

Unusual occurrence of large size oilsardine (*Sardinella longiceps*) at Karwar, Uttar Kannada coast of Karnataka

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The oilsardine, *Sardinella longiceps* (Valenciennes, 1847), is a major pelagic fishery resource of Malabar and Konkan coast. At Karwar, the fishing season for oilsardine is from August-May and the peak season is from October to March. During the current year, after the ban period, the oilsardine

fishery by the purseseine boats started from the first of August, 2011.

In the second week of October, on 17th, it was observed that among the oilsardines landed by purseseiners, about 5-6% of fishes were unusually long, including a longest ever observed large sized

oilsardine in the landings (Fig. 1). On 20th October 2011, there were reports in the local daily news papers that large sized oilsardines were caught in purseseines near Karwar coast. The local media persons also gave wide publicity to this. On 20th October 2011, the fishermen of Karwar observed about 3-4% of fishes of unusually long sizes in their purseseine catches. The trend continued till the end of the month.

These specimens were collected off Karwar at a depth of about 30 m. The purseseine catch on that day consisted of oilsardine along with rays, flatfishes and carangids. Samples of oilsardine were brought to the laboratory of CMFRI, for further investigations. The longest specimen was a male adult in spent stage, which measured 240 mm in total length and weighed 127g in wet condition. The morphometric measurements of the specimen were recorded (Table 1) and gut content was analysed. The gut content mainly comprised of phyto and zooplankton.

Table 1. Morphometry of the large sized oilsardine landed at Karwar

Morphometric parameter	Measurement (mm)
Total length	240
Fork length	212
Standard length	230
Depth of body at dorsal fin origin	45
Depth of body at anal fin origin	30.5
Maximum body depth	46.2
Caudal peduncle depth	13
Head length	62.6
Snout length	17
Eye diameter	11
Inter-orbital width	16.2
Upper jaw length	18
Tip of snout to origin of dorsal fin	92.1
Tip of snout to origin of pectoral fin	60.1
Tip of snout to origin of pelvic fin	110.2
Tip of snout to origin of anal fin	114
Distance between pelvic fin to anal fin	26.0
Length of first dorsal fin base	26.0
Pectoral fin length	29.0
Pelvic fin length	16.0
Length of anal fin base	24.0



Fig. 1. The unusually large size oil sardine (*Sardinella longiceps*) landed at Karwar

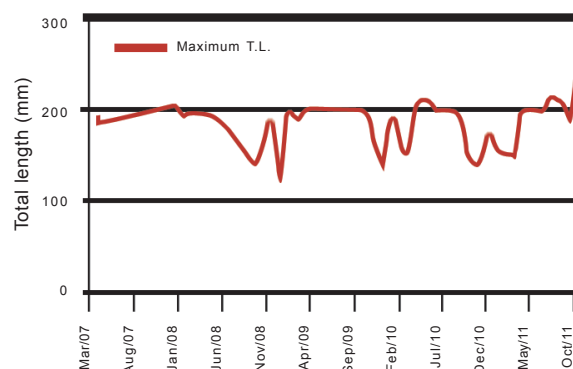


Fig. 2. Maximum lengths (total length) of oilsardine recorded in Karwar Landing Centre during 2007-2011

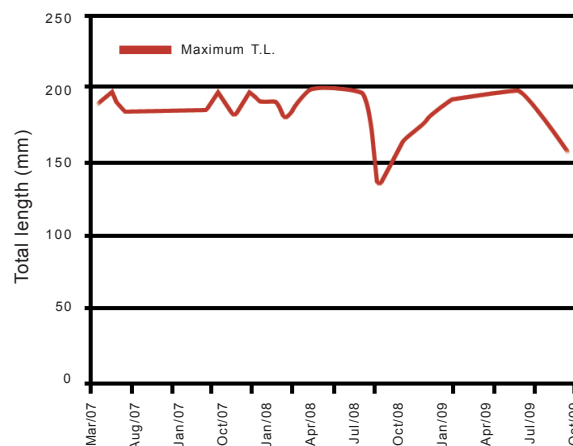


Fig. 3. Maximum lengths (total length) of oilsardine recorded in Tadri Landing Centre during 2007-2009

The maximum size of oilsardine recorded from seas around India is 272 mm (Prathibha Rohit, 2003). The largest ever recorded oilsardine (*Sardinella longiceps*) from Indian waters was landed by a purseseiner at Malpe Fishing Harbour in Karnataka. The length of oilsardine reported in 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 oilsardine attains a maximum body length of 20 cm (possibly 23 cm).

From the past five year's observations, during March 2007-2011, it was found that the size range for this species was 75 to 211 mm from Uttar Kannada coast (Fig. 2 and 3). The specimen recorded in the present report is the largest specimen of oilsardine (*Sardinella longiceps*) ever recorded from Uttar Kannada coast.