

Breakthrough in Mud Crab (*Scylla serrata*) seed production by Rajiv Gandhi Centre for Aquaculture (RGCA), MPEDA in Tamil Nadu



Scylla serrata, commonly known as the Mud Crab or Green Crab, has an immense market demand all over the world, particularly in South East Asian countries. This seafood delicacy is considered as one of the tastiest of all Crab species. This is often sold in live, in many international markets. India earns foreign exchange to the tune of 18 Million US \$ by exporting Live Mud Crab captured from the low-lying coastal belts across the country. Thus, Natural stocks of Mud Crab in the country are under constant pressure from fishing.

Crablet (Juvenile Crabs)

There is presently, no organized Aquaculture of Mud crab in India, for supporting the export trade. The major reasons being the non availability/inconsistent availability of Crab seeds for farming. Hence, only crab fattening is being practiced by the coastal farmers/fishermen, where soft crabs/water crabs (moulted crabs) caught from the wild are reared in brackish water tide fed ponds/pens in estuaries until they are hard and ready for marketing. Besides exploitation, natural stocks are also dwindling owing to habitat loss due to several reasons including fast urbanization in the coastal belts.

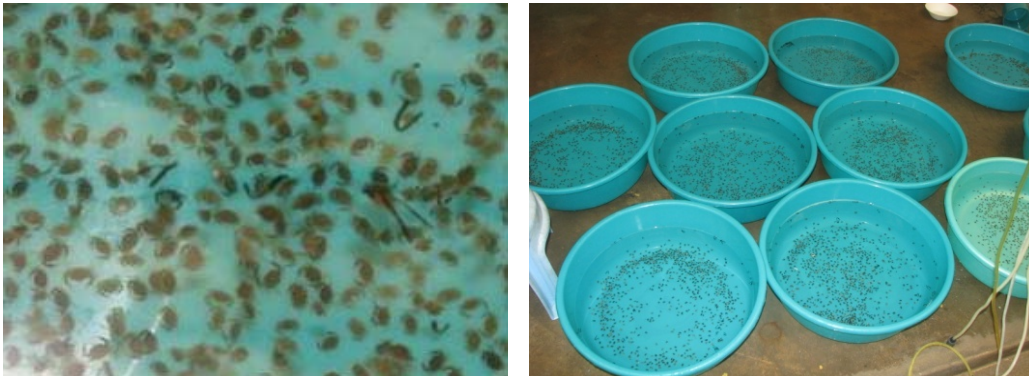


Scylla serrata

View of the larval rearing section of the RGCA hatchery at
Thoduvai, Sirkali, Nagapattinam Dist, Tamil Nadu

“Mud Crab or Green Crab”

In order to strengthen the production base of the Mud Crab so as to facilitate a sustainable source of Mud Crab for export, Rajiv Gandhi Centre for Aquaculture (RGCA), the R & D arm of the Marine Products Export Development Authority (MPEDA), Ministry of Commerce & Industry, located at Thoduvai, Sirkali in Nagapattinam District, Tamil Nadu have taken up R & D work on production of Mud Crab seeds in hatchery and established a Hatchery at Thoduvai Village, Sirkali, Nagapattinam, Tamil Nadu. This hatchery is one among very few Mud Crab hatcheries in the world, Philippines, Vietnam and China being the other countries having them. This hatchery has been regularly been producing Mud Crab seed reared to Crablet sizes at its Demonstration farm and supplying to farmers in the area. Crablets have also been supplied to several research institutions like the Central Institute of Brackish water Aquaculture (CIBA) and National Institute of Ocean Technology (NIOT) for their farming demonstrations. The facility has also been carrying out ranching of Crablets in estuarine and mangrove areas in Tamil Nadu from time to time for natural stock enhancement.



Crab instars (baby crabs) produced at the facility

Owing to the highly cannibalistic nature of the larvae of this species, larval rearing of Mud Crabs is a very challenging task and survival rates achieved are extremely low when compared to other crustacean species and species of finfish. **But, the scientists at RGCA have achieved a breakthrough survival of 7% to 14% against the world average survival rates of 3%.** This encouraging breakthrough achieved by RGCA can open up avenues for commercialization of Mud Crab hatchery technology leading to organized Mud Crab Aquaculture in the coastal areas of the country especially among the weaker sections of the society giving them an alternate livelihood option and also strengthens the production base of Mud Crab for export in Live & value added products. This can also result in reducing the fishing pressure on the natural stocks and thereby facilitating natural stock enhancement in the mangrove forests.

The hatchery & farming technology of Mud Crab developed by RGCA is being disseminated by its Training & Technology Transfer centre (TTTAC) at Sirkali through effective hands on training and awareness programmes.