

## ABSTRACT

Rahman , Fathor, 2014. **Diversity and Coral Cover in Giligenting island of Sumenep Madura . Supervisor : Dr. Drh . Hj . Bayyinatul Muctaromah,M.Si, Dr . H. Ahmad Barizi , M.A**

Keywords : Diversity , Cover , Coral Reef , GiligentingIsland .

Coral reefs are tropical marine ecosystems that form the basis of the association of a variety of organisms that live in tropical marine communities by biological activity. Coral reefs are one of the major coastal and marine ecosystems that have an important role in maintaining the function of coastal and marine. Coral reefs act as coastal protection from waves waves and strong currents in addition to the coral reef has ecological and economic values are quite high. Research data In Giligenting island of Sumenep Madura until now there is still no single data reveal about species diversity and reef conditions contained in Giligenting Island. Therefore, this study aims to determine the type, percent cover, diversity and distribution patterns of coral reef on the Giligenting island of Sumenep Madura. It is expected that the findings of this study can provide an overview of related coral reef ecosystem on the Giligenting island of Sumenep Madura.

This research is descriptive quantitative, samples were taken at four stations using the line intercept transect method, then on each - each made six transect stations. Samples identified in the laboratory Ecology Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang .

The results showed that on the Giligenting island of Sumenep Madura. found 45 species that are divided into nine Family Acroporidae, Agariciidae, Favidae, Fungiidae, Mussidae, Pectiniidae, Pocilloporidae, Poritidae dan Helioporidae, of the genus *Acropora*, *Anacropora*, *Montipora*, *Coeloeseris*, *Pavona*, *Favites*, *Goniastrea*, *Leptastrea*, *Leptoria*, *Montastrea*, *Oulastrea*, *Pleseastrea*, *Ctenactis*, *Cycloseris*, *Fungia*, *Loboyphyllia*, *Symphyllia*, *Pectinia*, *Pocillopora*, *Stylophora*, *Goniopora*, *Heliopora*. Percentage ( % ) cover reefs lifeform on the Giligenting island of Sumenep Madura. of 14.50 % , which according to the criteria of the Environment Decree No.4, 2001, it is included in the category of damaged / destroyed. Index diversity value of coral reefs on the Giligenting island of Sumenep Madura. is 1.77, which according to the criteria of the Shannon - Wiener , it is included in the category of moderate indexdiversity. The distribution pattern on the Giligenting island of Sumenep Madura of 0.05 , which according to the criteria of Soegianto (1994 ) The distribution pattern of uniform.