

PRELIMINARY NOTE ON THE BIOCHEMICAL COMPOSITION OF
MEAT OF DAI (*CHIROCENTRUS SPP*) AND KATI
(*OPISTHOPTERUS SPP*)

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ABSTRACT

Studies were taken up on biochemical composition of *Chirocentrus dorab* and *Opisthopterus sp.* The seasonal changes, yield of mince and energy value of the meat were also reported.

Dai, (Silver bar — *Chirocentrus dorab*) forms, one of the major fishery of Gujarat Coast with a total landing of 3,307 tonnes (Table 1). Kati (Rajor edge — *Opisthopterus tardoorse*) forms 3% of the catch. At present Dai and Kati fetch relatively low price. Much information is not available about their biochemical composition and their seasonal fluctuations.

Fresh samples were collected from departmental fishing vessels and local fish markets. Analysis was done for 2 consecutive years in 1977 and 1978. Dai samples were in the range of 28-64 cm length and 240-1650 g wt., for Kati it was 22-39 cm and 220-430 g. respectively.

Meat was separated in Bibbun deboning machine. Moisture, protein and ash were determined by standard procedure (A.O.A.C., 1975). Total lipids by the method of Bligh & Dyer, (1959). Energy values were worked out using factors of Wat and Merrill as reported by Dyer *et al.*, (1977). In all 48 samples of Dai and Kati each were analysed.

Results of the analysis show average moisture content in Dai as 74.36%. Minimum value recorded in March-April is 72.28% and maximum in August-September 78.35% (Table 2). For Kati average moisture is 73.66% with minimum and maximum values as 71.09%, and 76.79%. Average lipids for Dai and Kati are 1.40 and 2.83% respectively. Lipid value for Dai is comparatively low. It is observed that lipid and moisture vary inversely. Maximum lipid noted for Dai is 2.68% in April and for Kati 3.6% in November. Average Protein value for Dai and Kati is almost similar i.e. 19.50% and 19.08%. Only slight seasonal variation was observed in protein values. Ash content is 1.93% for Dai and 1.70% for Kati. Energy value for Dai is 90 cal/100 g and for Kati 101 Cal/100 g. In Kati calori value is higher due to more lipids.

Yield of mince meat in Dai is nearly 50% while in Kati it is 43%. Yield showing slight variations due to size and season. Mince meat from Dai and Kati

Table 1. Landings of Dal & Kati during 1982-83* (in Tonnes)

	Landings in Gujarat	Total landings in India
Dai <i>Chirocentrus</i>	3,307	14,855
Other Clupeids (including Kati)	4,109	26,493

* Source : Mar. Fish. Infor. Serv. T & C. E. SER No. 52 : 1983.

Table 2. Biochemical composition of Dai & Kati (Values given are in wet weight)

Values	Moisture	Lipid	Protein	Ash	Energy (Cal/100 g)
	Dai				
Average	74.36	1.40	19.50	1.93	90
Minimum	72.28	0.64	16.93	1.70	84
Maximum	78.35	2.68	21.87	2.13	110
	Kati				
Average	76.66	2.83	19.08	1.73	101
Minimum	71.09	1.05	17.50	1.40	79.5
Maximum	76.97	3.06	20.62	1.92	111

is rich in protein and other nutrients and is appealing in colour. It is a good raw material for various products as frozen minced meat blocks, fish soup powder, edible fish powder, fish fingers, fish steaks, fish sausages and fish wafers etc.

ACKNOWLEDGEMENT

Author express sincere thanks to late Shri G. K. Kuriyan, Director, CIFT for kind permission to publish the note.

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