

Keywords: Cages; *Penaeus indicus*; Postlarvae; *M. monoceros*

Introduction

Owing to the increasing demand for shrimps in world market, aquaculture is considered as extreme focus area by many countries. Much emphasis is also given to this fast moving commodity, because of its production potential, earning foreign exchange and scope for employment generation. Therefore last two decades, shrimp farming has witnessed tremendous technological advancements, the world over. Shrimps are cultured mainly in ponds, cages, pens and raceways. Out of which ponds and raceways are land based rearing methods, and cages and pens are water based rearing methods. Pond and raceway culture are found suitable in coastal areas and brackish water areas. Cage and pens are suitable in bay, lagoon, back water and open seas. Although previous workers used different type of cages [1-6] for shrimp culture but their suitability in terms of production in the estuaries was not attempted. Hence, in the present study, three type of cages viz, rectangular, square and circular cages were tried to find out their suitability for culturing *Penaeus indicus* in Vellar estuary.

Materials and Methods

Cage erection

The present study was carried out in Vellar estuary during one year period from January 2003 to December 2004. Three cages were used in the present study each covering 50 water spread area with different shapes. Of these one was rectangular (10 m×5 m×1.5 m), one was square (7.072×7.072×1.5 m) and remaining one was circular (Diameter-7.98 m; height -1.5 m). To avoid fouling problem on the top portion of the cages, the height of all the cages were uniformly raised to 1.5 m to expose the cage even during high tide. The entire cages were erected manually with the support of casuarina poles. For circular cage, to maintain the circular shape, a collar made up of bamboo materials were used inside the top portion of the cage. In the remaining two cages the collar made up of thick HDPE materials. All these cages were tied with the respective casuarina poles by using foot and head ropes. All the three cages were erected on the bottom soil substrate and provided hide-outs. Each cage bottom was provided with sixteen bi-cycle tyres as hide-outs.

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