

## ABSTRACT

Tranggono, Ulil Amri D. 2013. **Structure Community Down plants on Stands Open and Stand Closed As well as the Utilization by Community at Taman Hutan Raya (TAHURA) R. Soejo Cangar Batu City**. Advisor: Dr. Retno Susilowati, M.Si and Dr. H. Munirul Abidin, M.Ag

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Diversity of biological resources in tropical forests not limited on woody plant species or chronic, but there is also a lower vegetation which has a high species diversity. Under Plants are plants that live down on the forest floor, and covering the ground. The structure of tree stands formed believed to affect the existence of the understory contained in the forest floor. TAHURA R. Soerjo Cangar is a Forest Service regional conservation Batu areas which includes the nature reserve Arjuno Lali Jiwo. Factors that cause damage Tahura among others forest clearing and poorly controlled development. The purpose of this study to determine the structure of the plant community and the kind that prevailed in the stand open and closed, and lower plant utilization by the community.

The research was conducted in August-September 2012 in TAHURA R. Soerjo Cangar. Study site was divided into two, namely in the area of open and closed stands. This research is descriptive quantitative, sampling research belt transect method. Environmental factors were observed, among others, light, altitude and temperature. Data were analyzed by calculating the density, frequency, dominance and IVI. For deployment patterns are analyzed using an *Index of Dispersion* and the *Chi-Square test*. Furthermore, for the similarity of the two communities were analyzed using the method of Sorensen.

The research found 31 species of lower plants, 16 in a closed stand and 21 in open stands. In the closed and open stands of important value index of the highest found in the same species, namely *Eupatorium odoratum* L. with 63.93% and 72.73%. The pattern of spread in a closed stand (5.619) and open (8.584), distribution clumped distribution. Similarity coefficient 2 places ( $Q_s$ ) from the plant community found in closed and open stands was 0,28. Lower plant utilization by the public as herbs and daily necessities percentage is 60%, people who know the benefits of the plant without the benefit percentage is 40%. People who interviewed totaled 50 people, with 29 species of plants that can be utilized under.