

## **Daya Tolak Ekstrak *Repellent* Daun Sirih Hijau (*Piper Betle L*) terhadap Gigitan Nyamuk *Aedes aegypti***

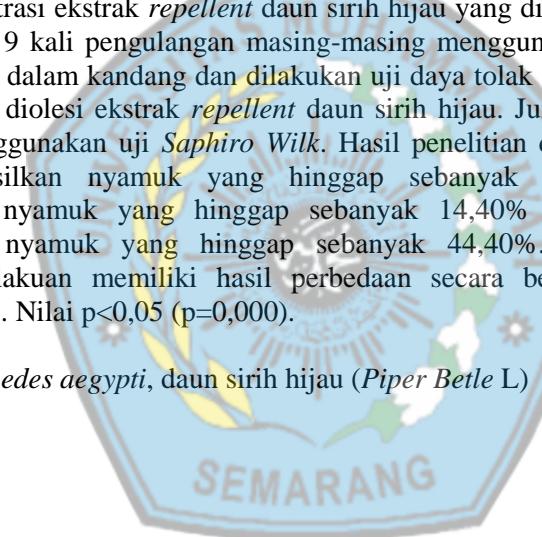
Ajie Sriwati Dwidi Ramandani<sup>1</sup>Tulus Ariyadi<sup>2</sup>Arya Iswara<sup>2</sup>

1. Program Studi DIII Analis Kesehatan Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang
2. Laboratorium Parasitologi Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang

### **ABSTRAK**

Nyamuk *Aedes aegypti* umumnya memiliki habitat di lingkungan perumahan, di mana terdapat banyak genangan air bersih dalam bak mandi ataupun tempayan..Salah satu cara untuk memutus mata rantai nyamuk *A. aegypti* dengan penggunaan *repellent*. Daun sirih hijau merupakan tanaman yang dapat digunakan sebagai *repellent*. Penelitian ini dilakukan pada bulan Juli 2018. Metode yang digunakan berupa eksperimental (Rancangan Acak Kelompok) dengan menggunakan nyamuk *A. aegypti* yang berumur 3-5 hari. Konsentrasi ekstrak *repellent* daun sirih hijau yang digunakan yaitu 0%, 20% dan 40% dengan 9 kali pengulangan masing-masing menggunakan 20 ekor nyamuk yang dimasukkan ke dalam kandang dan dilakukan uji daya tolak selama 30 detik pada tangan responen yang diolesi ekstrak *repellent* daun sirih hijau. Jumlah nyamuk yang hinggap dianalisis menggunakan uji *Sapiro Wilk*. Hasil penelitian didapatkan pada konsentrasi 40% menghasilkan nyamuk yang hinggap sebanyak 10,00%, konsentrasi 20% menghasilkan nyamuk yang hinggap sebanyak 14,40% dan pada konsentrasi 0% menghasilkan nyamuk yang hinggap sebanyak 44,40%. Semua konsentrasi pada kelompok perlakuan memiliki hasil perbedaan secara bermakna dengan kelompok konsentrasi 0%. Nilai  $p<0,05$  ( $p=0,000$ ).

**Kata kunci :** *Aedes aegypti*, daun sirih hijau (*Piper Betle L*)



## **Rejection Power of Green Betel Leaf (*Piper Betle L*) Repellent Extract against *Aedes aegypti* Mosquito Bites**

Ajie Sriwati Dwidi Ramandani<sup>1</sup>Tulus Ariyadi<sup>2</sup>Arya Iswara<sup>2</sup>

1. Study Program DIII Health Analyst, Faculty of Nursing and Health, University of Muhammadiyah Semarang
2. Laboratory of Parasitology, Faculty of Nursing and Health, University of Muhammadiyah Semarang

### **ABSTRACT**

*Aedes aegypti* mosquitoes generally have a habitat in a residential environment, where there are lots of clean water in a bath or crock. One way to break the chain by *A. aegypti* mosquitoes with *repellent*. Green betel leaf is a plant that can be used as an insecticide. This research was conducted in July 2018. The method used was experimental (Randomized Block Design) using *A. aegypti* mosquitoes aged 3-5 days. The concentration of extracts of green betel leaf *repellent* used was 0%, 20% and 40% with 9 repetitions each using 20 mosquitoes put in a cage and tested for 30 seconds of *repellent* on the respondeen hand smeared with extract of betel leaf *repellent* green. The number of mosquitoes that landed was analyzed using the *Sapiro Wilk* test. The results obtained at a concentration of 40% produced mosquitoes that landed as much as 10.00%, a concentration of 20% produced mosquitoes that landed as much as 14.40% and at a concentration of 0% produced mosquitoes that landed as much as 44.40%. All concentrations in the treatment group had significant differences with 0% concentration group. Value of  $p < 0.05$  ( $p = 0,000$ ).

**Keywords:** *Aedes aegypti*, green betel leaf (*Piper Betle L*)

