ABSTRAK

Demam Berdarah *Dengue* (DBD) merupakan penyakit yang disebabkan oleh infeksi virus *Dengue*. Tanaman daun pandan wangi memilki senyawa metabolit sekunder diantaranya alkaloid, saponin, flavonoid, tanin dan polifenol, senyawa metabolit sekunder ini dapat membunuh larva. Penelitian ini bertujuan untuk Mengetahui pengaruh variasi konsentrasi ekstrak daun pandan wangi (*P. amaryllifolius Roxb*.) terhadap kematian larva *A. aegypti* Instar III. Jenis penelitian ini adalah eksperimental, dengan rancangan *Contol Group Post-Test Design*. Tingkat pengaruh variasi konsentrasi ditinjau dari nilai *Lethal Concentration* (LC_{50}) dan *Lethal Time* (LT_{50}). Data yang diperoleh dianalisis menggunakan uji regresi probit atau analisis probit untuk mengetahui pengaruh variasi konsentrasi ekstrak daun pandan wangi (*P. amaryllifolius Roxb*.) terhadap kematian larva *A. aegypti* Instar II dan dinyatakan sebagai *Lethal Concentration* (LC_{50}) dan *Lethal Time* (LT_{50}) dengan tingkat kepercayaan 95,0%, uji probit diperoleh hasil LC_{50}-6 jam adalah 7,770%, LC_{50}-8 jam adalah 6,516%, LC_{50}-24 jam adalah 4,409%, LT_{50}-2% adalah 31,973 jam, LT_{50}-4% adalah 24,745 jam, dan LT_{50}-6% adalah 16,129 jam, dari uji parametrik yang dilakukan didapatkan hasil tidak normal dan homogen, maka dilanjutkan uji *Kruskal-Wallis* dan menunjukkan nilai *P-Value* 0,000(< 0,05). Sehingga dapat dikatakan bahwa adanya pengaruh variasi konsentrasi ekstrak daun pandan wangi (*Pandanus amaryllifolius Roxb*.) terhadap mortalitas larva *Aedes aegypti* instar III.

Kata kunci : Daun pandan wangi, larvasida alami, *Aedes*, larva

ABSTRACT

Dengue Hemorrhagic Fever (DHF) is a disease caused by Dengue virus infection. The use of synthetic larvicides causes side effects on human health. Efforts are made to use natural insecticides to minimize contact with dangerous chemical substances. Fragrant pandan leaf plants have secondary metabolite compounds including alkaloids, saponins, flavonoids, tannins and polyphenols, these secondary metabolite compounds can kill larvae. This study aims to determine the effect of variations in the concentration of fragrant pandan leaf extract (P. amaryllifolius Roxb.) on the death of A. aegypti Instar III larvae. This type of research is experimental, with a Control Group Post-Test Design. The level of influence of concentration variations is seen from the Lethal Concentration (LC50) and Lethal Time (LT50) values. The data obtained were analyzed using a probit regression test or probit analysis to determine the effect of variations in the concentration of wangi pandan leaf extract (P. amaryllifolius Roxb.) on the death of A. aegypti Instar III larvae. and expressed as Lethal Concentration (LC50) and Lethal Time (LT50) with a confidence level of 95.0%, the probit test obtained the results of LC50-6 hours was 7.770%, LC50-8 hours was 6.516%, LC50-24 hours was 4.409%, LT50-2% is 31,973 hours, LT50-4% is 24,745 hours, and LT50-6% is 16,129 hours, from the parametric tests carried out the results were not normal and homogeneous, then the Kruskal-Wallis test was continued and showed a P-Value 0,000 (<0,05). So it can be said that there is effect of variations in the concentration of fragrant pandan leaf extract (Pandanus amaryllifolius Roxb.) on the mortality of third instar Aedes aegypti larvae.

***Keywords**: Fragrant pandan leaves, natural larvicide, Aedes, larvae*