

The Difference of The Cutting on Clove Leaves Zanzibar Varieties (Syzgium aromaticum L.) on The Result of Essential Oil

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ABSTRACT

The abundant waste of clove leaves has been used for oil production. The clove leaves oil is one of the quality essential oil production in Indonesia. This is line with the increasing demand of clove leaves oil each year. However, the yield is often low. The difference of the cutting on the clove leaves is an alternative for increasing the oil yield. The objective of this research is to find out the effect of the cutting on the result of essential oil and to find out the best treatment to generate the highest yield. This research is conducted at Technical Unit of Food and Agriculture tool and machinery Laboratory of State Polytechnic of Jember during the period of July to Agustus 2018. This research is conducted using non-factorial Randomized Block Design. The factor to be used are the difference cutting by using 3 stages of treatment that covers full leaves (P1), big cut (P2), and small cut (P3) and 9 repetition by using water and steam distillation. The results showed that the treatment affect significantly on the essential oil at the quantitative parameter. Regarding qualitative parameter, the difference of the cutting that generates the highest material yield is the small cut, while the color of oil that is mostly produced is yellowish brown and brownish yellow and the highest eugenol is generated by the full leave treatment. The best treatment to generate the highest oil yield is the treatment using small cut.

Keywords : *Clove Leaves Oil, Water and Steam Distillation, Cutting On Leaves*