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Protaphorura kopetdagi n. sp. from Turkmenia (*Collembola*: *Onychiuridae*)

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ABSTRACT. *Protaphorura kopetdagi* n. sp. is described from the Kopetdag Mountains (Turkmenia). It differs from its closest relatives in dorsal and ventral pso formula, and in the presence of male ventral organ situated on 2nd and 3rd abdominal sternite.

I discovered the new species in one the of soil samples taken in April 1993 by Mr Grzegorz WÓJCIK during his botanical trip to Kazakhstan and Turkmenia.

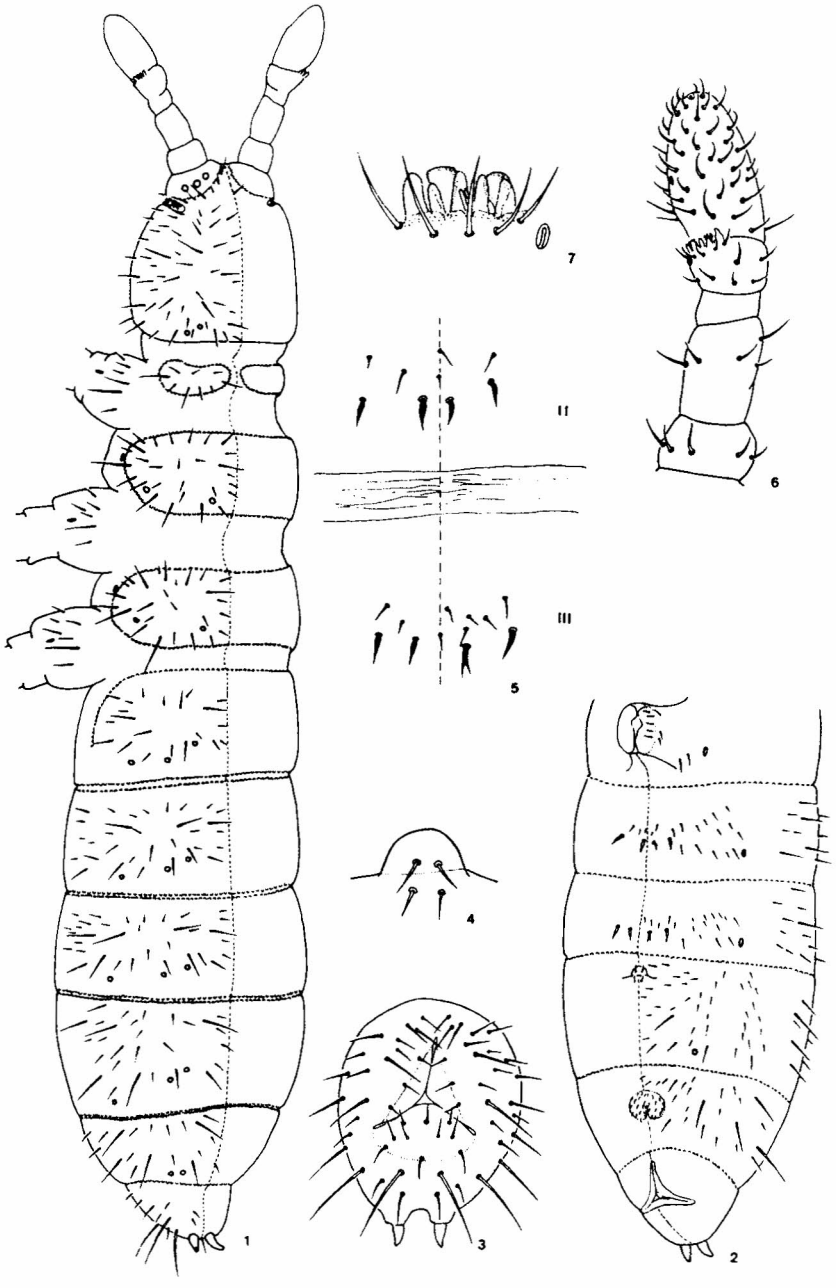
***Protaphorura kopetdagi* n. sp.**

DIAGNOSIS

PAO of *Protaphorura* type, composed of 26-36 simple vesicles. A remnant of furca as an integument fold, with 1+1 setae, and 1+1 setae at base. Formula pso dorsally: 32/022/33332, ventrally: 11/000/0001, on subcoxa no pso. Formula psx ventrally: 0/000/111, all subcoxa with 1 psx. Male with ventral organ situated on 2nd and 3rd abdominal sternite.

MATERIAL

Holotype (male), 20 paratypes (on slides) and numerous specimens in alcohol, Nochur region, Kopetdag Mountains, Turkmenia, April 1993, leg. G. WÓJCIK (preserved in the author's collection).



1-7. *Protaphorura kopetdagi* n. sp.: 1 - dorsal chaetotaxy, localization of pso and psx, 2 - ventral abdominal chaetotaxy, localization of pso and psx, 3 - chaetotaxy of 6th abdominal sternite, 4 - remnant of furca, 5 - male ventral organ, 6 - antenna, 7 - AOIII

DESCRIPTION

Length without antennae 1.0-1,6 mm, holotype 1.3 mm.

Body shape typical of *armatus*-group. Antennae approximately as long as head. A remnant of furca as an integument fold, with 1+1 setae and 1+1 setae at base.

Colour white.

Granulation homogenous, with no granular areas.

AOIII built of 5 guard setae, 2 sensory rods, 2 fine smooth sensory clubs and 5 comparatively short papillae (fig. 7).

PAO of *Protaphorura* type, consisting of 26-36 simple vesicles.

Pso and psx. Pso formula dorsally: 32/022/33332, ventrally: 11/000/0001. Subcoxa with no pso. Psx formula ventrally: 0/000/111. All subcoxa and femora with 1 psx. Position of pso and psx is presented in figs 1 and 2.

Dorsal chaetotaxy as in fig. 1. Formula of 1st thoracic tergite is i2-. 1st, 2nd and 3rd abdominal tergite with seta s'. Anal spines as long as inner edge of claw. Straight lines passing through the bases of setae, localized in front of anal spines, parallel or nearly so. On ventral side, between legs on pro-, meso- and metathorax no setae. Tubus ventralis with 2+2 setae at base. Ventral abdominal chaetotaxy as in figs 2 and 3.

Microsensillae. Ant. 4 with a subapical organ and ms in latero-external position, usually c. 1/2 length from the base (fig. 6). Ant. 3 with ms slightly below AOIII (fig. 7). Thoracic tergites 2nd and 3rd with ms laterally.

Legs. Claws always with teeth.

Male ventral organ situated on 2nd and 3rd abdominal sternite, fully developed only in mature specimens with ductus ejaculatorius. It consists of four thickened setae in a transverse row on the 2nd, and identical four setae on the 3rd abdominal sternite (fig. 5). Sometimes the setae forked.

Variability. In all the investigated material I found only one male with five setae in ventral organ on the 3rd abdominal sternite. I have not observed any variation in the number of pseudocelli typical for the members of *armatus*-group.

REMARKS

Because of the lack of pso on subcoxa *Protaphorura kopetdagi* n. sp. resembles *P. bicampata* (GISIN, 1956), *P. jacuticus* MARTYNOVA, 1976 and *P. borealis* MARTYNOVA, 1973 from which it differs in the pso formula and in the presence of ventral organ.

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