

**Reproductive cycle and size at maturity of wild mud crab, *Scylla tranquebarica*  
(Fabricus, 1798) in Marudu Bay, Sabah**

**ABSTRACT**

This study was conducted to investigate the reproductive cycle and size at maturity of wild mud crab, *Scylla tranquebarica*, in the mangrove forest of Marudu Bay. The sampling was conducted for 12-month consecutively with the assistance of local fishermen. Each sampling was carried out for 2 days, and baited crab traps were deployed in the river. During the sampling period, a total of 1459 crab specimens were caught. The different maturation stages of crab can be found throughout the year. The percentage of mature female crabs (Stage III to V) was relatively higher in February (38.5%) and May (50.5%), and lower in March (17.6%) and June (17.4%). A similar trend was observed in the male crab. Recruitment of crabs into the mangrove forest was observed after the breeding season. It was observed through histological observations that when 50% of the crabs were sexually mature, the size at maturity was in the range of 94.0 to 96.1 mm and 97.0 to 99.5 mm carapace width for female and male, respectively. This study suggests that *S. tranquebarica* breeds throughout the year and shows two peak breeding seasons and recruitment in Marudu Bay. This information can be used as baseline for mud crab fisheries management in Sabah.