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A new species of the genus *Paleonura* CASSAGNAU, 1982 from North Vietnam (Collembola: Neanuridae)

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ABSTRACT. *Paleonura epiphytica* n. sp. is described and illustrated. The springtails were collected in epiphytes growing on rhododendron's branches.

Key words: entomology, taxonomy, *Collembola*, *Neanuridae*, *Paleonura*, new species, North Vietnam.

During faunistic investigations of North Vietnam sponsored by the Museum and Institute of Zoology PAS (Warsaw) and Wrocław University, the first member of the genus *Paleonura* CASSAGNAU, 1982 in Vietnam was found.

TERMINOLOGY

The terminology and layout of the tables used in this paper follow DEHARVENG (1983), DEHARVENG & WEINER (1984) and GREENSLADE & DEHARVENG (1990), and the following abbreviations are used:

General morphology:

abd., abdomen; ant., antenna; Cx, coxa; Fe, femur; Scx2, subcoxa 2; th., thorax; Tr, trochanter; T, tibiotarsus; VT, ventral tube.

Groups of Setae:

Ag, antegenital; Fu, furcal; Ve, ventroexternal; Vi, ventrointernal; Vl, ventrolateral; Va, anal valve.

Tubercles:

Af, antenno-frontal; Cl, clypeal; De, dorsoexternal; Di, dorsointernal; Dl, dorsolateral; L, lateral; Oc, ocular; So, subocular.

Types of setae:

MI, large macrochaeta; Mc, short macrochaeta; me, mesochaeta; mi, microchaeta; ms, s-microchaeta; S, S-seta (seta sensalis or sensilla), or, organite of antenna IV; mou, cylindrical sensillae on antenna IV ("soies mousses"); M seta, seta on tibiotarsus; x, labial papilla x.

Paleounura epiphytica* n. sp.*ETYMOLOGY**

The new species is named after its habitat – epiphytes growing on rhododendron's branches.

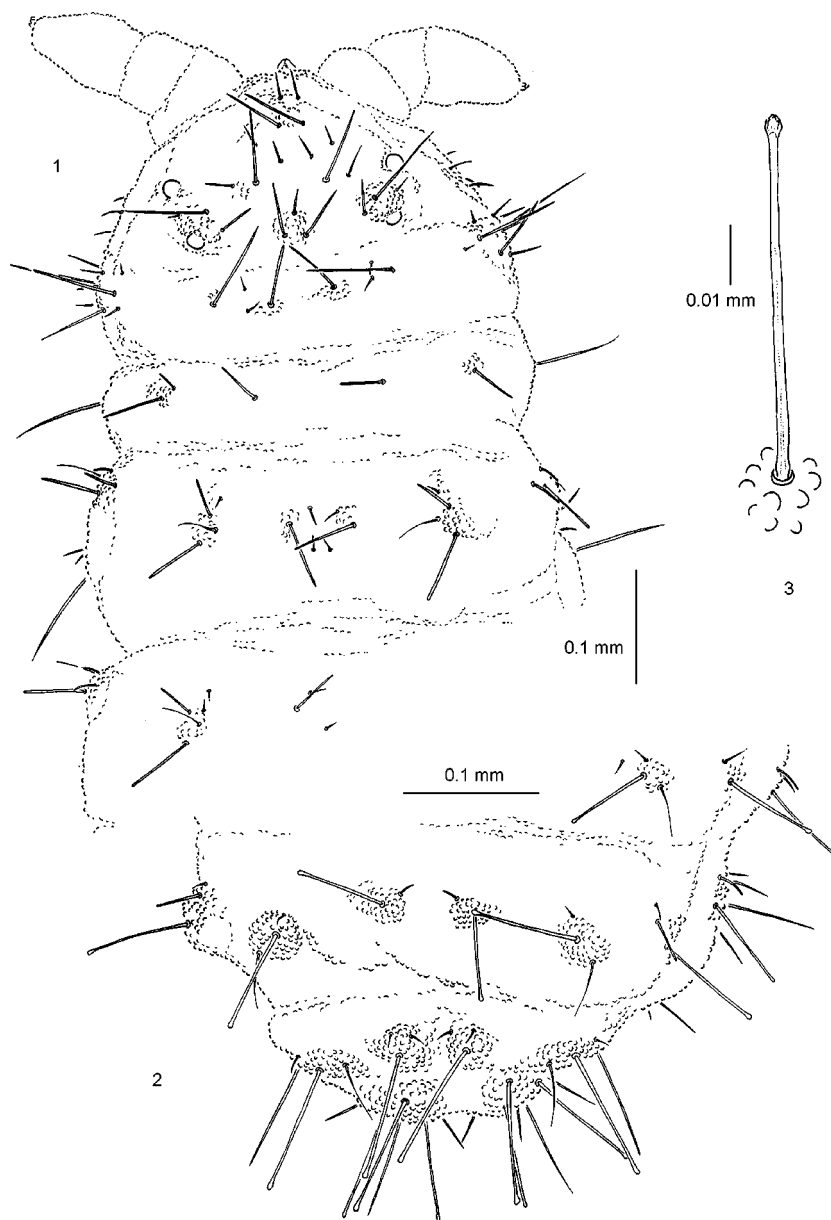
DIAGNOSIS

Two characters: the complete chaetotaxy of central area of head (Fig. 1) and the presence of clavate setae on tibiotarsus (Figs 4, 5) place the new species in an isolated position within the genus. Because of the presence of macrochaetae, distinctly clavate in form, on abdominal tergites, *Paleounura epiphytica* appears to be close to *Paleounura macronychia* CASSAGNAU, 1991 and *Paleounura siva* (YOSHII, 1966) (both described from India). Besides the characters given above, the new species differs from these two species in the number of setae De on th. II-III and abd. I-III (4, 5 setae on th. II-III and 4 setae on abd. I-III in the new species; 3 setae on th. II-III and abd. I-III in others) and the number of setae Di on abd. V (3 setae in the new species; 2 setae in *P. macronychia* and *P. siva*).

DESCRIPTION

Body length (without antennae) 0.74 – 1.44 mm (holotype: 1.44 mm). Habitus typical of the genus *Paleounura* Cassagnau, 1982. Colour of the body in alcohol white. Dorsal tubercles poorly developed, marked by larger secondary granules (Figs 1, 2). Tubercles located mainly on the posterior parts of the body. No reticulations. Ordinary dorsal setae smooth, differentiated into: short, thin, acuminate microchaetae, medium-sized, acuminate mesochaetae, and macrochaetae of two types: thick, short macrochaetae (Mc), and long, thick, large macrochaetae (MI). The large macrochaetae (MI) of the head are acuminate and those of th. II – III rounded at apex (Fig. 1). On the contrary the large macrochaetae (MI) of abd. I – VI have a spatulate, claviform apex (Figs 2, 3). S-setae thinner and shorter than the nearby macrochaetae (Figs 1, 2). No plurichaetosis on the body.

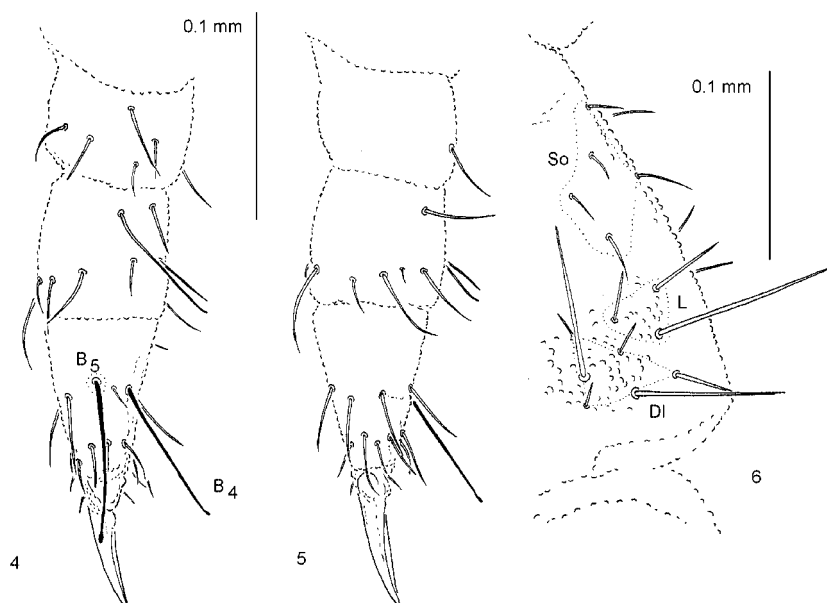
Head. Antennae shorter than head. S-setae of ant. IV short and thin. Apical bulb of ant. IV small and trilobed. Chaetotaxy of antennae as in Tab. 1. Buccal cone rather long and rounded at apex. Maxilla needle-like. Mandible tridentate.



1-3. *Paleonura epiphytica* n. sp.: 1 - dorsal chaetotaxy of head and thorax, 2 - dorsal chaetotaxy of abd. III-VI (holotype), 3 - seta DiI on abd. V

Chaetotaxy of labrum difficult to recognize. Chaetotaxy of labium as in Tab. 1. Labium with 2 + 2 apical papillae. Dorsal and ventral chaetotaxy of the head as in Tab. 1. 2+2 large, unpigmented eyes (Fig. 1).

Thorax, abdomen, legs. Dorsal chaetotaxy as in Figs 1, 2 and in Tab. 1. Ventral chaetotaxy as in Tab. 1. Claw without internal tooth. M seta present on tibiotarsus. The longest seta of femora I, II, III slightly clavate. Tibiotarsi I with distinctly clavate setae B4 and B5 (Figs 4, 5). Tibiotarsi II and III with distinctly clavate seta B5 and slightly clavate seta B4 (nomenclature of tibiotarsal setae after LAWRENCE 1977). Chaetotaxy of legs as in Tab. 1. Abd. VI slightly bilobed (Fig. 2). We observed the lack of both groups Di on abd. V in the male specimen and a few instances of asymmetrical lack of setae in the material examined.



4-6. *Paleonura epiphytica* n. sp.: 4 - 5 trochanteral, femoral and tibiotarsal chaetotaxy of the first pair of legs, ventro-external side (4) and dorso-internal side (5), 6 - arrangement of setae on lateral area of head

TYPES

Holotype: adult female on slide, lichens and mosses on rhododendron's branches, top of Tam Dao mount (1300 m. a.s.l.), Tam Dao National Park, North Vietnam, 08. 04. 1997, leg. R. J. Pomorski; paratypes: adult male and female, the same data as holotype (type material preserved in the collection of the Department of Biodiversity and Evolutionary Taxonomy, Wrocław University, Poland).

Table 1. Chaetotaxy of *Paleonura epiphytica* n. sp.

a) Cephalic chaetotaxy

Group of setae	Number of setae	Types of setae	Names or number of setae
Cl	4	Ml me	F G
An	4	Ml me	B C, D, E
Fr	2	Mc me	A O
Oc	3	Ml me mi	Ocm Ocp Oca
Di, De	4	Mc mi	De1, Di1 Di2, De2
DI	6	Ml me mi	DI 1, DI 5 DI 4 DI 2, DI 3, DI 6
L, So	7	Ml me mi	L1 L3, L4 6 setae

Number of other cephalic setae: Vi, 6; Ve, 10 – 11; labrum, ??; labium, 11, 2x; ant. I, 7; ant. II, 11; ant. III, 17 - 18 + 5s; ant. IV, 8s + i + or + 12mou.

b) Postcephalic setae

Terga					Legs				
Di	De	DI	L		Scx2	Cx	Tr	Fe	T
th. I	1	2	1	-	0	3	6	13	19
th. II	3	3+s	3+s+ms	3	2	7	6	12	19
th. III	3	4+s	3+s	3	2	8	6	11	18
Sterna									
abd. I	2	3+s	2	3	VT: 4				
abd. II	2	3+s	2	3	Ve: 4 Vel - absent				
abd. III	2	3+s	2	3	Ve: 4			Fu: 3me 0 micro chaetae	
abd. IV	2	2+s	3	5-6	Ve: 8-9			VI: 4-5	
abd. V	3	-----	3+s ----	3	Ag: 6			VI: 0	
abd. VI	----- --- 7 --- -----				Ve: 13-14			An: 2mi	

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