

Study of Optimal Culture Conditions for Juvenile Marble Goby (*Oxyeleotris marmorata* (Bleeker, 1852))

Study of [LINK DOWNLOAD \[23.04 KB\]](#) ptimal Culture Conditions for Juvenile Marble Goby (*Oxyeleotris marmorata* (Bleeker, 1852))

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Abstract

Marble goby (*Oxyeleotris marmorata*(Bleeker, 1852)) is a freshwater fish species with high demand on market. However, its culture is under production due to insufficient fish seeds. High mortality rate of goby juvenile in hatchery are obtained partly because of an unsuitable culture condition and lack of appropriate larval feed. Therefore, this study aims to improve growth performance and also survival rate of marble goby fingerlings through the alteration of stocking density and shelter existence. After two months of experiment, the results showed that both factors had a positive role on growth performance and survival rate of marble goby fingerlings. Marble goby juveniles reared at 50 fish/m² and 250 fish/m² gained higher weight, length, and survival rate than the one reared at 500 fish/m² (P<0.05). Moreover, marble goby juveniles cultured with a shelter produced significantly higher length and weight gain (P<0.05) than the fish without a shelter. The survival rate of the experimented fish also was higher in fish with shelter than without shelter but the difference was not significant (P>0.05). In conclusion, it is suggested that the best stocking density for 0.17±0.01 g marble goby should be 250fish/m² coupled with a shelter. More environmental factors for marble goby culture such as photoperiod and light intensity are also under investigation.

Keywords:Oxyeleotris marmorata, marble goby, density, shelter