## **ABSTRACT**

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PRODUCTION OF SIMPLICIA BIOMASS OF CAT WHISKER LEAVES (Orthosipon aristatus) WITH APPLICATION OF ORGANIC AND INORGANIC FERTILISER AND THE DIFFERENCE HARVEST ROTATION TIME

Cat whisker is a one of the commoditie of traditional medicinal plant that are often use have benefits and are widely use as raw materials in the medicinal industry. The quantitative and qualitative physical qualitie of simplicia to the quality and quantity of the biocative produce are obstacle to the technical aspect of cultivation in the production of cat whisker simplicia. Effort to overcome these obstacle require fertilization using Indigenous Arbuscular Mycorrhizal Fungi (AMF), N and P fertilizer and crop rotation. This purpose study to know the effect of fertilization treatment and the effect of the best harvest rotation time and to know the interaction between fertilization and harvest rotation on post-harvest growth and production of cat whisker leaf simplicia. The method use is a Randomized Block Design, consisting of 2 factor. The first factor is harvest rotation, consisting of two levels, namely once every four week and six week. The second factor is fertilization, consisting of three level, namely 100 g Indigenous AMF inoculum, 2.1 g Urea (N fertilizer) and 2.7 g SP-36 (P fertilizer), and a combination of 100 g Indigenous AMF inoculum + 2.1 g Urea (fertilizer N) and 2.7 g SP-36 (fertilizer P). The result showed that fertilization had an effect on post-harvest growth and production of simplicia biomass of cat whisker leaves. Harvesting time of six weeks is the best harvest rotation time that has an effect on post-harvest growth and biomass production of cat whisker leaf simplicia. There is an interaction between fertilization treatment and harvest rotation on postharvest growth and biomass production of of cat whisker leaf simplicia.

Keywords: annual plant, biomass, harvesting, leaf simplicia, medicinal plant,

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