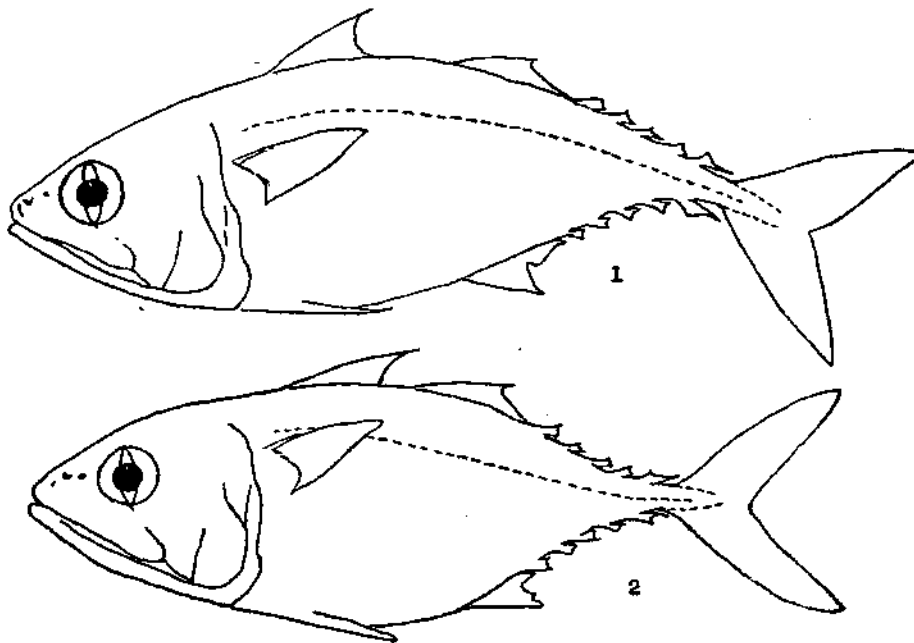


NOTES

A NOTE ON THE OCCURRENCE OF ABNORMAL SPECIMENS OF MACKEREL, *RASTRELLIGER KANAGURTA* (C.) ON THE KARWAR COAST

It is believed that the mackerel fishery along the west coast of India is based on only one species, namely, *Rastrelliger kanagurta* (C.). Pradhan (1956) examined a large number of mackerel from the Canara coast for morphological variations, various body proportions, fin counts, gill rakers and vertebral count and found that they conformed to the description of *Rastrelliger kanagurta* (Beaufort 1951). Abnormalities in the mackerel have been observed by Jones and Silas (1962).



Abnormal mackerel. FIG. 1. 189 mm, FIG. 2. 177 mm.

During the course of our studies on the Indian mackerel on the Canara coast, we came across two abnormal specimens of *Rastrelliger kanagurta*. These were 177 mm. and 189 mm. in total length and were collected from *Rampan* catches at Sashihittal, a fishing village near Kumta, on 1-12-1955 and 21-12-1955 respectively. As both the specimens looked considerably different from the rest of the catch, it was considered desirable to determine the different body proportions for these specimens in relation to their total length and compare it with the corresponding body proportions of the normal mackerel.

The mean values for the different body proportions in relation to total length for the 40 normal specimens with the values of standard deviation and the corresponding values for the abnormal specimens are presented below :

Body measurement/TL	Normal specimens		Abnormal specimens	
	Mean value	S.D.	I*	II*
Standard length ..	0.8224	0.0192	0.7627	0.8042
Head length ..	0.2498	0.0137	0.2711	0.2645
Length upto anus ..	0.5530	0.0209	0.5310	0.5343
Body length ..	0.5717	0.0146	0.4915	0.5396
Max. body depth along the pectoral fin ..	0.2390	0.0152	0.2881	0.2851
Max. body depth along the anal fin ..	0.2204	0.0917	0.2881	0.2698
Depth of caudal peduncle ..	0.0376	0.0039	0.0395	0.0423
Diameter of eye ..	0.0571	0.0059	0.0677	0.0634
Interorbital space ..	0.0997	0.0028	0.1186	0.1117

Note : TL=Total length, S.D.=Standard deviation.

I* = Specimen collected on 1-12-55.

II* = Specimen collected on 21-12-55.

Specimen I

D1 x, D2 11+5

A 11+5

C 26

V 1.5

P 2.16

Gill rakers (on the left lower branch of the first arch) 39.

Specimen II

D1 x, D2 11+5

A 11+5

C 26

V 1.5

P 2.17

Gill rakers (on the left lower branch of the first arch) 38.

A closer examination of the above data shows appreciable variation in the body proportions, namely, body length/TL, maximum body depth along the pectoral fin/TL and maximum body depth along the anal fin/TL. Minor differences in the first specimen were noticed in the standard length/TL, and interorbital space/TL and in the second specimen depth of caudal peduncle/TL in addition to those mentioned above. As regards the other morphological characters, namely, the number of different fin rays, gill rakers, no significant variations were noticed.

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