

CONTINUOUS CULTURE OF ROTIFERS FOR LARVAL REARING OF MARINE PRAWNS

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A technique for the continuous culture of the euryhaline rotifer *Brachionus plicatilis* has been perfected at the NPCL for the mass production of prawn seeds. Double filtered seawater is pumped into a 40 tonne capacity outdoor plastic lined pool and fertilised with groundnut oil cake (200 gm/ton), superphosphate (2 gms/ton) and urea (2 gms/ton). This medium is inoculated the same day with *Chlorella* culture at the rate of 5 litre/ton and on the second day rotifers are introduced at the rate of about 500 per litre. Vigorous aeration is provided continuously and the culture attains a concentration of $4-5 \times 10^5$ rotifers per litre in 5 days.

Harvesting is done with a hand-net of 60 micron mesh size in the morning

hours when they swarm at the surface. About 200 to 250 million rotifers are collected during each harvest. They are concentrated, washed twice with filtered seawater and after mixing with equal volume of 10% glycerin in seawater are frozen into blocks in a deep freezer. This method of harvesting and preservation ensures a ready stock for use at any time.

After continued harvesting, when the rotifer population declines due to their resorting to sexual reproduction, the culture is rejuvenated in the same pool by renewing 1/3 volume of water and by refertilising. This continuous culture with frequent harvesting can be maintained for over 2 months. The resting eggs produced by them during the sexual reproduction are collected from the bottom of the pool and they are dried and stored for future use. ○