

ABSTRACT

Abdul, Hamid. 2013. **The Diversity of Phytoplankton in Waters Lekok Coastal Pasuruan**. Thesis. Department Biology, Faculty of Science and Technology, Maulana Malik Ibrahim Islamic State University of Malang. Advisor I: Dwi Suheriyanto, S.Si. M.P. Advisor II: Ach. Nashichuddin, M.A.

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Coastal waters Lekok including three main Coastal are located in Pasuruan regency. Great variety of human activities that take place in the Lekok coastal areas such as use of the site as a landfill, TPI, harbor, PGLTU, agriculture and aquaculture led to changes in physical-chemical properties of lekok coastal waters directly or indirectly affect the presence of phytoplankton in the aquatic ecosystem. Based on the description of the research was conducted in the waters of Coastal Phytoplankton Diversity Lekok Pasuruan. The purpose of this study to determine the types of phytoplankton, the abundance and diversity of phytoplankton in the waters Lekok Coastal Pasuruan seen and to know the water quality of physical and chemical factors.

This research uses descriptive-quantitative method, implemented in April to June 2013 in Pasuruan Lekok Coastal Waters. The data samples are taken in five different observation stations in waters by using plankton net. Samples identified in Ecology and Optics Laboratory biology department, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang.

The results of phytoplankton in the waters of Pasuruan Lekok Coastal consists of: 12 families are: 9 phytoplankton genus consisting of three division that, Chrysophyceae as 6 genera, Chlorophyta Pyrrophyta much as 1 genus and 2 genus. Based on the abundance and classification criteria shanon-wiener diversity index of phytoplankton in the waters of the Lekok beach is low. value the abundance of phytoplankton station I (24 ind / l), station II (20 ind / l), station III (18 ind / l) station IV (17 ind / l) V station (13 ind / l). I station diversity index (1.98), station II (1.95), station III (1.92), station IV (1.66) and station V (1.44). Based on the physico-chemical factors waters known that the high value of environmental parameters such as TSS, TDS and low brightness values at each station observation led to the low value of the diversity of phytoplankton in waters Lekok Coastal Pasuruan regency.