COMPOUNDED FEEDS FOR POSTLARVAL REARING OF MARINE PRAWNS

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Availability of appropriate feed has been the main constraint for rearing the various stages of prawn larvae. This is largely overcome by the use of live feed cultures. But the maintenance of these live feed cultures require specialised technical inputs, labour and time. Compounded feeds have been tried for rearing prawn larvae with varied success in different countries of the world. Attempts are being made to develop compounded feeds for rearing different stages of prawn at the NPCL. One of the successful feeds developed for the post-larval rearing has been described here.

Several feeds were prepared and pelletized with protein contents ranging from 30 to 60%, using clam meat, groundnut oil cake, fish meal, mantis shrimp *(squilla)*, trash fish, yeast and cassava (tapioca). The feeds were prepared by mixing dry powdered ingredients with 50% water and steaming for 15 minutes. The homogenised wet dough was extruded in 1 mm diameter pellets and dried in oven at $70 \pm 2°$ C for 12 hours. The dry pellets are stored in polythene bags. By keeping the moisture content below 10%, the feeds could be stored for a period of six months.

Using these feeds several experiments were conducted in which over 1,50,000 postlarvae of *Penaeus indicus* were stocked and reared in 24' dia. pools. Among the feeds tested, the feed PLF – 3 consisting of mantis shrimp 20%, prawn waste 20%, groundnut oil cake 30%, fish meal 10% and cassava 20% with a protein content of 36.8% gave the best performance in terms of growth and survival. The postlarvae were reared using this feed from PL_6 to PL_{20} with a survival rate of 90.3% and the larvae had grown from an initial average length of 6.0 mm to a final average length of 18.0 mm. Feeding was done at the rate of 100% of the body weight for the first two days and it was gradually brought down to 10% of the body weight finally. The cost of preparation of the feed was approximately Rs. 2/- per kilogram. The details of the experiments conducted and the results obtained using this feed are illustrated in the posters.