

Food and feeding habits of Omobranchus sp. (Blenniidae: Omobranchini) larvae in the seagrass-mangrove ecosystem of Johor Strait, Malaysia

ABSTRACT

The stomach contents of *Omobranchus* sp. (family Blenniidae) larvae were investigated in a seagrass-mangrove based ecosystem in Johor Strait, Malaysia from October 2007 to September 2008. Specimens of larval fish were collected through subsurface towing of a Bongo net from five different stations. The stomach sacs of 267 *Omobranchus* sp. larvae were separated and observed, which comprised of 24 significant food stuffs belonging to 6 main groups viz. phytoplankton (62.45%), zooplankton (18.24%), algae (5.56%), plant-like particles (5.75%), debris (4.22%) and unidentified particles (2.03%). In situ water parameters were also measured throughout the sampling cruises. There was a strong and significant positive correlation between stomach phytoplankton and salinity ($r = 0.658$, $p < 0.05$).? Canonical correlation analysis indicated a weak relationship (29.8%) between stomach contents and physico-chemical parameters. Only salinity appeared to be the controlling factor for the stomach contents of *Omobranchus* sp. larvae in the investigated area. Based on the stomach content analysis, it could be concluded that *Omobranchus* sp. were mainly herbivorous during the larval stages.

Keyword: Larvae; Mangrove-seagrass ecosystem; *Omobranchus* sp.; Stomach contents