

**A NOTE ON THE MORPHOLOGICAL IRREGULARITIES IN THE  
INDIAN OIL-SARDINE, *SARDINELLA LONGICEPS* VAL.**

INSTANCES of gonadal abnormalities met with in the Indian oil-sardine, *Sardinella longiceps* Val., have been recently recorded by Bensam (1964) and Dhulkhed (1965). The present note deals with certain morphological abnormalities observed in the oil-sardine during the course of biological studies. The irregularities noticed are

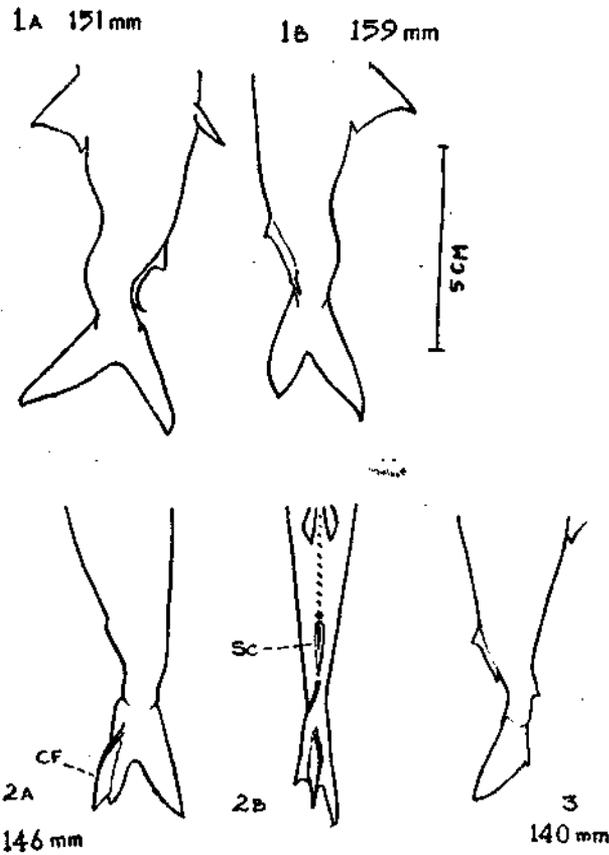


FIG. 2A. CF—Caudal flap.

FIG. 2B. Sc—Scar on the anal region.

(1) curvature in the region of the caudal peduncle, (2) absence of the anal fin, (3) and the absence of the upper caudal lobe.

A deep sigmoid-shaped curvature, from midway between the dorsal and anal fins, reaching upto the caudal base is noticed in two specimens. Both of them are male specimens and in the maturity stage-VIb, and measured 151 mm. and 159 mm. respectively (Figs. 1A and B). The curvature may probably be due to the flexion of the vertebral column. Complete absence of the anal fin and the presence of the flap-like structure on the lower caudal lobe are also recorded from a male specimen in stage-VIb, with a total length of 146 mm. (Figs. 2A and B). In the place of the anal fin a clear, long and deep depression extending from the cloacal aperture to the base of the caudal fin is noticed. The flap-like structure in the caudal lobe appears to be more or less a rigid one. Absence of the upper caudal lobe is noticed in a spent and recovering female with 140 mm. in total length (Fig. 3). A small stump-like vestige is noticed on the dorsal region slightly anterior to the caudal base. No trace of the rays of the upper caudal lobe is seen in the upper region of the caudal lobe.

TABLE

*Details of the morphometric and biological data of the irregular specimens of oil-sardines*

Characters	Fish number and date of capture		
	*1 A. 31-8-65	2. 28-10-65	3. 18-12-65
Total length .. .. .	151 mm.	146 mm.	140 mm.
Head length .. .. .	42 "	40.5 "	39 "
Max. depth of the body .. .. .	30.5 "	40.0 "	30 "
Length, Snout to base of Pectoral .. .. .	38.5 "	39 "	37 "
" " Pelvic .. .. .	70 "	70 "	67 "
" " Dorsal .. .. .	62 "	59 "	52 "
" " Anal .. .. .	103 "	99 "	92 "
Width through caudal base .. .. .	11 "	9.5 "	6.5 "
Weight .. .. .	32.5 gms.	29 gms.	25 gms.
Sex .. .. .	Male	Male	Female
Stage of maturity .. .. .	VIb	VIb	Spent and recovering.

\*Fish no. 1B, is also of the same abnormality and hence total length, 159 mm. and weight 34 gms. are only taken for the same.

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*Central Marine Fisheries Research Institute,  
Mandapam Camp.*

S. VENUGOPALA PILLAI

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DHULKHED, M. H. 1965. *Ibid.*, 7(1) : 210-212.