4. Hatchery Technology for Quality Prawn Seed

Preamble:

The project entitled "Pilot scale demonstration on seed production of *Macrobrachium rosenbergii* using artificial sea water" was financially supported by Rajiv Gandhi Science and Technology Commission (RGSTC), Govt. of Maharashtra. Technology was successfully developed and demonstrated by Professor (Dr.) HukamSingh Dhaker, Department of Aquaculture, College of Fisheries, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Maharashtra. The technology is now ready for seed production of *Macrobrachium rosenbergii* using artificial sea water in inland area of the country.

Objectives:

1. Standardization of different formulae for preparation of artificial seawater for the specific locality.
2. Optimization for utilization of the artificial seawater.
3. Assessing the performance of the formulae in hatchery for commercial production of seed.
4. Assessing the performance in terms of growth, survival and carcass composition of the seed produced in the artificial seawater.

Technology developed:

The project has developed a commercially viable artificial sea water hatchery technology for the production of quality prawn seed. The methodology includes 1) Brood stock collection, 2) Preparation of artificial sea water, 3) Spawning, 4) Hatching, 5) Larval rearing with artificial feed management and water management, 6) Harvesting, 7) Acclimatization and 8) Packing of post larvae.

Production of Post Larvae:

The total Post larvae production was 19no/L with survival of 57% in 25-36 days for the each larval cycle of *M. rosenbergii*.

Equipment Required for Production of M. rosenbergii:

Land area (2000 m^2), Hatchery building (20 x 15 m), Brood stock pond (0.10 ha), Larval rearing tanks (FRP, 20 no. of 500 L), PL rearing tanks (FRP, 12 no. of 500 L), Water storage tanks (3 no.), *Artemia* hatching unit (4 no.), Air blowers (2 no, 5 hp), Generator (15 KVA) with accessories, Water pumps (3 no.), Bore-well (depending on the products to be processed).

SEED PRODUCTION PLAN IS READY.

FOR DETAILS, CONTACT:

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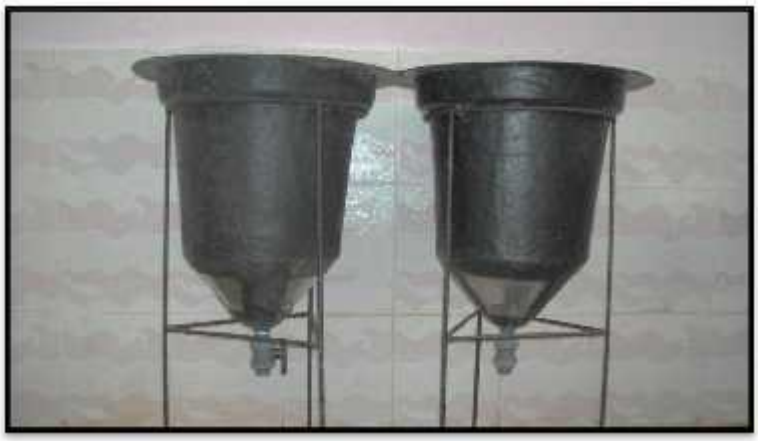
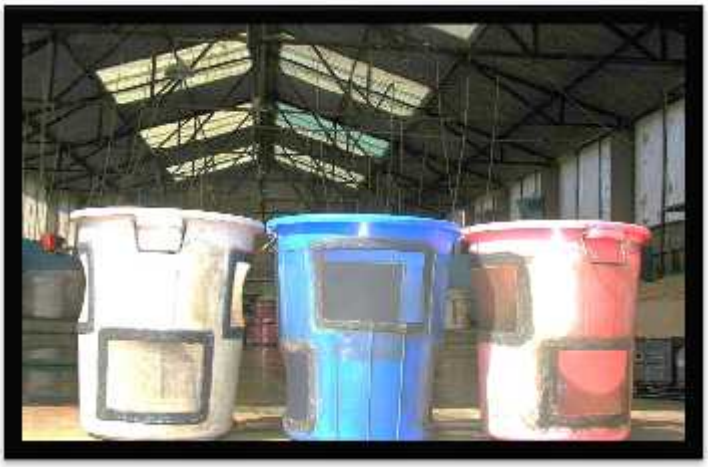
Artificial Hatchery Production



***Artemia* Hatching Tank**



Siphoning Buckets Used for Water Management

Sample Products developed under the project

Male adult of *M. rosenbergii*

Female adult of *M. rosenbergii*