

SUMMARY

1. The community structure of fish and prawns in small mangrove creeks connected to the inlet Sungai Sementa Kecil, Selangor, was studied for a period of 12 months.
2. Rainfall and hydrological conditions viz. salinity, dissolved oxygen and water temperature are described for the study period.
3. The abundance of fish and prawns species, their sex composition and food and feeding ecology are analyzed.
4. Thirty-eight species of fish and nine species of prawns were identified at three small mangrove creeks, i.e Sites I, II and III.
5. The negative *correlation* was shown between total wet weight of fish and tidal heights at Sites I, II and III. Whereas positive correlation was observed for prawn species only at Site I.
6. Analysis of the fish samples indicated that :
 - (a) Ambassidae is the numerically dominant species at Sites I, II and III. Monthly observation showed that Mugilidae and Engraulididae were also dominant at Site I. While at Sites II and III,

Engraulididae and Clupeidae were the co-dominant species.

- (b) *Ambassis gymnocephalus* stands as the dominant species at Sites I, II and III. However, *Ilisha megaloptera*, *Stolephorus tri*, *Thryssa kamalensis*, *Thryssa mystax* and *Liza melinoptera* were also represented as co-dominant species.
- (c) Species richness (D), diversity (H') and Evenness (J') between sites showed that Site III had the highest values for all the above indices. Only small differences in the evenness of species were shown between Sites I and III due to the near location of the two sites.
- (d) The monthly similarity (D) of species between Sites I and II were higher compared to between Sites I and III.

sex. The sex ratio between female and male specimens did not show any specific ratio due to the large number of undetermined sex.

9. Analysis of carapace length classes of *Penaeus merguensis* indicated that Site II had the larger size class (1.35cm to 1.50cm) compared to Sites I and III (1.05cm to 1.20cm). The larger size class of *Penaeus penicillatus* was observed at Site I (2.05cm to 2.20 cm) compared to Sites II and III (0.85cm to 1.00cm). Sites II and III showed the largest size class of *Macrobrachium* sp. (1.95cm to 2.10cm). However *Metapenaeus brevicornis* showed the same large size class for all the sites (1.05cm to 1.20cm).

10. *Ambassis gymnocephalus* feed on a variety of food with mysids as the main constituent. On the basis of diet, the species is ^azooplanktonivore. Analysis of the food variation of *Stolephorus tri* showed that *Acetes* sp. is the major diet and this species is considered a carnivore. *Liza melinoptera* is considered a detritivore with unidentified debris as the main constituent of food.