



Asian Fisheries Society Indian Branch (Regd. No. 41/87-88)



9th Indian Fisheries Forum

Renaissance in Fisheries: Outlook and Strategies

19-23 December 2011, Chennai

Book of

Abstracts



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Central Marine Fisheries Research Institute

(Indian Council of Agricultural Research)

P.B. No. 1603, Ernakulam North P.O

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www.cmfri.org.in

The main fishing season is from November to June with a primary peak in May and a secondary peak in December. The size in the catch ranged from 41 to 110 mm in males and that from 41 to 125 mm in females. Females dominated in the total catch of *P. stylifera* by 50.7%. Length-weight relationship obtained for the species is:

$$\text{Male : } W \text{ (g)} = 0.0068812 L \text{ (cm)}^{2.9607} \\ (r^2 = 0.769, n = 632)$$

$$\text{Female : } W \text{ (g)} = 0.004437 L \text{ (cm)}^{3.1476} \\ (r^2 = 0.857, n = 638).$$

The growth parameters L_{∞} and K , obtained are, 113 mm and 2.4 for males and 135 mm and 2.55 for females respectively. The natural mortality based on longevity was calculated as 3.54 for males and 2.79 for females. The main spawning was observed in March (60%) and December (55%). The size at first maturity was 80.2 ± 1.4 mm and the minimum size of matured female was at 61 mm. The size fecundity relationship of female was $Y = 0.0000196 L^{4.715}$ ($r = 0.986$). The population fecundity index (PFI (10^{10})) in December was 31.43 and that in March was 25.45. The average monthly egg production was 2.69×10^{10} numbers and the average monthly recruits was 17.6×10^6 numbers.

The predictive analysis of the fishery using Thompson and Bell model shows that though the fishing mortality can be increased by 40% to reach the MSY, the yield will not be profitable at this level. To attain the maximum sustainable economic yield, the fishing pressure has to be reduced by 20% from the present level of fishing. Moreover the spawning stock biomass (SSB) at the present level is only 18% of the virgin biomass (B_v) and at the MSY level it is 12% of B_v . But at the MSE level, the SSB was 22% of the B_v . So to maintain at least 20% of the SSB in the biomass and also to obtain a profitable yield, the fishing pressure has to be reduced by 20%.

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Present status of spiral Babylon fishery along Tamil Nadu and Puducherry coast of India

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In India, the marine gastropods contribute to important fisheries, provide nutritious food and are also valuable foreign exchange earners to the country. The shell has many industrial uses and is an object in making eye catching shell articles by deft craftsmen. Men, women and children participate in fishing gastropods, which provide employment and income in coastal rural areas. *Babylonia* sp., commonly known as 'Whelk,' or 'Spiral Babylon' and 'Puramuttai chank' (dove egg shell) in local parlance and 'Baigai' in the trade sector, is a marine edible gastropod. It is widely distributed in the Indo-Pacific region. It is extensively fished from Tamil Nadu at places such as Gulf of Mannar, Poompuhar, Nagapattinam, and Chennai using whelk trap, which consists of a net bag supported with an iron frame of circular and square shape on the top. The peak fishing season is from June to October with high catch rates (150 kg/Unit). The fishery is composed mainly of one species, *Babylonia spirata*, the size range of which ranges from 15 to 50 mm and weight varies from 6 to 21 g. A study of seasonal maturity stages indicated that the animals have a primary peak breeding period during October to December and secondary peak during April-May. Growth was found to be isometric and the maximum size encountered in the fishery was 55 mm. Biochemically, the meat has more than 60% protein, 9% carbohydrates and 9.1% lipids. Live *Babylonia* is exported to Japanese, Korean, Singapore, Hong Kong, Thailand, UAE, Maldives and Chinese markets. The price at landing centers range from Rs.180-200/kg.

