

**RELATIONSHIPS BETWEEN ORGANIC MATTER IN SEDIMENT AND ABUNDANCE, CONDITION INDEX, AND GROWTH OF COCKLE *ANADARA GRANOSA* L. IN THREE INDONESIAN ESTUARIES.**

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**ABSTRACT**

The relationship between organic matter on the sediment and growth of cockle (*Anadara granosa* L.) was studied in three estuaries and in the laboratory. Quadrats were used for sampling during three consecutive months in two estuaries of Demak and one estuary of Pati, Central Java, Indonesia. Three types of sediment from the study areas were used for growth experiments in the laboratory. The condition index was significantly correlated with the organic matter concentration. The correlation of weight increment and population size in different substrates differed significantly. Environmental parameters: temperature, salinity, pH, and dissolved oxygen displayed slight differences among areas.