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Acopauropus szeptyckii sp. n. *(Pauropoda, Eurypauropodidae)* from North Korea

[With 6 text-figs]

Acopauropus szeptyckii sp. n. *(Pauropoda, Eurypauropodidae)* z Północnej Korei

Abstract. *Acopauropus szeptyckii* sp. n. *(Pauropoda, Eurypauropodidae)* is described from North Korea. Some remarks about the generic classification of *Eurypauropodinae* are added.

I have received from my friend Prof. Dr. Andrzej SZEPTYCKI a rich and very interesting material of various soil — and litter invertebrates from North Korea. In this material I found, among others, three specimens of *Acopauropus* COOK, belonging to a new species. This is the second record of *Pauropoda* in Korea, and the first species of the family *Eurypauropodidae* from this country (SCHELLER, 1979).

Acopauropus szeptyckii sp. n.

Description of holotype (♂)

Body colour light brown. Lenght 1240 μm, width 550 μm.

Head (Fig. 1) oval, 160 μm broad. Temperal organs subspherical with small lateral convexity and minute sensory on tergal side. Frontal side of head 15 pairs of setae and 3 setae unpaired, annulate and blunt pointed; distributed as in Fig. 1. Two vertex setae. Eventual labral setae not visible.

Antennae. First and second antennal segments with 2 setae, third with 4 setae and globulus *g2*, fourth with 5 setae. These setae cylindrical, annulate and blunt at tip, of about equal length. Sclerotized rings on 3rd and 4th antennal segment complete, not open. Tergal antennal branch almost cylin-

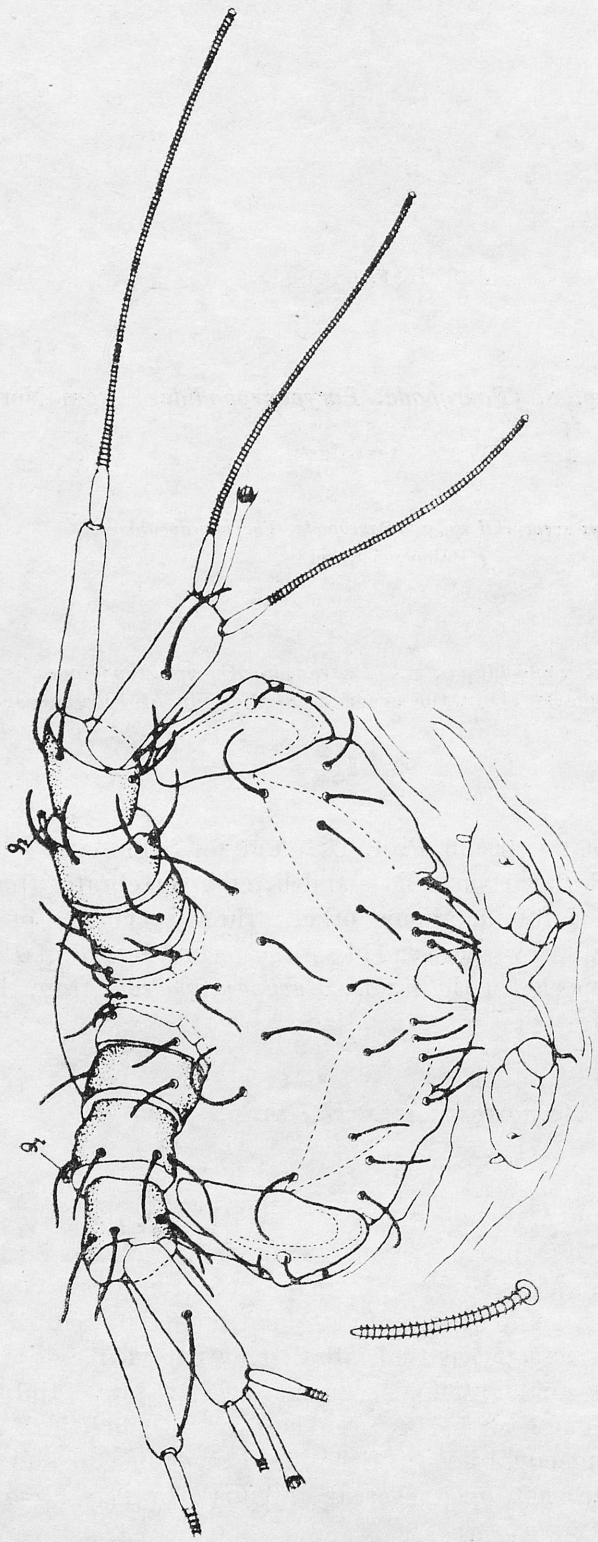

Fig. 1. *Acopauropus szeptyckii* sp. n. Head-frontal view and first rudimental pair of legs

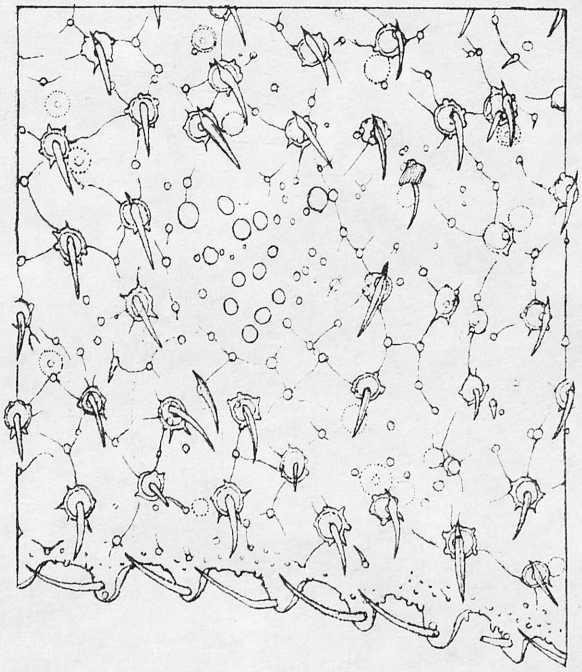

Fig. 2. *Acopauropus szeptycki* sp. n. Part of tergite III with a cluster of tubercles in greate magnification than in Fig. 3

drical, 55 μm long and about 5 times longer than broad. Sternal branch truncated, its posterior margin shorter than anterior; 40 and 48 μm long respectively.

Globulus *g1* long-stalked with 6 (?) bracts. First flagellum *F1* (without basal segment) 126 μm long. Second flagellum *F2* 110 μm long and third flagellum *F3* 92 μm long. Basal segments of flagella subequal in length, 16—18 μm long. Antennal segments, branches and stalk of globulus smooth. Globulus *g2* small, twice as long as wide, pubescent.

Trunk. Tergites with three main types of phaneres:

1) on lateral margins of tergites two rows of curves and pubescent spines settled on conical but obtused bases. These spines project posteriorly, but to median line on tergite VI.

2) on hind margins of tergites I—V these spines are smooth and strongly pointed, projecting to median line (Fig. 2).

3) on dorsal side of tergites phaneres are straight or slightly curved, growing from circular or oval bases. They are somewhat different in shape and length (Fig. 2).

Distribution of circular, flat tubercles of different size on tergites as in Fig. 3. One of the fields with these tubercles is represented in Fig. 2 in greater magnification.

Trichobothria *T1* and *T2* filiform, shortly pubescent in distal half. *T1* 94—

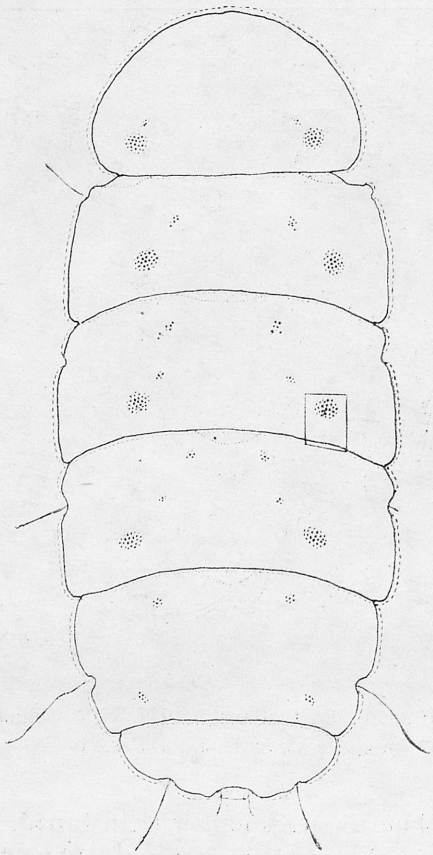

Fig. 3. *Acopauropus szeptyckii* sp. n. Dorsal side with distribution of flat tubercles schematically marked. On the right side of tergite III, the marked part is presented in greater magnification in Fig. 2

95 μm, *T2* 97—98 μm long *T3* thicker than *T1* and *T2*, pubescent in distal part. *T4* as *T1* and *T2*, but 172 μm long. *T5* as in Fig. 6, 94 μm long.

Legs (Fig. 4). Legs I and IX 5-segmented, II—VIII 6-segmented. Tarsi in all legs with two accessory claws. Setae on coxae and trochanters with three pubescent branches, but on coxae straight with funnel-shape bases; on trochanters flat and flexible. Tarsus of legs I and IX with only two distal sternal setae. Tarsi of legs II—VIII divided with one long tergal seta, 2—2.2 time as long as distal sternal setae. Cuticle of all segments of legs except coxae fine granular.

Penes (Fig. 5) conical, with two basal rings and hair-like terminal part, 38—40 μm long.

Pygidium (Fig. 6). Tergal margin rounded but with small postmedian lobe. Setae *a1* cylindrical, annulate and blunt, setae *a2* and *a3* smooth, sharply pointed. Distance: *a1—a2* 18 μm, *a2—a2* 50 μm, *a3—a3* about 75 μm. Styli hooked, sharply pointed. Sternal margin slightly convex. Setae *b1* smooth, sharp, slightly s-shaped, about 40 μm long. Setae *b2* and *b3* nearly the same

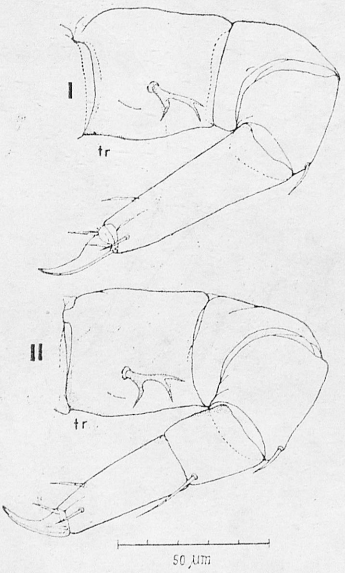

Fig. 4. *Acopauropus szeptyckii* sp. n. Left leg I and II. Granulation of cuticle marked only partially

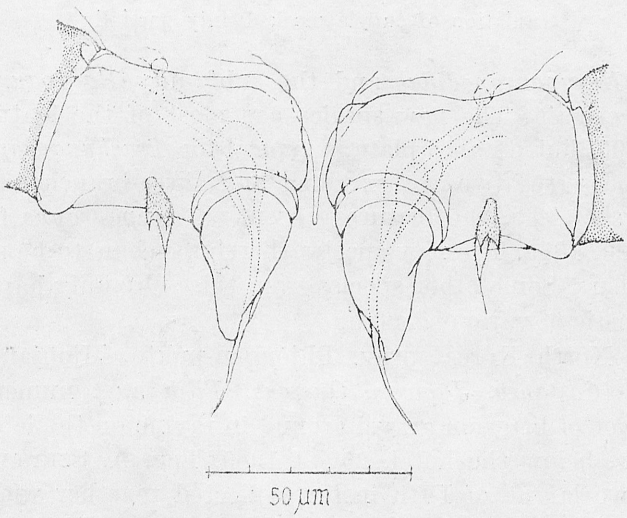

Fig. 5. *Acopauropus szeptyckii* sp. n. Penes

lenght, 10—11 µm long, pubescent. Distance: *b1—b1* 35 µm, *b2—b2* 62 µm, *b3—b3* 15 µm. Anal plate as in Fig. 6, shortly pubescent with sclerotized base. Systematic remarks. After this paper had already been completed, I received a valuable and very interesting paper by Dr. Klaus HASENHÜTL (1986) on the systematics of *Eurypauropodinae*, which I could take into account only in part. As it seems to me, regardless of the paper by REMY (1937) and the above-mentioned paper of HASENHÜTL, the systematics on the generic level

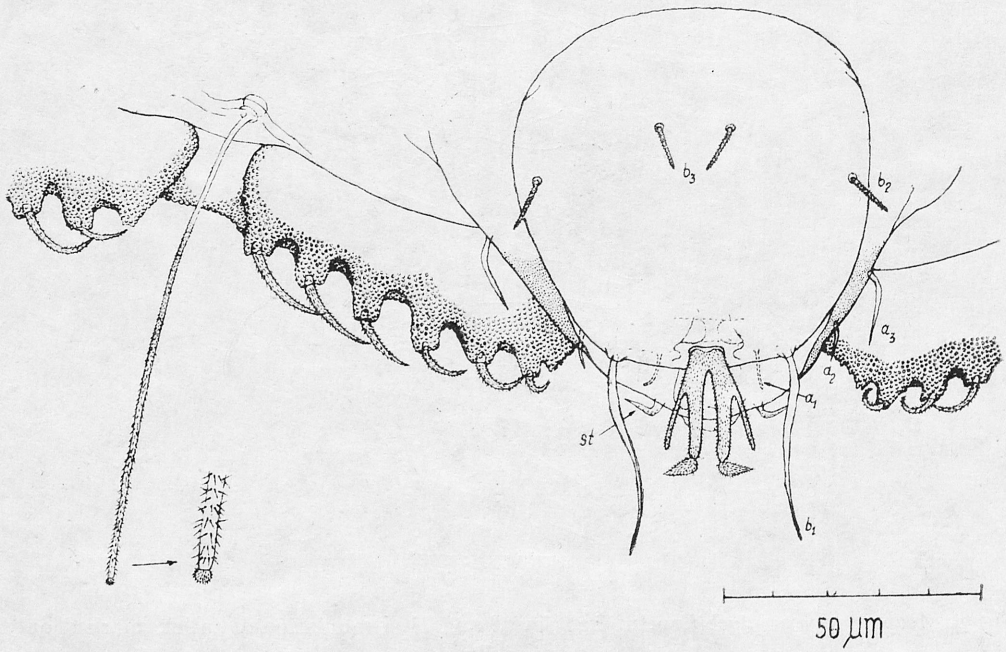

Fig. 6. *Acopauropus szeptyckii* sp. n. Pygidium and parts of tergite VI from ventral side. Granulation of cuticle marked only partially

in the family *Eurypauropodidae* and the subfamily *Eurypauropodinae* is not yet absolutely certain. The new species has most of the features of *Acopauropus* Cook, 1896, but its anal plate is typical for *Trachypauropus* Tömösvary, 1892; it also possesses two vertex setae and three-branched setae on coxae and trochanters of legs, the features absent in *Acopauropus* Cook nor *Eurypauropus* Ryder, 1879. The new species therefore seems to be separate enough from the all others. Some other species from this subfamily have also some features characteristic of various genera.

Holotype ♂. North Korea, prov. Phjŏngan-pukto, Mjohjang-san Mts. Deciduous forest (*Castanea*, *Juglans*, *Quercus*, *Tilia* a.o., numerous herbs and ferns). Thin layer of litter on gravel ground in ravine on the left bank of Hjangsan-čhŏn river, below the hotel. 25 VI 1985. Leg. A. Szeptycki.

Paratypes: two larvae of IVth instar, collected together with the holotype. The holotype is preserved in my collection.

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STRESZCZENIE

Autor opisuje nowy gatunek skąponoga *(Pauropoda)* z Północnej Korei.

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