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SCHIZOPERA (SCHIZOPERA) CICOLANII N.SP. FROM BRACKISH WATERS OF APULIA, SOUTH ITALY (CRUSTACEA COPEPODA: DIOSACCIDAE) (*)

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ABSTRACT

Schizopera (Schizopera) cicolanii n.sp. is described from brackish waters of Apulia, south Italy. Following Apostolov's (1982) review of the genus *Schizopera* s.l., the new species belongs to the subgenus *Schizopera* and is close to *S. (S.) jugurtha* (Blanchard & Richard, 1891) and *S. (S.) compacta* De Lint, 1922. The discovery of this species brings the total number of *Schizopera* s.str. from Italy to four, the others being *S. (S.) subterranea* Lang, 1948, *S. (S.) lindae* Apostolov & Pesce, 1987 and *S. (S.) lagrecai* Pesce, 1987, all from south Italy or Sicily.

During investigations of the community structure and population dynamics of freshwater fauna of Italy, conducted by the "Dipartimento di Scienze Ambientali" of the University of L'Aquila (Italy), an undescribed species of the genus *Schizopera* sensu Apostolov (1982) was obtained from slightly brackish waters of Apulia, south Italy.

Four species of *Schizopera* are known from Italy, viz.: *S. (S.) subterranea* Lang, 1948, from brackish waters of the Zinzulusa cave, Apulia (south Italy); *S. (S.) lindae* Apostolov & Pesce, 1987, from phreatic fresh waters of Basilicata (south Italy); *S. (S.) lagrecai* Pesce, 1987, from phreatic brackish

waters of Sicily; and *S. (S.) cicolanii* n.sp., from epigeal brackish waters of Apulia.

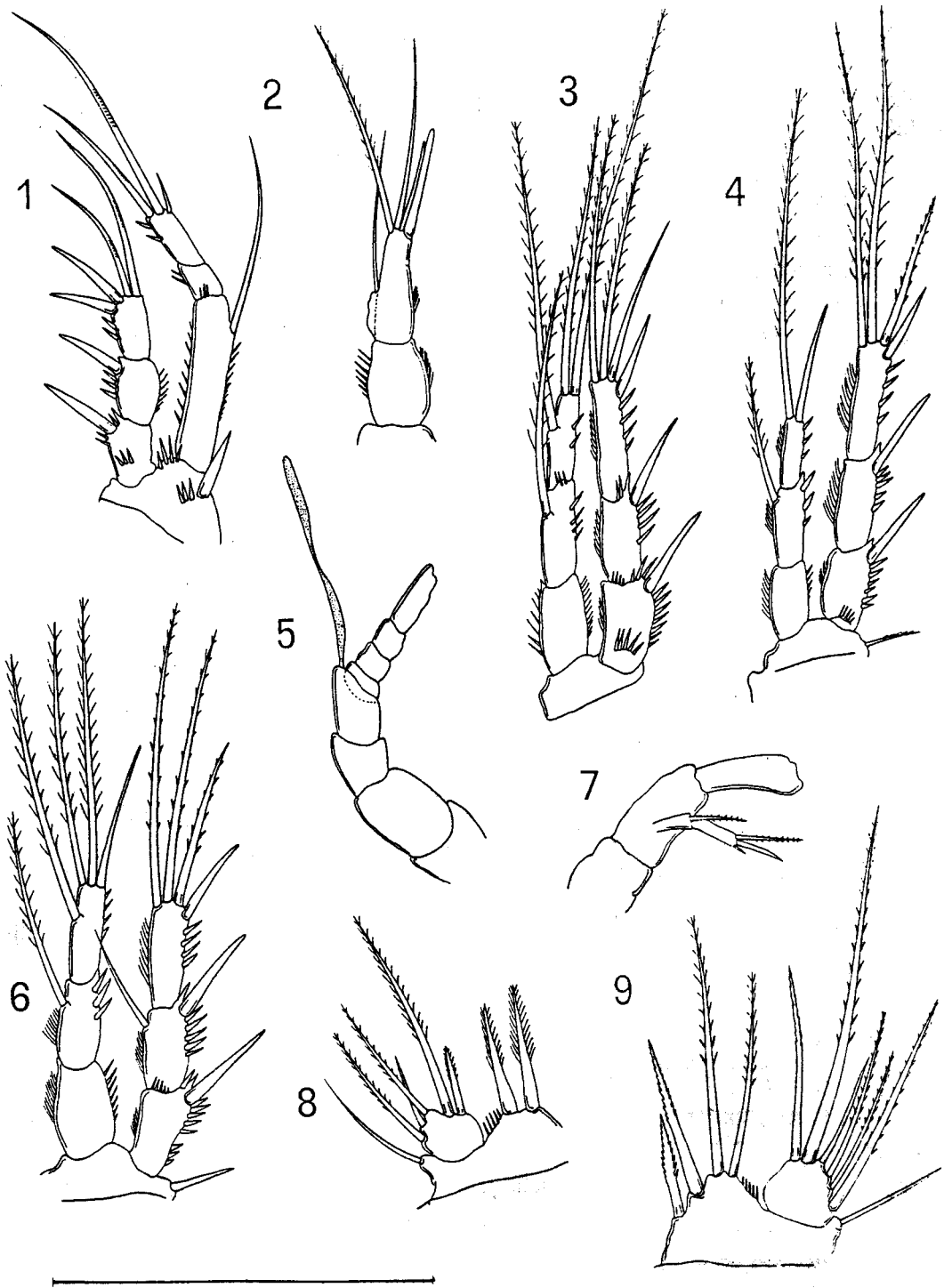
FAM. DIOSACCIDAE Sars, 1905
GENUS *SCHIZOPERA* Sars, 1905 SENSU APOSTOLOV, 1982
SUBGENUS *SCHIZOPERA* Sars, 1905

Schizopera (Schizopera) cicolanii n.sp.

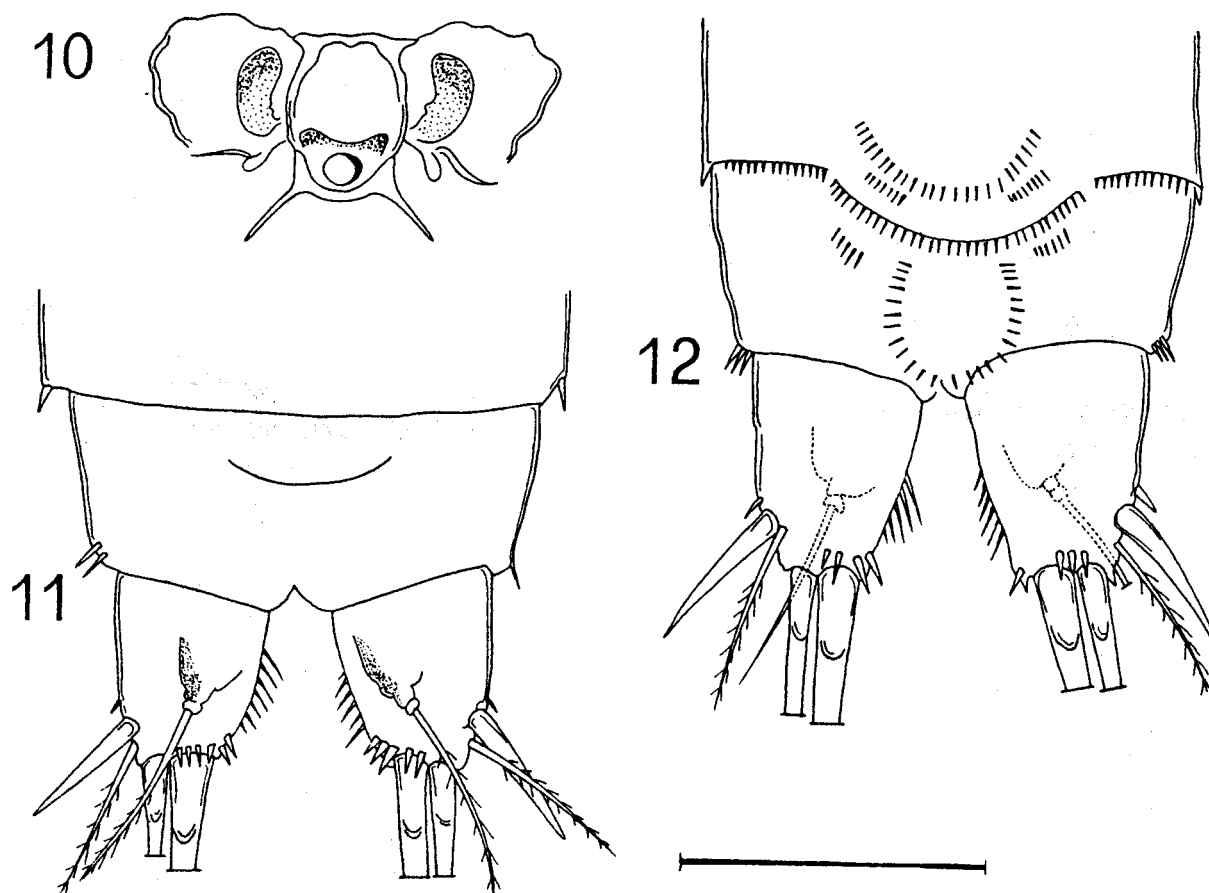
MATERIAL

Holotype: ♀, completely dissected and mounted on coverslips in Faure's medium, in the collection of the Zoölogisch Museum, Amsterdam, The Netherlands (ZMA Co. 102.800); paratypes (4♀♀, 1♂), mounted as above, in the

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Figs. 1-9. *Schizopera (Schizopera) cicolanii* n.sp. 1, leg 1; 2, endopod of male leg 2; 3, leg 3; 4, leg 4; 5, antennula; 6, female leg 2; 7, antenna; 8, male leg 5; 9, female leg 5. Scale represents 0.1 mm.



Figs. 10-12. *Schizopera (Schizopera) cicolanii* n.sp. 10, genital field; 11, male furcal rami, dorsal view; 12, female furcal rami, ventral view. Scale represents 0.05 mm.

senior author's collection, at the "Dipartimento di Scienze Ambientali", University of L'Aquila, Italy. The material was collected at Frigole, S. Cataldo (Lecce, south Italy) in a small brook, about 50 m from the Adriatic sea coast; 40°09'34"N 06°01'06"E; April 19, 1987, coll. B. Cicolani. The new species co-occurs with the harpacticoid copepods *Mesochra aestuarii* Gurney, 1921 and *Onychocampus mohammed* (Blanchard & Richard, 1892), the asellid isopod *Proasellus coxalis* (Dollfus, 1892) and hygrobatid water mites.

DESCRIPTION

Female: Body slender, subcylindrical, about 4.8 times longer than wide; total body length, excluding antennulae and furcal setae, 422 μ m (holotype) and 415 to 455 μ m (paratypes). Rostrum not well developed. Thoracic somites posteriorly naked; genital somite

about as long as wide, "genital field" as in fig. 10. Abdominal somites dorsally covered by numerous rows of small "hair"-like elements, ventrally with rows of thin spines on posterior margin only; anal somite with characteristic subcircular pattern of spinules on medial margin; anal operculum slightly convex and smooth.

Antennula, 8-segmented; aesthete on fourth segment well over-reaching tip of distal one. Antenna with allobasis; exopod 2-segmented, basal segment bearing one slender, plumose seta, distal segment armed with two distal setae and one short spiniform seta. Mouthparts without particular characteristics.

Legs 1 to 4 with both exopod and endopod 3-segmented; connecting plates of legs 2 to 4 with spi-

niform protrusions. First segment of endopod of leg 1 about as long as exopod and 1.83 (holotype) or 1.85-1.88 (paratypes) times longer than the others.

Setal formula of legs 1 to 4 as follows:

	exopod			endopod		
P1	0	0	022	1	0	111
P2	0	1	022	0	1	121
P3	0	0	022	0	1	120
P4	0	0	022	0	1	020

Leg 5 reduced; basipodite not reaching distal margin of exopod and armed with 2 long setae and 2 shorter characteristic spines; exopod wider than long, armed with 6 setae of different length.

Furcal rami, 1.65 (holotype) or 1.55-1.56 (paratypes) times longer than wide, with well developed "hair"-like spinules on the inner margin; outer margin armed with a stout, naked spine and one slender, plumose seta; dorsal seta slightly shorter or about as long as furcal ramus; inner apical seta not developed, medial setae of different length, inner the longest.

Male: Body length, excluding antennulae and furcal setae, 425 μm . Armature of leg 1, exopod of legs 2 to 4, anal operculum and furcal rami similar to those of female; sexual dimorphism in antennula (haplocerate), endopod of leg 2, exopod of leg 3 and leg 5.

Endopod of leg 2 2-segmented; distal segment with two spiniform processes, one inner and two subapical setae. Third segment of exopod of leg 3 with hyaline spine on inner margin. Leg 5: basipodite not well developed, with two plumose spines; exopod wider than long and with 5 setae.

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Affinities

According to Lang's (1948) key and Apostolov's (1982) review of the genus *Schizopera*, *S. cicolanii* n.sp. does fit the diagnosis of the genus *Schizopera* (subgenus *Schizopera*), being close to *S. (S.) jugurtha* (Blanchard & Richard, 1891), known from marine interstitial habitats in the Black Sea, the USSR and Africa, and *S. (S.) compacta* De Lint, 1922, known from the marine interstitial of the Black Sea, Germany and The Netherlands. With the former, the new species shares identical armature of legs 2 to 5, both in male and female; with the latter it shares morphology and armature of leg 1, the construction of the "genital field", the presence of cilia on the inner margin of the furcal rami and the morphology and armature of leg 2 (φ).

S. (S.) cicolanii n.sp. differs from *S. (S.) jugurtha* by a longer basal segment of the endopod of leg 1, presence of fine setules on the inner margin of the furcal rami (versus absence), absence of an inner apical, furcal seta, and the characteristic armature of the anal somite, and from *S. (S.) compacta* by the armature of both the endopod and exopod of leg 4, the absence of an inner apical, furcal seta, as well as the armature of the anal somite.

Etymology

Named after our colleague, Prof. B. Cicolani, who collected the new species.

LITERATURE

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LANG, K., 1948. Monographie der Harpacticiden, 1-2: 1-1682 (Hakan Ohlsson, Lund).

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