# A new species of the genus *Stachorutes* Dallai, 1973 from Poland (*Collembola: Neanuridae*)

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ABSTRACT. A new species of the genus *Stachorutes* Dallai, 1973 from Poland is described and illustrated.

Key words: entomology, taxonomy, Collembola, Neanuridae, Stachorutes, new species, Poland.

During faunistic investigations in the Tatra National Park (Poland), sponsored by University of Wrocław (grant 2020/W/IZ/2001), a new species of the genus *Stachorutes* Dallai, 1973 was found. Its description is given below.

## Stachorutes tatricus n. sp.

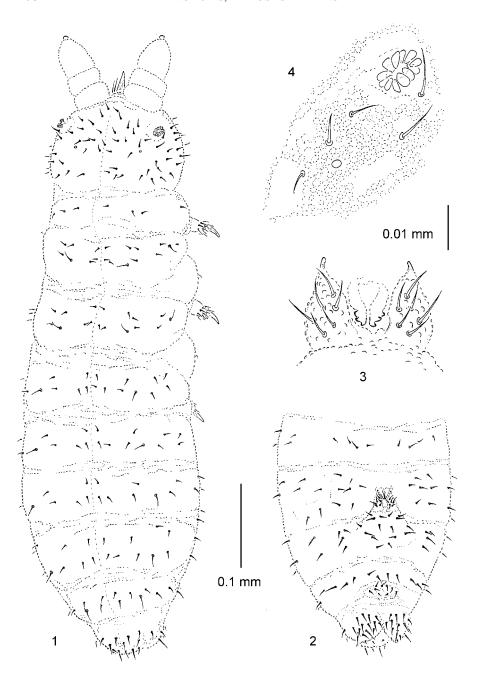
#### ETYMOLOGY

Named after its terra typica, the Tatra Mountains in Poland.

#### Diagnosis

Combination of the following characters: 1+1 ocelli, exceptionally elongated buccal cone and mucrodens with 6+6 setae place *S. tatricus* n. sp. in an isolated position within the genus (see Kováč 1999, Pomorski & Smolis 1999, Thibaud & Palacios Vargas 2000).

S. jizuensis Tamura, 1997 which has 1+1 ocelli differs in shorter buccal cone, fewer number setae on dens (5+5), absence of mucro and lower number and



1-4. Stachorutes tatricus n. sp.: 1 – dorsal chaetotaxy, 2 – chaetotaxy of abdominal sterna II-IV, 3 – mucrodens and tenaculum, 4 – area ocularis and postantennal organ

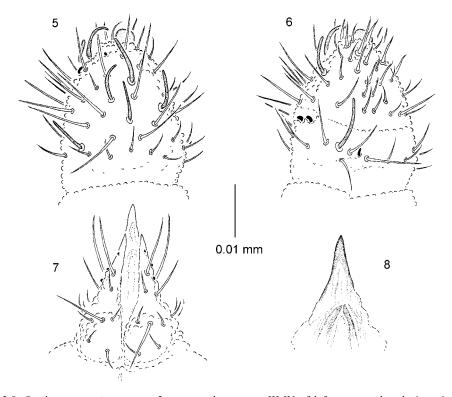
different shape of sensilla on antennal segment IV (5 flame-shaped versus 6 cylindrical).

Elongated buccal cone is found in *S. longirostris* Deharveng & Lienhard 1983 but it has 5+5 ocelli and 5+5 setae on dens. *S. scherae* Deharveng & Lienhard 1983 has mucrodens with 6+6 setae but it differs in a higher number of ocelli (5+5) and short buccal cone.

## DESCRIPTION

Habitus typical of the genus *Stachorutes* Dallai, 1973. Body length (without antennae) 0.5-0.73 mm (holotype: 0.73 mm). Colour of the body white, eyes dark. Granulation homogenous, 6-8 granules between setae p, on abdominal tergite V.

Antennae shorter than head. Antennal segment I with 7 setae, antennal segment II with 12 setae. Antennal segments III and IV fused dorsally. Antennal III-organ with two small internal curved sensilla and two cylindrical guard sensilla, the ventral one longer than the dorsal (Figs 5, 6). Ventral microsensillum on antennal segment III present. Antennal segment IV with large simple apical



5-8. Stachorutes tatricus n. sp.: 5 - antennal segments III-IV of left antenna, dorsal view, 6 - antennal segments III-IV of left antenna, ventral view, 7 - labium, 8 - cuticular sceleton of labrum, ventral view

vesicle, subapical organite, microsensillum, seta "i" and 6 cylindrical sensilla (Fig. 5). Ventral chaetotaxy of antennal segment IV as in Fig. 6.

Postantennal organ elliptical, composed of 10-12 simple vesicles (Fig. 4).

Eyes consist of 1+1 very small ocelli, about as large as skin granules, hard to detect (Fig. 4).

Buccal cone exceptionally elongated. Mandible with two teeth, maxilla styliform. Labium with 4+4 distal and 9+9 proximal setae, 1+1 subapical denticles, 2+2 spherical sensilla in shallow depressions (Fig. 7). Setae L on labium absent. Labrum pointed, strongly sclerified, especially in its apical and basal parts (Fig. 8).

Dorsal chaetotaxy as in Fig. 1. Seta  $a_0$  on the head absent, unpaired seta  $d_1$  present. Setae  $a_2$  and  $m_4$  on mesonotum,  $m_4$  on abdominal tergum IV absent. Sensorial formula of the body 022/11111. Setae sensuales twice longer than ordinary setae. Thoracic sterna without setae, ventral tube with 4+4 setae. Ventral chaetotaxy of abdominal sterna II-VI as in Fig. 2.

Furca short. Dens with 6 setae. Mucro fused to dens, 3-4 times shorter than dens, triangular in shape (Fig. 3). Tenaculum with 3+3 teeth.

Tibiotarsi I, II, III with 19, 19, 18 setae respectively. Femora I, II, III with 13, 12, 11 setae respectively. Trochanters with 6 setae each. Coxae I, II, III with 3, 7, 7-8 setae respectively. Subcoxae I, II, III with 0, 2, 2 setae respectively.

Claws without inner tooth. Empodial appendage absent.

# Types

Holotype: adult female on slide, soil under stone, herb vegetation in dwarf pine shrubs, north slope of summit Gładkie Upłaziańskie, 1600 m a.s.l. (Tatra Mts, S Poland), 10.07.2001, leg. D. Skarzyński paratypes: 2 females and 2 males on slides, same data as holotype; 1 male on slide, soil under stone in nitrophilous tall-herb vegetation in Tomanowa Valey, 1400 m a.s.l. (Tatra Mts, S Poland), 1.06.2001, leg. A. Smolis & D. Skarzyński (type material preserved in the collection of the Department of Systematic Zoology and Zoogeography, Wrocław University, Poland).

#### ACKNOWLEDGEMENTS

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