The Living Fossil (Horseshoe crab)

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CHAPTER – 15

Sediment characteristics of horseshoe crabs nesting ground at Balok station, Pahang, Malaysia

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Abstract

Horseshoe crabs prefer beaches with loosely packed sediment for the nesting of their eggs. In present study, Sediment profile at the observed the nesting ground of horseshoe crabs at Balok, Pahang coast was investigated. Mean sediment size analysis (σ phi) showed that during the non-monsoon and monsoon seasons, the distribution of sediment at the nesting grounds was mostly were of median sediment (1.88±0.378σ) and finer sediment (2.249±0.114σ) at Balok station respectively. The nature of sediments were of moderately well sorted There was no significant difference in sediment size or sorting value during monsoonal cycle. The results clearly showed that the sediment nature at the Balok station is still conducive for the better nesting of horseshoe crabs.

Key Words: Horseshoe crabs; Tachyleus gigas; Carcinoscorpius rotundicauda; Nesting ground; Sediment profiling

Introduction

Like number of species, horseshoe crabs lay their eggs on beaches in the intertidal zones. They migrate from continental shelf to the shallow coastal area during full and new moon days and their spawning is well synchronized with spring tides (Penn and Brockmann, 1994). It is interesting to note that out of four extant species of horseshoe crabs Limulus polyphemus, Tachyleus gigas, T.tridentatus and Carcinoscorpius rotundicauda. later three are inhabiting Malaysian coastal waters while the distribution of T.tridentatus is restricted to East Malaysian coast (Borneo) (John et al., 2010; Kamaruzzaman et al., 2011). Considerable amount of studies