

**PENCIRIAN dan AKTIVITAS PENOLAK SERANGGA
MINYAK ATSIRI KULIT BUAH JERUK LIMAU
(*Citrus amblycarpa* (Hassk) Ochse.) SEGAR TERHADAP
BIOINDIKATOR KUTU BERAS (*Calandra oryzae* L.)**

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ABSTRAK

Telah dilakukan penetapan kadar, pencirian dan pengujian aktivitas *Insect repellent* minyak atsiri kulit buah jeruk limau segar terhadap bioindikator kutu beras. Hasil penelitian menunjukkan kadar, indeks bias dan bobot/volume minyak atsiri masing-masing adalah $0,52 \pm 0,02\%$, $1,4632 \pm 0,0008$ dan $0,837 \pm 0,017$ g/ml. Profil GC-MS menunjukkan 75 komponen dengan 5 komponen terbesar antara lain Limonene (12,88%), Citronellal (9,82%), β -Pinene (7,63%), Terpinene-4-OL (5,74%) dan Linalool (3,87%). Dari hasil pengujian aktivitas *Insect repellent* diketahui bahwa minyak atsiri kulit buah jeruk limau mempunyai aktivitas *Insect repellent* pada konsentrasi 5000-9000 bpj pada menit ke-30, 60, 90, dan 120.

Kata Kunci : *Citrus amblycarpa* (Hassk) Ochse., minyak atsiri, pencirian, *Insect repellent*, *Calandra oryzae* L..

**FEATURING and *Insect repellent* OF
ESSENTIAL OIL OF FRESH LIMAU CITRUS
FRUIT'S PEEL(*Citrus amblycarpa* (Hassk) Ochse.) ON
RICE FLEAS' BIOINDICATOR (*Calandra oryzae* L.)**

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ABSTRACT

The research on assay, featuring and testing of insect repellent's activity of essential's oil of fresh limau citrus fruit's peel on rice fleas' bioindicator. Research's result shows concentration, refractive index and weight per volume of each essential's oil is $0.52 \pm 0.02\%$, 1.4632 ± 0.0008 and 0.837 ± 0.017 g/ml. Cromatogram of GC-MS shows 75 components with 5 biggest components, such as : Limonen (12.88 %), Citronellol (9.82 %), β -pinene (7.63 %), Terpinene-4-OL (5.74 %), Linalool (3.87 %). It is known from the result of testing on insect repellent's activity that essential oil of citrus fruit's peel has insect repellent's activity on the concentration of 5000 – 9000 ppm on the minute of 30, 60, 90, and 120.

Key Words : *Citrus amblycarpa* (Hassk) Ochse., essential oil, featuring, *insect repellent*, *Calandra oryzae* L..