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## A new species of Lamippidae (Crustacea, Copepoda) from the Red Sea

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ABSTRACT

*Enalcyonium ciliatum* n.sp., a copepod of the family Lamippidae, endoparasitic in *Dendronephthia (D.) hemprichi* (Klunzinger), is described from the Dahlak Archipelago, Ethiopia. Apart from unnamed, *Lamippe*-like copepods collected by the Siboga Expedition in Indonesia, these Ethiopian specimens are the first Lamippidae described from the Indo-West Pacific faunal region.

The Lamippidae form a family of transformed copepods, living endoparasitic in Octocorallia. Of the 23 species described so far, not less than 21 have been found on the Mediterranean and Atlantic coasts of Europe, the remaining two coming from the Antarctic and from Sierra Leone. (References in Humes, 1957, and Bouligand, 1960, 1966).

Versluys (1902a: iii, 1902b: 47; 1906: 6) records the existence of unidentified copepods, "related to *Lamippe*", parasitic in octocorals "of the genera *Crysogorgia, Caligorgia, Stenella* and *Thouarella*", collected by the Siboga Expedition in the Indonesian archipelago. The first three of these records are repeated by Leigh-Sharpe, 1934: 4.

Versluy's and Leigh-Sharpe's records, unaccompanied by any description or illustration, form the only evidence of the occurrence of Lamippidae in the Indo-West Pacific faunal region. The present discovery of a new species of the genus *Enalcyonium* thus constitutes the first named lamippid from that vast area.

### **Enalcyonium ciliatum** n.sp.

Material examined. — 1 ♀ (holotype) and 1 ♂ (allotype). Endoparasitic in *Dendronephthia (Dendronephthia) hemprichi* (Klunzinger, 1877). Israel South Red Sea

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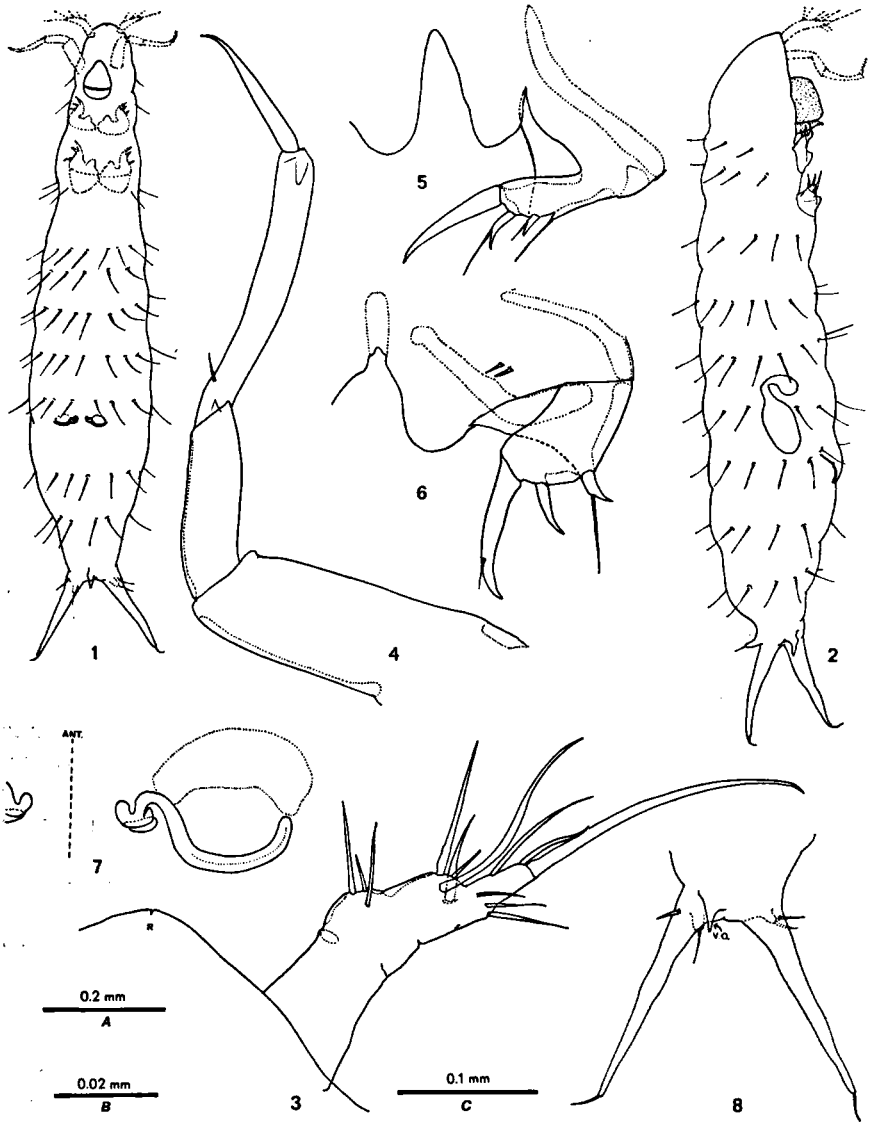


FIGS. 1—8. *Enalcyonium ciliatum* n.sp. 1, female in ventral view; 2, male from the right; 3, anterior antenna, ♀ (R = rostral area); 4, posterior antenna, ♀; 5, first leg, ♀; 6, second leg, ♀; 7, vulval area, ♀, left side in ventral view (ANT. = anterior side; the dashed line represents the mid-ventral line); 8, the medio-ventral caudal organ (V.O.) and the furcal rami, ♀, in ventral view. Scale A applies to figs. 1 and 2; scale B to figs. 3 to 7; scale C to fig. 8.

Expedition, No. E62-10028: Island of Condabilu, Dahlak Archipelago, Ethiopia, depth about 3 m, 14 March 1962. The material is preserved in the Zoölogisch Musem, Amsterdam, with catalogue nr. Co. 102.360a-b.

Description. — Total length (including caudal rami) of the female 1.45 mm, of the male 1.40 mm.

The body shape of male and female is pretty much the same (figs. 1 and 2). Although the body segments are completely fused, their presence is indicated not only by faint swellings, but likewise very clearly by the presence of transverse rows of cilia. In the male there are 3 postgenital rows, in the female only 2.

The caudal rami are slender, tapering, armed with 2 short proximal setae (one dorsally implanted on a tubercle, one latero-ventral) and 1 short distal seta. A simple (i.e., not bicuspidate) medio-ventral organ is found between the insertions of the caudal rami (fig. 8).

The anterior antenna is rather slender (fig. 3), but apparently unsegmented; it bears 13 setae, arranged in 4 groups.

The posterior antenna (fig. 4) is moderately elongated; segment 3 is provided with a basal spinule, but no such spinule could be found on the distal claw.

The mouth-cone is of the "r" type of Bouligand, 1966. No maxillipeds have been found.

The first leg (fig. 5) has an unsegmented exopod, armed with 1 lateral setule, 2 lateral claws (each with auxiliary lash) and 1 simple terminal claw. The endopod is a simple, unarmed lobe, connected by a membrane with the exopod at the level of the proximalmost spine.

The second leg (fig. 6) has likewise 3 claws on the exopod; the proximalmost of these has a long auxiliary lash. The endopod is slightly wider than in leg 1, but otherwise similar to it.

The vulval area (fig. 7) is of a structure often found in this genus.

Remarks. — Only the female specimen has been dissected. The male has been studied in undissected state, mounted in lactophenol, and with the aid of an interference contrast microscope. Taken into account the limitations of this method, it seems that the male is very similar to the female, apart from the number of post-genital rows of cilia, and of course the presence of comma-shaped spermathecae (fig. 2). The left endopod of leg 2 is remarkable in having a long medial seta not seen in the right endopod, and not present in either second endopod of the female.

The presence of rows of cilia, as well as the non-bifurcated shape of the medio-ventral organ, distinguish the present species from all previously described Lamippidae.

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