

ABSTRACT

Luthfiyah, Hidayatul. **2014 Diversity and density Earthworm In Tea Plantation PTPN XII Bantaran Blitar**. Thesis. Department of Biology, Faculty of Science and Technology, State Islamic University (UIN) Maulana Malik Ibrahim Malang. Lecturer: Dwi Suheriyanto, M. P and Ach. Nasichuddin, M. A

Keywords: Earthworm, diversity, density and physical-chemical factors.

The presence of earthworms was instrumental in increasing the productivity of the soil. Earthworm population density is very dependent on the physical-chemical factor of soil and the availability of enough food for him. The location will be a place of research is the tea plantation PTPN XII Bantaran Blitar where there are differences in the age of the tea plant and there are also differences at each age tea treatments, which affect the life of the soil fauna, one of which is the earthworm. The purpose of this study was to determine the diversity, density and physical-chemical factors relationship with earthworm density contained in the tea plantation PTPN XII Bantaran Blitar.

This research is descriptive quantitative research. Earthworms in field observations conducted in March-April 2014 in a systematic research method using a 100 m transect line and then on each line taken 10 points with 3 replications. The method used in making the earthworm is Hand Sorting method (direct retrieval).

Diversity Index (H') earthworms at three research stations in the tea plantation PTPN XII Bantaran Blitar is low with values at station 1 is 0.41, at station 2 is 0.43 and at station 3 was 0.31. Highest earthworm density Pontocolex with the value of 1.25 individuals / m^2 and a relative density of 86.24% while the lowest is the value Perionyx 0.003 individuals / m^2 and 0.30% relative density. The correlation between the density of earthworms found in tea plantation PTPN XII Bantaran Blitar with physical-chemical factors that chemical into the main supporting factor is humidity, pH and the content of N. The larger the contribution of moisture, pH and N content, the greater the population density of earthworms.