

**DAYA PROTEKSI SEDIAAN LOTION ANTI NYAMUK
KOMERSIL DAN LABORATORIUM TERHADAP NYAMUK
Ae.aegypti DI GUNUNG PANGILUN**

SKRIPSI SARJANA BIOLOGI

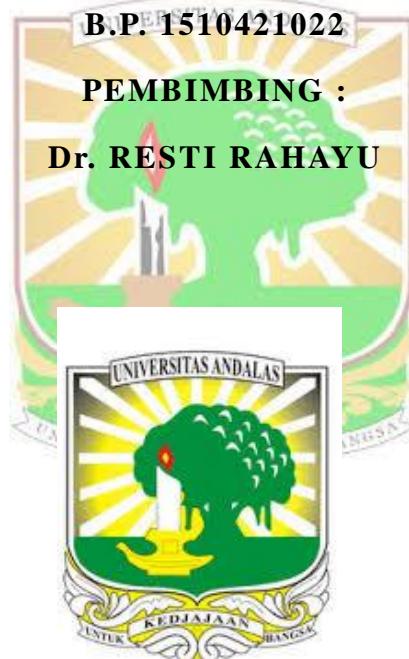
OLEH:

GUSTYA SUHERMAN

B.P. 1510421022

PEMBIMBING :

Dr. RESTI RAHAYU



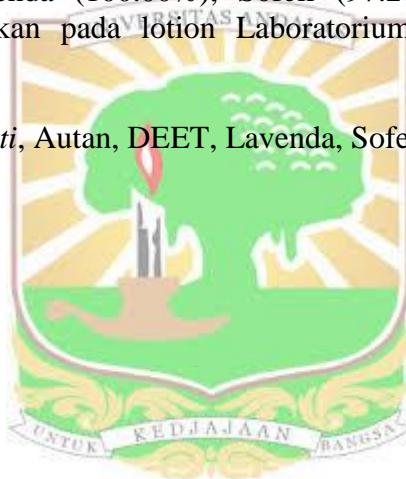
JURUSAN BIOLOGI

**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
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ABSTRAK

Penelitian ini bertujuan untuk mengetahui efektivitas pada sediaan lotion anti nyamuk komersil dan Laboratorium terhadap nyamuk *Ae. aegypti* di Gunung Pangilun. Penelitian dilakukan pada bulan Maret – Mei 2019 di Laboratorium Fisiologi Hewan, Jurusan Biologi, Unand. Penelitian menggunakan metode kontak langsung dengan lengan tangan yang setiap usikan dianggap ulangan dengan lama pengamatan dilakukan selama 6 jam, jam ke-0 dihitung setelah pengolesan lotion. Pengujian ini menggunakan 3 sampel lotion komersil yaitu Sofell DEET 13.00%, Lavenda DEET 12.50% dan Autan 12.50% ditambah lotion racikan Laboratorium yaitu 0.00%. Kategori efektivitas suatu lotion dilihat dari jumlah nyamuk hinggap pada kelompok kontrol (tidak diolesi lotion) dan jumlah nyamuk yang hinggap pada kelompok perlakuan (diolesi lotion). Kategori efektif dilihat dari nilai Daya Proteksi lebih dari 90.00%. Hasil penelitian menunjukan bahwa berdasarkan nilai daya proteksi selama 6 jam dari yang tertinggi ke terendah pada lotion komersil berturut-turut adalah lotion Lavenda (100.00%), Sofell (97.20%) dan Autan (96.20%) kategori efektif. Sedangkan pada lotion Laboratorium (83.47%) kategori tidak efektif.

Kata Kunci : *Ae. aegypti*, Autan, DEET, Lavenda, Sofell.



ABSTRACT

This study aimed to determine the effectiveness of lotions of commercial and laboratory mosquito repellent against *Ae. egypti*. The study was performed from March to May 2019 in the Laboratory of Animal Physiology, Department of Biology, Andalas University. It used a direct contact method by topically applying the lotion on the arm. The frequency of arm motion was counted as repetition during a total 6 hours of continuous observation starting from the lotion application time (0 h). This test used three commercial lotions namely Sofell with DEET (N,N diethyl-m-toluamide) 13.00%, Lavenda with DEET 12.50% and Autan with DEET 12.50%, and a DEET-free lotion prepared in the laboratory (noncommercial lotion). The effectiveness category of a lotion was justified by the number of mosquitoes perched on the control group (without lotion treatment on the arm) as compared with the treatment group (with a lotion treatment on the arm). It was considered as an effective lotion if its protection power was more than 90% for 6 hours of observation. The results demonstrated that the protection power, from the highest to the lowest respectively, of the commercial lotions were Lavenda (100.00%), Sofell (97.20%) and Autan (96.20%) showing an effective protection. Otherwise, the protection power of laboratory lotion was considered as ineffective with a protection power below 90% (83.47%).

Keyword : *Ae. aegypti*, Autan, DEET, Lavenda, Sofell.

