

A New Species of *Nudomideopsis* from Yugoslavia (Acari, Hydrachnellae)

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Abstract: *Nudomideopsis montenegrinus* spec. nov., (Acari, Hydrachnellae) is described from material collected in Navotinska pecina-cave near Berane (Montenegro, Yugoslavia). This is the first finding of the genus *Nudomideopsis* from Yugoslavia.

Key words: Water mites, Hydracarina, Yugoslavia, taxonomy, new species.

Introduction

During the sampling of the interstitial fauna in Yugoslavia, conducted by Dr. T. Karanovic, several species of water mites ("Hydrachnellae" and Halacaridae) were collected, among them one new species of the genus *Nudomideopsis* (Acari, Actinedida, Nudomideopsidae) described here.

The genus *Nudomideopsis* has been known in Europe by only four species: *Nudomideopsis longipalpis* Szalay, 1947 collected from hyporheic waters of Romania (Szalay, 1947); *Nudomideopsis fonticola* Tanasachi et Orghidan, 1955 from the wells of Romania (Tanasachi et Orghidan, 1955); *Nudomideopsis latipalpis* (Angelier, 1963) from France and *Nudomideopsis motasi* Petrova, 1966 from Bulgaria and from Croatia.

Discovery of the new species *Nudomideopsis montenegrinus* n.sp., elevated the number of known European *Nudomideopsis*-species on five.

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Material and Methods

The samples of water mites were collected by hand netting and conserved in Koenike's fluid. The examined specimens were completely dissected and mounted in Faure's Medium for identification.

All measurements are expressed in μ . The following abbreviations are used: p-1-5= segments 1 to 5 of palp, IV-leg-4-6= fourth - sixth segment of fourth leg.

Results

Material examined. Cave Navotinska pecina, near Berane, Montenegro, 18.02.1995, (leg. Karanovic), one specimen, male (holotype). The holotype is deposited in the Department of Biology of the University of Montenegro.

Description. Male (holotype): Body 423 long and 347 wide. Dorsal shield roundish; ocular pigment absent. Capitular bay more or less V-shaped. The shape of coxae are similar to that of *N. motasi* Petrova, 1966 and *N. latipalpis* (E. Angelier 1963); tips of first coxae poorly exceeding anterior margin of body (Fig.I, 1); distance between insertions of fourth legs 276; one pair of glandularia appears between insertions of the fourth legs and genital field; genital organ is 87 long and 28 wide; genital valves with three pairs of acetabula; sclerified integument surrounding the gonopore without porosity (Fig.I, 3); length of ejaculatory complex 138.

The measurements of the mouth parts are as follows: chelicerae total length 84, claw 32, palp total length 152; dorsal lengths of p-1-5 and relative length [% total length] of single segments (in parentheses): p-1, 15,5 (10,2); p-2, 32 (21); p-3, 24 (15,8); p-4, 50,5 (33,2); p-5, 30 (19,7). Palps chaetotaxy as in figure I, 2; p-2 with three long mediodorsal setae, p-3 with two dorsal setae, p-4 bearing one long dorsal hair in the anterior half of the segment and two hairs inserted near the weakly developed ventral protuberance in the posterior half of the same segment.

Legs: third segment of legs I-III bearing long fine setae; dimensions of IV-leg-1-6 are: 55,8; 62; 55,8; 89; 102,5; 112, respectively.

Female: unknown.

Discussion

N. montenegrinus n.sp., is similar to the two other species of the genus *Nudomideopsis*, *N. latipalpis* (Angelier, 1963) and *N. motasi* Petrova, 1966. *N. latipalpis* is described from a spring in France (Angelier, 1963) and *N. motasi* is known from hyporheic waters of Bulgaria (Petrova, 1966) and from Croatia (Smit et al., 2000). As compared with *N. motasi* and *N. latipalpis*, *N. montenegrinus* is characterized by the following features: high relative length of p-5 (about 20 %, in *N. motasi* 14 % [length 20 μ m], in *N. latipalpis* about 10 % [length 17 μ m]); p-4/p-5 ratio 1,68 (in *N. motasi* 2,85; in *N. latipalpis* 4,7); setae on the palps are shorter in *N. latipalpis* and *N. motasi* than these in *N. montenegrinus*; the genital organ is more elongated in *N. montenegrinus* than in *N. motasi*; ratio genital organ width / genital organ length in *N. montenegrinus* is 0,32 (0,45 in *N. motasi*).

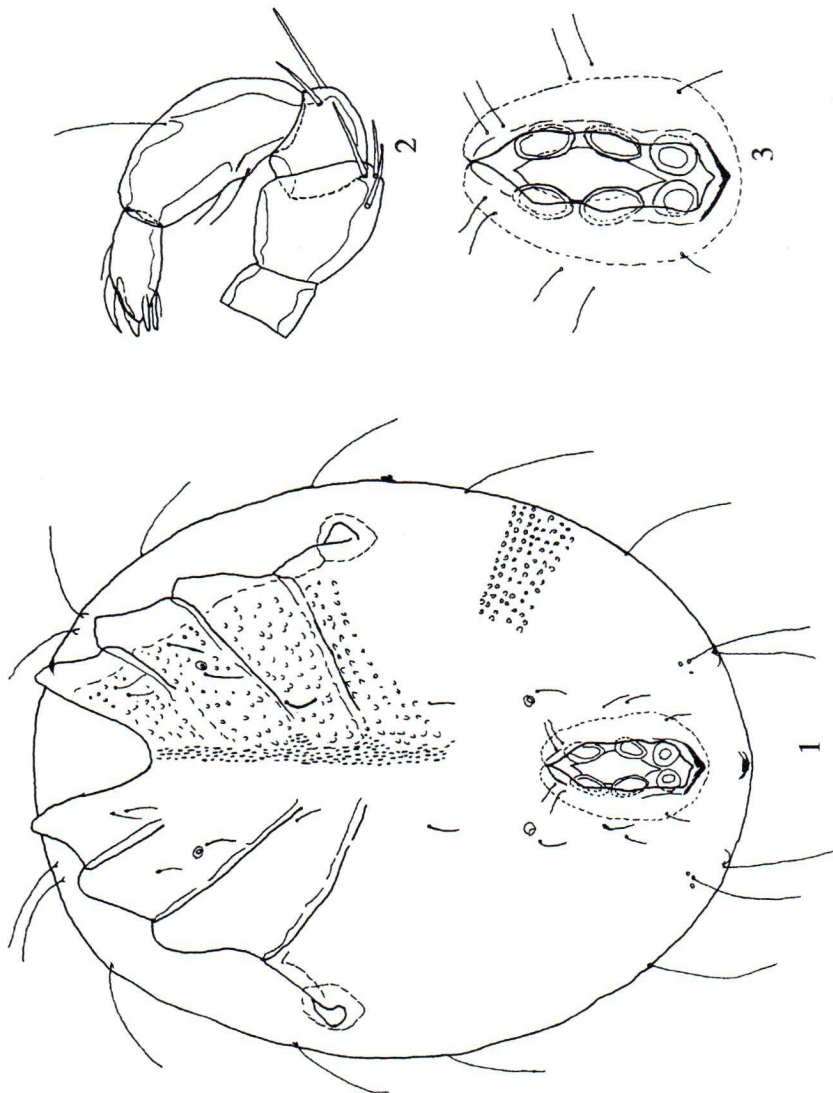


Fig. I. *Nudomideopsis montenegrinus*, n.sp., Navotinska pecina-cave, male
1 - ventral view; 2 - palp; 3 - genital field

Etymology

The species is named after the country Crna Gora (Montenegro) where it has been collected.

Conclusion

Nudomideopsis montenegrinus nov spec., is described from the - Navotinska pecina - cave near Berane, Crna Gora (Montenegro). It is the first species of genus *Nudomideopsis* reported from Yugoslavia. Discovery of the new species *Nudomideopsis montenegrinus* n.sp., elevated the number of known European *Nudomideopsis*-species on five.

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NOVA VRSTA NUDOMIDEOPSIS IZ JUGOSLAVIJE (ACARI, HYDRACHNELLAE)

-originalni naučni rad-

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Rezime

Na osnovu materijala sakupljenog iz Navotinske pećine (Berane, Crna Gora) opisana je nova vrsta za nauku, *Nudomideopsis montenegrinus* n.sp., (Acari, Actinedida, Nudomideopsidae). To je prvi nalaz subgenusa *Nudomideopsis* u Jugoslaviji i peta vrsta iz istoga podroda poznata u Evropi. *Nudomideopsis montenegrinus* n.sp., je slična dvema vrsteama iz roda *Nudomideopsis*: *Nudomideopsis latipalpis* (E. Angelier, 1963) opisana u iz jednog izvora u Francuskoj i *Nudomideopsis motasi* Petrova, 1966 opisana iz hiporeičnih voda Bugarske. Od gore navede dvije vrste *Nudomideopsis montenegrinus* n.sp., se jasno razlikuje drugačijom relativnom i apsolutnom dužinom petog segmenta palpi, drugačijim odnosom p-4/p-5 kao i drugačijim odnosom širina genitalnog organa / dužina genitalnog organa.