COPEPODS ASSOCIATED WITH INDIAN MOLLUSKS (C). OSTRINCOLA PORTONOVIESENIS N. SP. FROM COMMERCIAL BIVALVES AT PORTONONO, S. INDIA

BY

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While studying the copepod genus Conchylurus at Portonovo, a great number of individuals of a hitherto undescribed copepod species, Ostrincola portonoviensis n. sp. (fam. incertae sedis — Ergasilidae pars?) were found co-existing with the Conchylurus species in three bivalve hosts. The specific name of the new species is derived from the type locality.

The genus Ostrincola was erected by C. B. Wilson (1944) to receive his new species O. gracilis as the type. This species was redescribed by Humes (1953), who corrected some inaccuracies of the original description and gave additional details of the species. Apparently, Humes did not intend to alter the taxonomic status of the species, although he gave an emended diagnosis both for the genus and the species; he remarked (: 103) that the generic validity of Ostrincola seems to rest upon the future discoveries of other related species.

O. gracilis Wilson was originally described from Crassostrea virginica (Gmelin) from Beaufort, North Carolina, U.S.A. Humes (1953) reported it from Crassostrea virginica (Gmelin), Modiolus demissus granosissimus Sowerby, Mytilus recurvus Rafinesque and Venus mercenaria Linne, in the Barataria Bay region of Louisiana, U.S.A. Later Humes & Cressey (1960) recorded this copepod from Tagelus gibbus (Spengler) in Cotuit Bay, Cape Cod, Massachusetts, U.S.A. Humes (1958) described two more species, O. clavator Humes and O. simplex Humes from Ostrea sp. at Nossi Bé, Madagascar. O. portonoviensis described below is the fourth species of the genus; it was found at Puddupeta, Portonovo (Coromandel coast), South India, occurring abundantly in the mantle cavity of Meretrix meretrix (L.) and M. casta (Chemnitz, nec Deshayes), and sporadically in Sanguinolaria (Soletellina) difbos (Gmelin).

Collections of the new species were made when the author was holding a Post-Doctorate Fellowship of the University Grants Commission of India at the Marine Biological Station at Portonovo and the study was made at the Eastern Regional Station, Zoological Survey of India, Shillong.

Ostrincola portonoviensis n. sp.

MATERIAL AND TYPES. Several ovigerous females and adult males from the mantle cavity of Meretrix meretrix collected in the sandy mud lagoon at Puddupeta,
near Portonovo in June 1960. Holotype and allotype (one ovigerous female and one adult male; Reg. no. C. 3977/1) and paratypes (one ovigerous female and one adult male; Reg. no. C. 3978/1) have been deposited in the collection of the Zoological Survey of India, Calcutta. Some specimens are retained in the author’s collection. As indicated above, this species has been found also in the mollusks Meretrix casta and Sanguinolaria dipho.r.

**Description of the Adult Female.** Length of the body excluding the caudal setae 1.07 mm, body width 0.32 mm. The shape of the body (fig. 1a) is cyclopoid. The prosome equals the length of the urosome and is 4-segmented. The cephalosome is ovoid anteriorly while the posterior part appears to be fused with the first pedigerous segment. The remaining four pedigerous segments become successively narrower; their lateral margins are free and rounded. The urosome is 5-segmented, the second (genital) segment being the longest and the fifth the shortest. The genital segment is barrel-shaped with a circle of spinules posteriorly, below which arises an ovisac on either side, extending to about the middle of the caudal rami. Each ovisac measures 0.66 mm, bearing five eggs arranged lengthwise. The junctions of the postgenital segments are set with rows of conspicuous denticles. The first postgenital segment is nearly a square, smaller than the succeeding segment; the latter is markedly divergent posteriorly. The last abdominal segment is small, bearing two long and slender caudal rami. The caudal rami (fig. 1d) are nearly three times as long as the last abdominal segment, each bearing three outer setae, the longer arising from within the proximal 1/3 of the ramus, a second small one close to it, while the third arises from within the last 1/3 of the ramus. There are three terminal setae on each ramus, of which the inner and outer are about equal in length, while the middle one is thrice as long as either of the other two.

A large and bluish median eye is visible in dorsal view. There is no free rostrum but a process similar to it exists ventrally as a backward directed lobe of the carapace between the bases of the antennules.

The antennule (fig. 1e) is 7-segmented; the first segment is the largest and the third the smallest. There are several setae on the segments as shown in the figure; the one on the fourth segment is the longest. The antennule is devoid of aesthetascs.

The antenna (fig. 1f) is a powerful prehensile organ consisting of three segments. The first segment is robust and equals the length of the third, while the second is the shortest. The third segment bears a row of bristles on the outer lateral margin, a few denticles in the middle, and two small setae on the inner lateral margin. The third segment terminates in a strongly recurved and characteristically shaped claw.

The labrum (fig. 2a) is conspicuous; it is wider than long. The posterior part is lobed while the postero-lateral corners bear a row of denticles on either side. The maxillule (fig. 2b) is the smallest of the mouth parts, uni-segmented, bearing two small and one long unarmed terminal spines. The mandible (fig. 2c) consists