ABSTRAK

Insektisida sintetis mengandung zat aktif yang memiliki efektivitas tinggi seperti DEET *(N, N*-diethyl-*meta*-toluamide*)* untuk mencegah dan mengendalikan Demam Berdarah *Dengue*. Insektisida sintetis dapat berdampak buruk bagi kesehatan dan lingkungan. Daun kawista *(Limonia acidissima)* memiliki potensi sebagai insektisida alami terhadap nyamuk *Aedes aegypti* karena mengandung senyawa metabolit sekunder yaitu fenol, flavonoid, saponin, dan terpenoid. Penelitian ini bertujuan untuk mengetahui efektivitas daya tolak ekstrak daun kawista *(Limonia acidissima)* terhadap nyamuk *Aedes aegypti.* Penelitian ini menggunakan metode eksperimental dengan metode *post test only control group design*. Sampel yang digunakan sebanyak 25 ekor nyamuk *Aedes aegypti* dewasa pada setiap perlakuan. Ekstrak etanol daun kawista dibuat dalam bentuk *spray* dengan konsentrasi 25%, 50%, dan 75%. Kontrol positif menggunakan soffel *spray* dan kontrol negatif menggunakan aquades. Ekstrak daun kawista konsentrasi 25%, 50%, dan 75% memiliki daya tolak efektif terhadap nyamuk *Aedes aegypti* berturut-turut yaitu 15,22%, 46,20%, dan 70,08%. Hasil analisis ekstrak daun kawista terhadap nyamuk *Aedes aegypti* diperoleh ED_{50} *(Effective Dose 50)* pada konsentrasi 60,343% dan ED_{99} *(Effective Dose 99)* pada konsentrasi 124,452 %. Dari hasil penelitian dapat disimpulkan bahwa daun kawista memiliki kemampuan daya tolak terhadap nyamuk *Aedes aegypti.*

Kata Kunci : Ekstrak Daun Kawista, *Aedes aegypti*, Daya Tolak

ABSTRACT

Synthetic insecticides contain highly effective active substances such as DEET (N,N-diethyl-meta-toluamide) to prevent and control Dengue Fever. Synthetic insecticides can have adverse effects on health and the environment. Kawista leaf (Limonia acidissima) has the potential as a natural insecticide against Aedes aegypti mosquitoes because it contains secondary metabolite compounds namely phenols, flavonoids, saponins, and terpenoids. This study aims to determine the effectiveness of the repellent power of kawista leaf extract (Limonia acidissima) against Aedes aegypti mosquitoes. This study used experimental method with post test only control group design. The sample used was 25 adult Aedes aegypti mosquitoes in each treatment. The ethanol extract of kawista leaf was prepared in spray form with concentrations of 25%, 50%, and 75%. Positive control used soffel spray and negative control used distilled water. The 25%, 50%, and 75% concentrations of kawista leaf extract have effective repellency against Aedes aegypti mosquitoes, respectively 15.22%, 46.20%, and 70.08%. The results of the analysis of kawista leaf extract againts Aedes aegypti mosquitoes obtained ED_{50} *(Effective Dose 50) at a concentration of 60,343% and* ED_{99} *(Effective Dose 99) at a concentration of 124,452%. From the results of the study it can be concluded that kawista leaves have the ability to repellency Aedes aegypti mosquitoes.*

Keywords*: Kawista Leaf Extract, Aedes aegypti, Repellency*