HATCHERY SEED PRODUCTION OF GOLD-LIPPED PEARL OYSTER *PINCTADA MAXIMA* (JAMESON)

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Seeds of the gold-lipped pearl oyster *Pinctada maxima* (Jameson) were produced in the mollusc hatchery at Prachuap Khiri Khan Coastal Aquaculture Development Center. Broodstocks were maintained in the sea, either by hanging from the raft or holding in bottom cages. Various methods of spawning induction were tried. The mature broodstock was successfully induced to spawn by sea water manipulation. Mass fertilization in spawning tank was found more effective than controlled fertilization. Evidently, high sperm density in the spawning tank did not affect larval development. Veliger larvae were cultured using intensive bivalve larval rearing techniques. Pediveligers were provided with plastic net and plastic shade-cloth as settling substrates. Unicellular phytoplankton *Isochrysis galbana, Chaetoceros calcitrans, Chlamydomonas* sp., and *Tetraselmis* sp. were used as feed for the larvae and juveniles throughout the hatchery rearing period. Hatchery breeding of the pearl oyster *Pinctada maxima was performed during* 1991-1997. Totally 4 successful rearing batches yielded a production of 50,000-200,000 spat of 1-2 mm size per batch. Survival from D-shaped larvae to the pediveliger stage was 3.3-6.7%. On average, 0.5-15% of the pediveligers developed to settlement and metamorphosis. Spat of 1-2 mm shell length were about 1.5 months. High mortality occurred during pediveliger and metamorphosis stages due to contamination with protozoa and bacteria in rearing tanks. Hatchery hygiene as well as gentle handling could basically reduce these problems. Use of antibiotics, streptomycin, neomycin, and sulfamethazine, was applied at necessity to reduce bacteria