

**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*