

ASPECTS OF REPRODUCTIVE BIOLOGY OF *Tilapia mariae* (BOULENGER) FROM LEKKI LAGOON, NIGERIA

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ABSTRACT

Specimens of *T. mariae* were collected from the catches of local fishermen operating on Lekki Lagoon between February and November 2000. Specimens were measured and weighed, sexes and stages of gonad development were recorded and fecundity determined by the wet weight method. Egg size was measured under a binocular microscope with the aid of a standardized calibrated ocular. Chi-square test showed that there was no significant difference between the observed and the expected female:male ratio of 1:1. The condition factor was 2.20 ± 0.17 . No sexual or seasonal variation in CF was observed. The gonadosomatic index ranged from 2.34-6.98. Absolute and relative fecundities were $2,157 \pm 522$ and 16.26 ± 4.49 eggs/g.; respectively. The Maximum egg size was 2.29 ± 0.13 mm. The observed low population of *T. mariae* in the Lagoon may be related to the low fecundity exhibited by the species.

Keyword: absolute fecundity, egg size, parental care, gonadosomatic index, relative fecundity, condition factors.