**Utilization Anting-anting Extract *(Acalypha indica* L*.)***

**as *Aedes aegypti* Repellent**

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**ABSTRACT**

Dengue Hemorrhagic Fever (DHF) is a disease caused by the dengue virus which is transmitted through *Aedes aegypti* mosquito bite. DHF is mainly found in tropic areas and often leads to extraordinary events (KLB). One way to prevent this disease is using repellent. Controlling mosquitoes with insecticides should be reviewed since the use in community has not been monitored and it will accelerate the occurrence of resistance. It encourages the development of alternative natural ingredients from plants as herbal pesticide that is relatively safe, one of them is by using Anting-anting extracts *(Acalypha indica* L*.).* The research objective was to determine the effect of Anting-anting *(Acalypha indica* L*.)* extract formulation in lotions as repellent against *Aedes aegypti* protective power and to know the most effective formulations of Anting-anting *(Acalypha indica* L*.)* extract lotion towards *Aedes aegypti* protective power. The research method was Post Experiment With Test Only Control Group Design. Anting-anting extract formulations used were 6 ml, 8 ml, and 10 ml. The results were analyzed by statistical tests *One-Way Anova* and LSD *(Least Significant Different)*. The results showed that there were different use of various formulations of Anting-anting extract towards *Aedes aegypti* protective power. The three variations of Anting-anting *(Acalypha indica* L*.)* extract lotion formulations had the capability of protection until the sixth hour, but did not meet the established standards that should had the protection of at least 90% for 6 hours. The highest protective power was in the Anting-anting *(Acalypha indica* L*.)* extract lotion formulation of 10 ml with the percentage of protective power from the first until the sixth hour amounted to 92.14% and 75.23%.

Keywords : Anting-anting*,* lotion, repellent, protective power, *Aedes aegypti*

Literature : 22 Books

**Pemanfaatan Ekstrak Anting-anting *(Acalypha indica*L*.)***

**sebagai *Repellent Aedes aegypti***

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**ABSTRAK**

Demam Berdarah *Dengue* (DBD) merupakan penyakit yang disebabkan oleh virus *Dengue* yang ditularkan melalui gigitan nyamuk *Aedes aegypti.* Penyakit DBD banyak dijumpai terutama di daerah tropis dan sering menimbulkan kejadian luar biasa (KLB). Salah satu cara yang dapat mencegah penyakit DBD adalah menggunakan *repellent*. Pengendalian nyamuk dengan menggunakan insektisida perlu dipertimbangkan karena penggunaannya di masyarakat tidak terpantau dan akan lebih mempercepat terjadinya resistensi. Hal ini mendorong untuk dikembangkannya alternatif lain dengan menggunakan bahan alami dari tumbuhan sebagai pestisida nabati yang relatif lebih aman, salah satunya dengan memanfaatkan ekstrak Anting-anting *(Acalypha indica*L*.).* Tujuan penelitian adalah mengetahui pengaruh formulasi ekstrak Anting-anting *(Acalypha indica*L*.)* dalam *lotion*  sebagai *repellent* terhadap daya proteksi *Aedes aegypti* dan mengetahui formulasi *lotion* ekstrak Anting-anting *(Acalypha indica*L*.)* yang paling efektif terhadap daya proteksi *Aedes aegypti.* Metode penelitian yang dilakukan adalah eksperimen dengan menggunakan *Post Test Only With Control Group Design.* Formulasi ekstrak Anting-anting yang digunakan adalah 6 ml, 8 ml, dan 10 ml. Hasil penelitian dianalisis dengan uji statistik *One-Way Anava* dan LSD *(Least Significant Different)*. Hasil penelitian menunjukkan bahwa ada beda penggunaan berbagai variasi formulasi *lotion* ekstrak Anting-anting terhadap daya proteksi nyamuk *Aedes* aegypti dengan nilai *p-value* 0,049. Ketiga variasi formulasi *lotion* ekstrak Anting-anting *(Acalypha indica* L*.)* memiliki kemampuan daya proteksi sampai jam keenam, namun belum memenuhi standar yang telah ditetapkan yaitu harus memiliki daya proteksi sedikitnya 90% selama 6 jam. Daya proteksi yang paling tinggi pada *lotion* ekstrak Anting-anting *(Acalypha indica* L*.)* adalah formulasi 10 ml dengan persentase daya proteksi jam pertama sampai jam keenam sebesar 92,14% dan 75,23%.

Kata Kunci : Anting-anting*, lotion, repellent,* daya proteksi, *Aedes aegypti*

Kepustakaan : 22 buku