

## HUBUNGAN SUHU PERMUKAAN LAUT DAN KLOROFIL-A TERHADAP HASIL TANGKAPAN IKAN CAKALANG (*Katsuwonus pelamis*, Linne) DI PERAIRAN BAGIAN TIMUR SULAWESI TENGGARA

(The Relationship Between Sea Surface Temperature and Chlorophyll-a With  
Production of Skipjack Tuna (*Katsuwonus pelamis*, Linnaeus) Off Eastern Coast of  
Southeast Sulawesi)

Oleh:

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### ABSTRACT

Sea surface temperature (SST) and chlorophyll-a (chl-a) are the important oceanographic parameters determining the abundance and distribution of marine pelagic organism, include skipjack tuna. The aim of this research is to determine the relationship between SST and chl-a concentration with production of skipjack tuna off eastern coast of Southeast Sulawesi. Such relationship can be used to identify potential fishing ground of skipjack tuna.

SST was derived by NOAA-AVHRR 16 and the data was collected from Lembaga Antariksa dan Penerbangan Nasional (LAPAN). Chl-a was derived from TERRA-MODIS satellite and the data were obtained from Colorado Center of Astrodynamics Research (CCAR) website. Skipjack tuna production data were obtained from direct observation and pole and line fishermen reports (log book) from March to June 2004.

The lowest SST occurred at March, while the highest at April and May 2004. The higher SST indicated a flow of water mass from northern area to southern area. From March to May 2004, there was no significant change in chl-a concentration. In that period, the chl-a concentration was relative low and uniformly distributed but significant spatial variation was observed in June. The optimum observed SST for skipjack fishing in the studied area ranged from 25 to 26 °C and from 31,5 to 32,5 °C ; the optimum chl-a concentration ranged from 0,38 to 0,52 mg/m<sup>3</sup>. SST did not show strong influence on

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