

First record of two Neanurinae species (Collembola) from Albania

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Abstract – Two Neanurinae species, *Bilobella matsakisi* CASSAGNAU, 1968 and *Endonura dalensi* (DEHARVENG, 1979) were found in Albania. Short descriptions and distributions are given. With 11 figures.

Key words – *Bilobella matsakisi*, *Endonura dalensi*, first record, distribution, Albania.

INTRODUCTION

The Collembola fauna of Albania is poorly known. The first mention of the Albanian springtails was given by STACH (1923), who investigated the springtail materials of the first Hungarian Albania-expedition. Several taxonomical and chromosome research data of Mediterranean and Albanian springtails were published by CASSAGNAU (1979) and by CASSAGNAU & PEJA (1979). PEJA (1981) gave a summary of the Albanian springtail fauna and mentioned 128 species from this country. THIBAUD (1992) studied the Collembola fauna of littoral stations and found four species. Two species (from the genus *Mesaphorura* BÖRNER, 1901) of them were new to the fauna of Albania. PEJA & DEHARVENG (1995) investigated the genus *Pumilinura* CASSAGNAU, 1979 and published the first record of two Neanuridae species. The last data of the Albanian Collembola fauna were given by KONTSCHÁN *et al.* (2003), who mentioned the circumpannonic *Tetrodontophora bielanensis* (WAGA, 1842) from Albania.

Only one *Bilobella* CAROLI, 1912 and two *Endonura* CASSAGNAU, 1979 specimens were found in Albania. According to the Neanurinae list of PEJA & DEHARVENG (1995) it is the first time that the genus *Endonura* CASSAGNAU, 1979 and the species *Bilobella matsakisi* CASSAGNAU, 1968 are recorded in Albania.

MATERIAL AND METHODS

Soil, litter and moss materials were collected on several localities of Albania in 2002 and 2003. The identified specimens are deposited in the Institute of Forest and Wood Protection of the University of West Hungary (Sopron).

Endonura dalensi (DEHARVENG, 1979)
(Figs 2–5)

Neanura (Endonura) dalensi DEHARVENG, 1979: 22.

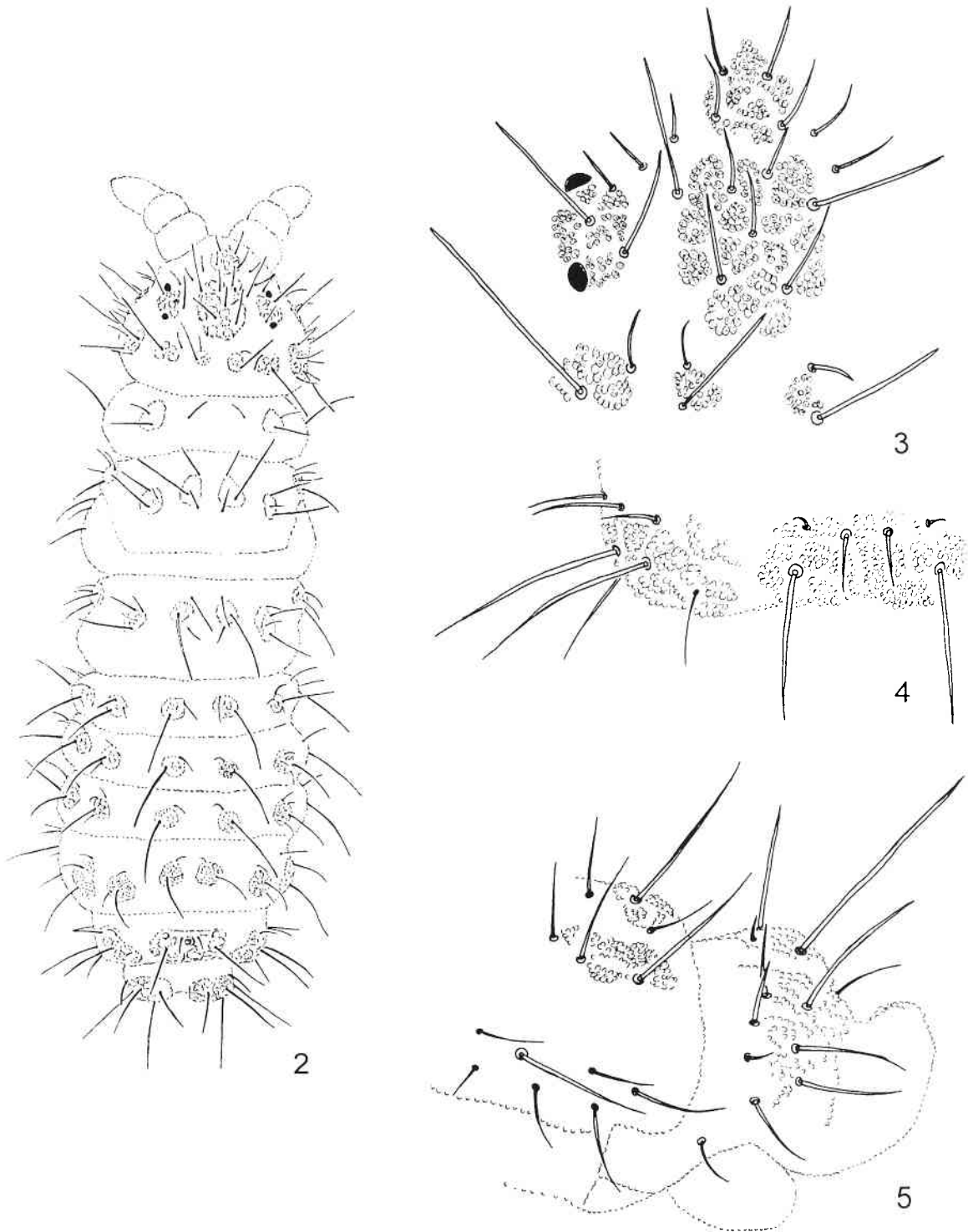
Albanian locality – 39/a, Albania, Periferi Malësia, between Hani Hoti and Vermosh, 1370 m a.s.l., N 42°31.936', E 19°43.073', a beech forest, from litter, 07.07.2003, leg. Z. ERÓSS, Z. FEHÉR, J. KONTSCHÁN & D. MURÁNYI.

Distribution – *Endonura dalensi* is a species with West-Mediterranean distribution (Fig. 1). It is known from France, Spain and the island of Sardinia (DEHARVENG 1979, JORDANA *et al.* 1997, DALLAI 1980, LUCIÁÑEZ & SIMÓN 1988). It is supposed to be an oriental Pyrenean species, but DALLAI (1980) described the subspecies *Endonura dalensi sardosa*, which was found on the island of Sardinia. The subspecies differs from the continental (nominotypical) specimens of *Endonura dalensi* in the less developed dorso-internal tubercles of the



Fig. 1. Localities of *Endonura dalensi* (DEHARVENG, 1979)

head, and the seta Oca (ocular anterior), which is a microchaeta on *Endonura dalensi sardosa*, but a short macrochaeta on the continental form. The lateral tubercle on the first abdominal segment is with 4 setae on the subspecies, but with 3 setae on *Endonura dalensi dalensi*.



Figs 2–5. *Endonura dalensi* (DEHARVENG, 1979): 2 = habitus, 3 = central part of head, left side, 4 = dorsal aspect of 5th abdominal segment, 5 = lateral aspect of 5th and 6th abdominal segments

Table 1. Head chaetotaxy of *Endonura dalensi* (DEHARVENG, 1979)

Tubercles	Clypeal	Antennal	Frontal	Ocular	Di	De	DI	L+So
Granulation	+	-	+	+	+	+	+	+
Number of setae	4	4	7	3	2	2	6	8+2
Remarks	F, G	D, E	A,B,C,O	Ocp>Oca				

Table 2. Dorsal chaetotaxy of *Endonura dalensi* (DEHARVENG, 1979)

Tubercles	Di	De	DI	L
Thorax 1	1	2	1	-
Thorax 2	3	2+s	3+s+ms	3
Thorax 3	3	3+s	3+s	3
Abdomen 1	2	3+s	2	3
Abdomen 2	2	3+s	2	3
Abdomen 3	2	3+s	2	4
Abdomen 4	2	2+s	3	7
Abdomen 5	(3+3)		- 7 + s -	
Abdomen 6			- 7 -	

Description of the Albanian specimens – Length of the female specimen is 2.13 mm, of the male 1.47 mm (Fig. 2). Colour pale in alcohol, the 2 + 2 eyes are with small dark spots below the ocelli.

The chaetotaxy (Tables 1–2) is the same as that of the Pyrenean specimens described by JORDANA *et al.* (1997).

Bilobella matsakisi CASSAGNAU, 1968

(Figs 6–11)

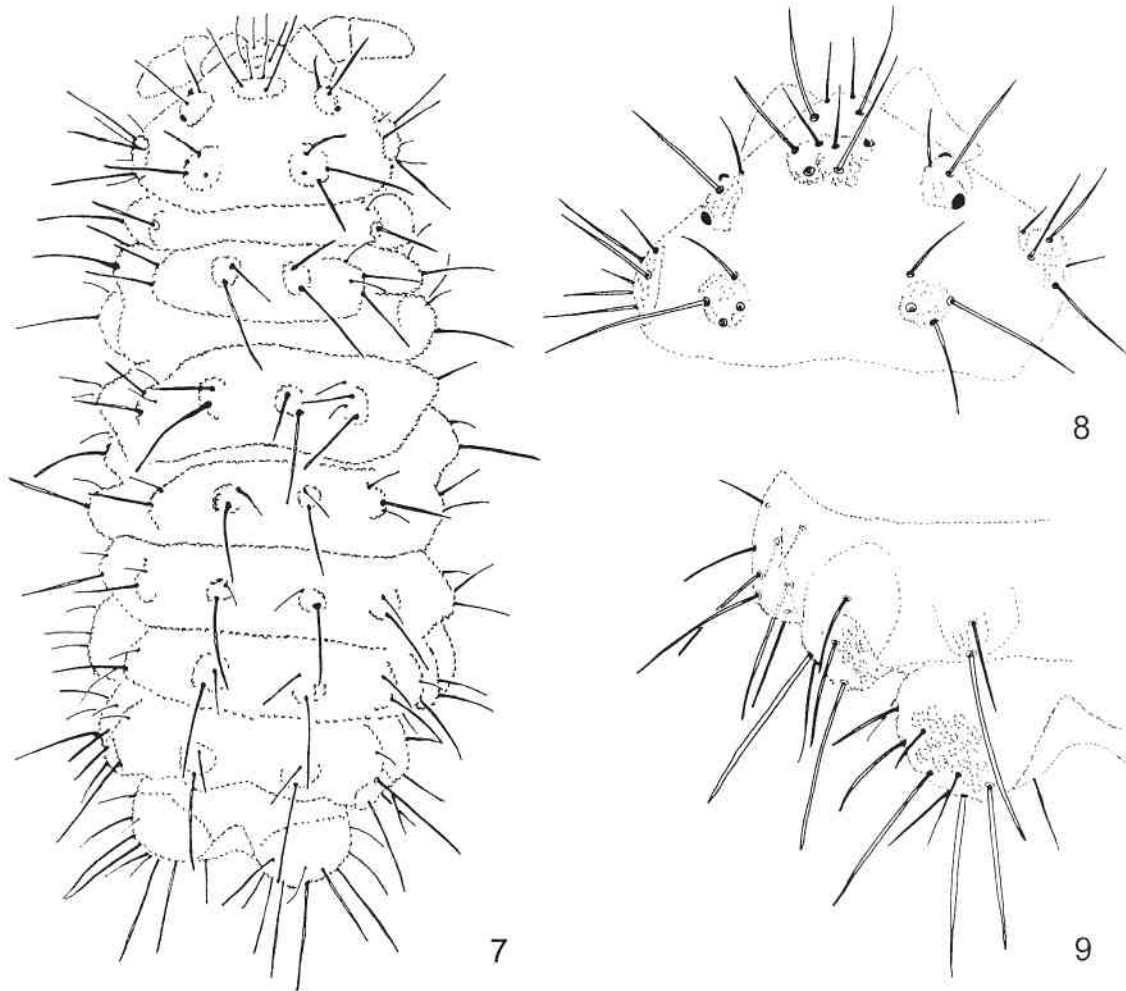
Bilobella matsakisi CASSAGNAU, 1968: 299.

Albanian locality – 39/a, Albania, Periferi Malësia, between Hani Hoti and Vermosh, 1370 m a.s.l., N 42°31.936, E 19°43.073, a beech forest, from litter, 07.07.2003, leg. Z. Erőss, Z. Fehér, J. Kontschán & D. Murányi

Distribution – According to CASSAGNAU, DEHARVENG & PEJA (1985) *Bilobella matsakisi* was known from some localities of Greece only (Fig. 6).



Fig. 6. Localities of *Bilobella matsakisi* CASSAGNAU, 1968



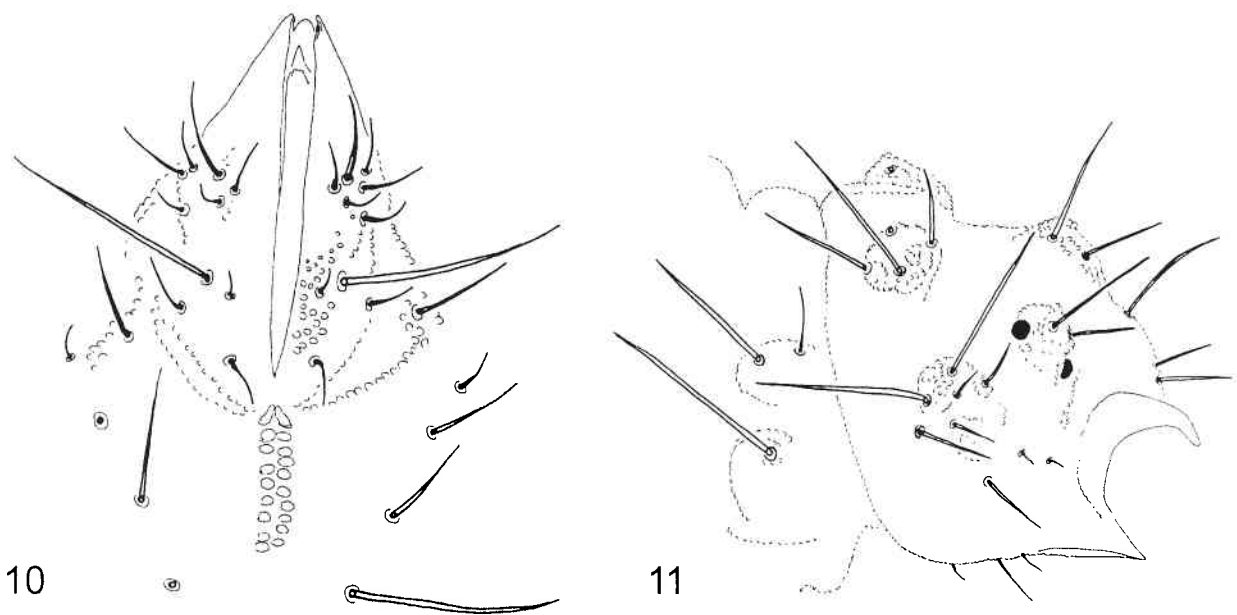
Figs 7–9. *Bilobella matsakisi* CASSAGNAU, 1968: 7 = habitus, 8 = dorsal aspect of head, 9 = dorsal aspect of 5th and 6th abdominal segments

Table 3. Head chaetotaxy of *Bilobella matsakisi* CASSAGNAU, 1968

Tubercles	Clypeal	Antenno- frontal	Ocular	Dorsointernal & dorsoexternal	Dorsolateral + lateral + subocular
Number of setae	4	6	6	6	9
Remarks	Cuticular tubercles less developed			Tubercles strongly developed	CASSAGNAU (1968): 10 setae

Table 4. Dorsal chaetotaxy of *Bilobella matsakisi* CASSAGNAU, 1968

Tubercles	Di	De	DI	L	Remarks
Thorax 1	–	2	1	–	
Thorax 2–3	2	4	3	3	
Abdomen 1	2	3	2	3	
Abdomen 2–3	2	3	2	6	CASSAGNAU (1968): L=7–9
Abdomen 4	2	5		8	CASSAGNAU (1968): DI+L=10–11
Abdomen 5		11 + ventral lobus 5			
Abdomen 6		7 + anal valvule 12			

**Figs 10–11.** *Bilobella matsakisi* CASSAGNAU, 1968: 10 = labial chaetotaxy, 11 = lateral aspect of head

Description – Length of the single female Albanian specimen is 2.7 mm. Colour pale in alcohol. In the key of CASSAGNAU (1968) our specimen runs to *Bilobella matsakisi*. The chaetotaxy of our specimen presented in Tables 3–4 corresponds well with CASSAGNAU's description. Some little differences with fewer numbers of the setae may be a reason of the small body length of our specimen (length up to 4 mm by CASSAGNAU (1968)). These differences of the setae numbers occur mostly on the lateral tubercles.

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Checklist of the Diptera of Hungary

Edited by L. Papp

This is an international undertaking of 20 authors: a checklist of the dipterous species found through the end of 2000 in Hungary, with references to their first reliable records in the territory of modern Hungary. The "minimum requirements" for a "first record" are to have the name of the identifier and the place of deposition, and to have evidence that the site is a locality of present-day Hungary. The starting point for most parts is Thalhammer's *Fauna Regni Hungariae* in 1900 and every family part has a short introduction. These parts contain data on the number of recorded species and on the number of species expected to occur in Hungary. Most of the voucher specimens are deposited in the Diptera collection of the Department of Zoology, Hungarian Natural History Museum, Budapest (HNHM); in exceptional cases the name of the relevant institution is given. There are numerous species new to Hungary reported here for the first time, however, the dipterous fauna of Hungary is still poorly known with 5550 species in this book. According to our present knowledge no less than 10000 species may occur in the country.

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