

vessels. The testis portion was connected by connective tissue with the ovary portion in the ovo-testis.

Blood supply for the testis portion was through the same blood vessels that supplied the ovary portion, as can be seen from Fig. 2. Inside the connective tissue neither ova nor spermatogonia were observed.

The ova diameter ranged from 0.15 to 0.38 mm. and a number of transparent ova of smaller size ranges were present in both right and left gonads, indicating that the ovary was in stage III of maturity. A study of the sections of the testicular portion, revealed the presence of a number of spermatogonia in their cysts. Further examination of a cyst under oil-immersion, showed, that the primary spermatogonia have divided into secondary spermatogonia and only a few spermatids were present in the centre of the cyst. The cyst wall was intact. A testis in this condition corresponds to stage III described by Gokhale. A camera-lucida drawing of the sections of ovarian and testicular portions is given in Fig. 3.

As the ovary portion of the ovo-testis was only slightly asymmetrical with the left gonad which was a complete ovary, and as it was connected directly with the oviduct and blood vessels, it seems more obvious that the testis was an overgrowth on an ovary which would have been normal otherwise.

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#### LETHRINELLA CONCHYLIATUS SMITH (LETHRINIDAE : PISCES), A NEW RECORD FOR INDIAN SEAS

In a recent account on the pigface breams from Andaman waters we (Silas and Toor, 1961) described five species of lethrinids, namely, *Lethrinus ornatus* Valenciennes, *L. harak* (Forsk.) *L. nebulosus* (Forsk.) *Lethrinella microdon* (Valenciennes), and *L. xanthocheilus* (Klunzinger). In addition, two specimens were provisionally placed under *Lethrinella* prox. *xanthocheilus*. Since the paper was sent to press we have come across Wheeler's recently published work on 'The genus *Lethrinus* in the Western Indian Ocean' (Wheeler, 1961), wherein a new species, *Lethrinus floridus* is very briefly described and figured in colour. Wheeler's notes on this species are mostly based on recollections and as such, details regarding nature of dentition, morphometric measurements, etc. are wanting. However, the mention that the depth of the body (23.7% in total length) is considerably less than the length of the head (30.5%) indicates that it is a species of *Lethrinella* Fowler which genus is characterised by the teeth on both jaws being lanceolate or conical and pointed and none molariform. The colour drawing shows the following distinctive features of *Lethrinus floridus* : (i) the presence of a vermilion patch above insertion of pectoral fin and along the margin of the opercle ; and (ii) fleshy lips coloured vermilion. The elongate head with pointed snout, the colour characteristics mentioned above

and the presence of five rows of scales above the lateral line as reported for *L. floridus* are identical with the diagnosis of *Lethrinella conchyliatus* Smith (1959) described from Pinda, Mozambique. We consider both these species described from the Western Indian Ocean as being conspecific and advocate the use of the earlier proposed name *Lethrinella conchyliatus* Smith, relegating *Lethrinus floridus* Wheeler to its synonymy, although the caudal lobes in the figure of the latter are shown to be subequal and the lower lobe rounded.

In our earlier account (Silas and Toor, 1961) three specimens were referred to *Lethrinella microdon*, but as will be evident from the table of measurements given therein the body proportions for the specimen 207 mm. in standard length are markedly different. A re-examination of this specimen in the light of Smith's and Wheeler's recent works on lethrinids has convinced us that the specimen (Fig. 1) should be correctly referred to *Lethrinella conchyliatus* and not to *L. microdon*, which error is rectified here. The reddish or vermilion patch above the base of the pectoral (in life) is seen as a whitish triangular patch in the preserved material, and so also the opercular edge. The absence of radiating dark lines in front of and below the eyes is another feature distinguishing it from *L. microdon*. Since *L. conchyliatus* is being recorded for the first time from Indian Seas (Andaman Sea), important body proportions and meristic counts for the specimen are given below:

D. X, 9; P<sub>1</sub>, ii, 11; P<sub>2</sub>, i, 5; A. III, 8; C. i, 15, i; L. 1. 49; L. tr. 5/1/15; Gill rakers 5+6.

Depth of body 3.63; length of head 2.68; snout to origin of spinous dorsal 2.38; and depth of body at anal origin 3.83 in standard length. Length of snout 1.97; preorbital depth 2.26; length of maxilla 2.85; length of pectoral 1.45; length of pelvic 1.57; diameter of eye 4.16; longest anal ray 3.3; and longest soft dorsal ray 3.01 in head length. Diameter of eye 2.13 in snout length; 1.83 in preorbital depth; and 1.16 in inter-orbital distance. Least height of caudal peduncle is contained 2.42 in its length.

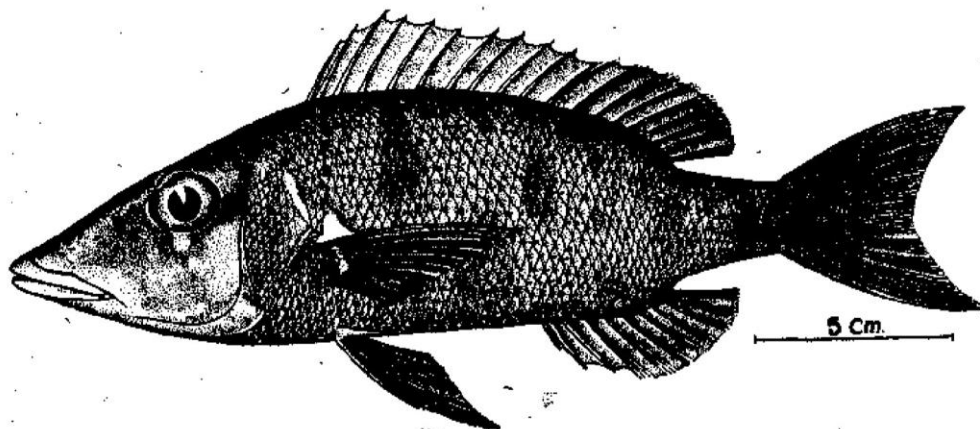


FIG. 1. *Lethrinella conchyliatus* Smith. Lateral view of specimen 207 mm. in standard length from Port Blair, Andamans.

For various body dimensions expressed in thousandths of standard length reference may be made to Table I, specimen measuring 207 mm. under *L. microdon*

given elsewhere (Silas and Toor, 1961). Some differences in body proportions between this and the type specimen from Mozambique described by Smith may be on account of differences in their sizes, the latter measuring 460 mm. in total length.

This new distributional record brings the total number of known lethrinids from Andaman waters to six species.

The specimen is deposited in the collection of the Central Marine Fisheries Research Institute, Mandapam Camp.

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