

## **Food and Feeding Habits of Fishes in Brunei Bay, Malaysia**

### **ABSTRACT**

The study of the food and feeding habits of fishes is crucial in understanding their ecology. Food and feeding habits of the 30 fish species belonging to 22 families from Bukit Sari and Awat-awat of Lawas in the Bay of Brunei were studied on 11th February 2020 and 12th February 2020 respectively. Samples were collected using "Kabat" nets, casting nets, and seine nets. The dietary components of each species were studied and expressed as a percentage of numerical composition (N), percentage of weight composition (W), and percentage of frequency of occurrence (F). Diet compositions of the species were estimated using the Index of Relative Importance (%IRI) and trophic level (TROPH<sub>j</sub>). The major food and their Index of Relative Importance (%IRI) showed the highest was shrimps (64.25%) followed by crabs (11.78%), zooplankton (6.94%), fish (6.91%), algae (4.21%), plants (1.48%), mollusks (1.01%) and others below 1.0%. TROPH<sub>j</sub> value ranged from 2.0 to 4.2 and the trophic level value of 25 fish species was carnivorous, followed by 2 species (detritivorous and herbivorous) respectively, and 1 species (piscivorous). The findings of the study may offer important data for developing management plans for the region's fishing resources.