

A new calanoid copepod, *Scaphocalanus somaliensis* from the western Arabian Sea (Copepoda: Scolecitrichidae)

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Scaphocalanus somaliensis sp. n. from the Somalia current is described. The new species is very similar to *S. brevisrostris* Park, 1970, but clearly distinguished by the setation of the maxillule and some details of the 5th pair of legs (in the new species, inner seta of P5 twice as long as the segment itself and 1.8 times longer than terminal seta, inner seta with 18-23 setules; in *S. brevisrostris*, 5 and 3 times longer respectively and inner seta with about 12 setules). The new species is also related to *S. pseudobrevirostris* Schulz, 1987, but can be easily distinguished from it by the large distal vesicle of spermatheca, 3 inner setae on the endopod of the 1st pair of swimming legs (2 in *S. pseudobrevirostris*), different relative length and setation of inner and apical setae of the 5th pair of legs, and by longer outer spine of Re1P2.

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In the samples collected by R/V TYRO during cruises of Netherlands Indian Ocean Programme (NIOP), Project "Monsoons and Pelagic Systems" from May 1992 to February 1993 in the Arabian Sea off Somalia a new species of the genus *Scaphocalanus* with slightly reduced rostrum was found. It is similar to *S. brevisrostris* Park, 1970 and *S. pseudobrevirostris* Schulz, 1987 in the rudimentary rostrum but is clearly distinguished by some characters discussed below.

The following abbreviations are used in the description: A1 – antennule; A2 – antenna; Md – mandible; Mx1 – maxillule; Mx2 – maxilla; Mxp – maxilliped; P1-P4 – swimming legs of first-fourth pairs, P5 – fifth pair of legs; Re1-Re7 – first-seventh segments of exopod; Ri1-Ri3 – first-third segments of endopod.

Scaphocalanus somaliensis sp. n.

(Figs 1-13)

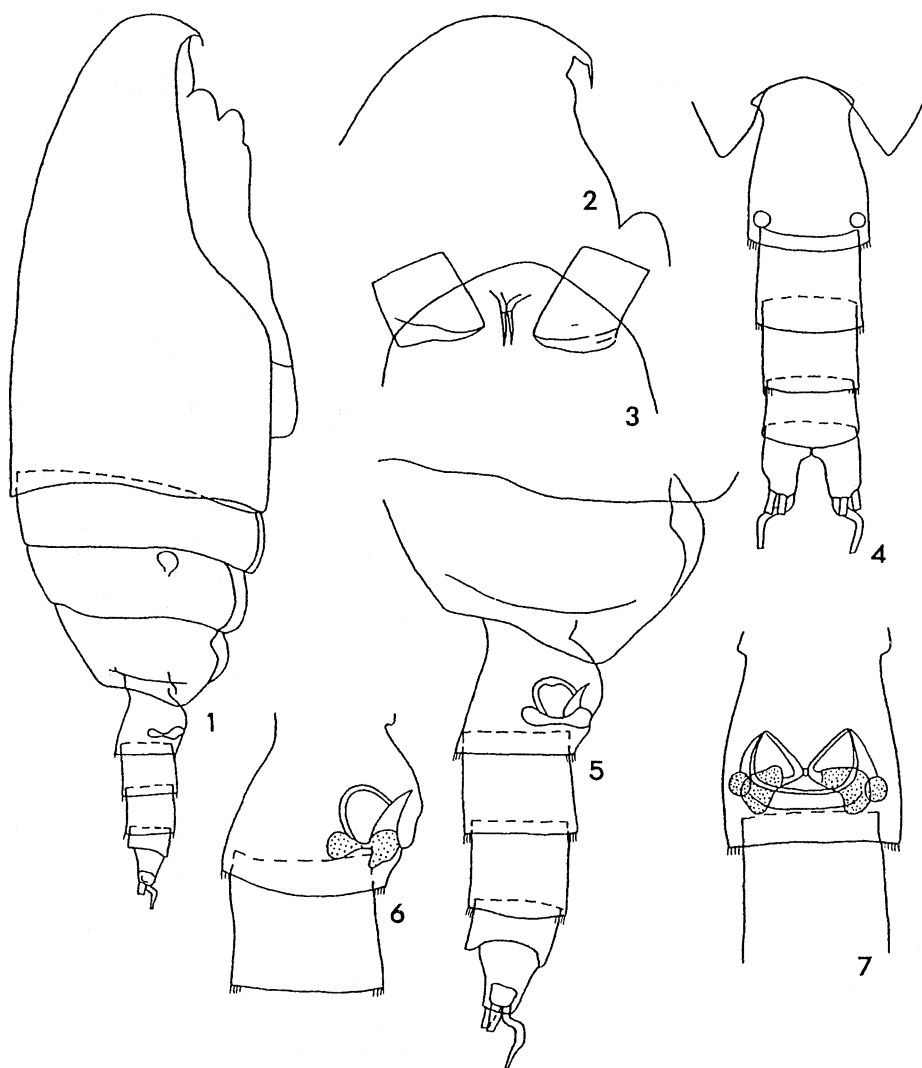
Holotype: No. 1/90534, female, off Somalia, 03° 59' N 48° 60' E, vertical haul 205-600 m, made at night 18 July 1992, deposited in Zoological Institute, St.Petersburg.

Paratypes: No. 2/90535, 7 ♀, as holotype.

Additional material (not designated as paratypes): 4 ♀ collected at 03° 48' N 48° 50' 2" E, 18 July 1992, at night, vertical haul 200-300 m.

All the material was collected with Rectangular Midwater Trawl 1 (mesh size 320 µm) from R/V TYRO.

Description. Female. Prosome length 1.45-1.77 mm, body length 1.8-2.0 mm (holotype 1.77 and 2.0 mm respectively). Body relatively robust. Forehead broadly rounded in lateral view, in form of low triangle in dorsal view. Rostrum reduced, as a short plate with two short thin filaments. Cephalosome fused with first pedigerous somite; 4th and 5th pedigerous somites incompletely separate. Posterior corner of prosome in lateral view slightly produced into a broadly rounded lobe, covering anterior third of the genital somite. Urosome 3.6-4.0 times shorter than prosome. Genital somite in dorsal view with almost parallel sides, in lateral view about as long as thick, with genital swelling moderately protruded. Distal part of spermatheca extending dorsad, long and massive, like a distally enlarged vesicle. 2nd urosomal somite as long as wide and thick. Third urosomal somite 0.93 times as long as second, slightly thicker than long, as wide as thick.

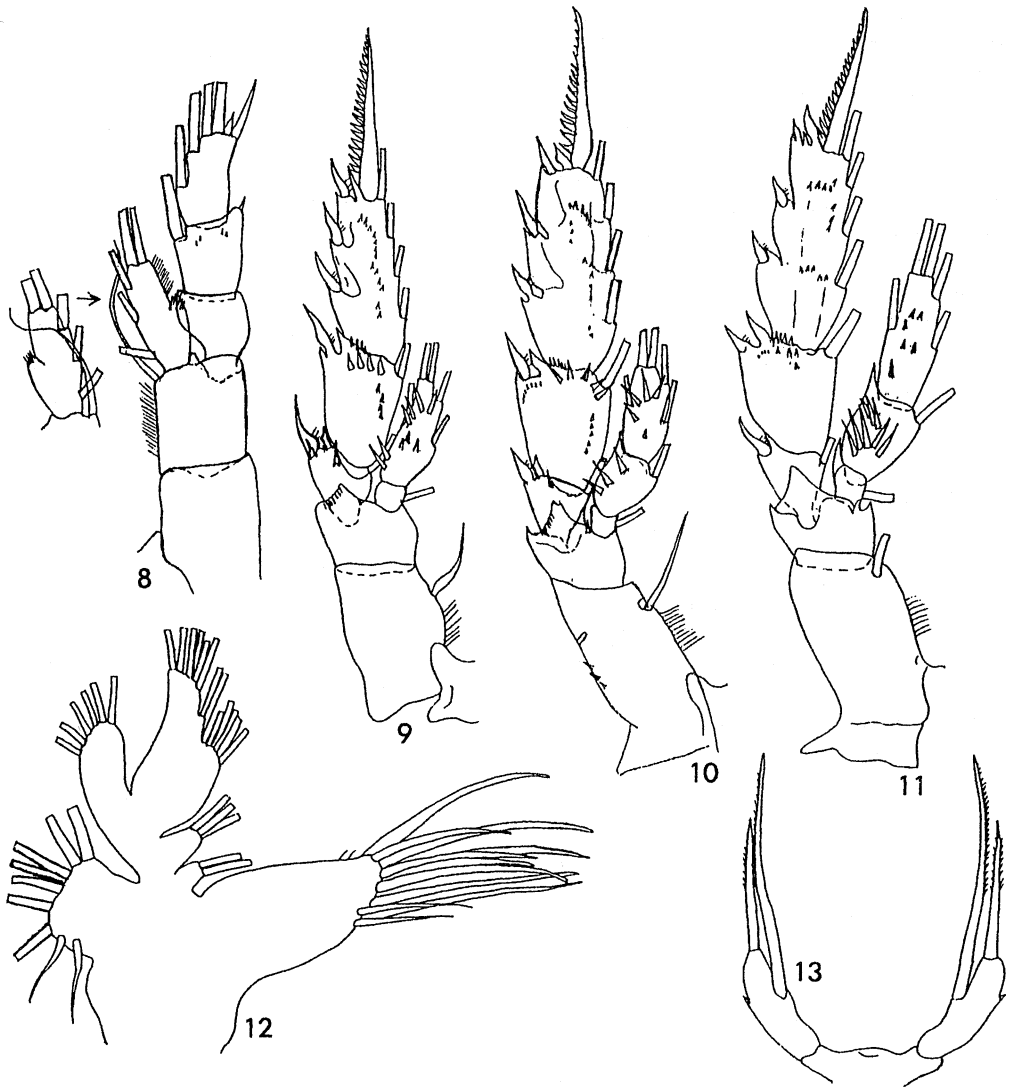


Figs 1-7. *Scaphocalanus somaliensis* sp. n. (1-5, female, holotype; 6-7, paratype); 1, body, right lateral view; 2, anterior part of cephalon, right lateral view; 3, the same, ventral view; 4, urosome, dorsal view; 5, urosome, right lateral view; 6, first and second urosomal somites, right lateral view; 7, genital somite, ventral view.

A1 reaching posterior end of prosome; 9th segment fused with 8th and partly fused with 10th segment. A2 endopod slightly longer than exopod; Re2A2 with short distal seta; Re7 with medial seta and 3 distal setae. Md palp base and Ri1 with 2 setae each. Mx1 first inner lobe with 1 anterior, 9 terminal and 2 posterior setae; 2nd and 3rd inner lobes with 2 and 3 setae respectively; basis with 5, endopod with 2 + 6, exopod with 6, and outer coxal lobe with 9 setae. Mx2 fifth inner lobe with 2 long and 1 short setae and 1 worm-like sensory filament. Mx2 endopod

distally with 3 worm-like and 5 brush-like sensory filaments. Two of five brush-like sensory filaments of Mx2 endopod about half as long as three others and with slightly thicker brushes. Mxp protopodite with 2 worm-like filaments and 1 seta in proximal part, one short brush-like sensory filament in the middle of segment and 3 setae distally. Mxp Ri1 – Ri6 from proximal to distal with 3, 2+4, 4, 3, 3+1 and 4 setae respectively.

P1 basis with well developed inner seta; endopod with 5 setae and narrow, pointed outer lobe. Re2P1 with small outer spine and



Figs 8-13. *Scaphocalanus somaliensis* sp. n. (8, 9, 11-13 holotype; 10, paratype): 8, P1; 9, P2; 10, P3; 11, P4; 12, Mx1; 13, P5.

several spinules on posterior surface. P2 coxopod without spinules, naked. Ri2P2 with 2 long proximal, 3 short medial and 3-4 long distal spines on posterior surface, and with longitudinal rows of short spinules on anterior surface. Re1P2 outer spine long, about $\frac{3}{5}$ length of Re2 outer edge. Posterior surface of Re1-3P2 with a few strong long and short spinules. Re3 terminal spine about 1.1 times as long as Re2, serrate, with 19-22 strong teeth. P3 coxopod with a few spinules on outer edge and on anterior sur-

face. Ri2-3P3 with a few strong long spines on posterior surface and longitudinal rows of short strong spinules on anterior surface. Re2-3P3 as in P2. Re3 terminal spine about 0.8 times as long as Re2, with 15-16 teeth. Anterior surface of P4 coxopod with a few small spinules, inner seta well developed. Posterior surface of Ri2P4 with two groups of long spines, that of Ri3 with a few strong short spines; anterior surface of Ri2-3P4 with longitudinal rows of short strong spinules. Anterior and posterior surfaces of

Re2-3P4 with a few small spinules. Re3 terminal spine about 0.7 times as long as Re3, with 19 strong teeth.

P5 two-segmented. Distal segment 3.65 times as long as wide, inner edge slightly protruded in proximal part. Distal half of segment with 3 setae: terminal seta slightly longer than segment, reaching about 2/3 length of inner seta; inner seta twice longer than segment and 1.8 times longer than terminal seta, bordered with 18-23 strong setules along inner edge; minute outer seta situated opposite to inner seta.

Comparison. The body shape and P1-P4 armament of the new species are very similar to those of *S. brevirostris* Park, 1970, described from the Caribbean Sea, but the new species is distinguished by the setation of Mx1, length ratio of P5 apical and inner setae (in the new species, inner seta of P5 twice longer than the segment itself and 1.8 times longer than terminal seta; in *S. brevirostris* 1.5 and 3 times respectively) and higher number of setules on inner seta of P5 (18-23 and about 12 respectively). The new species is also similar in some features to *S. pseudobrevirostris* Schulz, 1987 described from the upwelling area of NW Africa: length of

body, rudimentary rostrum, 6 setae on Mx1 exopod. However the new species is well distinguished from *S. pseudobrevirostris* by the shorter urosome (1/4 of prosome length instead of 1/3), large distal vesicle of spermatheca (short finger-like in *S. pseudobrevirostris*), P1 endopod with 3 inner setae (2 setae in *S. pseudobrevirostris*), and longer Re1P2 outer spine.

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