

Gut content of mangrove gastropod, *Cerithidea obtusa* (Lamarck, 1822) from Kuala Selangor Nature Park, Selangor and Tanjung Piai National Park, Johor, Peninsular Malaysia

ABSTRACT

Commercially valuable gastropod *Cerithidea obtusa* is abundant in the Malaysian mangrove ecosystems, yet little research has been done on this species. The present study was conducted to examine the diet of *C. obtusa* from two sites, Kuala Selangor Nature Park, Selangor and Tanjung Piai National Park, Johor, Malacca Strait. A total of 90 individuals were randomly collected from both sites by hand and fixed in 10% buffered formalin. Data from the sample analysis revealed that the percentage frequency of occurrence (Fpi) of food items found in both sites representing six major groups, dominated by vegetal detritus (100%), leaf matter (84.34%), diatoms (71.08%), dinoflagellate (44.58%), porifera (38.55%) and foraminifera (19.28%). A total of 16 diatom genera were recorded from the gut content analysis. Percentage frequency of occurrence of diatoms (Fpi) indicated that three genera were frequently found in the guts from Kuala Selangor; *Cyclotella* (73.33%), *Navicula* (70%) and *Coscinodiscus* (40%) and in the guts from Tanjung Piai; *Cyclotella* (56.6%), *Navicula* (32.08%) and *Coscinodiscus* (26.42%). In addition, the diet of *C. obtusa* showed that this species is a non-selective bottom grazer and the composition might vary due to the different localities and environmental factors such as tidal level. Further study can be carried out to allocate the relationship between their feeding mechanism and food preferences for a better understanding of their ecological roles in the mangrove ecosystems.