ABSTRACT

Firdaus, Ali. 2011. **Seagrass diversity in Cote Paciran Lamongan East Java**. Supervisor: Dr. Ulfah Utami, and Dr. M. Si. drh. Bayyinatul M. M.si

Key words: Diversity, Distribution, Seagrass.

Seagrass are flowering (*Magnoliophyta*), fruit, leaves and true roots plants that grow on the substrate muddy, sandy to rocky life immersed in sea water shallow and clear, with good water circulation. Seagrass spread to an area through the deployment of fruit (*propagule*) are produced sexually. The number of seagrass species in the world there are 60 species, which consists of two families and 12 genera. In Indonesia there are 13 species of marine seagrasses, which consists of 2 families and 7 genera. Seagrass is an ecosystem that has a wide range of benefits, but in Paciran Lamongan utilization for human needs less optimized, even likely destroyed for land converted to other purposes. Based on this it is necessary to do research on the diversity of seagrasses in Cote Paciran Lamongan East Java with the aim to determine the diversity and distribution of seagrasses .

The research was carried out on the beach Paciran Lamongan in September to November 2011. The research is descriptive. Sampling was done by dividing the coast into 4 stations Paciran Lamongan. Determination of the station is based on differences in the environmental setting and location that makes it possible to do research. At each station on doing the installation of a transect line that aims to identify existing seagrass species as well as measuring the distance from the limit distribution of seagrass highest tide toward the sea. At each transect line placed fifth in alternate squares 2x2 size, the distance between the square is 5 meters. The placement of the transect line perpendicular to the shoreline.

The results obtained identified three genera of seagrass at the study site are: *Cymodocea, Thalassia, Enhalus*. Diversity of seagrass on the beach Paciran Lamongan very low, especially at station 2 (a genus of seagrasses), station 1 (two seagrass genus), and followed by stations 3 and 4 (each of the three genera of seagrass). Based on the calculated distribution patterns obtained distribution patterns of individuals in groups *(clumpet)*.