

**Food and feeding habits of *Nemipterus japonicus* and *Nemipterus peronii* from coastal water of Bintulu, Sarawak, South China Sea**

ABSTRACT

Aim: Knowing that feeding habit of fishes is important for ecosystem management and conservation purposes. In this regard, a total of 240 fish stomachs of each species of *Nemipterus japonicus* (11.9-26.0 cm in length) and *Nemipterus peronii* (11.6 -25.3 cm in length) from the coastal area of Bintulu were examined monthly for one year from April 2013 to March 2014. Methodology: Food items were analyzed using frequency of occurrence, numerical and fullness methods. Each species were grouped into three different length sized groups (large, medium and small). The degree of stomach fullness was classified into five categories (empty, one quarter full, half full, three quarter full and full). Results: *N. japonicus* was an active feeder with a higher percentage (38.03%) of full stomachs, while *N. peronii* was poor feeder with higher percentage (27.05%) of one-quarter full stomachs. Diet composition contained seven major categories that included fish, crustaceans, molluscs, echinoderms, polychaetes, nematodes and unidentified food items. Crustaceans (mainly crabs) were preferred in both the *N. japonicus* and *N. peronei* at 13.54-35.71% of occurrence and 13.07-33.56%, respectively. Food items in both the species varied with season with maximum in intermediate and minimum in wet season. Interpretation: Findings revealed that *N. japonicus* and *N. peronii* are carnivorous, and may change their feeding habits from shrimp to crabs, and then to fish as they grow.

**Keyword:** Feeding habits; *Nemipterus japonicus*; *Nemipterus peronii*; Numerical method; Stomach fullness

