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ON AN UNUSUALLY HEAVY CATCH OF BLACK POMFRET, *FORMIO NIGER* BY PURSE SEINE ALONG DAKSHINA KANNADA COAST*

The Pomfrets, *Formio niger*, *Pampus argenteus* and *Pampus chinensis* called locally 'Maanji' in Kannada are exploited by purse seines, gill nets and trawl nets and together contribute 0.5-1.0% to the total marine fish production of the Dakshina Kannada district. Among these *F. niger* is the most important, forming more than 80% of the total pomfret catches. The fishing season for the species extends from September to December and February-March, the peak landings being generally in October/November. Occasional heavy landings of a single species of pomfret, particularly *F. niger* by purse seines (Fig. 1) is a common feature in this area. Such heavy catches amounting to 207 t, 161 t and 377 t were recorded at Malpe during October, 1986, September, 1987 and November, 1990 respectively and 855.5 t at Mangalore in October, 1990 (Fig. 2). In all these cases, the bumper catches were obtained only for a short period of about a week and ended abruptly as seen in November, 1990 at Malpe or sometimes continued for another week with the catches decreasing gradually as that observed at Mangalore in October, 1990.

The catch details of *F. niger* recorded in October '90 at Mangalore and in November '90 at Malpe are given in Table 1. In the first week of October '90 at Mangalore, the total estimated catch was 747.7 t with cpue at 1,271.61 kg. At Malpe, it was 372.8 t and 621.38 kg during first week of November, '90. In the second week, the catch decreased considerably to 92 t with cpue



Fig. 1. A purseseine boat showing bumper catch of *F. niger*.

TABLE 1. Catch details of *F. niger* recorded in October '90 (Mangalore) and in November '90 (Malpe)

Month	Mangalore			Malpe		
	October, '90			November, '90		
Period of occurrence	Effort	Catch (t)	cpue (kg)	Effort	Catch (t)	cpue (kg)
First week	588	747.7	1271.61	600	372.8	621.38
Next week	525	92.0	175.24	222	no catch	-
Total for the month	2358	855.5	362.83	1225	377.3	308.03

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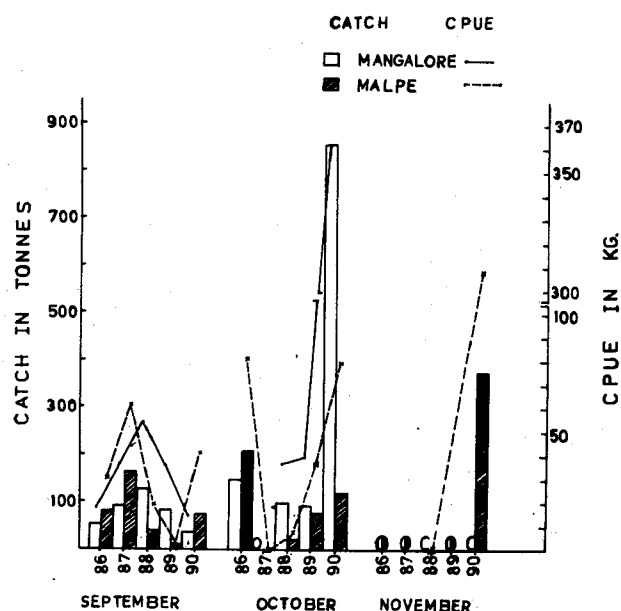


Fig. 2. *F. niger* landings during September-November (1986-1990).

at 175.24 kg at Mangalore and there was no landing recorded in November at Malpe. The quantity of pomfret catch ranged from 1.2 t to 3.5 t in each boat.

Price structure

Due to heavy landings, throughout the first week of October '90 at Mangalore, the price of *F. niger* fluctuated between Rs. 10/- and Rs. 7.5/ per kg. At Mangalore the total value of the catch in the first week was estimated to be Rs. 63.5 lakhs. Though there was a decrease in the catch during the second week, the price of fish remained as in the first week and the value realised from the landings was Rs. 7.8 lakhs. At Malpe on 7-11-1990 the auction rate varied from Rs. 14,000/- to Rs. 40,000/- per boat catch depending on the quantity. This almost comes to Rs. 15-17 per kg fish and the total estimated value realised on 7-11-1990 alone was Rs. 11.0 lakhs and the week's total was Rs. 52.2 lakhs. All the pomfret catch was transported to Kerala by trucks in fresh condition packed with ice.

Length-weight relationship of *F. niger*

The size of *F. niger* sampled on 7-11-1990 at Malpe from purse seine ranged from 270 to 480 mm. The major mode was at 360 mm which contributed to 21.6% of the pomfret catch. There were three secondary modes at 330 mm (9.8%),

390 mm (5.8%) and 420 mm (3.9%) (Fig. 3). The weight of individual fish ranged from 385 g to 1,600 g.

The average calculated weights for different length groups are given in Table 2.

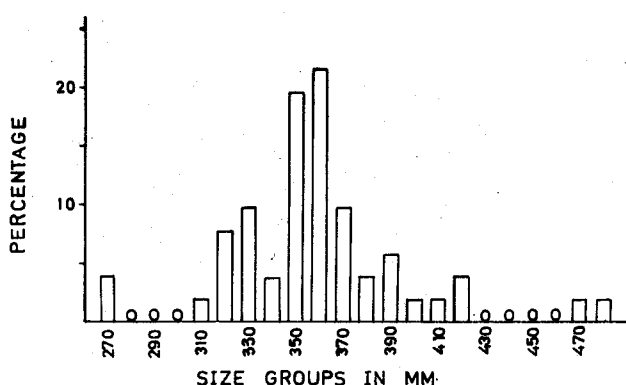


Fig. 3. Size frequency distribution of *F. niger* (Malpe).

TABLE 2. Average calculated weight for the different length group

Length group (mm)	Average weight (g)	Length group (mm)	Average weight (g)
120 - 129	46.96	310 - 319	529.00
130 - 139	57.46	320 - 329	574.10
140 - 149	69.31	330 - 339	621.49
150 - 159	82.55	340 - 349	671.22
160 - 169	97.25	350 - 359	723.34
170 - 179	113.47	360 - 369	777.89
180 - 189	131.26	370 - 379	834.90
190 - 199	150.67	380 - 389	894.43
200 - 209	171.77	390 - 399	956.50
210 - 219	194.59	400 - 409	1021.17
220 - 229	219.20	410 - 419	1088.47
230 - 239	245.64	420 - 429	1158.44
240 - 249	273.97	430 - 439	1231.11
250 - 259	304.23	440 - 449	1306.54
260 - 269	336.47	450 - 459	1384.76
270 - 279	370.73	460 - 469	1465.81
280 - 289	407.08	470 - 479	1549.72
290 - 299	445.54	480 - 489	1636.53
300 - 309	486.16		