ABSTRACT

Romadhoni, Misbakhul Fatta. 2013. **Diversity of Echinoderms Species in Kondang Merak Coast District Donomulyo Malang**. Supervisor: Romaidi, M.Si and Ach. Nashichuddin, M.Ag

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Marine ecosystems that have a high biodiversity. Representatives of nearly every phylum of animals can be found in the ocean. Organisms that live in the ocean water is affected by the nature around him, both in the form of plants or animals. Echinoderms is one of the most important animals in the marine ecosystem of the coral reef and especially useful as one component in the food chain, is eating detritus and other small animals. Kondang Merak beach is a beach on the south coast of East Java province, located in Malang regency precisely in District Donomulyo. This beach is characteristically dominated by hard rock and coral reefs.

This study aims to determine the diversity and species dominance Echinodermata in Kondang Merak Coast. The research was conducted in Kondang Merak Beach Malang Regency in June-July 2013. This is a descriptive quantitative research. Sample data retrieval is by direct observation. Echinoderms sampling is done at low tide using a transect method squares. Installation is done on the transect line plot that has spread from the shoreline to the middle of the intertidal zone to a distance of 100 m, with a spacing of 8 m plot, and a plot size of 2 x 2 m, consists of 3 stations, each station is done 3 times a transect observation, and each transect contained 10 plots.

The results showed that the type of Echinoderms found in Kondang Merak Beach consists of 8 species, namely: *Holothuria sp, Diadema setosum, Echinometra oblonga, Echinometra viridis, Echinometra sp, Echinothrix calamaris, Tripneustes gratilla, Ophiarachna affinis.* Echinoderms diversity in Kondang Merak Beach cumulatively amounted to 2,003, which means diversity Echinodermata being. While the cumulative dominance value of 0.14, which means low or no dominance of a species. Highest IVI (INP) in Kondang Merak Beach at the station I was of the type of *Ophiarachna affinis* (41, 6%). At the second station is also on the species of *Ophiarachna affinis* (38.4%), and the third station was *Tripneustes gratilla* of species of (39.8%).