

**EUPLEUROGRAMMUS INTERMEDIUS (GRAY) (TRICHIURIDAE : PISCES),
A NEW RECORD FROM INDIAN WATERS¹**

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DAY (1876) recorded three species of Trichiurids viz., *Trichiurus haumela* (Forskål), *Trichiurus savala* Cuvier, and *Trichiurus muticus* Gray from the Indian Seas and indicated their occurrence in the Indo-Pacific.

In a preliminary revision of the family Trichiuridae Tucker (1956) adopted the following nomenclatorial changes viz., *Trichiurus lepturus* Linnaeus, *Lepturacanthus savala* (Cuvier) and *Eupleurogrammus muticus* (Gray) for the above three species respectively.

In the course of his work on the biology and fishery of Indian Trichiurids, the author obtained representative collections of the different species from various parts of the Indian coast, and is now in a position to say that a fourth species *E. intermedius* (Gray) (*T. intermedius* Gray) definitely occurs in our waters. Day has not mentioned the occurrence of this species in our coastal waters. It appears that this species is most common and dominant in the Gulf of Mannar and Palk Bay, while it occurs along with *E. muticus* further north (Andhra Coast). The occurrence of the other two Indian species *T. lepturus* and *L. savala* is more widespread along our coast and they are often fished along with *E. intermedius* in the Gulf of Mannar and Palk Bay, while all four are found along the Andhra Coast.

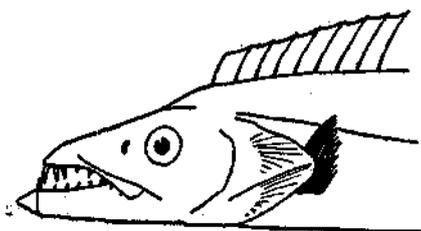


FIG. 1. *Eupleurogrammus intermedius* (Gray)
Head of specimen of 46.3 cm. S.L.

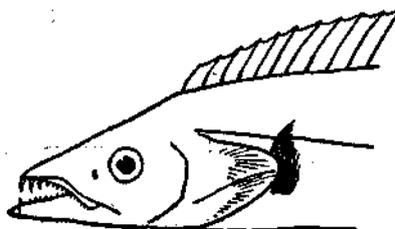


FIG. 2. *Eupleurogrammus muticus* (Gray)
Head of specimen of 52.7 cm. S.L.

Prabhu (1955) has referred to *E. muticus* as occurring in the Gulf of Mannar and Palk Bay, but the author has not come across this species during one year's intense collection in this area and in the absence of material for examination, it is not possible to say anything definite on this.

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The differences between the two species are given below :

No.	Character	<i>E. intermedius</i> (25 to 50 cm. S.L.)	<i>E. muticus</i> (36 to 62 cm. S.L.)
1.	Anal origin below	D 32-33	D 38-41
2.	Structure and arrangement of teeth (other than Canine-like teeth)	Few, big and distantly placed	Many, small and finer and closely set
3.	Colouration	Purely silvery or silver white	Burnished or dull silvery
4.	Slope of snout	Gentle	Sharply declivous
5.	Inter-orbital	Convex	More convex
6.	Location of orbit	Near dorsal profile of head	Away from dorsal profile of head
7.	Dorsal Fin ray count*	III, 123-129	III, 139-147
8.	Vertebrae*	31-32+126-131	39-42+150-159

There has been some difference of opinion as to whether the colouration of these species could be of any help taxonomically. The author examined fresh material of both species at the fish landing places and agrees with Delsman (1927)

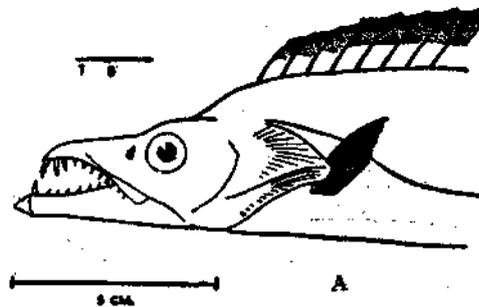


FIG. 3. *Trichurus lepturus* Linnaeus
(A) Head of specimen of 57.2 cm. S.L. (B) Nature and disposition of second anal spine

that *E. intermedius* is 'purely silvery' or silver white and with Day that the colour of *E. muticus* is 'burnished silver' or dull silvery, both being distinguishable by colour when fresh. In this connection it may be mentioned that *T. lepturus* and *L. savala* are also distinguishable by colouration when fresh, the former being silver-grey and the latter silvery, but the juveniles of all the four species are indistinguishable by colour alone.

A Key to aid in the field identification of the four known species of this family occurring in Indian waters is given below.

* 12 alizarin stained specimens of each species were examined for meristic counts.

Key to the identification of the species

- I. Pelvic fins present, appearing as scale like structures about midway between tip of lower jaw and vent; lateral line gently sloping from upper angle of operculum to tip of tail.
 - A. Origin of anal below D 32-33 (colour purely silvery or silver-white)*E. intermedius* (Fig. 1)
 - B. Origin of anal below D 38-41 (colour burnished or dull silvery)*E. muticus* (Fig. 2)
- II. Pelvic fins absent; lateral line abruptly descending from upper angle of operculum to below P₁, from whence it runs straight to tip of tail.
 - A. Eyes (Large), 5.5-7.0 in head length; second anal spine rudimentary; distal half of dorsal and pectoral fins tinged grey.....
T. lepturus (Fig. 3 A, B)
 - B. Eyes (small), 6.0-9.3 in head length; second anal spine prominent; margin of dorsal fin greyish.....*L. savala* (Fig. 4 A, B)

Although *E. intermedius* is known to occur in many parts of the Indo-Pacific, the precise distribution of the species along our coast is of interest both from the fishery point of view and perhaps also as a good source of pearl essence for the manufacture of artificial pearls as the lustre of the epidermis of this species is brighter than that of all other known species.

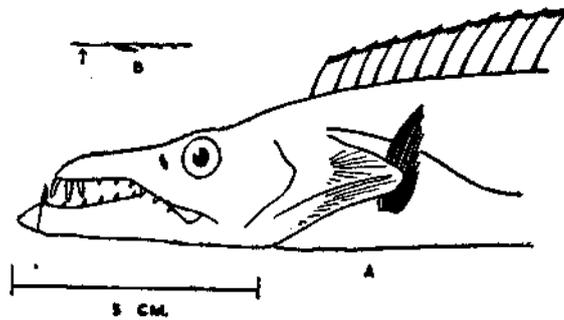


FIG. 4. *Lepturacanthus savala* (Cuvier)
(A) Head of specimen of 54.1 cm. S.L. (B) Nature and disposition of second anal spine.

SUMMARY

The occurrence of a fourth species of ribbon fish *E. intermedius* in Indian waters is reported. A Key for field identification of the four species is given.

ACKNOWLEDGEMENT

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