ABSTRAK

UJI EFEKTIVITAS SERBUK DAUN KETAPANG (*Terminalia cattapa* L.) DALAM MEMBUNUH LARVA NYAMUK *Aedes aegypti*

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Di daerah tropis, nyamuk merupakan salah satu penyebab kesehatan masyarakat. Penanggulangan *Aedes aegypti* dengan insektisida kimiawi memiliki banyak efek samping dan tidak ramah lingkungan, untuk menghindari dampak negatif tersebut, diperlukan metode lain. Salah satunya adalah dengan memanfaatkan tanaman lokal untuk dijadikan insektisida nabati. Daun ketapang dapat dimanfaatkan sebagai biolarvasida alami untuk membunuh larva nyamuk *Aedes aegypti*. Tujuan penelitian ingin mengetahui efektivitas serbuk dalam ketapang *(Terminalia catappa* L.*)* dalam membunuh larva *Aedes aegypti.* Dengan metode *Quasi-Eksperimen*. Pada penelitian ini memiliki variasi dosis yakni 250 mg/100mL, 275 mg/100mL, 300 mg/100mL, 325 mg/100mL, dan 350 mg/100mL. Uji skrining fitokimia dilakukan secara kualitatif. Hasil skrining fitokimia daun ketapang mengandung saponin, alkaloid, flavonoid, dan tanin. Mortalitas kematian larva *Aedes aegypti.* pada dosis 250 mg/100mL, 275 mg/100mL, 300 mg/100mL, 325 mg/100mL, dan 350 mg/100mL berturut turut 16%, 36%, 64%, 76%, 80% dan 100%. Berdasar uji *kruskall wallis*, nilai *P_Value* (sig.) sebesar 0,074; yang lebih besar dari nilai sig. Menunjukkan bahwa H0 diterima. Nilai LD_{50} sebesar 291.473 mg/100 mL bisa membunuh larva sebesar 50% dan LD_{90} sebesar 364.759 mg/100 mL dapat membunuh larva sebesar 90%. LT_{50} di dapatkan 10,909; yakni untuk membunuh 50% dari larva nyamuk dibutuhkan waktu hingga 10 jam 15 menit dan LT_{90} di dapatkan 27.219; yakni untuk membunuh 90% dari larva nyamuk dibutuhkan waktu hingga 27 jam 4 menit.

Kata kunci: *Aedes aegypti, Serbuk daun ketapang, biolarvasida*

ABSTRACT

TEST OF THE EFFECTIVENESS OF KETAPANG (Terminalia cattapa L.) FLOWER POWDER IN KILLING Aedes aegypti larvae

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In tropical areas such as Indonesia, mosquitoes are one of the causes of public health. Combating Aedes aegypti with chemical insecticides has many side effects and is not environmentally friendly, to avoid these negative impacts, other methods are needed. One of them is by utilizing local plants to be used as vegetable insecticides. Ketapang leaves can be utilized as a natural biolarvicide to kill Aedes aegypti mosquito larvae. The purpose of this study was to determine the effectiveness of ketapang (Terminalia catappa L.) powder in killing Aedes aegypti larvae. The research method used is Quasi-Experiment. This study has a dose variation of 250 mg/100mL, 275 mg/100mL, 300 mg/100mL, 325 mg/100mL, and 350 mg/100mL. Phytochemical screening test was done qualitatively. The results of phytochemical screening of ketapang leaves contain saponins, alkaloids, flavonoids, and tannins. Mortality of Aedes aegypti larvae death. at doses of 250 mg/100mL, 275 mg/100mL, 300 mg/100mL, 325 mg/100mL, and 350 mg/100mL respectively 16%, 36%, 64%, 76%, 80% and 100%. Based on the results of the Kruskall Wallis test, the P_Value (sig.) is 0.074; which is greater than the sig. this indicates that H0 is accepted. LD_{50} value of 291,473 mg/100 mL can kill larvae by 50% and LD_{90} of 364,759 mg/100 mL can kill larvae by 90%. LT_{50} was found to be 10.909; i.e. it takes up to 10 hours 15 minutes to kill 50% of mosquito larvae and LT_{90} was found to be 27.219; i.e. it takes up to 27 hours 4 minutes to kill 90% of mosquito larvae.

Keywords: Aedes aegypti, ketapang leaf powder, biolarvicide