

RESTOCKING OF WINDOWPANE SHELL, *PLACUNAPLA CENTA* IN A DEPLETED BED OFF TIGBAUAN, ILOILO, THE PHILIPPINES

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ABSTRACT

The Tigbauan coast, Iloilo, the Philippines, has been depleted of the natural population of the windowpane shell, *Placuna placenta* Linnaeus, 1758, since the early 1980's. To support the declining *P. placenta* industry of the Philippines, restocking of depleted natural beds has to be done. This work aimed at assessing the suitability of the area for restocking of this valuable bivalve species. Immature *P. placenta* broodstock (71.6 ± 6.2 mm) and juveniles (40 ± 10 mm) were stocked in a 40 m² muddy bottom area off Tigbauan. Growth, survival, and reproduction of the animals were monitored monthly for 3 months. All juveniles were found dead after a month covered with sand and silt. However, broodstock remained alive. Broodstock samples, taken after a month, spawned after exposure to UV-light irradiated sea water. Survival rate, shell length and body weight increment of the broodstock after 91 days were 51%, 15.0 mm and 12.6 g, respectively. *P. placenta* veligers were found in the plankton one month after spawning and until the end of the three-month rearing period. Net productivity of the area ranged from 0.03-0.32 ml O₂/l. Phytoplankton species and microbenthic organisms, such as *Ophelina acuminata* Oersted, 1843, *Halophilajohnstoniae* Busk, 1852 and sipunculans, associated with *P. placenta* in the natural habitat were also collected in the area. Restocking of the depleted bed is still feasible by using adult animals to naturally repopulate the area.