

**Feeding habits of larval fishes of the family Gobiidae (Actinopterygii: Perciformes) in seagrass beds of Sungai Pulai estuary, Johor Strait, Malaysia.**

**ABSTRACT**

Diet composition and feeding habits of fish larvae from the family Gobiidae were investigated in seagrass beds of Sungai Pulai estuary, Johor Strait, Malaysia. Samples were collected monthly from December 2007 to May 2008. Stomach contents were analyzed in 88 larval specimens with size range between 2.0 to 4.0 mm in total length. Prey analyses of stomach contents identified 24 important items belonging to seven major diet groups: phytoplankton, zooplankton, algae, insects, plant-like matter, debris and unidentified matters. In term of percentage, dominant preys were phytoplankton (56.33%) and this was followed by plant matters (15.13), zooplankton (9.84%), algae (9.73%), debris (4.85%), decapods appendages (3.19%), unidentified matters (2.39%) and insects (1.73%). The in situ temperatures were recorded in the range of 26.92 to 30.83°C (Mean±SD, 28.60±1.38); dissolved oxygen ranged from 4.73 to 6.24mgL<sup>-1</sup> (5.56±0.53) and the salinity fluctuation was between 29.37 and 33.68 ppt (31.31±1.68). Among the series of food items, phytoplankton was the first rank by Simple Resultant Index (56.33%) and followed by plant-like matter (15.13%). The results of the study could be used to conclude that gobiid larvae are mainly herbivorous.

**Keyword:** Diet composition; Fish larvae; Seagrass bed.