

ON AN ABNORMAL RAY FROM VIZHINGAM

Various degrees of arrested development or monstrosities have been recorded in skates and rays resulting in the establishment of new genera and species. Most common forms of deviation are found in the separation of pectoral fins from the head and in the consequent lateral shifting of eyes and spiracles. Gill (1895) considered the freak species as different phases of monstrosity or arrest of development, viz., *Cephaloetherus* phase and *Propterygia* phase. Luther (1962) while discussing the abnormalities in *Rhynchobatus djiddensis* observed that these teratological conditions could be due to certain structures having considerably lagged behind in the course of development.

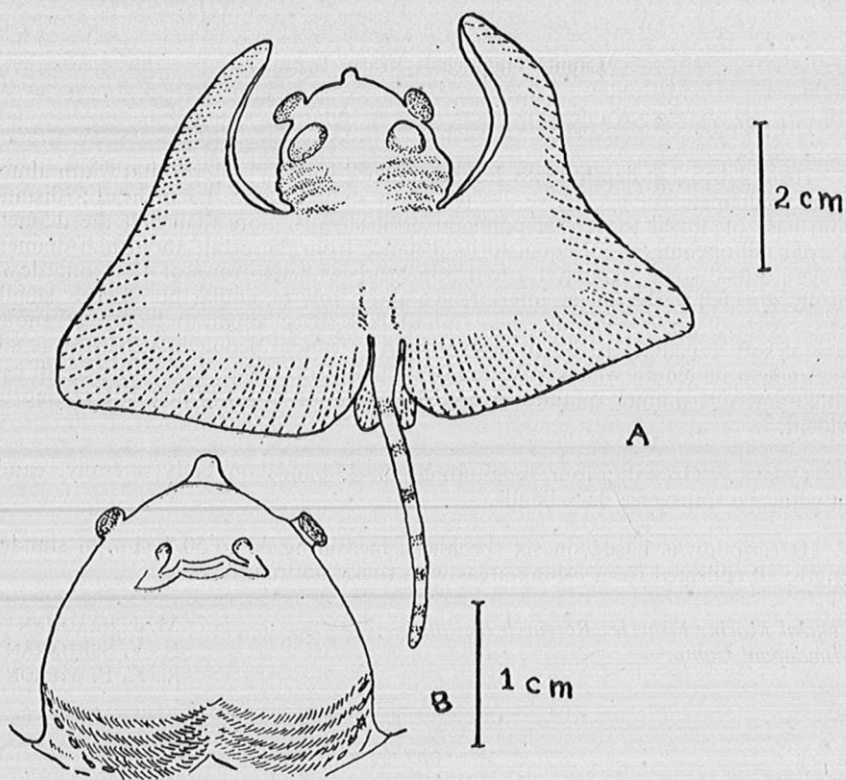


FIG. 1. An abnormal ray from Vizhingam.
A. dorsal view, B. ventral view of head enlarged.

In January 1962 along with other fish specimens a small ray was obtained from Vizhingam fish landing centre near Trivandrum. It distinctly differed from that of any other ray being landed at Vizhingam. The specimen has the following dimensions.

Disc length 37 mm.; disc breadth 89 mm.; tail length 46 mm.; head length 17 mm.; head breadth 25 mm.; rostral lobe length 2 mm.; ventral fin length 7 mm.; 'Cephalic' horn length 23 mm.

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.

Central Marine Fisheries Research Institute,
Mandapam Camp.

P. SAM BENNET

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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-