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ON THE EGG-CASES OF ZEBRA SHARK (STEGOSTOMA FACIATUM) CAUGHT OFF TUTICORIN, GULF OF MANNAR*

Landings of zebra shark Stegostoma faciatum (Hermann), are not uncommon along the Indian coast. Occasionally they form one of the constituents of the elasmobranch catch exploited by hooks and line. On 22-8-91 two female zebra sharks measuring 157 and 165 cm in total length and weighing 30 and 34.5 kg respectively were landed at Tuticorin North landing centre which were caught from a depth of 40-50 m by hooksand-line operated from Tuticorin type of mechanised boat. They were sold for Rs.170. When the sharks were cut open for salting, six eggcases (capsules) were noticed in the larger shark (Fig. 1). Morphometric measurements of the egg cases are given in Table 1.



Fig 1. An egg case of zebra shark Stegostoma faciatum.

The tough, keratinous egg cases were more or less rectangular in shape, strongly convex on both the broader sides, and dull green in colour, having darker and thicker edges and angles. Thick coating of a white fatty material was noticed near marginal edges. Membrane was thick, coated externally with dull coloured longitudinal streaks. One longitudinal side of the egg-case possessed bunches of soft, long and delicate silky filaments which were not densely packed all along. The fibres along its upper free border were much more elongated than others and formed the anchoring cord.

All the egg-cases were obtained intact. The length of capsules ranged between 194 and 210 mm and the weight varied from 185 to 320 g. Contents of the egg cases varied between 100 and 160 g in weight and 90 ml and 110 in volume.

The content of the egg-cases was a viscous fluid of dull white colour with pale green tinge, and a semi-solid substance of pale green colour and gelatinous nature. When the content was mixed with water it turned into white like lime. Major portion was composed of fatty material. Volume of the fluid was more than the semisolid content in all egg capsules.

Table 1. Morphometric measurements and other details of egg-cases of zebra shark Stegostoma faciatum from Tutloorin waters

Particulars	Egg cases					
	1	2	3	4	5	6
Total length (mm)	195	195	195	198	210	194
Width at anterior, posterior and middle regions (mm)	65,23,110	68,25,111	64,23,109	70,27,115	73,30,120	66,23,110
Maximum thickness (mm)	53	52	52.5	55	60	52.5
Width of the cell membrane at the origin (mm)	180	183	185	190	205	182
Width of the cell membrane at the middle (mm)	160	158	155	160	172	158
Length of the anchoring core (mm)	400	410	405	412	417	405
Total weight (g)	185	260	270	320	275	290
Empty capsule weight (g)	85	120	135	160	155	155
Weight of contents in each egg capsule (g)	100	140	135	160	120	135
Volume of contents in each egg capsule (m	I) 93	110	107	107.5	100	90
Volume of semisolid matter in each egg capsule (ml)	38	52.5	44	35	42	13
Volume of fluid in each egg capsule (ml)	55	57.5	63	72.5	58	77

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