Survival, growth, and feeding ability of marble goby, Oxyeleotris marmorata (Bleeker, 1852) Larvae under delayed initial feeding

ABSTRACT

This study evaluated the effects of delayed initial feeding (DIF) time [Control (fed at initial feeding), 1, 2, 3, 4, or 5 days delay] on growth, survival, feeding ability, point-of-no-return (PNR), and deformity of Oxyeleotris marmorata larvae. Findings revealed that the growth and survival of the larvae were significantly lower in all other treatments than the control. The mean percentage of the deformity was the highest in 5 d DIF. The PNR was between 3 and 4 d DIF, which indicated irreversible starvation at this point. The negative effect of DIF on the feeding intensity was significant in 3, 4, and 5 d DIF. Decreasing feeding intensity with the DIF time signified the deterioration of feeding ability, which subsequently affects the larval growth and survival. It is recommended to introduce initial feeding within one day after commencing the exogenous feeding (36 HAH) ($29 \pm 0.5^{\circ}$ C) for optimum growth and survival.