

Light intensity requirements for feeding behaviour by the brown-marbled grouper, *Epinephelus fuscoguttatus*

Abstract

In this study, we investigated the feeding behavior of the brown-marbled grouper, *Epinephelus fuscoguttatus* with light intensities ranging over eight orders of magnitude from 0 - 1000 lx to estimate the optimum light intensity for larval rearing. Artemia ingestion rates of *E. fuscoguttatus* of 36 days and 42 days old larvae were measured in feeding behavior experiments and they were significantly higher with light intensities ≥ 10 lx compared with feeding rates at ≤ 1 lx. *E. fuscoguttatus* larvae also exhibited Artemia ingestion rates in the dark or in dim lighting (0 - 1 lx) that were about 20% of the ingestion rates with ≥ 10 lx.