REARING OF PRAWN LARVAE FOR SEED PRODUCTION

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Rearing the newly hatched prawn larvae is the most demanding of the procedures in hatchery production of seeds. Freshly spawned eggs of the penaeid prawn hatch out into nauplii which pass through protozoea and mysis stages before metamorphosing into post larvae. The method followed for rearing larvae of *Penaeus indicus* at the NPCL of CMFRI is given below.

Freshly hatched nauplii are stocked at the rate of 50 nos. per litre in 2 ton plastic lined rearing pools containing settled and filtered seawater of 33 $\pm$ 2 ppt salinity. Continuous oil free air supply is provided. Rearing is carried out in normal ambient temperature of 28 $\pm$ 2° C. Nauplius passes through six developmental stages before transforming into protozoea I stage within two days. From nauplius VI stage onwards freshly cultured phytoplankton dominated by Chaetoceros sp. at the concentration of 2 million cells per ml (separately cultured and maintained in batch cultures) is added as food at the rate of 200 litres per rearing pool. This feed is introduced daily after removal of approximately 1 ton of water from each rearing pool and the volume is made up with fresh filtered sea water. This process is repeated throughout the rearing period. The protozoea start feeding from stage I and successively pass through three substages to become mysis stage within 3–4 days. The mysis are fed with frozen rotifer *Brachionus plicatilis* (a continuous culture of which is separately maintained) at the rate of 100 per larvae in addition to phytoplankton culture. Mysis pass through three substages in 3–4 days and metamorphose into postlarvae. On metamorphosis, the supply of phytoplankton feed is discontinued and frozen cladoceran *Moina* sp. (separately cultured and maintained) is given at the rate of 20 per larvae along with rotifers until the larva reaches postlarva V stage, when they are transferred to the nursery or despatched to farmers for stocking in their nursery ponds. Following this method, the average survival rate of 80% was obtained. ○