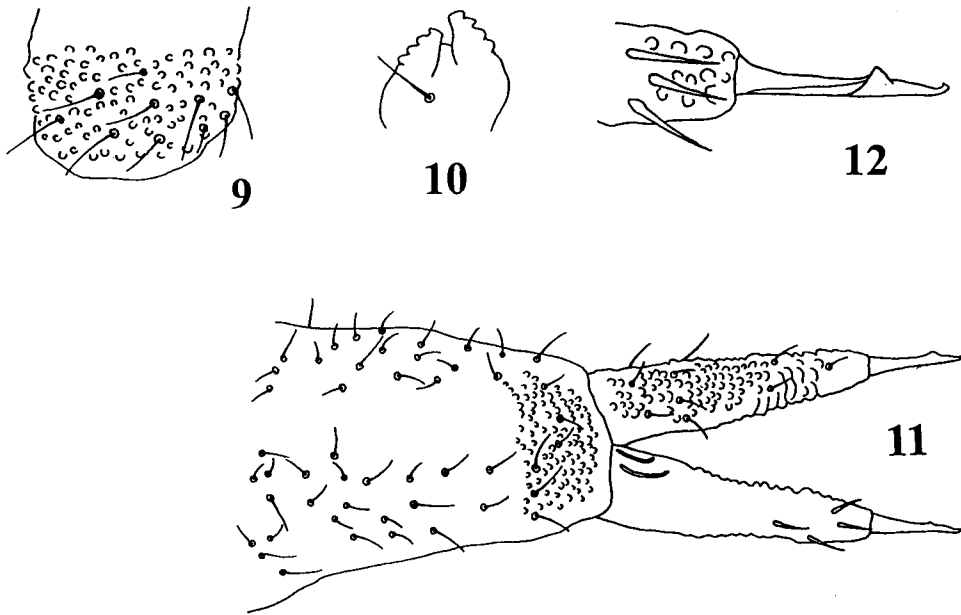
Bonetrura dabeiensis sp. nov. (Figs. 1-12)

Body dark purple, but ventrally pale (Fig. 1), 900-1,225 micra long (1,170 micra long in holotype). Integument uniformly coarsely granulate (Figs. 3, 7 and 11). Body setae all simple. Antenna 305 micra long in holotype, somewhat longer than head diagonal, being 1.2 in ratio to head. Length ratio of antennal segments I:II:III:IV as 1:1.6:1.8:4.6. Ant. IV without apical retractile papilla, subapically with 3 blunt sensory setae and an organelle, medially with 2 blunt setae (Fig. 2). Ant. III with 2 long sensory rods guarded by 4 setae (Fig. 3). Eyes 8+8; PAO 19 micra long in holotype, broadly rounded, being 1.4 times as long as nearest eye (Fig. 6). Labral setae as 3/3,2,4 (Fig. 4). Labial triangle as in Fig. 5.

Th. I granulate, without setae. Unguis 36 micra long in holotype, toothless, 3.0 times as long as unguiculus; unguiculus also toothless (Fig. 8). Tibiotarsus weakly subdivided, with a long acuminate tenent hair (Fig. 8). Abd. IV longer than Abd. III (Fig. 1). Ventral tube with 10+10 setae (Fig. 9). Tenaculum with a seta and 4+4 barbs (Fig. 10). Manubrium ventrally without setae; dorsally granulate, with more than 25 setae on each side, lacking median setae (Fig. 11). Dens dorsally granulate, with 10 dorsal and 4 ventral setae, 2.5 times as long as mucro (Fig. 11). Mucro bidentate, with inner lamella (Fig. 12), 1.1 times as long as unguis. Anal spines absent.



Figs. 1-8 *Bonetrura dabeiensis* sp. nov. 1, habitus; 2, distal part of Ant. IV; 3, Ant. III; 4, labrum; 5, labial triangle; 6, eyes and PAO; 7, median part of Abd. I; 8, distal part of hind leg.



Figs. 9-12 *Bonetrura dabeiensis* sp. nov. 9, ventral tube; 10, tenaculum; 11, furca (dorsal manubrium; a, dorsal dens and b, ventral dens; mucro); 12, mucro.

Holotype: Litter layer of a forest dominated by *Lithocarpus leucostachyus* and *Lindera communis*, 2, 280 m alt. at Dabei, Gaoligongshan, Tengchong, western Yunnan, southwest China, 11-X-1996, L. Zhao leg. **Paratypes:** five, same date as for holotype. Holotype and 2 paratypes are deposited in Shanghai Institute of Entomology, Academia Sinica and 3 paratypes in the collection of the senior author.

Remarks: This species resembles *B. boneti* (Yosii, 1962) (Christiansen and Bellinger, 1980), but differs by the number of barbs on tenaculum as well as the ratio of PAO to nearest eye (*boneti* with 3+3 barbs on tenaculum and having PAO about 2.3 times as long as nearest eye).

Etymology: The specific name is derived from the name of the type locality.

Acknowledgment

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