

## ABSTRACT

Al Fajri, Ahmad Safari. , 2014. **Vegetation Analysis in Understorey Nature Reserve Manggis Gadungan Subdistrict Puncu Kediri**. Thesis. Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang. Supervisor I: Dwi Suheriyanto, M.P. Supervisor II: Ach. Nashichuddin, M.A.

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The understorey is an important component in forest ecosystems that must be taken into account its usefulness. The presence of understorey are expected to reduce disruption to the forest and can also be used as an indicator of forest condition. Allah SWT in Al-Syu'ara verse 7 explains that Allah SWT created many different types of plants that are useful, a good to other living things or to maintain the balance of nature ecosystems. Understorey diversity in determining the structure of the forest, which in turn will affect the ecological function of the forest. Understorey is also one part of the forest and the forest becomes constituent structures have ecological functions as well as the mixing of litter and humus formation.

This study was performed on the month from October to November 2013 in the Nature Reserve Manggis Gadungan District of Puncu Kediri. This type of research is descriptive quantitative. The area of observation is taken 10% of the total area reached 12 ha. Observation method, plots, 60 plots were made measuring 2x2 meters. Sample species in the plots in the photo and was taken to the herbarium, then after that in identification. This study aims to determine the type and diversity of understorey the Nature Reserve located in Manggis Gadungan District of Puncu Kediri

The research found 24 species of herbaceous plants consisting of 19 and 5 shrubs. The index diversity ( $H'$ ) in the understorey Nature Reserve Manggis Gadungan is 3,828 (high). Index Value Importance on herbaceous plants, *Momordica charantia* L is a species that has index value important with the highest value is 38,84 for *Curcuma xanthorrhiza* species has index value important with the lowest value of 2,44. In herbaceous plant, *Lantana camara* L is a species that has index value important with the highest value of 90,09 for *Pandanus* sp is the species that has index value important with the lowest value of 5,84%.