Comparision on Culture of *Anadara granosa* (Linnaeus, 1758) and *Anadara nodifera* (Martans, 1860) in Bandon Bay, Suratthani Province

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**ABSTRACT**

Two species of blood cockle, *Anadara nodifera* (Martans, 1860) and *Anadara granosa* (Linnaeus, 1758), were reared in Bandon Bay, Suratthani Province for a year from May 2004 to May 2005. The growth of both species varied upon seasons. And *A. nodifera*’s growth was higher than *A. granosa*’s from the second month through the end. The relationship of month and growth by length of *A. nodifera* and *A. granosa* were Length=1.8430+0.4643month-0.0712month²+0.0036month³ and Length=1.8112+0.3724month-0.0623month²+0.0034month³, respectively. By length and weight relationship, both species showed allometric growth with Weight=2.2310Length 1.5031 for *A. nodifera* and Weight=2.1201Length 1.5265 for *A. granosa*. Survival rate of *A. nodifera* (56.2%) was lower than *A. granosa* (85.3%). An investment return as income gain of *A. nodifera* (6,308 ฿ per rai or 1,600 m²) was also lower than *A. granosa* (35,934 ฿ per rai) at about 5.7 time.

Water quality, as mean+standard deviation, in the area and period of rearing were 18.6±0.2 ppt salinity, 105±14 mg/l alkalinity, 1.17±1.04 mg/l biological oxygen demand, 29.4±1.8 degree celsius temperature, 8.1±0.2 pH, 5.8±1.6 mg/l dissolved oxygen, 0.0219±0.0186 mg/l NH₃-N, and 0.0071±0.0056 mg/l NO₂-N. Salinity of a year round was 19.3±7.6 ppt and there were 6 months from July to December lower than this value.

**Key words**: Blood cockle culture, *Anadara nodifera*, *Anadara granosa*, Growth, Life history, Investment return.

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