

# NEW SPECIES OF THE GENUS *MICRANURIDA* BÖRNER, 1901 (*COLLEMBOLA*, *NEANURIDAE*) FROM ROMANIA

MAGDALENA GRUIA and TEODOR HARȘIA

The authors describe an edaphic new species belonging to genus *Micranurida*, found in the Retezat Mountains, the Meridional Carpathians, Romania.

## *Micranurida retezatica* n. sp.

Type locality: Meridional Carpathians, Retezat Mountains, Retezat National Park, Scientific Reservation, Gura Slatna, Zlătui Valley, 1.200 m a.s.l., V exp., Symphyto cordatae-Fagetum, humus sample.

*Holotype*: male from type sample, 27 V 1989, T. Harșia leg.

*Paratypes*: two ex. from type sample; four ex. from Retezatul Mic, Cimpuşel, Scocul Iarului Valley, 1.500 m a.s.l., SV exp., Leucanthemo-Piceo-Fagetum, humus sample, 18 VI 1987, T. Harșia leg.

The type series in coll. Institutul de Speologie Buc., the paratypes in coll. Centr. Cercet. Biol. Cluj.

*Description*: Color white. Body length 500–600  $\mu$ m. Head: antenna ratio I : 0.85. Antennal segments I : II : III–IV ratio 1 : 1 : 2.5.

Antennal segment I with 7 setae, segment II with 11 setae. Sense organ of segment III with two small sensory rods in a shallow deepening, dorsal sensory seta S-shaped (Figs 1 and 2). Segments III and IV fused dorsal, without suture. Segment IV with 5 pedunculate globular sensillae and one curved blunt sensilla, microsensilla  $s$  and subapical sensorial papilla. Apical bulb simple.

Postantennal organ elliptical, with 9/10–12 oval vesicles (Fig. 3).

Ocelli absent. Labral chaetotaxy 4/3 5 2.

Labium with 11 setae and two small sensory papillae in apical position (Fig. 4).

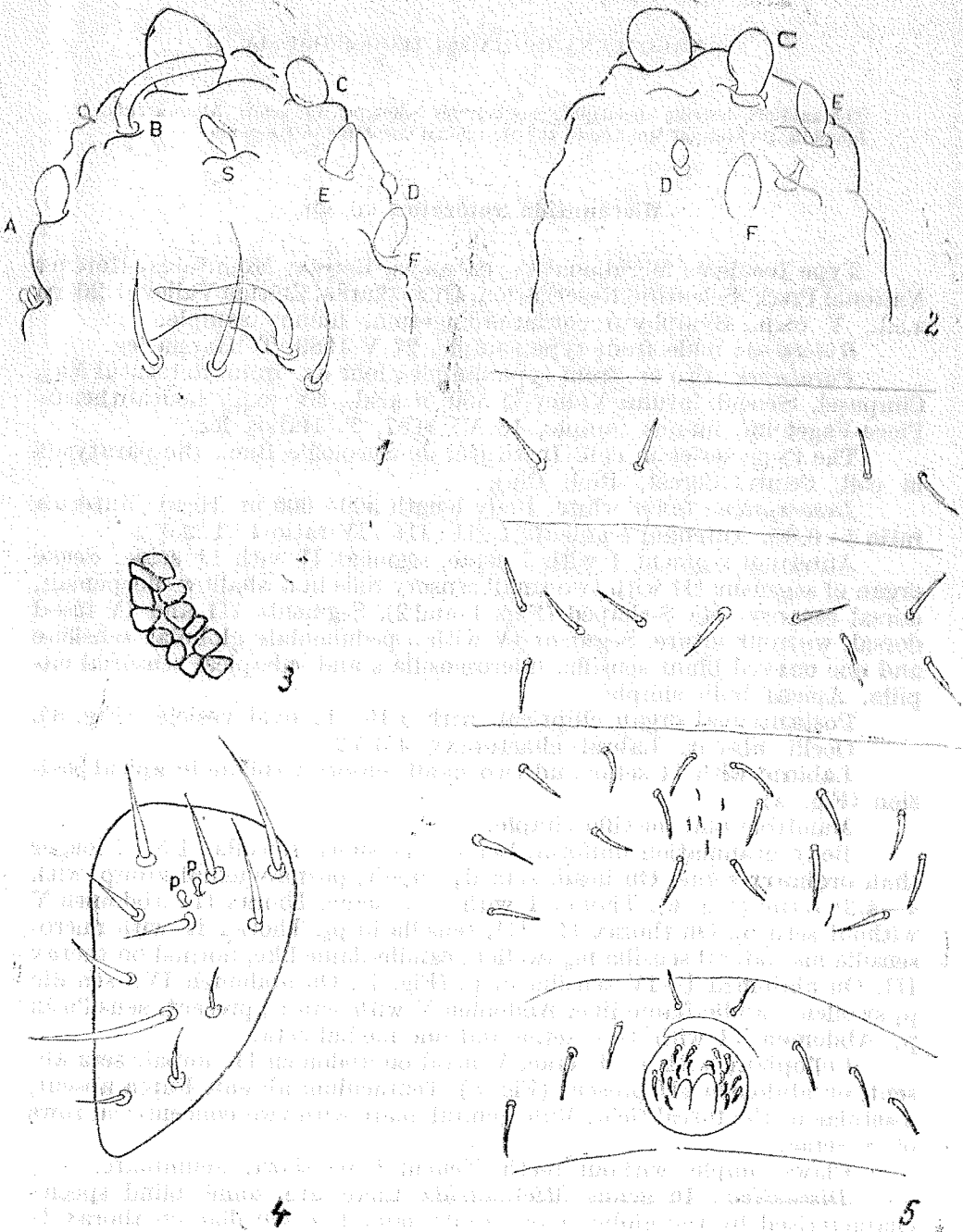
Mandible and maxilla simple.

Body granulation uniform. Setae very short, sensillae 1.5–2 longer than ordinary setae. On head, seta  $d_0$  impair, posteromedial group with 4–4/3/ setae (Fig. 6). Thorax I with 3–3 setae. Thorax II–abdomen V without seta  $p_2$ . On thorax II–III, sensilla in  $p_3$ . Thorax II with microsensilla  $ms$ , lateral sensilla  $m_6$  swollen, candle-flame like, normal on thorax III. On abdomen I–IV sensilla in  $p_4$  (Fig. 7). On abdomen IV, sensilla  $p_4$  swollen, candle-flame like. Abdomen V with seta  $a_3$  present, sensilla in  $p_3$ . Abdomen VI with 4–4 setae and one medial seta.

Collophore with 4–4 setae. Ventral on abdomen II, impair seta absent, on abdomen III present (Fig. 5). Tentaculum absent. Furca absent, 6 setulae in the fureal field. Male genital plate with two concentric rows of 8 setae.

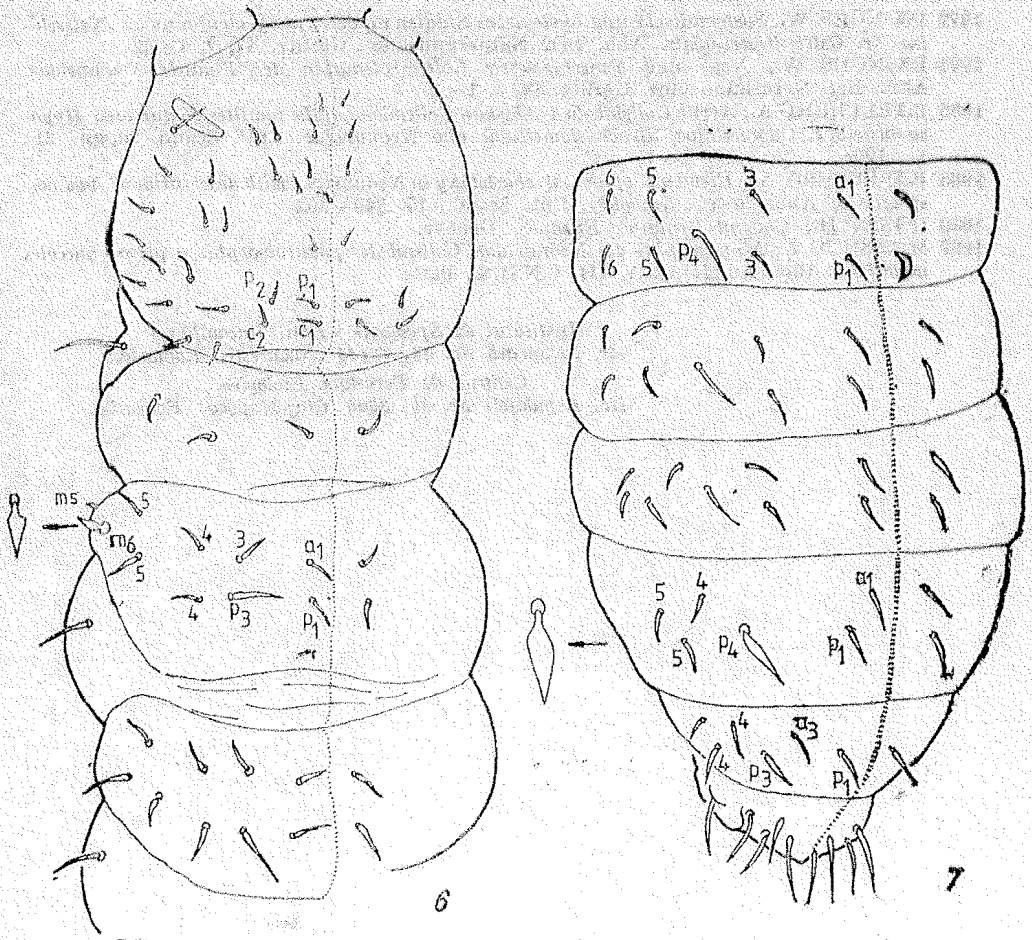
Claws simple, without teeth. Tenent hairs short, acuminate.

*Discussion*: In genus *Micranurida* there are some blind species characterised by the globular or candle-flame like sensillae on thorax II and abdomen IV.



Figs 1–5: *Micranurida retezatica* n.sp.

Fig. 1. — Antennal segments III–IV, dorso-lateral view/A, B, C, D, E, F — sensillae, s-microsensilla/; Fig. 2. — Antennal segments III–IV, ventro-lateral view; Fig. 3. — Postantennal organ; Fig. 4. — Labium chaetotaxy/pp-sensora papillae/; Fig. 5. — Abdomen II–V ventral chaetotaxy.



Figs 6-7: *Micranurida retezata* n. sp.

Fig. 6. — Head — thorax III dorsal chaetotaxy; Fig. 7. — Abdomen I—VI dorsal chaetotaxy.

The new species is closest to *Micranurida sensillata* (Gisin, 1953), from Switzerland and Germany, but differs in the simple apical bulb on antennal segment IV, the absence of the seta  $p_2$  on the whole body, the presence of the seta  $a_3$  and the absence of the seta  $a_1$  on abdomen V.

Also the new species is near *Micranurida spirillifera* (Hammer, 1953) from Canada and *Micranurida endroedii* (Dunger, 1972) from Hungary, but is different in the number of globular sensillae on antennal segment IV, in the shape of postantennal organ, the number of vesicles in the postantennal organ and the presence of seta  $a_3$  on abdomen V.

#### REFERENCES

- 1980 CHRISTIANSEN K. and BELLINGER P., *The Collembola of the North America, north of the Rio Grande*. Grinnell College, Grinnell.
- 1982 DEHARVENG L., *Contribution à la connaissance taxonomique et phylogénétique des Neanuridae 1. Le genre Rusekella n.g. et ses implications phylogénétiques*. Bull. Soc. Hist. Nat. Toulouse, 118, 235—251.

- 1972 DUNGER W., *Systematische und ökologische Studien an der Apterygotenfauna des Neissetales bei Ostritz/Oberlausitz*. Abh. Ber. Naturkundemus. Görlitz, **47**, 4, 1—42.
- 1974 DUNGER W., *Neue und bemerkenswerte Collembolenarten der Familie Neanuridae*. Abh. Ber. Naturkundemus. Görlitz, **48**, 5, 1—20.
- 1985 FJELLBERG A., *Arctic Collembola I-Alaskan Collembola of the families Poduridae, Hypogastruridae, Odontellidae, Brachystomellidae and Neanuridae*. Ent. Scand. Suppl., **21**: 1—126.
- 1985 FJELLBERG A., *Elements of dorsal chaetotaxy in Neanuridae with description of two new species of Anurida (Collembola)*. Ent. Scand., **15**, 349—362.
- 1960 GISIN H., *Collembolenfauna Europas*. Genève.
- 1967 MASSOUD Z., *Monographie des Neanuridae, Collemboles poduromorphes à pièces buccales modifiées*. Biol. Amer. Austr. **III**, C.N.R.S., Paris.

Institutul de Speologie « Emil Racoviţă »,  
 str. Frumoasă nr. 11, 78114 Bucureşti, România,  
 Centrul de Cercetări Biologice,  
 str. Republicii nr. 49, 3400 Cluj-Napoca, România.

The new species is closest to *Stenonurda arctica* (Linné, 1758) from Sweden and *Stenonurda* sp. differs in the shape of the anterior segment IV, the shape of the setae on the whole body, the presence of the setae  $\alpha_1$  and the absence of the setae  $\alpha_2$  on segment V. Also the new species is near *Stenonurda septentrionalis* (Linné, 1758) from Canada and *Stenonurda septentrionalis* (Linné, 1758) differs in the number of glabrous setae on anterior segment IV, in the shape of posterior setae, the number of setae in the posterior segment and the presence of setae  $\alpha_2$  on anterior V.

REFERENCES

- 1960 FJELLBERG A. and BULL-KROHN T., The Collembola of the North American north of the Great Lakes. *Journal of Animal Ecology*, **29**, 387—400.
- 1967 MASSOUD Z., *Monographie des Neanuridae, Collemboles poduromorphes à pièces buccales modifiées*. Biol. Amer. Austr. **III**, C.N.R.S., Paris.