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**«NITOCRELLA STOCHI» N. SP. FROM GROUNDWATERS
OF VENEZIA GIULIA, «(CRUSTACEA COPEPODA: AMEIRIDAE)»**

An interesting collection of harpacticoid copepods from different groundwater habitat of Friuli-Venezia Giulia (north-eastern Italy) was placed at our disposal by the kindness of dr. F. Gasparo and F. Stoch of the University of Trieste (Italy).

In the present paper a new species of the genus *Nitocrella sensu* PETKOVSKI (1976), viz. *Nitocrella stochi* n. sp., is described from the above material.

The new species fits the «*hirta*-group» of species *sensu* PETKOVSKI (1976), being close both to *N. slovenica* PETKOVSKI (1959) and *N. hirta tirolensis* (KIEFER, 1963), respectively known from groundwater habitat of Yugoslavia and Austria, Switzerland.

Nomenclature and descriptive terminology are adapted after LANG (1948, 1965). Abbreviations used through the text and figures as follows: A₁, antennula; A₂, antenna; enp., endopod; exp., exopod; P₁-P₅, legs 1 to 5; benp., baseoendopod. Body length measurements are along the mid-dorsal line, from the frontal margin, excluding antennulae, to the end of furcal rami, furcal setae excluded.

Type-specimens in the senior Author's collection, at the «Dipartimento di Scienze Ambientali», University of L'Aquila, Italy.

FAMILY AMEIRIDAE *sensu* LANG 1936
GENUS *NITOCRELLA sensu* PETKOVSKI 1976
Nitocrella stochi n. sp. (**)

Material

1 ♂ (Holotype), 1 ♀ (Allotype), completely dissected and mounted on coverlips in Faure's medium; karst springs of Timavo (first branch), 2 m a.s.l., S. Giovanni al Timavo (Commune of Duino Aurisina, Province of Trieste, Friuli-Venezia Giulia, Italy); 25.10.1985, 12.7.1986; leg. F. Gasparo and F. Stoch.

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(**) Name after dr. Fabio Stoch who collected the new species.

Description

(Holotype). Body slender and gradually tapering posteriorly; total length 0.65 mm. Abdominal somites ornamentated ventrally with a row of spinules along the posterior margin; on the same somites, dorsally there are some spinules at the lateral outer margin; anal somite with rows of spinules along the anterior margin, and a row of spines at the basis of each furcal ramus. Anal operculum slightly convex and naked.

Caudal rami about as long broad; seta on the inner distal corner slightly shorter than the corresponding outer one; innermost principal terminal seta longer than the outermost; dorsal seta longer than furcal ramus.

A₁, 7-segmented, aesthetasc on segment 4 very elongated.

A₂, endopod 2-segmented, with basis; exopod 1-segmented, armed with 3 setae.

Mouthparts without particular characteristics.

P₁: both rami 3-segmented, endopod longer than exopod; first two segments of the endopod naked.

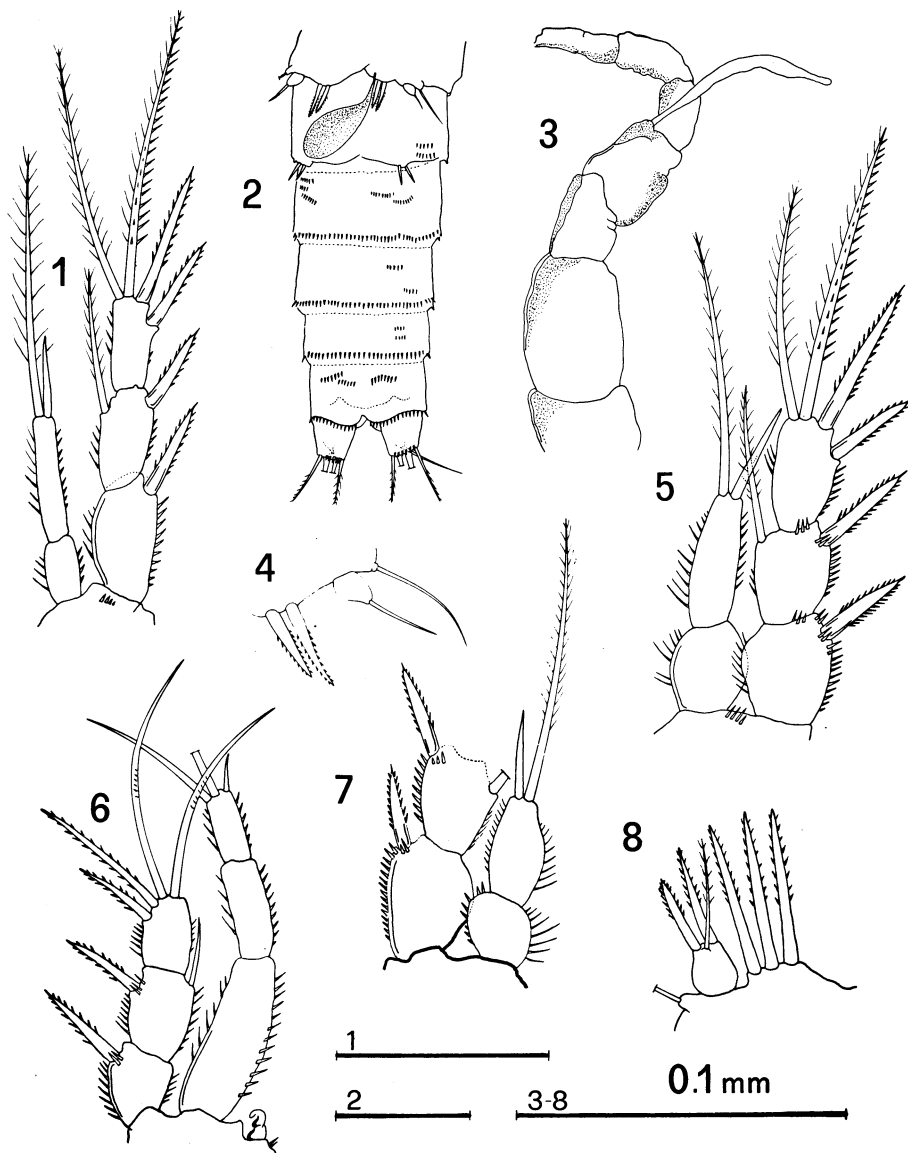
P₂-P₄, with 3-segmented exopod and 2-segmented endopod; second segment of the endopod of P₄ very elongated; outer spines of all the exopods slightly transformed. Setation of P₁-P₄ listed below.

	exp.			enp.		
P ₁	0	1	022	0	0	120
P ₂	0	1	022	—	0	020
P ₃	0	1	022	—	0	020
P ₄	0	1	022	—	0	020

P₅: benp. armed with two stout spines; exopod pear-like and armed with one slender seta.

(Female). Body length 0.68 mm, ornamentation like male. Only the A₁, P₁ and P₅ differ from the male.

A₁, 8-segmented with a long aesthetasc on segment 4. P₁, exopod about as long as the endopod. P₅ with benp. armed with 3 long spines and exopod with 2 apical spines and one slender, subapical seta.



Figs. 1-8 - *Nitocrella stochi* n. sp. 1-P₄ (♀); 2-abdomen and furcal rami (ventral view); 3-A₁ (♂); 4-P₅ (♂); 5-P₂ (♂); 6-P₁ (♂); 7-endopod of P₂ (♀); 8-P₅ (♀).

Remarks

N. stochi n. sp. belongs to the «*hirta*-group» of species *sensu* PETKOVSKI (1976), resembling most *N. slovenica* PETKOVSKI 1959, from groundwaters of Yugoslavia and *N. hirta tirolensis* (KIEFER 1963), from groundwater habitat of Austria and Switzerland.

With the former, the new species shares the naked anal operculum and the identical armature of the endopod of P₂-P₄; to the latter it is close by the absence of seta on the first segment of the endopod of P₁, the setal formula of P₂-P₄ and the armature of the female exopod of P₅.

N. stochi n. sp. can be easily discriminated from the above taxa, as well as from the other species of the same group, by the peculiar shape and armature of the male exopod of P₅ and by the elongated second segment of the P₄ endopod, both in the male and female.

SUMMARY

Nitocrella stochi n. sp. is described from groundwaters of Friuli-Venezia Giulia, north-eastern Italy. The new species belongs to the «*hirta*-group» *sensu* PETKOVSKI (1976), differing from the other known species making up the group in the elongated endopod of leg 3 and 4, and in the peculiar armature of the male leg 5.

RIASSUNTO

Viene descritta *Nitocrella stochi* n. sp. di acque sotterranee della Venezia Giulia. La nuova specie rientra nel gruppo «*hirta*» proposto da PETKOVSKI (1976), risultando affine a *N. slovenica* PETKOVSKI 1959 e a *N. hirta tirolensis* (KIEFER 1963) note rispettivamente per la Jugoslavia e per l'Austria e la Svizzera.

N. stochi n. sp. si differenzia agevolmente dalle suddette specie, come pure dalle altre dello stesso gruppo, per la lunghezza degli endopoditi del terzo e quarto paio di appendici toraciche e per la originale armatura dell'esopodite del quinto paio di appendici toraciche del maschio.

REFERENCES

- LANG K., 1948 - Monographie der Harpactiden. Lund. 2: 1-1682.
— — — 1965 - Copepoda Harpacticoidea from the Californian Pacific Coast. *Kungl. Svenska Vetenskapsakad. Handl. Farde, Stockolm.* Ser. X (2): 1-560.
PETKOVSKI T.K., 1976 - Drei neue *Nitocrella* Arten von Kuba, zugleich eine Revision des Genus *Nitocrella* Chappuis (s. restr.) (Crustacea, Copepoda, Ameiridae). *Acta Mus. Mac. sc. nat., Skopje.* 15 (1): 1-26.