

**THE PRACTICE OF AGROFORESTRY AT MIXED
PLANTATION AND PALM OIL PLANTATION IN PADANG PELAWI
AND KUTI AGUNG BABATAN VILLAGES, SOUTH BENGKULU**

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ABSTRACT

The permanent generation pattern using enrichment of *Elaeis guineensis* species, it can be expected to increase the productivity of plant which is cultivated. The knowledge about permanent generation pattern is needed by knowing structure, composition, and variability of vegetation which construct the community of each type of plantation.

Field experiment was done by constructing the rows which was arranged to be five pores field plot was 20m x 20m and inside this plot was constructed some plots having the measures of 10m x 10m; 5m x 5m; and 2m x 2m. These plots were used for identification of trees at the levels of seeding, sapung, poles, and tree, respectively. The rows were made at 16 farmers land with the arrow of 270 degree or to the west cutting the land. The research was also done by using questionnaire given to the owners of plantation having the intensity of 100%. Vegetation analysis was done by knowing the important values index and species variability that can be found using Shannon index. The application of traditional agroforestry system using cross tabulation analysis.

The results indicated that there were different structure and composition of kind of vegetation constructing the community at two types of plantations by availability of changing species, mainly *Elaeis guineensis* to dominance of vegetation at the levels of seedling example *Peronema canescens*, Sapling example *Anacardium occidentale*, Poles example *Gmelina arborea* and tree example *Shorea leprosula*. The variability of kind vegetation that construct the community of mixed garden higher than that of constructing the community of people palm oil plantation, because there were difference of tree's age. The beneficial of traditional agroforestry system are in terms of economy, ecology, social, and politic. The weakness are the awareness of farmers in terms of yield sustainability are very low. The efforts for solving the problems are done by increasing the knowledge of farmers about how to cultivate in the field of agriculture.

Pass Word : Composition, Structure and Variability of vegetation

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