

EXPERIMENTAL RAFT CULTURE OF THE GREEN-LIPPED MUSSEL
(PERNA VIRIDIS) IN SRI LANKA

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Experimental raft culture of the green-lipped mussel, Perna viridis, was conducted for the first time in Sri Lanka at Thambalagam Bay. The major objectives were: (1) identifying and testing a method of spat collection to supply the requirements of the experimental raft unit, and (2) identifying the optimum density to make an experimental raft unit profitable.

Spawning commences in April/May and continues until October/November. Two peaks occur in July and in October. Polypropylene, coir and poly-coco ropes were initially used as collectors. Spat settlement on all three types was unsatisfactory. Failure of these collectors was attributed to rapid currents with speeds varying between 30 and 100 cm/sec. Two equally effective alternative methods of spat collection were developed. The first alternative was sets of asbestos panels on which barnacles (Balanus sp.) had grown to a base diameter exceeding 4 mm. The second alternative was an entirely new type of collector made of polypropylene with a brushy surface.

Growth determined at three densities varied between 0.54 and 0.82 cm/month. Profitable yields were obtained from a raft at density (250 seed mussel/meter length of rope) and intermediate density (500 seed mussel/meter length of rope). Stunting and mortality were significantly higher at intermediate density.