

the shore. The present report confirms the earlier observations on the presence of solitary forms of *P. confoederata* from the tidal zones. This appears to be the first record of the occurrence of *P. confoederata* (Forsk.) from the Gujarat Coast.

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A NOTE ON HOST SPECIFICITY OF THE ISOPOD PARASITE, *NEROCILA* SP.

Host specificity is very strongly expressed in a great number of fish parasites, especially in the majority of ectoparasites like isopods. While engaged in the length frequency studies of the Indian Herring, *Ilisha filigera* (Val.) landed by bull trawlers of the New India Fisheries Company Limited at Sassoon Docks, the isopod parasite, *Nerocila* sp. was seen very commonly in *Ilisha indica* during the months of December and February. Though this has been already observed by Chidambaram and Devidas Menon (1945) in Calicut, the case of host specificity among the species of the same genus has not been pointed out so far.

Indian Herring (locally called 'Kati') are mainly represented in trawler catches by *Ilisha filigera* (Val.) though occasionally *I. indica* are also landed in small quantities.

TABLE

| Date of landing | Region where caught | No. of <i>I. filigera</i> examined | No. infected | No. of <i>I. indica</i> examined | No. infected |
|-----------------|---------------------|------------------------------------|--------------|----------------------------------|--------------|
| 16-12-59 | Kutch | 44 | Nil | 132 | 53 |
| 23-2-60 | Kutch | 76 | Nil | 75 | 20 |

It can be seen from Table that though both the species were caught in the same region, the parasite was found to occur only in *I. indica*. The seat of infection was on the caudal peduncle and also the inside of the gill chambers (Figs. 1 & 2). They were found attached to the host by hook-like projections of their man-

dibles and first maxillae and first two thoracic legs. In all cases in the attached position the body was directed towards the anterior end of the fish. It is believed

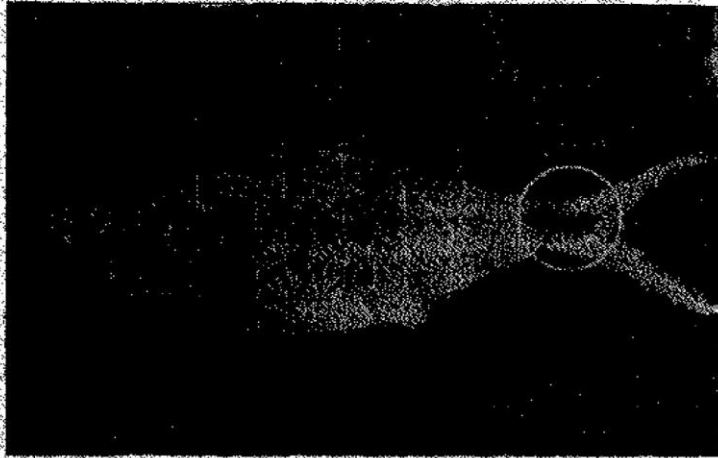


FIG. 1. *Ilisha indica* showing ectoparasite, *Nereoclla* sp. on the caudal peduncle.



FIG. 2. *Ilisha indica* showing the parasitic infection by *Nereoclla* sp. attached to the inside of the right and left gill covers.

that the development of specificity in all those ectoparasites has been promoted by the combination of two factors: the uniformity of diet (blood or epithelium) and morphological adaptation to the particular kind of gill lamellae, epithelium or scales. The host specificity of fish parasites helps the fisheries workers to classify the species of fishes.

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ON THE CAPTURE OF TWO GIANT DEVIL RAYS [*MANTA BIROSTRIS* (WALBAUM)] AT VERAVAL, SAURASHTRA

On 28 December 1961, the fishermen from Maharashtra who were engaged in long line fishing at Veraval on the Saurashtra coast caught a gigantic devil ray, *Manta birostris* (Walbaum), measuring 626 cm. (20' 6") across the disc and weighing nearly a tonne. The ray (called KARAJ in Gujarati) was caught off Veraval at 20°30' N., 70°10' E. at a depth of 50 metres in hook with catfish and ray fillets as bait. The ray, as reported by the fishermen was alive for more than two hours after capture, when it went on splashing the water and towing the boat in various directions. When it was completely exhausted the fishermen tried to haul it inside the boat but could not do so due to its huge size and heavy weight. The ray was then towed from the fishing ground to the harbour.



The devil ray, *Manta birostris*, caught off Veraval.

Subsequently on 15 March 1962 another specimen of *M. birostris* measuring 482 cm. (15' 10") across the disc was landed at Veraval. The specimen was caught