

usually lies between 2.5 to 4.0. For an ideal fish which maintains the same shape without any change, the value of 'n' is equal to 3.0 (Allen, 1938). In the present study the exponent value was found to be 3.0420, thus *P. niger* in its juvenile stages obeys the cube law relationship maintaining the same shape without any change (Allen, 1938). In fishes 'b' value is usually '3' in the length-weight relationship, but during growth change in specific

gravity of body contour, morphological changes due to age may also cause the coefficient of regression of logarithm on logarithm of length, to depart substantially from 3.0 (Rounsefell and Everhart, 1953). It is also interesting to note that allometrical growth is common in this species (Pati, 1977) and probably the study on adult specimens of *P. niger* may through more light on the deviation of the exponent value from 3.0.

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FIRST RECORD OF SPOTTED CHUB MACKEREL *SCOMBER AUSTRALASICUS* CUVIER (SCOMBRIDAE : PISCES) OFF VIZHINJAM, SOUTHWEST COAST OF INDIA

ABSTRACT

The occurrence of spotted chub mackerel *Scomber australasicus* Cuvier, 1831 off Vizhinjam, southwest coast of India is reported. This is the first record of the species from the Indian Coast. The diagnostic characters, description, distinguishing characters from the other closely related species and distribution of this species are briefly given.

ON JULY 24, 1993, a specimen of spotted chub mackerel *Scomber australasicus* Cuvier, 1831 which was described by Cuvier and Valenciennes (1831) was found in drift gill net (operated from motorised craft) catch off Vizhinjam (08°22'30" N 76°59'15" E) along with *Sarda orientalis*. The net was operated about 20 km off the coast at a depth of about 70 metres. The species is relatively rare in tropical waters and the present report is the first record from the Indian Coast. The fish specimen is deposited in the museum of the Vizhinjam Research Centre of Central Marine Fisheries Research Institute, Vizhinjam.

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Diagnostic characters: First dorsal fin with 10 spines; space between first dorsal fin groove and second dorsal fin approximately equal to length of groove; distance from the end of first dorsal fin to the origin of second dorsal fin clearly greater than the dorsal fin base; anal fin origin below the 4th ray of second dorsal; anal fin spine independent from anal fin.

adipose eyelid; teeth in upper and lower jaws small and conical, teeth also present on vomer and palatine bones; gill rakers shorter than gill filaments; two widely separated dorsal fins; entire body covered with small scales, scales behind the head and around pectoral fins larger and more conspicuous than those covering the rest of the body, but no well-defined corselet; two small keels on each side of the caudal peduncle, but no central keel between them (Fig. 1).

The relevant morphometric measurements in millimetres and meristic counts are as follows: fork length 314, standard length 306, head length 89, eye diameter 22, length of maxilla 37,



FIG. 1. Spotted Chub mackerel *Scomber australasicus* caught off Vizhinjam, southwest coast of India.

Colour: Dorsal side steel blue with oblique lines which zigzag and undulate; belly pearly white marked with numerous dusky, rounded blotches.

Description: The total length of the fish was 348 mm and it weighed 447 gm. Body elongate and rounded, snout pointed; anterior and posterior margins of eyes covered by an

preorbital length 28, postorbital length 39, predorsal length to first dorsal base 110, dorsal fin base 40, distance between the end of first dorsal to the beginning of second dorsal 56, second dorsal base 31, distance to the origin of anal 206, anal base 27 (anal origin below 4th ray of second dorsal), space from the end of first dorsal groove to origin of second dorsal 46, length of first dorsal fin groove 47, pectoral

fin length 40, length of pelvic fin 37, depth of body 75, number of detached finlets 10, first dorsal fin spines 10, second dorsal fin rays 11 and anal fin with one independent spine and 11 rays.

Ripe running ovaries were noticed in the fish.

Remarks: The species has close resemblance with *S. japonicus* and *S. scombrus*. In *S. japonicus*, the space between the first and second dorsal fin is less than the first dorsal fin base, anal fin origin opposite to that of

second dorsal fin. In *S. scombrus*, space between the first dorsal fin groove and second dorsal fin clearly greater (approximately 1.5 times) than length of groove; anal fin origin opposite to that of second dorsal fin.

It is distributed in Western Pacific Ocean from Australia to New Zealand, north to China and Japan and east to Hawaiian Islands and also at Socorro Island, off Mexico in the Eastern Pacific Ocean. This species constitutes important fishery in Japan, Australia and New Zealand (Collette and Nauen, 1983).

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OPISTHOMONORCHEIDES YAMAGUTINSIS SP. NOV. FROM THE INTENSTINE OF POMFRET *STROMATEUS ARGENTEUS*

ABSTRACT

A new species of the family Monorchiidae (Odhner, 1911) Nicoll, 1955; Subfamily Opisthomonorchiidae Yamaguti, 1971 and Genus *Opisthomonorcheides* Parukhin, 1966 is reported from intestine of the marine fish *Stromateus argenteus* (Bloch). The account includes the morphological description of the new species and a detailed discussion justifying its recognition as a new species.

PARUKHIN (1966) created a new genus for the trematodes collected from the fishes *Decapterus* sp. and *Selarmate* and named it *Opisthomonorcheides* with *O. decapteri* as type species. Subsequently, some species are added to this genus. A new species is reported there from the intestine of the pomfret *Stromateus argenteus* (Bloch).

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