NOTES

ON THE OCCURRENCE OF THE ORIENTAL BONITO, SARDA ORIENTALIS (TEMMINCK AND SCHLEGEL) ALONG THE MADRAS COAST

A FEW specimens of the Oriental Bontio, Sarda orientalis were obtained on 28-7-1966 during one of my routine visits to the fish landing place at Ayodhyakuppam in Madras city. This species continued to occur for nearly a week in small quantities in the gill net landings which also brought good catches of the Indian Mackerel, Rastrelliger kanagurta. It is quite likely that the Oriental Bonito constitutes a sporadic fishery along the east coast of India also during June to September which is the season for its fishery along the West coast.

Sarda orientalis has a wide range of distribution. Silas (1962) summarises its distribution as 'the east coast of South Africa; Seychelles; Somalia and Gulf of Aden; west coast of India; south west coast of Australia; Philippines; Japan; Hawaii; Pacific coast of Central American and Galapagos Islands, besides two records from the Atlantic.' Even in the Indian waters this species has not so far been recorded along the North East coast of India, Andamans sea and Laccadive sea. In the map showing its occurrence and fishing areas in the coasts of India Silas (1963) has shown its occurrence around Tuticorin in the South East coast but no published account is available for reference. This present record of the Oriental Bonito in Madras seems to be the first report of its occurrence along the North East coast of India.

A comparison of the various meristic counts of the present material with those observed by Silas (1962) in the West coast of India revealed remarkable similarity. All the fishes examined were juveniles measuring from 240 mm. to 260 mm. in total length. Excepting one specimen, which had only some remnants of skeleton of a certain big-scaled fish in its stomach, all the others had their stomachs practically empty and clean.

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ON THE OCCURRENCE OF THE SPOTTED THREADFIN, POLYNEMUS MICROSTOMA BLEEKER IN THE GULF OF MANNAR

DURING the course of examination of the trawl catches off Mandapam in the Gulf of Mannar (79°-79°30' E. 8'50'-9°10' N. landed by the Indo-Norwegian Project fishing boats at Mandapam during October 1965 to March 1966, we came across several specimens of *Polynemus microstoma* Bleeker (Fig. 1) hitherto not reported from the seas around India. *Polynemus indicus* Shaw, *P. sexiarius* Bl.

NOTES

Schn., P. heptadactylus C.V., and Eleutheronema tetradactylum (Shaw) (P. tetradactylus) also occur in this region along with P. microstoma. Thirty specimens ranging in size from 144 mm. to 211 mm. in total length have been examined and a brief note on the same is given below. Two specimens are deposited in the reference collection museum of the Central Marine Fisheries Research Institute, No. CMFRI-F. 64/501.



In the three species, namely *P. microstoma*, *P. plebeius* and *P. indicus*, which have five free filaments in the lower half of pectoral fin, the first filament is the longest, reaching the middle of ventrals in *P. microstoma*, little beyond the tip of ventrals in *P. plebeius* and well beyond the end of ventrals or even upto the anal in *P. indicus* (but according to Weber and de Beaufort (1922) 2nd or 3rd filament is the longest in *P. indicus*). *P. microstoma* may also be distinguished from others by the presence of a dark opercular spot and a unique dark blotch on the shoulder at the beginning of the lateral line. The blotch measures 7 mm. long and 5 mm. wide in a specimen measuring 144 mm. and 13 mm. long and 7 mm. wide in a specimen measuring 211 mm. It commences on the 3rd or 4th scale of lateral line and extends over 5 to 6 successive scales.

The meristic counts of the specimens examined here differ slightly from those given by Weber and de Beaufort for *P. microstoma*. There are only 13 rays in the pectoral fin as against 15 stated by Weber and de Beaufort. Further, in all the specimens examined by us there are always 3 anal spines instead of a variation from 2 to 3 as mentioned by Weber and de Beaufort. The first anal spine may easily escape observation as it is very short and remains almost covered by the scales.

The known distribution of the species is from the southern tip of Formosa to Bali and Sumbawa in the south and from New Guinea westward upto Penang in Malaya coast. The present record extends the distribution of the species westward up to the Indian coast. .

SI. No,	Morphometric character	variation	Sl. No.	Meristic count	No. or range
1. H 2. C 3. L 4. S 5. L 6. L 7. D 8. L	lead length bepth of body ength of caudal nout to origin of first dorsal ength of pectoral ength of longest pectoral filament inameter of eye ength of snout	22.9-25.8 21.3-24.5 23.1-28.5 27.7-29.6 14.2-16.4 17.3-20.3 6.2-6.6 4.8-5.2	1. Do 1st 2n 2. Do 3. An 4. An 5. Pec 6. Pec 7. Ve 8. Ve 9. Lat	orsal spines Dorsal d Dorsal orsal rays al spines al rays storal fin rays storal filaments ntral spine ntral spine ntral rays ceral fine scales	VIII I 13-14(13) II 13 13 5 5 1 5 47-50(49)

Details of body proportions and meristic counts of the 30 specimens examined are given below :

Parentheses indicate the most common number.

It may be mentioned in this connection that *P. sextarius* resembles *P. microstoma* in many external characters especially in the black blotches but the former could easily be distinguished by the presence of six filaments in the pectoral.

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