Picnic seabream seed transportation and nursery rearing



Fish seeds in the oxygenated pack are being released after acclimatized

Hatchery bred picnic seabream (Acanthopagrus berda) seeds of 1 inch size were transported from Karwar Regional Station of ICAR-CMFRI to its Tuticorin Regional Station in oxygen filled polythene bags of 10 L capacity filled with 5 L of water volume. The average weight of seeds was 0.6-0.8 g. Five hundred numbers of seeds were transported in 7 bags each with 70 numbers and one bag with 80 numbers. The picnic seabream seeds were starved for 24 hours prior to packing to reduce the metabolic waste especially ammonia load in the water. The seeds were packed in 35 ppt salinity seawater. The seeds were transported through air-conditioned train compartment at about 25°C. The duration of seed transportation was 25 hours from packing to releasing in the stocking tanks at Tuticorin Regional Station of ICAR-CMFRI, Thoothukudi and reached the destination with no mortality. On arrival, the seed packs were acclimatised in the hatchery water. After 30 minutes of acclimation, the seed packs were opened and the water quality parameters such as dissolved oxygen (DO), ammonia, nitrite and nitrate levels were monitored

The DO, ammonia, nitrite and nitrate levels were 2.12 mg/L, 0.12 mg/L, 0.06 mg/L and 3.20 mg/L, respectively after 25 hours of transportation. The seeds were stocked in 1.25 ton capacity FRP tanks at the rate of 100 numbers/ton water. The tanks were provided with adequate aeration and water 100% exchange was done in the next day morning with 35 ppt salinity water. The survival was recorded until 24 hours after release in to the tanks and it was 97.6%. The seeds were acclimatized at the hatchery for 30 days and reached the average size of 1.2-1.3 g. The seeds were

anaesthetised using 2 phenoxyethanol at the rate of 250 ppm, weighed and stocked. The *Acanthopagrus berda* seeds were used for fish nutrition experiments to assess the dietary protein and dietary energy requirement.

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