

Age, growth and length-weight relationships of *Pinna bicolor* Gmelin (Bivalvia: Pinnidae) in the Seagrass Beds of Sungai Pulai Estuary, Johor, Peninsular Malaysia.

ABSTRACT

Age and growth of *Pinna bicolor* were examined in the seagrass beds of Merambong shoal (N 1°19'55.62"; E 103°35'57.75") off the south-western coast of Johor, Peninsular Malaysia between May 2006 and April 2007. Monthly growth increment data of *P. bicolor* were analyzed using FiSAT software (FAO-ICLARM Stock Assessment Tools) to estimate the asymptotic length (L_{∞}) and growth coefficient (K). Average growth rate of *P. bicolor* was 1.42 (± 0.01) cm per month; the estimated asymptotic length (L_{∞}) and growth coefficient (K) were 34.66 cm and 0.88 per year, respectively. In their natural habitat, *P. bicolor* attain shell heights of approximately 17, 25 and 30 cm at the end of their first, second and third years of growth. The length–weight relationship was estimated as $\text{Log } W = -5.397 + 3.111 \text{Log } L$, and in exponential form the equation was $W = 0.000004L^{3.111}$ ($r^2 = 0.99$, $P < 0.01$). Habitat temperature and salinity ranged between 27.47 and 29.66°C and 28.66–33.00 ppt with a mean of 29.10 (± 0.66) m°C and 30.52 (± 1.41) ppt, respectively.

Keyword: Age and growth; *Pinna bicolor*; Peninsular Malaysia.