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New species from the genus *Micraphorura* BAGNALL, 1949 (*Onychiurinae*, *Collembola*)

[With 10 text-figs]

Nowy gatunek z rodzaju *Micraphorura* BAGNALL, 1949 (*Onychiurinae*, *Collembola*)

Abstract. The author describes a new species of *Collembola* belonging to the genus *Micraphorura*, found in the Pieniny Mts. (Carpathians, Poland).

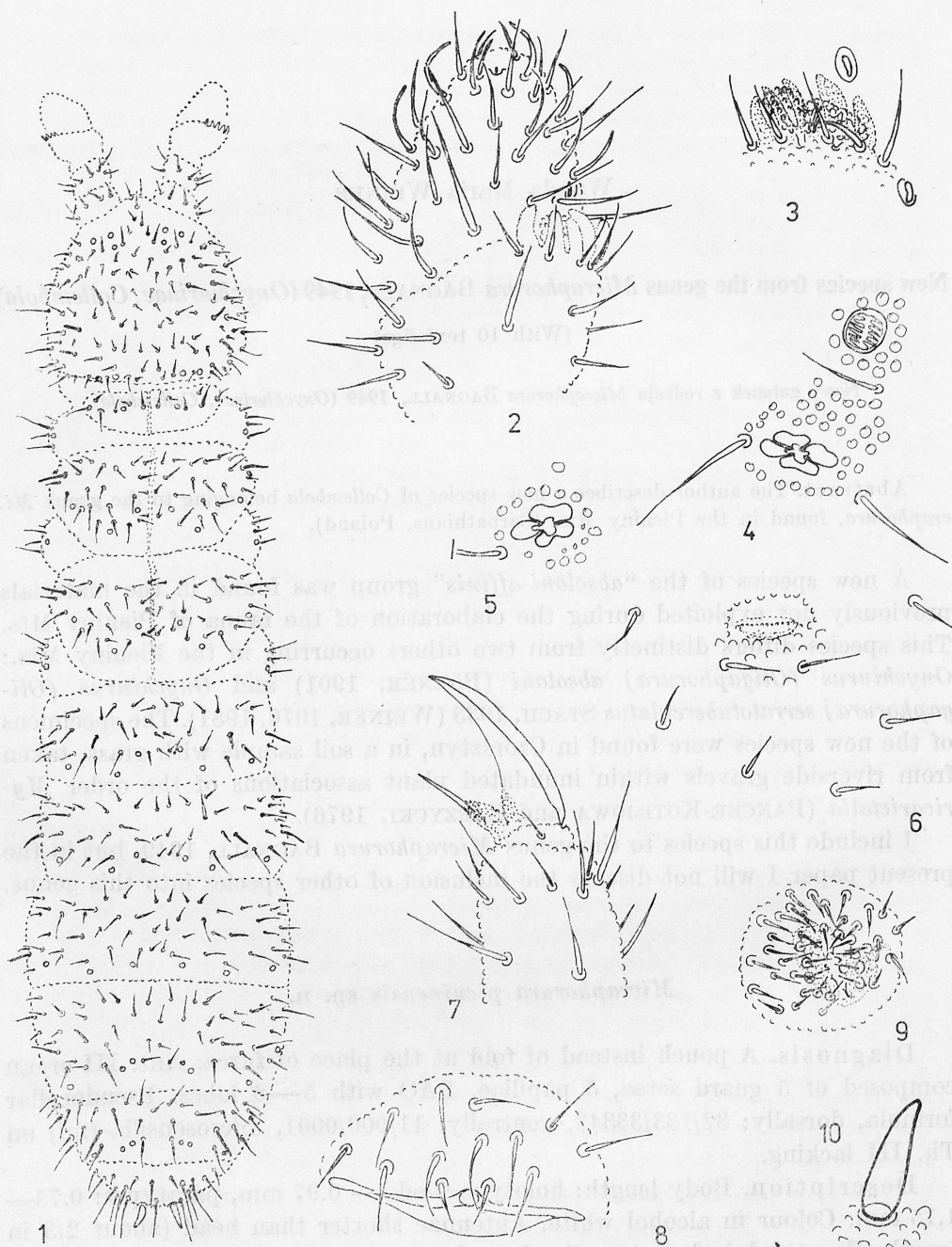
A new species of the "*absoloni-affinis*" group was found in the materials previously not exploited during the elaboration of the fauna of Pieniny Mts. This species differs distinctly from two others occurring in the Pieniny Mts.: *Onychiurus (Oligaphorura) absoloni* (BÖRNER, 1901) and *Onychiurus (Oligaphorura) serratotuberculatus* STACH, 1933 (WEINER, 1976, 1981). The specimens of the new species were found in Czorsztyn, in a soil sample with grass, taken from riverside gravels within inundated plant associations of the order *Myricarietalia* (PANCER-KOTEJOWA and ZARZYCKI, 1976).

I include this species to the genus *Micraphorura* BAGNALL, 1949, but in the present paper I will not discuss the inclusion of other species into this genus.

*Micraphorura pieninensis* sp. n.

Diagnosis. A pouch instead of fold at the place of furca. Ant. III-organ composed of 5 guard setae, 5 papillae, PAO with 5—6 lobes. Pseudocellar formula, dorsally: 32/133/33343, ventrally: 11/000/0001, microsensilla (mi) on Th. III lacking.

Description. Body length: holotype ♀ ad. — 0.97 mm, paratypes: 0.75—1.15 mm. Colour in alcohol white. Antennae shorter than head (about 2/3 in length; Fig. 1); clubed on two distal segments. Ant. IV (Fig. 2) with one, very small subapical organ (*or*) and with small sensilla (*m*) in latero-external position at 1/4 of the height of Ant. IV, just over Ant. III—organ. Some of the setae on Ant. IV resemble curved sensillae. Ant. III—organ (Figs. 2 and 3) built of 5 guard setae, 2 smooth sensory rods and 2 granulated sensory clubs, of which



Figs. 1—10: *Micraphorura pieninensis* sp. n. 1 — body shape with dorsal chaetotaxy, 2 — Ant. III and IV, 3 — Ant. III—organ, 4 — PAO with pseudocellus, 5 — PAO of another specimen, 6 — remnant of furca, 7 — claw, 8 — female genital plate, 9 — male genital plate, 10 — anal spine

the external ones are larger and more curved. Four guard setae placed at the bases of papillae I, II, IV and V (counting from the internal side), the fifth one — slightly more externally of papilla V. A small sensilla occurs on the ventral side, below the guard seta. PAO (Figs. 4 and 5) composed of (3) 4—5 vesicles. Labral setae as 4/3, 4, 2.

Pseudocellar formula, dorsally: 2+1, 2/133/33343, ventrally: 11/000/0001. One pseudocellus on each subcoxa. Chaetotaxy as on Fig. 1, with microchaete prevailing. 4, 5, 5, setae on subcoxa I, II, III. Arrangement of sensual setae: 2/0, 1+mi, 1/22211. All dorsal setae sensuales are smaller than the lateral ones. On Abd. VI  $a_0$  and  $p_0$  occur. Claw (Fig. 7) without teeth. Empodial appendage with basal lamella. Length of the empodial appendage equals 2/3 of the inner edge of the claw. Tenent clavate hair absent. Ventral tube with 7+7 setae (exceptionally 8+8) and 2+2 setae at the base. A remnant of furca in the form of small pouch as on Fig. 6. Genital plates of ♀ and ♂ on Figs. 8 and 9, respectively. Anal spines (Fig. 10) almost without papillae, reaching in length 2/3—1 of the inner edge of the claw. Distinct granulation, particularly around pseudocellulae.

Locality of types: holotype ♀, 44 paratypes — Czorsztyn (Pieniny Mts., Poland), riverside gravels at the Dunajec River, 490 m a.s.l., 10. 10. 1976, leg. W. M. WEINER.

Discussion. As was stated above, the new species belongs to the "*absoloni-affinis*" group and to the genus *Micraphorura* BAGNALL, 1949. GISIN (1953), having at his disposal the materials from Switzerland, Sweden, Finland and North Germany, came to the conclusion that *Onychiurus affinis* ÅGREN, 1903 (= *Micraphorura affinis* (ÅGREN) comb. nov.) is a synonym of *O. absoloni* BÖRNER, 1901 (= *Micraphorura absoloni* (BÖRNER) nec BAGNALL, 1949). HANDSCHIN (1920), and later SALMON (1959) considered them as two separate species. Both authors justified this distinction pointing to the different shape of the clubs of Ant. III-organ.

The new species is closest to *M. affinis* (ÅGREN). It differs in the number of papillae in Ant. III-organ (4 papillae in *M. affinis*). Pseudocellar formulas differ only on sternites. In the new species pseudocelli occur on Abd. IV (one on each side). It is not clear whether the number of pseudocelli on the ventral side of the head can be considered a distinguishing character. In all specimens of *M. affinis* (ÅGREN) coming from various regions of Poland I have found 2 pseudocelli on each side, one of those in lateral position. In these specimens I have also noticed a trace of furca in the form of a concavity with 2 setae underneath. Comparing the specimens of *M. pieninensis* sp. n. with those of *M. affinis* (ÅGREN) found in Poland I have discovered differences in the number of setae on subcoxae. This number equals in *M. pieninensis* sp. n.: 4, 5, 5, whereas in *M. affinis* (ÅGREN) (= *O. absoloni* BÖRNER, 1901 in WEINER, 1976, 1981) from the Pieniny and Gorce Mts. it amounts to 3, 3, 3, and from Puławy and the Kampinos Forest: 3, 4, 4. In the Polish specimens of *M. affinis* (ÅGREN) seta  $a_0$  on Abd. VI is absent, but it occurs in *M. pieninensis* sp. n.

In *M. pieninensis* sp. n., *M. affinis* (ÅGREN) as well as in *M. pseudoraxensis* (NOSEK et CHRISTIAN, 1983) comb. nov., microsensilla (mi) on Th. III is lacking.

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#### STRESZCZENIE

Autorka opisuje *Micraphorura pieninensis* sp. n. (*Collembola*, *Onychiurinae*), najbardziej podobny do *Micraphorura affinis* (ÅGREN, 1909).

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