

ABSTRACT

ANALYSIS OF LAND SUITABILITY FOR RED SNAPPER (*Lutjanus sp.*) AQUACULTURE BASED ON PHYSICAL-CHEMICAL PARAMETERS IN CIKUNYINYI BAY, DISTRICT PESAWARAN

By

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Cikunyinyi has a high potency for aquaculture. It's protected by small island as enclosed waters that suitable for fish culture e.g. red snapper. The key for success in aquaculture is site selection. Analysis of suitable location is needed to determined location for red snapper culture. Objective of this research were to describe physical and chemical factor of Cikunyinyi bay and also to analyze suitable location for red snapper based on physical and chemical factor. This study was conducted in October – November 2013. Water quality analysis conducted in fish health environment laboratory, mariculture research center Lampung. Water sample is taken from 8 station in Cikunyinyi bay. The method for analyzing suitable location based on matching and scoring. The result of this study showed that the condition of Cikunyinyi bay as follow: DO of 5.32 mg/l, salinity of 31.48 ppt, phosphate of 0.076 mg/l, nitrate of 0.050 mg/l, water depth of 6.74 m, the substrate is muddy, current velocity of 29.48 cm/s, temperature of 30.34 °C, and water durity of 3.67 m. The result of scoring analysis of land suitability for red snapper culture is 215 point. That means Cikunyinyi bay is marginal suitable for red snapper culture.

Keywords: Cikunyinyi Bay, red snapper, aquaculture, aquatic suitability.