Reproductive cycle of hard clam, Meretrix lyrata Sowerby, 1851 (Bivalvia: Veneridae) from Sarawak, Malaysia

ABSTRACT

A study of the reproductive cycle of the hard clam, Meretrix lyrata, was documented based on histological observation and Gonad Index (GI). Samples were taken from estuarine waters of the Buntal River in Sarawak, Malaysia. The gonad of M. lyrata started to develop in September 2013. Gametogenesis continued to develop until the maturation and spawning stage from February to April 2014. The GI pattern for a one-year cycle showed a significant correlation with chlorophyll a. The corresponding GI with chlorophyll a suggested that the development of the reproductive cycle of M. lyrata required a high amount of food to increase gametogenesis.

Keyword: Chlorophyll a; Gametogenesis; Gonad index; Histology; Meretrix lyrata