

**Prey size selection by Piscivorous fish  
*Ophicephalus striatus* (Bloch)**

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Determination of prey size selection by piscivorous fish is important to evaluate trophic status of aquatic ecosystems. A laboratory experiment was conducted to investigate size selection of *Oreochromis mossambicus* (Peters) by piscivorous fish *Ophicephalus striatus* (Bloch).

Five different sizes of *O. striatus* ranging from 21.0 cm to 51.0 cm total length were used in this experiment. Known numbers of *O. mossambicus* in different length classes ranging from 2.0 cm to 7.5 cm were introduced to the five glass aquaria with different sized *O. striatus*. After 96 hours, the numbers of *O. mossambicus* remaining in each length class were counted.

The proportions of *O. mossambicus* consumed from each of the length classes by the five specimens of *O. striatus* were analysed. The relationship of proportions of *O. mossambicus* (S) consumed by *O. striatus* against length of *O. mossambicus* (L) is described by the equation,  $S = 1/[1 + \exp \{0.7674 (L-1.20)\}]$ . The findings of the present study are important for planning aquaculture management because this methodology can be employed to determine the size ranges of prey organisms that could be used as live feed for aquaculture of piscivorous fish. In seasonal reservoirs, stocking sizes of fish fingerlings which are not vulnerable to predatory fish could also be determined through this procedure. Another potential importance of this study is that this analytical procedure can be used to quantify trophic relationships in aquatic ecosystems.

Keywords: Predator-prey relationships, Trophic models, Cichlidae, Ophiocephalidae