

D-35: Some aspects of biology of *Scylla serrata* Forskal (Crustacea : Portunidae) from the Jaffna lagoon.

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Scylla serrata constitutes an important crab fishery in the Jaffna Lagoon. The present investigation carried out for 2 years from January 1991, elucidates some basic information on the biology of *Scylla serrata*.

Morphometrics, length-weight relationships, sex-ratio, fecundity and rate of growth were studied using weekly samples from collections made at 4 landing centres at Kakkaitivu, Araly, Columbuturai and Ariyalai by parik-koodu, sirahu-valai, drag-net, kandi, hoop net and trammel net.

Apart from the abdominal width, only the regression line describing the relationship between carapace-width and height of major chela was significantly different in male and female. The calculated carapace-width weight relationships of $W = 0.1859 CW^{2.9759}$ for male and $W = 0.1969 CW^{2.9263}$ for females indicate an almost isometric growth. The males are heavier than females for any given carapace width beyond 95 mm.

Fecundity ranged between 1.3×10^6 and 3.71×10^6 with a mean value of 2.45×10^6 .

The monthly progression of modal carapace-widths indicated an average rate of growth of 20.0 mm month⁻¹ irrespective of sex. *Scylla serrata* caught in the Jaffna lagoon ranged in carapace-width from 63 to 193 mm.