

## **EVALUATION OF PAYAOS IN SOUTH COAST OF JAVA RELATED TO THE SUSTAINABILITY OF TUNA FISHERIES**

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### **Abstract**

During the last decade, several payaos were set up in territorial water of Indian Ocean of South Java. These payaos were used as assistive appliance in trolling fishery to catch tuna. Payaos functions as a place of fish gathering, so that the activity of fish catching operation can be made more effective and efficient. Effectiveness in the usage of payaos has increased tuna production in high values in some catching bases area in South Coast of Java. Some result from the research indicated that catching resulted from trolling fishery caught mostly the small sized tuna, which are not competent to catch. If this condition persists, it will endanger the sustainability of tuna resources. This research was aimed to determine the composition of tuna catching result and to evaluate the sustainability and estimation of stock of tuna resources. Research was done in 3 locations, which was Pacitan, Gunungkidul and Trenggalek regions. Method of analysis was to analyse the composition of catching result and analyse estimation of the stock. Result of the research indicated that dominant composition of catching result of tuna around payaos in PPP Tamperan is yellow fin, and about 68% of catching result is a small size and not competent to catch. Composition of tuna result in Sadeng were dominated by big eye tuna, about 95% is a small size and not competent to catch yet. Results showed that tuna resources were already overfished, due to increasing trolling activity at Trenggalek.