

Biodiversity and distribution of pen shells (Bivalvia: Pinnidae) from the seagrass beds of Sungai Pulai, Peninsular Malaysia

ABSTRACT

Studies on biodiversity and distribution of pen shells were conducted at Merambong Shoal (N1 19' 55.62" E103 35' 57.75"), Tanjung Adang Shoal (N1 19' 48.03" E103 33' 59.44") and Merambong Island (N1 18' 54.83" E103 36' 33.37") off South Western Johor coast, Malaysia from August 2005 to June 2006. A total of 135 individuals were collected from three different stations. *Pinna bicolor* and *Pinna atropurpurea* were dominant. Higher density of pen shells were recorded in St 1 with 0.027 ind/m and St 2 was recorded lower density with 0.004 ind/m at 22 Merambong Shoal. Univariate analysis at Merambong Shoal population recorded higher values for diversity and richness indices compared to Tanjung Adang Shoal and Merambong Island but the value of Evenness index was quite similar between the three stations. Fifty eight individuals of pen shell were collected from study areas for taxonomy identification. Seven groups of pen shell were identified based on the internal and external surface of the valves of pen shell. Seven species were clearly identified which *Pinna* and *Atrina* were dominant from the seagrass bed of Sungai Pulai, Peninsular Malaysia.

Keyword: Bivalvia; Pinnidae; Pen shells; Distribution; Diversity; Malaysia