

A report on the largest sized Indian mackerel on record



The Indian Mackerel, *Rastrelliger kanagurta*, is a prominent pelagic species with a geographical distribution spanning the entire Indian coast, and caught in diverse fishing gears. The size range caught by the commercial fishery operations typically ranges from 14 to 30 cm. Exceptionally larger sized mackerels have been documented during the routine surveillance of fisheries resources as sourced from reports in eprints@cmfri.org.in (Dhulkhed & Annigeri, 1983; Kakati & Gowda, 1999). On 28th August 2023, a remarkably large sized Indian mackerel was captured in the large meshed gillnet (known as "Beedu bale") operated from an outboard motorised (OBM) fiber boat, at a depth of 45 meters off the coast of Karwar, Karnataka by Shri. Anandu Rama Harikantra. The gear mainly targets capture of the seer fishes (*Scomberomorus* spp.) in the vicinity of the Karwar coast. The mackerel, upon

capture, measured an impressive 48 cm in Total Length (TL) and weighed 1.23 kg. Through canulation procedure it was determined as female in spent stage of gonad development. The present specimen thus appears to be the largest mackerel ever captured from Indian waters. Following freezing and a week of preservation in 5% formalin, the specimen's total length reduced to 45 cm and is preserved in the museum at the Karwar Regional Station of the ICAR-CMFRI.

Morphometric measurements of the specimen and their percentage against the standard length were as follows: Total length (TL) 48 cm; Fork length (FL) 44.6 cm; Standard length (SL) 40 cm; Head length 11.8 cm (29.6%); Snout 2.2 cm (5.6%); Eye diameter (Same along both axes) 1.9 cm (4.7%); Eye (middle dark portion) 1 cm (2.5%); Maxillary length 6.7 cm (16.7%); Mandibular length

8.8 cm (22 %); Width of gill opening 8.9 cm (22.3%); Snout to insertion of dorsal fin 14.8 cm (37.1%); Length of first dorsal fin base 8.1 cm (20.4%); Length of second dorsal fin base 5.6 cm (14%); Snout to insertion of pectoral fin 11.7 cm (29.3%); Length of pectoral fin 5.9 cm (14.8%); Snout to insertion of pelvic fin 14 cm (34.9%); Length of pelvic fin 5 cm (12.6%); Snout to insertion of anal fin 26.8 cm (67%); Length of anal fin base 5 cm (12.6%); Length of caudal fin base 1.9 cm (4.7%); Snout to vent 25.7 cm (64.2%); Snout to insertion of lateral line 11.7 cm (29.3%); Gape 3.3 cm (8.4%); Depth of body in line with eye 6 cm (15.1%); Depth of body at first dorsal fin insertion 11.7 cm (29.3%); Depth of body at second dorsal fin insertion 10.9 cm (27.3%); Depth of body at pectoral fin insertion 10.8 cm (27.1%); Depth of body at pelvic fin insertion 11.4 cm (28.5%); Depth of body at anal fin insertion 10.9 cm (27.3%); Depth of body at mid-length 12.5 cm (31.3%); Depth of body at caudal fin insertion 1.7 cm (4.2%); Inter-orbital distance 4.1 cm (10.3%); Distance between eyes 4.5 cm (11.2%); Breadth of body at first dorsal fin insertion 7.5 cm (18.7%); Breadth of body at second dorsal fin insertion 6.3 cm (15.6%); Breadth of body at mid-length 7.1 cm (17.9%).

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Table 1. Large-sized mackerel *Rastrelliger kanagurta* reported so far in India.

Date	Locale	Depth (m)	Gear/Boat	Length (cm)	Sex	Weight (g)
15-01-1976	Off Siridao, Goa	30	Purse-seine	34.8	Unsexed	520
14-04-1982	off Karwar	12	Purse-seine	36	Male	560
11-09-1984	Off Karwar	30	Purse-seine	36.6	Unsexed	592
17-08-1999	Off Karwar	70	Purse-seine	34.7	Female	524
19-08-1999	Off Karwar	70	Purse-seine	42.1	Female	859
28-08-2023	Off Karwar	45	Large-mesh Gillnet	48	Female	1230