COMMENTS ON THE SOCALLED RARE MARINE FISHES OF THE GENERA DACTYLOPTENA JORDAN AND RICHARDSON AND LEPIDOTRIGLA GÜNTHER RECENTLY REPORTED FROM MADRAS

By S. JONES

Central Marine Fisheries Research Institute, Mandapam Camp

THREE fishes viz., Brotula jerdoni Day, Lepidotrigla spiloptera Günther and Dactyloptena orientalis (Cuvier) have been recently reported upon as rare and interesting based on the material collected from Madras by the Zoological Survey of India (Menon and Rao, 1963). Of these B. jerdoni has only a limited distributional record and is stated to be under further study and as such does not call for any comments. With regard to the other two species a number of references published subsequent to those cited by them in their paper have come to my notice and a few of the relevent ones are given here with some comments on the species for the benefit of those interested.

Dactyloptena orientalis (Cuvier and Valenciennes)

The following three references have been cited by Menon and Rao (op. cit.):

- 1829 Cuvier, (in Cuvier & Valenciennes), Hist. Nat. Poiss., 4, 134, Pl. 76 (Type locality, Coromandal coast, Bay of Bengal).
- 1860 Günther, Cat. Fish. Brit. Mus., 2, 222.
- 1878 Day, Fishes of India, 1, 279, Pl. 60, Fig. 6.

References in addition to the above on the species are too numerous to be cited here. De Beaufort (1962) cites over twenty references and the following which are not listed by him appear relevant regarding the distribution of the species in the seas around India.

- 1926 Malpas, Ceylon J. Sci., (C), 2, 164. Wadge Bank.
- 1929 Pillai, J. Bombay nat. Hist. Soc., 33, 375. Trivandrum.
- 1956-58 De Sylva, Spol. Zeyl., 28, 30. Wadge Bank.
- 1959 John, Bull. Centr. Res. Inst., (C), 7(1), 136. Cape Comorin Bank.

Menon and Rao (op. cit.) give its distribution as Indo-West Pacific presumably based on the references cited by them. According to De Beaufort (op. cit.) the distribution of the fish is as follows, indicating thereby that it is very widely distributed in the Indo-Pacific.

East coast of Africa, Madagascar, Somalia, Mauritius, Réunion, Muscat, Aden, Cargados Carajas, coast of India, Ceylon, Riu Kiu Islands, Japan, China, Korea, Formosa, Malay Peninsula, Indo-Australian Archipelago, Philippines, coasts

of Queensland and of New South Wales, New Hebrides, New Caledonia, eastwards to Hawaii and Tuamotu Islands. In the Indo-Australian Archipelago it has been recorded from Singapore, West coast of Sumatra, Java sea, Celebes, Lembeh Strait, Batjan, Ternate, Buru, Manipa straits, Ceram, Ambon, Banda, Arafura Sea, Waigeu and New Guinea.

Specimens of this fish have been collected by the Research Staff of the Central Marine Fisheries Research Institute from off Madras, Vizhingam (Trivandrum), Calicut, Minicoy (Laccadives) and Karwar. One of my colleagues, Mr. A. Noble has collected recently about 300 specimens in a single haul off Karwar and a note on the studies he has made on them is being published elsewhere. Larval specimens have been collected from the west coast of India (Jones and Kumaran, MS.). All these show that the species is not so rare as alleged.

There is no mention by Menon and Rao (op. cit.) about Dactyloptena macracanthus (Bleeker) (=Dactylopterus cheirophthalmus Bleeker) which is really rare and which has been recorded by Alcock (1896) from the coasts of India, but not reported on by anyone since then from the seas around India.* This is distinguished from its congener by the presence of a distinct lateralline and a dark blotch on the middle of the pectorals. De Beaufort (op. cit.) gives its distribution as: Singapore, Celebes, Ambon and Banda (Indonesia), Madras, Malabar and Orissa (India) and Philippines. Larval specimens of this species have been collected from the west coast of India (Jones and Kumaran, MS.).

It may be stated in this connection that Jordan and Richardson created the genera Dactyloptena, Ebisinus and Daicocus to accommodate the three Indo-Pacific species, of dactylopterids viz., orientalis, macracanthus and peterseni respectively, but De Beaufort (op. cit.) recognises only one genus Dactyloptena under which all the three species come. This view appears to be acceptable and the only other genus of dactylopterid is Dactylopterus with the single species volitans found in the Atlantic and the Mediterranean.

It may be of interest to state here that Smith (1961) has recorded from South Africa Dactyloptena peterseni (=Daicocus peterseni) which was previously known only from the Pacific. The presence therefore of this species in the seas around India cannot be ruled out and it would be worthwhile to be on the look out for the same and at the same time re-examine the specimens now labelled as D. orientalis*. This species could be distinguished by the absence of a second free spine between the occipital spine and the first dorsal.

Lepidotrigla spiloptera Günther

Menon and Rao (op. cit.) have given its distribution as 'Ki Islands in the West Pacific and Bay of Bengal (Gulf of Martaban and Off Madras Coast)' and have sited the following references:

1880 Günther, Challenger Shore Fishes, 1, 42, Pl. 18, Fig. C. (Type locality, Ki Islands, 140 fathoms).

[•] Subsequent to the preparation of this note I have been informed by Dr. E. G. Silas of this Institute that he has collected quite a large number of Dactyloptena peterseni (=Daicocus peterseni) in addition to D. orientalis and D. macracanthus from the west coast of India and that a report on the same is under preparation. A specimen of this species has been found subsequently in the collections of the Madras Substation of the Central Marine Fisheries Research Institute.

- 1887 Günther, Challenger deep-sea fishes, 64 (Ki Islands, 140 fathoms).
- 1889 Alcock, Cat. Ind. Deep-sea fishes, 67 (Gulf of Martaban, 67 fathoms).

De Beaufort (op. cit.) cites a number of later references also and gives the distribution of the species as follows: Near Sulu Islands, Borneo (Sandakan)?, Timor Sea, Arafura Sea, off Ki Islands, Natal? Zanzibar area, Arabian Sea, Bay of Bengal, Philippines, Manila Bay.

A perusal of the literature on fishes of the genus Lepidotrigla indicates the need for a taxonomic reappraisal of the various species.

According to De Beaufort (op. cit.) Lepidotrigla spiloptera may possibly be a synonym of L. alata (Houttuyn) which is distributed from China and Japan to Queensland. He has also expressed the doubt that L. multispinosus J. L. B. Smith could be the same as L. spiloptera. The figure of the latter given by De Beaufort (op. cit.) shows the pectorals shorter than head and just reaching the anal which appears to be the case in L. multispinosus. However, in the typical L. spiloptera as described by Günther the pectorals extend upto the 4th or 5th anal ray and it appears that in L. natalensis Gilchrist and Thompson the condition is similar. It may be stated in this connection that the latter has recently been recorded from off the South West Coast of India (Samuel, 1963) thereby extending its distribution from the Western to the Central Indian Ocean. There is striking difference between the figures of L. spiloptera given by Günther (op. cit.) and De Beaufort (op. cit.) and it is therefore necessary that specimens reported as L. spiloptera require re-examination. L. longipinnis Alcock in which the pectorals extend upto or beyond the 9th anal ray seems to be quite distinct from other species. It may be of interest in this connection to mention here that De Beaufort (op. cit.) has quite pertinently pointed out that Lepidotrigla 'differs from Trigla only by having smaller scales and is hardly worth generic rank.'

The above points have been raised based on the perusal of descriptions and not on the examination of any material. It is hoped that these would receive the attention of some taxonomist in due course.

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