

GROWTH OF A WINGED PEARL OYSTER, *PTERIA PENICILLATA* SUSPENDED AT DIFFERENT DEPTHS

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ABSTRACT

Winged pearl oyster *Ptena pengwn* suspended at 1 m (surface), 4 m (mid-depth), and 8 m (bottom) below the sea surface was studied at a site approximately 10m deep, Ko Naga Noi, Phuket. Growth of cleaned oysters (rid of fouling organisms) showed no significant difference at the three depths during a five month period. The water quality and food concentration (chlorophyll *a*) showed no marked variation among the depths. However, infestation of fouling organisms on oyster shells was much more intense at the surface than the greater depths. Mortality rates of uncleaned oysters (with fouling organisms) were 40%, 33% and 6.7% respectively at the surface, mid-depth and bottom. Growth rates of the uncleaned bivalves were higher at the bottom. This indicates that fouling organisms in competition for food with the oysters can cause deleterious impact on oyster survival and fitness, if the bivalves are reared near the surface.