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## **CENTRAL MARINE FISHERIES RESEARCH INSTITUTE**

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## An account on the smallest whale shark, *Rhincodon typus* (Smith, 1828) landed at Calicut

Instances of whale shark being caught in shallow waters along the Indian coast and subsequently brought ashore are not uncommon. They were considered to be commercially unimportant until 1980's. Whale shark landings in India were mainly due to incidental catches and mostly discarded. Along the Saurashtra coast in Gujarat, there is a regular fishery of whale sharks between February-May with the peak in March-April. Although there are many records of whale shark landings from different parts of Indian waters, records of catches of embryo are scanty.

In the present observation a male whale shark embryo with yolk sac was accidentally caught in a gillnet, 5 km away from the shore at a depth of 20 meters and brought to the shore at Vellayil in Calicut on 15.11.2001. The specimen measured 94 cm in length and weighed 3.8 kg. The embryo was bluish grey in colour dorsally and whitish ventrally with characteristic white spots. A narrow furrow connecting the nostril to the mouth was present, the nasal flaps were well developed and extended in a cresentic fold from the nostril to under the rim of the tip. Three distinct longitudinal lateral ridges of body keels were present on either side of the body. A dorsolateral keel commencing above the second dorsal and a median keel commencing anterior to the first dorsal extended to the region of the tail. The lowest keel was the strongest and most pronounced. The embryo bore the yolk sac which was pale reddish in colour and weighed 300 g. The specimen is preserved in the museum of the Calicut Research Centre of the Central Marine Fisheries Research Institute, Calicut for future reference. The morphometric measurement of the embryo is given in Table-1.

Whale sharks have internal fertilization and deliver young ones. They are known to mature at 8-9 m length when they are 30 years of age. Whale sharks are kept well in captivity in oceanariums and aquariums in Japan. At present it is not known where exactly whale sharks breed in Indian seas. Only pregnant whale sharks have been recorded. This is an indication of their possible breeding grounds in the Indian coastal waters and breeding season is likely to be towards the last quarter of the year. This claim is supported by the landing of two more juveniles of 2.5 and 2.8m respectively on 2-2-2002 and 11-2-2002 at Calicut in the ring seine. Earlier landing of juveniles of whale shark were also during December-March period. Further studies are needed for determining the breeding season and breeding grounds of whale sharks in Indian waters.

Table-1 Morphometric measurements (cm) of whale shark landed at Calicut

Total length	-	94
Fork length	-	84

2	Pectoral length
9	Pectoral base

First dorsal length

First dorsal base

Width of mouth

CMFRI, Calicut.

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Total weight

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19

10

8

10

3.8 Kg

Pre branchial length	-	14	Second dorsal length	-	4
Pre spiracular length	-	12	Second dorsal base	-	3
Pre orbital length	-	8	Dorsal caudal margin	-	22
Pre pectoral length	-	21	Ventral length	_	6
Pre pelvic length	-	44	Ventral width	_	4
Snout vent length	-	51	Ventral caudal margin	_	8
Pre anal length	-	57	0		4
Inter dorsal space	-	23	Anal Length	-	2.5
			Anal width	-	2.5

57

26

1 1

12

16

9

12

38

Pre caudal length

Head length

Pre first dorsal length

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Dorsal caudal space

Pectoral pelvic space

Pelvic anal space

Anal caudal length

Vent caudal length

Pre second dorsal length