

**BREEDING OF THE ORIENTAL HARD CLAM  
*MERETRIX MERETRIX* (L., 1758)**

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**ABSTRACT**

*Meretrix meretrix* (L., 1758) was successfully bred in hatchery. Spawning was induced by injection of serotonin into the gonad of each clam. Spawning began within 1-30 minutes after induction. Seven breeding batches with 19-49 clams per trial, yielded a total of 31-95 % of the injected clams spawning, with 35-84% males and 16-64 % females. The number of eggs spawned by each female (5.1-

7.7 mm shell length) ranged from a few ten thousands to over 2.8 millions, with an average number of  $5.13 \times 10^5$  eggs/female. Fertilisation rates, estimated from the number of D-shaped veligers attained, were 6-74 %. D-shaped veliger larval stage developed within 16 hrs after fertilisation. The larvae spent 5-7 days as free swimming veligers, then developed into benthic living stages, with 30-80 % survival. Juveniles exhibited clear shell colour patterns, as seen in adults, from the size of about 2-3 mm shell length, at an age of about 1.5 months. Details of larval and juvenile growth and development, rearing methodology, and production yield are presented.