

POLITEKNIK KESEHATAN TANJUNGPURWATI
JURUSAN KESEHATAN LINGKUNGAN
PROGRAM STUDI DIII SANITASI

Laporan Karya Tulis Ilmiah, 10 Juni 2024

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Uji Kemampuan Kombinasi Ekstrak Kulit Jeruk Nipis (*Citrus Aurantifoli*) Dengan Daun Salam (*Syzygium Polyanthum*) Terhadap Pengendalian Kecoa

XVI + 83 Halaman + 14 Tabel + 9 Gambar

ABSTRAK

Kecoa merupakan salah satu hama rumah tangga yang paling umum dan terkenal karena kemampuannya bertahan hidup di berbagai lingkungan serta kemampuannya untuk berkembang biak dengan cepat. Kecoa dapat membawa berbagai patogen yang berbahaya bagi kesehatan manusia, seperti bakteri, virus, dan parasit, yang dapat menyebabkan berbagai penyakit. Pengendalian populasi kecoa menjadi penting dalam upaya menjaga kesehatan lingkungan. Untuk itu, penelitian ini berupaya melakukan eksperimen untuk menguji mortalitas kecoa dengan kombinasi kandungan insektisida pada kulit jeruk nipis dan daun salam.

Penelitian ini menggunakan metode eksperimen pendekatan pre-eksperimen dengan replikasi sebanyak 3 kali dengan variasi konsentrasi 25%, 50%, dan 75%. Data dianalisis menggunakan analisis data univariat (distribusi frekuensi), bivariat (one way anova), dan probit (LC50). Hasil penelitian menemukan persentase kematian kecoa paling tinggi ialah konsentrasi 75% dan 35% di waktu efektif menit ke 10, 40, dan 50. Hasil analisis data univariat menunjukkan perbedaan kematian di masing-masing konsentrasi. Kemudian, analisis bivariat membuktikan kelompok yang berbeda signifikan adalah konsentrasi 25% dengan 75%. Sementara, LC50 untuk mematikan kecoa dari elaborasi ekstrak kulit jeruk nipis dan daun salam selama 1 jam adalah 1,471% atau sebesar 14713 ppm. Kesimpulannya, hasil penelitian menunjukkan bahwa terdapat potensi mortalitas kecoa dengan kombinasi ekstrak insektisida.

Kata kunci : Ekstrak Kulit Jeruk Nipis, Ekstrak Daun Salam, Kecoa

Daftar Pustaka : 41 (2000-2022)

TANJUNGPURANG HEALTH POLYTECHNIC
ENVIRONMENTAL HEALTH DEPARTMENT
DIII SANITATION STUDY PROGRAM
Scientific Paper Report, June 2024

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Test of the Ability of the Combination of Lime Peel Extract (Citrus Aurantifoli) with Salam Leaf (Syzygium Polyanthum) Against Cockroach Control

XVI + 83 Pages + 14 Tables + 9 Figures

ABSTRACT

Cockroaches are one of the most common household pests and are well known for their ability to survive in a variety of environments as well as their ability to reproduce quickly. Cockroaches can carry various pathogens that are harmful to human health, such as bacteria, viruses and parasites, which can cause various diseases. Controlling cockroach populations is important in an effort to maintain environmental health. For this reason, this research seeks to conduct experiments to test the mortality of cockroaches with a combination of insecticidal ingredients in lime peels and bay leaves.

This study used an experimental method of pre-experiment approach with replication 3 times with variations in concentration of 25%, 50%, and 75%. Data were analyzed using univariate (frequency distribution), bivariate (one way anova), and probit (LC50) data analysis. The results of the study found that the highest percentage of cockroach mortality was 75% and 35% concentrations in the effective time of minutes 10, 40, and 50. The results of univariate data analysis showed differences in mortality in each concentration. Then, bivariate analysis proved that the significantly different groups were 25% and 75% concentrations. Meanwhile, the LC50 to kill cockroaches from the elaboration of lime peel and bay leaf extracts for 1 hour is 1.471% or 14713 ppm. In conclusion, the results showed that there is potential for cockroach mortality with a combination of insecticidal extracts.

Keywords : Lime Peel Extract, Bay Leaf Extract, Cockroach

Heritage List : 41 (2000-2022)