THE OCCURRENCE OF THE RED MULLET (GOATFISH) UPENEUS LUZONIUS JORDAN AND SEALE, IN THE INDIAN SEAS

During my studies on the taxonomy and biology of goatfishes some specimens of *Upeneus luzonius* Jordan and Seale (1907) hitherto unreported from Indian waters have been collected from the Palk Bay and Gulf of Mannar near Mandapam. This species has been previously reported from Philippines (Jordan and Seale 1907, Herre and Montalban 1928, and Fowler 1933), Borneo (Seale 1910, Herre and Montalban 1908 and Fowler 1933) and Singapore (Herre and Myers 1937).

Since this is a new distributional record for this area a brief description of the specimens collected is given below.

Upeneus luzonius

D. viii-i, 8, P. 14-15 (85% with 14), L.1 33-34, gillrakers 5-6 +1+12-15. The variability in the number of lateral line scales and gillrakers are shown below.

Variations in the number of lateral line scales and gillrakers of U. luzonius

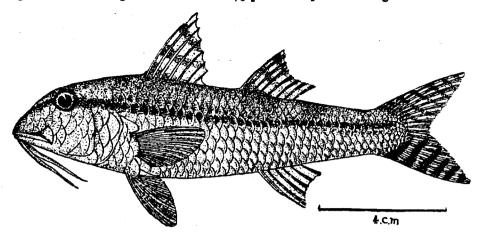
•	No. of L. scales			Number of gill rakers				
	 33	34	18	19	20	21	22	
Number of specimens	 11	31	4	14	12	10	2	

Two specimens of *Upeneus luzonius* (numbers USNM 1,02,649 and 1,06,829) kindly lent by the U.S. National Museum, Washington, collected by H. C. Kellers in 1929 from Panay (Philippines) have been examined and their morphometric characters have been given in parentheses along with the description of the specimens from this area.

*Length of head 4-4.4 (3-3.5) [4.4], of caudal 4.4-5.3 (3.6-4.2) [5.4 and 5.5] and greatest depth of body 4-4.9 (3.5-3.9) [4.5 and 4.6]. Diameter of eye 4-4.6

[•] Figures without enclosures represent the body proportions in total length, those in brackets refer to the proportions in standard length and those in parentheses are for the two specimens from U.S. National Museum in total length.

[4.1 and 4.4], length of snout 2-2.5 [2.2] and interorbital space 3.1-3.8 [3.5] in length of head. Length of barbels 63-79% [64 and 68] in head length.



Upeneus luzonius Jordan and Seale. Total length 145 mm. Locality Rameswaram island.

Colour in life—Dark brown on head and body and pale yellow at the belly. A dark brown longitudinal stripe from the tip of the snout through the eye to the base of the caudal fin, passing below the lateral line upto the base of the spinous dorsal and thereafter above it backwards. Three dark brown saddles, the first along the base of the spinous dorsal, second through the base of the soft dorsal and the third along the caudal peduncle just behind the soft dorsal, extending on either side upto the lateral line. In some specimens a very faint fourth saddle is seen on the upper base of the caudal peduncle not extending to the sides.

The spinous dorsal with three dusky to brown oblique bars and the soft dorsal with two in smaller and three in larger specimens. Caudal fin with two to seven bands of the same colour on each lobe. The bands on the upper lobe are narrow with clear interspaces. Those on the lower lobe are more wide and intensely coloured.

The specimens from this area generally agree with the original description of *U. luzonius* Jordan and Seale (1907) and the comparative study of the two specimens from U.S. National Museum also did not reveal any significant differences. However, the statement of Jordan and Seale that 'the second dorsal spine is greater than depth of body, about equal in length to head 'is not found to be true as far as the 50 specimens ranging in size between 50 to 145 mm. in total length from this area and also the two specimens from the U.S. National Museum are concerned. In all these cases the second dorsal spine is less than both the greatest depth of body and head length.

I wish to record my sincere thanks to Dr. E. G. Silas and Dr. P. S. B. R. James for critically going through the manuscript and to the authorities of the U.S. National Museum, Washington, for giving the two specimens on loan.

Central Marine Fisheries Research Institute, Mandapam Camp.

P. A. THOMAS