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SOME PARASITE ISOPODS (CRUSTACEA: CYMOTHOIDAE) OF MARINE FISHES FROM THAILAND¹

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Abstract. Lironeca circularis was found attached to the inner surface of the opercular flap in the gill chamber of Amblygaster sirm, Mothocya renardi in the gill chamber of Strongylura leiura, and Glossobius sp. in the mouth of Parexocoetus mento from Thailand. The attachment position of Lironeca circularis differs from that of other members of this genus. The lateral view and ventral view of the head of this isopod are illustrated for the first time. Amblygaster sirm is a new host record for L. circularis; and this isopod and M. renardi have not been previously reported from Thailand.

Sirikanchana (1982) listed four species of Cymothoid isopods ("Livoneca vulgaris Stimpson, Livoneca sp., Nerocila pigmentata, Nerocila sp.") from the mouths of 15 species of Thai fishes. The identities of the isopods may be in some doubt because Lironeca sp. usually occur in the gill chambers of their hosts and Nerocila sp. on the fins and external body surfaces. We examined a collection of fishes from Thailand held in the Department of Marine Sciences, University of the Ryukyus (URM-P), and found three species of cymothoid isopods. All isopods are deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.

Lironeca circularis Pillai, 1954 (Figs. 1A-E)

Material examined: 2 specimens. 14.0 mm long, 9.6 mm in maximum width, female with oostegites, in posterodorsal corner of right gill chamber, attached to inner surface of opercular flap of a 14.6 cm SL Amblygaster sirm (Walbaum) (Clupeiformes: Clupeidae) (URM-P-9102); a 14.2 × 8.6 mm female with costegites in similar position in 14.2 cm SL A. sirm (URM-P-9099), Phuket Island Fish Market, Thailand (12 April 1984).

Remarks: Amblygaster sirm is a new host record for this isopod. Pillai (1954) described L. circularis from Clupea (=Amblygaster) leiogaster (Valenciennes). The unusual attachment position of the female of this isopod was not described by Pillai (1954, 1964). Lironeca sp. usually attach in the ventral portion of the gill chambers of their hosts, with their dorsal (not ventral) surfaces exposed when the opercular flap of the host is opened.

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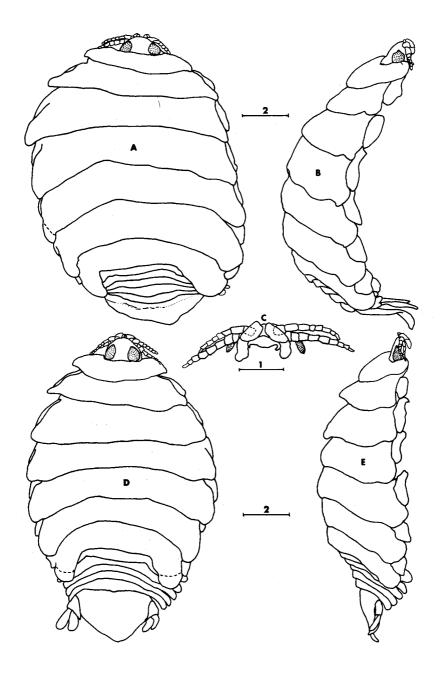


Fig. 1. Lironeca circularis Pillai (A-C from 14 mm female; D-E from 14.2 mm female) (Scale of A-B, D-E equal, scale bars in mm). A, dorsal view. B, lateral view. C, head, ventral view. D, dorsal view. E, lateral view.

The mandibular palps of this isopod extend beyond the anterior margin of the head and are visible in the dorsal view (Fig. 1A & D). This unusual condition was not described by Pillai (1954, 1964). He did not illustrate the lateral view (Fig. 1B & E) or ventral view of the head (Fig. 1C) of this isopod.

Distribution: Not previously recorded from Thailand. Pillai (1954) described this species from Trivandrum, India.

Glossobius sp.

Material examined: 1 female-male pair. 19.4 mm long, 11.6 mm in maximum width female with oostegites, on tongue in mouth of 12.2 cm SL Paraxecoetus mento (Valenciennes) (Beloniformes: Exocoetidae) (URM-P-9167), 9.8×2.4 mm male on gill rakers beneath female in same host, Phuket Island Fish Market, Thailand (11 April 1984).

Remarks: Bowman (1978) restored Glossobius Schioedte & Meinert (isopods of flying-fishes, Exocoetidae). Williams and Williams (1985) added a parasite of halfbeaks (Beloniformes: Hemiramphidae) to this genus. Bruce and Bowman (in preparation) are revising this genus (N.L. Bruce, pers. comm.). Assignment of the present specimens to a species should await the completion of their revision.

Mothocya renardi (Bleeker, 1857)

Material examined: 1 specimen. 20.3 mm long, 9.5 mm in maximum width female with oostegites, in ventral portion of right gill chamber, and a wound characteristic of the male of this isopod observed in the same position in the left gill chamber of 38.5 cm SL Strongylura leiura (Bleeker) (Beloniformes: Belonidae) (URM-P-14664), Songkhla Fish Market, Gulf of Thailand, Thailand (9 April 1984).

Remarks: A second specimen of S. leiura, 39.1 cm SL (URM-P-14665) from the same locality had wounds from a female isopod in the right gill chamber and from a male in the left.

Distribution: Not previously reported from Thailand.

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