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Note

Record size oil sardine (*Sardinella longiceps*) caught off Malpe, India

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Abstract

The report is about the largest specimen of oil sardine (*Sardinella longiceps*) ever recorded from seas around India. The fish measured 272 mm in total length and weighed 159 g.

The largest ever recorded oil sardine (*Sardinella longiceps*) from Indian waters was landed by a purseseiner at Malpe Fishing Harbour in Karnataka on 8th September 2003. The fish measured 272 mm in total length and weighed 159 g in wet condition, and is the longest ever observed along Indian coast (Fig. 1). It was netted off Malpe at a depth of 30 m. The purseseine catch on that day consisted of only oil sardine and the length ranged from 120-185 mm with a mode at 145 mm. The morphometric measurements of the specimen are given in Table 1.

The maximum size of oil sardine recorded so far from seas around India is 225 mm. The fish was caught by *matubale*,

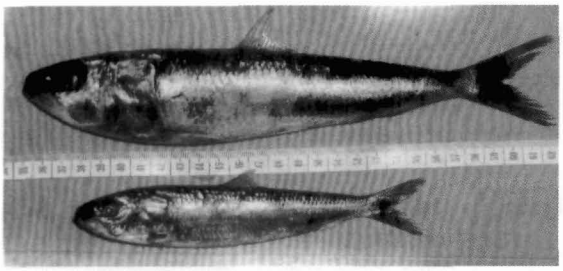

Fig. 1. *Record size oil sardine (272 mm) along with the commercial size oil sardine (173mm)*

Table 1. *Morphometry of the record size oil sardine*

Morphometric character	Measurement (mm)
Total length	272
Fork length	240
Standard length	225
Depth of body at dorsal fin origin	45.2
Depth of body at anal fin origin	29.4
Maximum body depth	47.4
Caudal peduncle depth	14.5
Head length	69.8
Snout length	20.2
Eye diameter	10.8
Inter-orbital width	15.4
Upper jaw length	27.2
Tip of snout to origin of dorsal fin	104.8
Tip of snout to origin of pectoral fin	70. 03
Tip of snout to origin of pelvic fin	124.3
Tip of snout to origin of anal fin	183.0
Distance between Pelvic fin to anal fin	56.8
Length of first dorsal fin base	28.9
Pectoral fin length	37.4
Pelvic fin length	18.8
Length of anal fin base	25.0
Sex (spent recovering stage)	Female (IIb)
Wet weight (g)	159

Table 2. *Maximum length (Total length) of oil sardine recorded along Mangalore-Malpe coast*

Total length (mm)	Gear	Centre	Month/year
225	*Matubale*	Malpe	July, 1999
215	Trawl net	Malpe	October, 2000
216	Purseseine	Mangalore	November, 2000
216	Purseseine	Mangalore	October, 2001
215	Trawl net	Malpe	May, 2002
272	Purseseine	Malpe	Present report

Table 3. *L_∞ and K values of oil sardine estimated by earlier workers*

L_∞(mm)	k/yr	Author	Study area
209.8	0.6	Antony Raja, 1972	Indian seas
207.0	0.53	Bannerji, 1973	Indian seas
197.2	1.01	Kurup *et al.*, 1987	West coast of India
221.1	0.75	Annigeri *et al.*, 1992	West coast of India
200.0	2.10	Yohannan *et al.*, 1998	West coast of India
204.0	1.6	Ganga, 2000	Karwar, west coast of India
228.0	0.9	Rohit and Uma, 2003	Mangalore-Malpe, West coast of India

an indigenous gear operated during the monsoon months along Karnataka coast. The largest size of oil sardine landed so far by different gears at Malpe and Mangalore is given in Table 2.

The maximum length of oil sardine reported by Fishbase 1999 (http/www/fishbase.org) is 23 cm (standard length). FAO species Identification Sheets for Fishery Purposes, Western Indian Ocean, Fishing Area 51, 1984 has reported that oil sardine attains a maximum body length of 20 cm (possibily 23 cm) in standard length.

The growth parameters (L_∞ and K) oil sardine estimated by different workers along Indian coasts are given in Table 3.

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