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A new species of the genus *Cryptonura* CASSAGNAU, 1979 from Poland (Collembola: Neanuridae)

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ABSTRACT. A new species *Cryptonura jubilaria* is described from Poland (Carpathians).

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

The genus *Cryptonura* CASSAGNAU, 1979 comprised up to now four species (DEHARVENG 1982): *C. franzi* (STACH, 1951), *C. kuehnelti* (GISIN, 1954) (both from the Alps), *C. anthrenoidea* (ELLIS, 1976) and *C. dirfysensis* CASSAGNAU & PEJA, 1979 (both from the Mediterrranean region).

During faunistic investigations in the Polish Carpathians, sponsored by the University of Wrocław (grant 2020/W/IZ/2000-20001), another new species of the genus *Cryptonura* was found. Its description is given below.

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.

Tubercles:

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

Types of setae:

Ml - large macrochaeta; Mc - short macrochaeta; Mcc - very short macrochaeta; me - mesochaeta; mi - microchaeta; ms - s-microchaeta; S - S-seta (seta sensualis or sensillum); or - organite of antenna IV; i - ordinary seta on ant. IV; mou - cylindrical sensilla on ant. IV ("soies mousses"); x - labial papilla x; L' - ordinary seta on abd. V.

Cryptonura jubilaria n. sp.

ETYMOLOGY

The name is derived from the Latin "*iubilaeum*" (= jubilee). This species is dedicated to the Uniwersity of Wrocław, on the three hundreth anniversary of its founding (1702-2002).

DIAGNOSIS

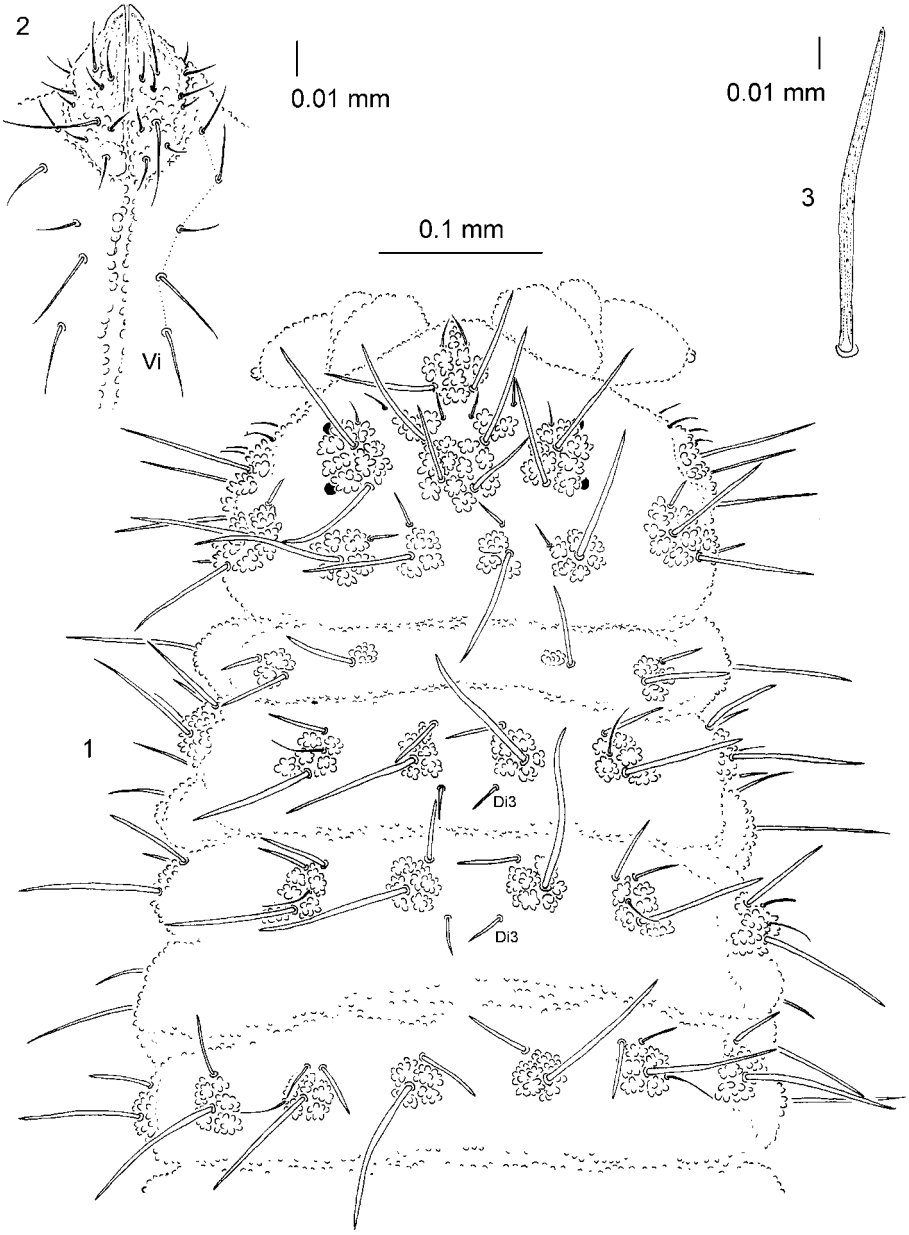
Because of the presence of one seta Di on th. I, the same number of setae on tubercles L on abd. I-IV and identical shape of tubercles (round, not triangular) the new species is closely related to *C. anthrenoidea* (ELLIS, 1976) from Crete. It strongly differs in the following characters: mandible with 3 teeth (in *anthrenoidea*: 2 teeth), presence of setae C and De2 on the head (in *anthrenoidea*: absent), presence of seta Di3 on th. V (in *anthrenoidea*: absent) and relatively short macrochetae Ml (in *anthrenoidea*: very long, equal to the axial diameter of two abdominal segments).

DESCRIPTION

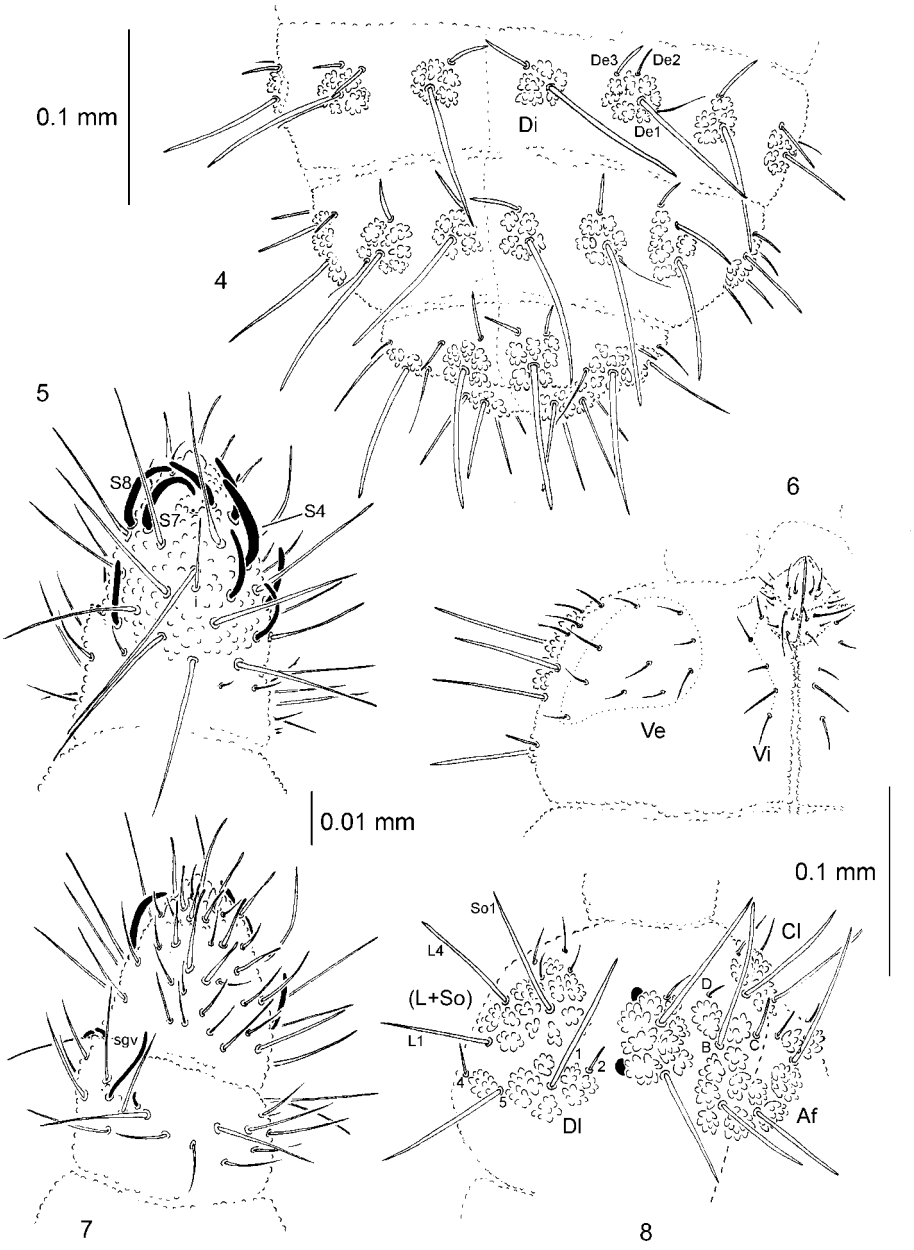
Body length (without antennae) 0.7-1.3 mm (holotype: 0.8 mm). Habitus typical of *Neanurini* (CASSAGNAU 1989). Colour of the body white. 2+2 small, dark-pigmented eyes (Figs 1, 8).

Types of dorsal ordinary setae: macrochetae Ml straight or slightly arc-like, narrowly sheathed, thin, slightly serrated, apically pointed (Fig. 3); macrochetae Mc i Mcc straight, thin and pointed; thin pointed mesochetae and very short acuminate microchetae.

Head. Buccal cone very short and rounded at apex (Figs 2, 6). Labrum chaetotaxy 4 / 2, 4. Labrum with ventral sclerifications arc-like. Chaetotaxy of labium as in Fig. 2 and Tab. 1. Maxilla styliform, mandible thin and tridentate. Chaetotaxy of antennae as in Figs 5, 7 and in Tab. 1. Ventral guard sensillum (sgv)



1-3. *Cryptonura jubilaria* n. sp.: 1 - dorsal chaetotaxy of head, thorax and abdomen I, 2 - chaetotaxy of labium and group Vi, 3 - seta Di1 on th. V



4-8. *Cryptonura jubilaria* n. sp.: 4 - dorsal chaetotaxy of abd. III-VI, 5 - dorsal chetotaxy of ant. III-IV (left antenna), 6 - ventral chaetotaxy of head, 7 - ventral chaetotaxy of ant. III-IV (left antenna), 8 - dorsal and lateral chaetotaxy of head

Table 1. Chaetotaxy of *Cryptonura jubilaria* n. sp.

a) Cephalic chaetotaxy:

Tubercle	Number of setae	Types of setae	Names of setae
Cl	4	Ml Mcc or me	F G
Af	8	Ml Mc Mcc mi	B A C D
Oc	3	Ml mi	Ocm, Ocp Oca
Di	2	Ml Mcc or mi	Di1 Di2
De	2	Ml Mcc or mi	De1 De2
Dl	4	Ml Mcc	Dl1, Dl5 Dl2, Dl4
(L+So)	7	Ml me	L1, L4, So1 So3-6

Number of other cephalic setae: Vi, 5; Ve, 10; labrum, 4 / 2, 4; labium, 11, 0x; ant. I, 7; ant. II, 11; ant. III, 18 + 5s; ant. IV, 8S + i + or + 12mou.

b) Postcephalic chaetotaxy:

	Terga				Legs				
	Di	De	Dl	L	Scx2	Cx	Tr	Fe	T
th. I	1	2	1	-	0	3	6	13	19
th. II	3	2+s	3+s+ms	3	2	7	6	12	19
th. III	3	3+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: 5	Ve1 - present			
abd. III	2	3+s	2	3	Ve: 4			Fu: 4 me 0 mi	
abd. IV	2	2+s	3	5	Ve: 8			Vl: 4	
abd. V	3	4+s			Ag: 2			Vl: 1	L': 1
abd. VI	7				Ve: 11 -12			An:2mi	

on ant. III sinuous (Fig. 7). S-setae: S4, S7 and S8 on ant. IV longer than other S-setae. S-setae: S7 and S8 more curved and S-seta S4 distinctly thicker than other S-setae (Fig. 5). Apical bulb distinct, trilobed. Chaetotaxy of head as in Figs 1, 2, 6, 8 and in Tab. 1. Setae O and E absent, seta D free. Seta A shorter than B. Elementary tubercles in area between setae B and C absent (Fig. 8). Tubercle Dl with 4 setae (setae Dl3 and Dl 6 absent). Tubercle (L+So) with 7 setae, setae: So2, L2 and L3 absent. Group Vi with 5 setae (Fig. 2).

Thorax, abdomen, legs. Chetotaxy of th. and abd. as in Figs 1, 4 and in Tab. 1. Setae Di3 on th. II-III free. Setae De2 on th. II and De3 on th. III and abd. I-III situated on tubercles De. Setae De3 on abd. I-III longer than setae De2. Tubercles L on abd. III and IV with 3 and 5 setae respectively. Abd. V with 2 setae Ag. Seta L' on abd. V present. Cryptopygy present, poorly developed (Fig. 4). Chaetotaxy of legs as in Tab. 1. Claw untoothed.

TYPES

Holotype: adult female on slide, soil under stone, sycamore forest with heart's tongue fern - *Phyllitis scolopendrium* (association: *Phyllitido-Aceretum pseudoplatani* MOOR 1952), north slope of Ostra hill (400 m a.s.l.), nature reserve "Przełom Jasiołki", near village Tylawa, Beskid Niski Mts., The Carpathians, SE Poland, 05. 05. 2000, leg. A. SMOLIS; paratypes: 2 females, 2 males and 2 juv., soil and leaf litter under and between stones, same locality as holotype, 05. 05. 2001, 16. 06. 2001, leg. A. SMOLIS, (type material preserved in the collection of the Department of Systematic Zoology and Zoogeography, Wrocław University, Poland).

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