

EXPERIMENT ON HATCHERY SEED PRODUCTION OF THE SCALLOP *CHLAMYS SENATORIUS* GMELIN

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Breeding of the scallop *Chlamys senatorius* Gmelin was performed successfully in the Prachuap Khiri Khan Mollusc Hatchery. Spawning was induced by injection of 0.3-0.5 ml saline solution with 2 mM serotonin (5-hydroxytryptamine creatinine sulfate) into either adductor muscle or gonad, or by sea water manipulation combined with air exposure methods. Fertilized eggs developed into D-shaped larval stage within 18 hours. The larvae took 8-8 days to reach pediveliger stage, then settlement and metamorphosis began after 10-11 days at a size between 220-240 μm shell length. The rate of development from fertilization to D-shaped larval stage ranged from 2.5 - 66.9 %. Survival rate from D-shaped larvae to pediveligers was 0-38 %, and it was about 5-10 % from pediveligers to one month old spat with 0.5-1.0 mm shell length. Spat grew up to 14 mm shell length at the age of 2 months and reached the size of 7-18 mm as young juveniles at 3 months of age, with approximately 40-50 % and 80-90 % survival rate, respectively.

NOTE. The paper will be printed in Proceedings of the 7th TMMP Workshop.