

## Preliminary Trials on the Effects of Weaning and Larval Diets on Survival and Growth of Silver Therapon (*Leiopotherapon plumbeus*) Larvae

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Success in larval rearing of silver therapon can be achieved through early weaning of fish larvae from live food to artificial diet. Two experiments were carried out to investigate the effects of (a) weaning age (abrupt and gradual) and (b) larval diets (artificial and live foods) on survival and growth of silver therapon (*Leiopotherapon plumbeus*). In the first experiment, larvae were randomly stocked in round 4-l plastic basins at 15 larvae per basin to provide triplicates of four weaning age treatments (8, 14, 20 and 26 days after hatching or DAH, respectively). Larvae were fed thrice daily for 21 days with commercial feed (CF) and with copepods (COP) which served as the control. Larvae weaned at 26 DAH had the highest survival, body weight and total length among the treatment groups, which were comparable with that of the control. In the co-feeding protocol, larvae were fed *Artemia nauplii* (ART) as the control group and co-fed with either zooplankton i.e. 50% COP + 50% CF or 50% ART + 50% CF for 8 (8-15 DAH), 6 (14-19 DAH) and 4 (20-23 DAH) days, and suddenly weaned to FM until 21 days. Survival ranged from  $22.2 \pm 16.8$  to  $40.0 \pm 24.0\%$  between treatments, but was still lower than the control ( $88.9 \pm 3.8\%$ ). Body weight and total length were significantly higher in larvae with co-feeding for 4 days ( $70.1 \pm 2.8$  mg;  $18.1 \pm 0.8$  mm), but were still lower than that of the control ( $142.8 \pm 7.6$  mg;  $22.3 \pm 0.3$  mm).

In the second experiment, 26-day old larvae were stocked in 20-l glass aquaria at 4 larvae l<sup>-1</sup>. Larval diets ((I) commercial prawn feed (38% crude protein); (II) *Artemia nauplii*; (III) copepods; and (IV) free-living nematode *Panagrellus redivivus*) were given twice daily for 28 days. Survival was highest in larvae fed *Artemia nauplii* and poor in copepod fed larvae. Final total length (TL) of larvae fed prawn diet was higher than those fed copepod or nematodes. However, best growth was noted in larvae fed *Artemia nauplii* (TL =  $24.30 \pm 0.81$  mm; BW =  $156 \pm 8$  mg; specific growth rate or SGR =  $5.33 \pm 0.19\%/d$ ).

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