

ABSTRACT

Background : Dengue Hemorrhagic Fever (DHF) is a contagious disease caused by the Dengue virus and transmitted by mosquito vectors from the *Aedes aegypti* or *Aedes albopictus* species. Dengue hemorrhagic fever cases that occurred in Jambi city in July 2020 experienced a large number of cases, as many as 674 cases.

Methods : The type of research to be carried out is experimental research with post-test only design with control group design. The population in this study was 500 *aegypti* mosquitoes with a total sample of 240 *Aedes aegypti* mosquitoes with a preference test and color test of 30 people. Data analysis using T test.

Results : The results of the test of the highest repulsion of citronella oil at a concentration of 49% with a repulsion of 100% were assessed at 15 minute intervals. The average repulsion up to the 60th minute with 6 repetitions is 100%. There is aromatherapy activity of citronella, it is stated that there is no ability to perch or bite in experimental animals. the difference in aromatherapy activity of citronella oil with a solution without citronella aromatherapy obtained p value = $0.00 < 0.05$. The essential protection power of citronella oil aromatherapy oil as an anti mosquito *Aedes aegypti* is 100%. The level of preference for *Aedes aegypti* anti-mosquito aromatherapy products, for the level of liking for the aroma, 60% likes slightly, and 30% says Like. For the level of preference for the color, 40% quite like it and 56% say like it. The average preference level is more than 3 (slightly like) which is 3.33 for the average preference for aroma and 3.65 is the average preference for color.

Conclusion : Citronella oil aromatherapy in the form of a diffuser has activity as an anti-mosquito and provides protection against the bite of the *Aedes aegypti* mosquito.

Keywords : mosquito dengue fever, , Citronella Oil Fragrant

ABSTRAK

Latar Belakang: Demam Berdarah Dengue (DBD) merupakan penyakit menular yang disebabkan oleh virus Dengue dan ditularkan melalui vektor nyamuk dari spesies *Aedes aegypti* atau *Aedes albopictus*. Kasus Demam Berdarah Dengue yang terjadi di kota Jambi di bulan juli tahun 2020 mengalami kasus yang begitu banyak sebanyak 674 kasus.

Metode: Jenis Penelitian adalah penelitian experimentdesain *post-test only with control group design*. Populasi pada penelitian ini adalah Nyamuk *aegypti* berjumlah 500 dengan total sampel 440 nyamuk *Aedes aegypti* dengan dilakukan uji kesukaan dan uji warna sebanyak 30 orang. Analisa data dengan menggunakan uji T

Hasil : hasil pengujian daya tolak tertinggi minyak sereh wangi pada konsentrasi 49 % dengan daya tolak sebesar 100% dinilai dengan interval 15 menit. Rerata daya tolak hingga menit ke-60 dengan pengulangan 6 kali yaitu 100%. Terdapat aktivitas aromatheraphy sereh wangi dinyatakan tidak terdapat daya hinggap atau menggiigt pada hewan coba. perbedaan Aktivitas aromatheraphy minyak sereh wangi dengan larutan tanpa aromatheraphy sereh wangi diperoleh nilai $p = 0,00 < 0,05$. Daya proteksi *esensial oli* aromatheraphy minyak sereh wangi sebagai anti nyamuk *aedws aegypti* sebesar 100% . Tingkat kesukaan terhadap produk aromateraphy anti nyamuk *Aedes aegypti*, untuk tingkat kesukaan terhadap aroma 60 % agak suka, dan 30 % menyatakan Suka. Untuk tingkat kesukaan terhadap warna 40% agak suka dan 56 % menyatakan suka. Rata rata tingkat kesukaan melebihi angka 3 (agak suka) yaitu 3.33 untuk rata rata kesukaan aroma dan 3,65 adalah rata rata kesukaan untuk warna.

Kesimpulan : Aromatheraphy minyak sereh wangi dalam bentuk diffuser memiliki aktivitas sebagai anti nyamuk dan memberikan proteksi terhadap gigitan nyamuk *Aedes aegypti*

Kata Kunci : Nyamuk Demam Berdarah ,Sereh Wangi