

Body depressed and smooth. Disc broad, expanded, and about $2\frac{1}{2}$ times as broad as long. Tail slender slightly longer than disc and with indistinct transverse bands. Head distinct from disc, broader than long and with a short blunt redundant rostral lobe. Pectoral fins are not fused with the sides of the head. Anteriorly the pectoral fins are prolonged forwards in the form of horns on either side of the head. This portion of the fin is supported at the inner side by a cartilaginous extension of the pectoral girdle. Dorsal fin not developed. Mouth wide and ventral. Teeth present only on the lower jaw in the form of a single ridge in the middle. Colour of fresh specimen, brown above and whitish below. Weight of fish 9 gm. The specimen agrees in general features with the woodcut of *Ceratoptera ehrenbergii* reproduced in Day (1878).

According to Gunther (1870) the genus *Ceratoptera* includes three species *C. ehrenbergii* Muller & Henle (1841), *C. johnii* M. & H. (1841) and *C. vampyrus* Mitchell (1823). Of these *C. johnii* is considered a synonym of *C. vampyrus* by Gunther. Day (1878) recorded *C. ehrenbergii* in India based on a diagram 'amongst Sir Walter Elliot's figures of Madras fish'. Bigelow and Schroeder (1953) strongly discredit the genus *Ceratoptera* itself. They consider *C. vampyrus* and *C. johnii* as synonyms and *C. ehrenbergii* M. & H. a doubtful synonym of *Manta birostris* (Donndorff). *C. ehrenbergii* of Day is considered a monstrosity of *Gymnura poecilura* (Shaw). According to them 'this was a monstrosity of the same sort that has been reported for various skates and rays in which the anterior parts of the pectorals fail to unite with the sides of the head, hence have the form of narrow secondary lobes directed forward'. The present specimen is of particular interest in view of the nebulous position of the genus.

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A NOTE ON A JUVENILE SPECIMEN OF *ARGYROPS SPINIFER* (FORSKÅL)

A juvenile specimen of *Argyrops spinifer* (Forskål) measuring 62 mm. in standard length was obtained from the trawl catches from Gulf of Mannar off Mandapam on 2-3-1964, showing some differences in the dorsal spines from the hitherto described juvenile specimens of the species. Hence a brief description of the same is given here.

From the detailed measurements of the juvenile specimen given in the Table and from Fig. 1C it is clear that the third to 8th dorsal spines are considerably pro-

longed reaching much beyond the tip of caudal. The first and the second spines are short as in the adult and there is not much difference in the lengths of spines from 9th to 12th. Head is about 2.7 in standard length and 3.5 in total length. Maximum depth is at the origin of first dorsal which is about 1.7 in standard length and little more than 2.2 in total length. Eye diameter is about 2.5 in head length.

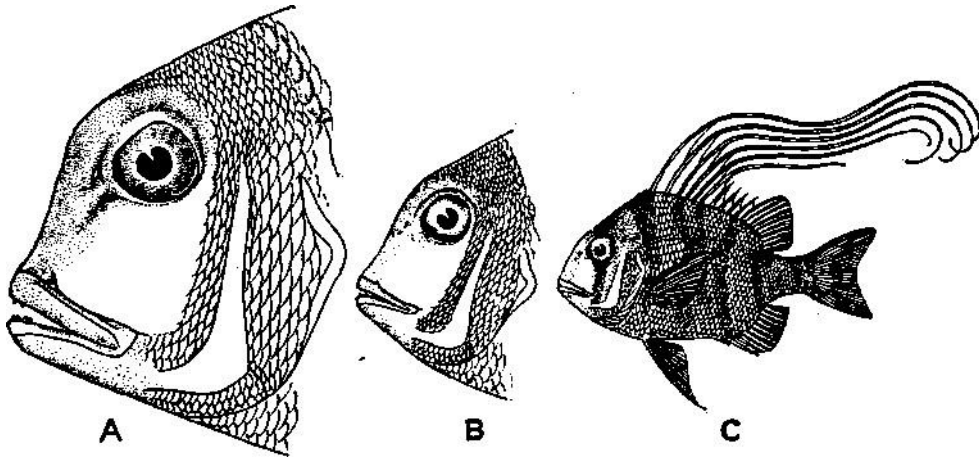


FIG. 1. *Argyrops spinifer* (Forsk.) A. Head of adult (296 mm. Fork length) B. Head of adult (156 mm. Fork length); C. Juvenile (77 mm. Fork length)

Measurements and counts of *Argyrops spinifer* (Forsk.)

Total length	81 mm	Length of 3rd dorsal spine	107 mm
Standard length	62 mm	>> 4th	81 mm*
Head length	23	>> 5th	98 "
Snout	9	a 6th	91 "
Eye diameter	9	7th	70 "
Max. Depth	36	>>> 8th	40 "
Snout to Dorsal	31	3/ 9th	9 "
Snout to Anal	45	PI	1,13
Pectoral length	26	LL	53
Dorsal	12 : 10	LTR	7-1-17
Anal	3 : 8		

•Broken

Dorsal spines of *Argyrops spinifer* (Forsk.) are found elongated especially in young ones and the length of the spines becomes reduced as they grow. According to Day (1878) the filamentous prolongation of the dorsal spines reaches upto the base of the caudal in two young specimens of about 3 " in length. According to Munro (1955) and Smith (1949) the third to seventh spines are elongated, and the first two spines are very short. Weber and de Beaufort (1936) have described the dorsal spines as flexible, laterally flattened and the second to fifth prolonged into long filaments.

The juvenile specimen was compared with four other larger ones measuring 296, 206, 176, and 156 mm. (fork length) respectively in the reference collection of the Central Marine Fisheries Research Institute.

While comparing the juvenile specimen with the larger ones it was also noticed that the more or less well developed protruberance before the anterior superior angle of the eyes (Fig. 1A & B) are less prominent in smaller specimens. Due to the presence of the above in the larger specimens the dorsal profile of the snout is slightly concave.

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ON A CASE OF REVERSAL IN *CYNOGLOSSUS SEMIFASCIATUS* DAY

Reversal of form or the occurrence of individuals with the eyes and colour on the side which is usually without the eyes and pigment is not uncommon in certain flat fishes, as for example in species of *Pleuronectes*, *Platichthys* and *Hippoglossus* (Norman, 1934). No such instances of reversal seem to have been recorded for any of the Indian species of flatfishes other than *Cynoglossus semifasciatus* (Seshappa and Bhimachar, 1955, p. 222) so far though a case of ambicoloration has been reported in *Brachirus pan* (Hamilton), the pan-sole (Jones & Menon, 1950). It is interesting to report therefore a second case of a reversed specimen of the Malabar sole, *Cynoglossus semifasciatus* from the Indian coast. The specimen (Fig. 1) was caught at West Hill, Calicut on 22nd December 1962 in the departmental boatseine in the inshore waters. This is the only other specimen of this type noticed by the author so far though he has examined several thousands of individuals of the species from 1949 to 1953 and again from 1959 onwards. The occurrence of reversal thus appears to be a very rare phenomenon in the species. The eyes and pigment are here found on the right side instead of the usual left side. The mouth, opercular opening and the anal fin are also found on the right side. This is thus a case not just of an incomplete migration of the eyes during metamorphosis but of a complete bilateral reversal in the arrangement of the parts of the body. Owing to a slight damage to the caudal fin the complete