

## **Condition index of *Meretrix lyrata* (Sowerby, 1851) and its relationship with water parameter in Sarawak**

### **ABSTRACT**

Condition Index (CI) was used to estimate the reproductive biology cycle of the hard clam *Meretrix lyrata* based on dry body weight and shell weight. High CI value was observed due to the increase in the body weight of the hard clam that corresponding to the maturity stage and early spawning. The CI value of *M. lyrata* from Buntal Village, Kuching, Sarawak showed three highest peaks during the 12-month study on May and October 2013 and March 2014. The lowest CI values were obtained in September and November 2013 and April 2014. Ammonia nitrogen was the only water parameter that significantly correlated to the CI values. The CI application is important to estimate the maturity of hard clam gonad to facilitate conservation activity through the hard clam harvesting out of the gonad maturation and spawning period.

**Keyword:** Ammonia; Condition Index; Gonad maturation; *Meretrix lyrata*; Sarawak