



Banana Shrimp : Low Cost Technology for Broodstock Development

Sherly Zacharia and V.S.Kakati,
Karwar Research Centre of CMFRI,
Karwar, Karnataka

Global aquaculture production more than doubled in weight and value between 1986 and 1996, and it currently accounts for over one quarter of aquatic production consumed by humans.

Shrimps are the most popular seafood both in fresh and frozen forms. Strong market demand coupled with technological changes in production has resulted in expansion of shrimp farming in many countries. One important factor determining the success of farming is the availability of required quantity of seeds of the desired species at proper time. Although successful induced maturation of several penaeid shrimps in captivity has been achieved in different parts of the world, in the case of species such as tiger shrimp, wild broodstock continues to be preferred by most. However, dependence on wild stock has many problems such as inconsistency in availability, preferred species not being found in places where their culture is practised and because of restrictions being imposed by many countries on wild stock collection to protect their indigenous shrimp population.

Attainment of the stage of maturity

20 more Sea Food Processing Units receive EU approval

Based on the recommendation of Export Inspection Council, it is reported that approval to 20 more sea food processing units has been accorded by the EU. Readers are aware that 76 such units besides 8 fishing vessels with on board processing and storage facilities had received nod of the EU earlier. It is expected that the Indian seafood exports will go up consequent to the fresh approvals given by EU.

The authorities have stipulated a deadline for all the remaining sea food

by several species of pond-reared shrimps in conditions of captivity is not generally come across. Where such specimens are noticed they are seen to yield far fewer fertilised eggs, those too of low quality compared to the gravid wildstock. The difference in the abiotic factors prevailing in the brackishwater and marine environments, have a significant influence on the overall performance of the animals, and this may be responsible for the varied responses in their maturation in the two environments. Methods to enhance the state of maturation of pond-reared broodstock to gravidity and improving egg quality are the major goals of improving shrimp culture technology.

With the modernisation of shrimp culture technology, the broodstock development techniques followed in different parts of the world have become expensive in terms of finance, land, labour and infrastructure. To develop a low cost, simple technique for broodstock development of Banana shrimp, *Penaeus merguensis*, which is a commercially important species along the Karnataka-Goa coast, specimens were collected from the estuarine ponds (18-20 ppt).

processing units to improve the facilities to meet the standards prescribed by EU. It is learnt that the export inspection council and MPEDA are now in the process of inspecting the remaining units which are awaiting approval of EU one after another. There has been a sea change in the attitude of the seafood exporters in respect of quality of products exported. Added to this there are on-going efforts on the part of the Seafood Exporters Association to ensure the adoption of a Code of Conduct by its members in respect of the quality of products and other standards to be complied with in respect of exported consignments.

Ablated females along with unablated males therefrom were shifted to experimental units set up in the shallow Karwar bay waters. Seventy per cent response was observed among the ablated females in the unit. The advancement was in respect of ovarian maturation which took place within 3-8 days, while no response was observed among the controls. The technology developed through the experiment, in addition to being both eco-friendly and non-polluting, is also highly cost-effective compared to land-based technologies that are expensive. The present technology has proved that farm raised banana shrimps can also be induced to reach a stage of gravidity in captivity and the technology could also be extended to other commercial shrimp species as the reproductive process of all closed thelycum species is the same. Larval development can also be carried out *in situ* as evidenced by the viable nauplii obtained in the present attempt. The adoption of this system would definitely pave the way for setting up floating hatcheries, replacing the traditional land-based ones. (A detailed paper on the subject will be published separately).

Fish Market in Delhi soon to be shifted to Bazipur

The major fish market of Delhi is now located in Jama masjid area in old Delhi. This market known as J.M. Fish Market will soon be shifted in all likelihood in October / November to a newly build modern fish market complex at Bazipur, a suburb of Delhi.

According to a press note all steps are being taken for shifting the J.M. Fish Market to Bazipur. J.M. Market happens to be largest fish market in Northern India. The shifting is being done as the market is located very close to a Historical monument. Water connection to the new market at Bazipur is expected to be completed by October'99.