

INTISARI

Penelitian tentang pengaruh ketebalan irisan terhadap kadar minyak atsiri simpleks rimpang lengkuas (*Languas galanga* L. Stuntz.) bertujuan untuk mengetahui kadar minyak atsiri simpleks rimpang lengkuas pada setiap ketebalan irisan yang berbeda serta untuk mengetahui ketebalan irisan yang harus dibuat supaya diperoleh kadar minyak atsiri dari sebesar 0,5 – 1% v/b.

Penelitian ini termasuk dalam penelitian eksperimental murni dengan rancangan acak lengkap pola satu arah. Perajangan rimpang lengkuas dilakukan dalam empat ketebalan yang berbeda, yaitu 2, 4, 6 dan 8mm. Penetapan kadar minyak atsiri dilakukan dengan metode penyulingan air menggunakan alat destilasi Stahl. Kadar minyak atsiri yang diperoleh kemudian dianalisis secara statistik berupa Anova satu arah dan diteruskan dengan uji LSD (*Least Significant Difference*) dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa semakin tebal irisan rimpang lengkuas kadar minyak atsiri juga semakin tinggi, namun pada ketebalan 8 mm kadar minyak atsiri menurun. Dari keempat ketebalan irisan tersebut yang kadar minyak atsirinya memenuhi persyaratan adalah pada ketebalan irisan 6mm, dengan kadar rata-rata sebesar $0,5981\% \text{ v/b} \pm 7,9561 \times 10^{-4}$.

Kata kunci: rimpang lengkuas, ketebalan irisan, kadar minyak atsiri

ABSTRACT

A research about the significance of slice's thickness toward the amount of languas rhizome's (*Languas galanga* L. Stuntz.) essential oil is meant to find out the amount of dried languas rhizome's essential oil and to know the exact thickness that should be made in order to get the essential oil's amount as much as 0,5% – 1% v/b.

This research is included as a pure experimental descriptive research with one way complete random design. The slices of languas rhizome are done in four different thickness, which are 2, 4, 6, and 8 mm. The determination of the essential oil's amount is done with steam distillation method using Stahl's distillation tool. The amount of the essential oil that has been gained is analyzed later statistically wich is one way Anova and is continued with LSD test with 95% trust percentage.

The result of the research shows that the more thick the slice of languas rhizome the higher amount of the essential oil is. But in 8 mm thick slice, the amount of the essential oil decreases. The proper thickness that fulfills the requirements for the amount of the essential oil of 0,5% -1% v/b is 6 mm thick with the amount of the essential oil average $0,5981\% \text{ v/b} \pm 7,9561 \times 10^{-4}$.

Key word : languas rhizome, slice thickness, essential oil's amount