

The Effect of Water Quality Parameters on Gonad Maturity of Marble Goby (*Oxyeleotris Marmorata*) Fed Earthworms

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ABSTRACT

This study aimed to determine the effect of average water quality parameters on gonad maturity of marble goby (*Oxyeleotris marmorata*) fed with earthworms. This research was conducted in Awang Village, East Bangkal, Banjar Regency, South Kalimantan. The data was analyzed by using regression analysis. The results of the analysis of water quality parameters, namely temperature, dissolved DO, CO₂, pH, and NH₃ in the research container were related to the number of marble goby that were TKG (spell, please) IV in several treatments. Treatment 30 cm water height, earthworm feed without vitamin E, 30 cm water height, earthworm feed + vitamin E 75 mg kg⁻¹, 30 cm water level, earthworm feed + vitamin E 85 mg /kg, water height 50 cm, earthworm feed without vitamin E, water height 50 cm, earthworm feed + vitamin E 75 mg/kg, water level 50 cm, earthworm feed + vitamins E 85 mg/kg. The results showed that the regression equation between the temperature of the parent Gonad Maturity Level IV is $R^2 = 0.0172$, DO with a number of parent Gonad Maturity Level IV is $R^2 = 0.2737$, CO₂ by the number of parent Gonad Maturity Level IV is $R^2 = 0.0238$, pH with the number of parents with Gonad Maturity Level IV is $R^2 = 0.2787$, and NH₃ with the number of parents having Gonad Maturity Level IV is $R^2 = 0.0816$.

Keywords: water quality parameters, marble goby, earthworms