

SOME ASPECTS OF BIOLOGY OF THE SNAKEHEAD,
OPHICEPHALUS STRIATUS BLOCH IN MUTHURAJAWELA,
A PEATY SWAMP IN SRI LANKA

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Abstract

Growth, reproduction and mortality of the snakehead, *Ophicephalus striatus* Bloch, inhabiting the Muthurajawela swamp, a low pH environment in Sri Lanka, were studied using monthly samples collected by angling and indigenous fish traps. The asymptotic standard length and growth coefficient were estimated to be 49.5 cm. and 0.194 year^{-1} respectively. These figures were smaller than those estimated for this species in other regions of the country. The estimated total and natural mortality coefficients were 3.7 year^{-1} and 1.7 year^{-1} respectively. The exploitation ratio was 0.5 and indicates that this stock is exploited at the optimum level. The absolute fecundity of the fish ranging from 23.8 cm to 29.5 cm in standard length varied from 3800 to 10800 eggs. These figures are higher than those recorded for *O. striatus* in other regions of Sri Lanka. The relative fecundity ranged from 19 to 38 eggs/g of body weight. The minimum size at maturity for the females and males were 19.5 cm and 24.5 cm respectively. The sex ratio was found to be 1 female : 3.6 males.

Key Words : *Ophicephalus striatus*, growth, mortality, fecundity, exploitation ratio.

Introduction

The snakehead, *Ophicephalus striatus* is one of the most popular freshwater food fishes in Sri Lanka. In the recent past, it has been recorded in significant numbers in the fish catches of minor irrigation reservoirs in the low country (Indrasena 1965).

O. striatus is cultured in many south east Asian countries (Ling 1977) mainly due to the high demand for its palatable white flesh which is claimed to have rejuvenating properties (Wee 1982).