

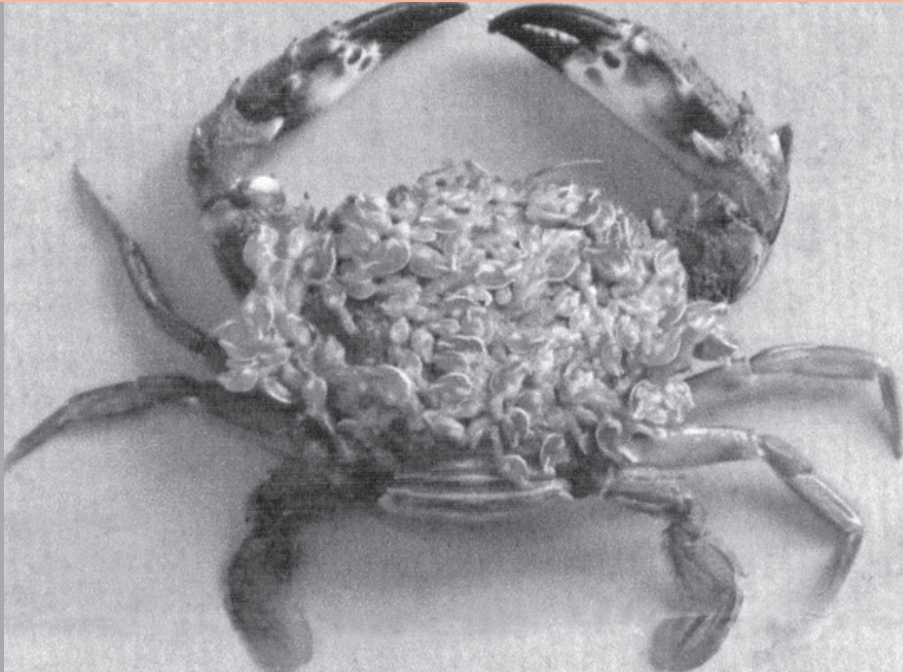
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**Observations on a shoal of the Javanese Cownose Ray  
*Rhinoptera javanica* landed at New Ferry Wharf, Mumbai**

Landing of shoals of Javanese Cownose Ray *Rhinoptera javanica* are not observed normally. Shoals of these fishes are generally not sighted and captured although fishermen report that shoals are at times seen as 'dark clouds' at midwater level. On 9-12-05 a shoal consisting of 28 specimens was caught by a single trawler based at New Ferry Wharf which is very rare and probably the first record

from this region. Similar shoals were reported earlier on two occasions from the Gulf of Mannar.

The size range of the fishes in the shoal ranged from 98 to 99 cm in disc width for males and between 100 and 104 cm for females. This catch is very significant since all the females caught were pregnant with fully-grown embryos without yolk and the males were all

mature with calcified claspers.

Examination of stomach contents revealed only light green fluid, small broken bits of shells of bivalves, mud and digested matter. Fifty percent of the specimens examined were with empty guts. These species are generally gregarious going about in shoals of great numbers.

The females which were pregnant had one embryo each. Generally these fishes eject out embryo on capture which was not the case in the present catch but the tail portion of all the embryos were protruding out. The colour of the embryo was dark brownish black. There were hardly any difference in the relative body proportion of adults and the embryo except in the width of the interorbital space and length of the tail. The interorbital space is smaller and tail appears much longer in the embryos. The size of the embryo ranged between 40.2 to 48 cm in disc width and the weight ranged

from 1.350 kg to 1.900 kg. The males were all in mature condition with their calcified clasper lengths ranging from 145-150 mm. The male to female sex ratio was 1:3. This shoal may not be a feeding shoal but they may be breeding population entering coastal waters as the shoal consisted of large fish of almost the same size range with the females having completely grown embryos.

The total weight of the shoal was 425 Kg and the catch fetched a price of Rs. 400/piece. The embryo also fetched a good price at Rs. 60/piece. The entire catch was sold in the local market. Occurrence and capture of such shoals are interesting as they throw more light on the abundance, size at maturity and breeding season.

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