

ABSTRAK

Mahkota dewa (*Phaleria macrocarpa* (Scheff.) Boerl.) mampu tumbuh dan berkembang di negara beriklim tropis seperti Indonesia. Beberapa penelitian sebelumnya dikatakan mahkota dewa memiliki banyak kandungan senyawa kimia salah satunya adalah minyak atsiri yang berpotensi membunuh nyamuk. Populasi *Culex* sp. lebih banyak dari jenis nyamuk lainnya. Penelitian ini bertujuan melihat efek toksik dari ekstrak batang mahkota dewa terhadap larva nyamuk *Culex* sp. dalam konsentrasi 5%, 10%, 15% dan 25% berdasarkan waktu pengamatan (0 detik, 30 detik, 1 menit, 5 menit, 15 menit, 30 menit, 1 jam dan 2 jam). Rancangan penelitian *the post test only controlled group design* dengan subjek penelitian yang digunakan larva nyamuk *Culex* sp.. Kedalam cawan petri yang berisi ekstrak batang mahkota dewa dengan berbagai tingkat konsentrasi ditambahkan larva nyamuk *Culex* sp.. Metode *Mann-Whitney* digunakan untuk menganalisa data penelitian, hasilnya mengatakan bahwa perbedaan persentase larva nyamuk *Culex* sp. yang mati setelah diberi perlakuan ekstrak batang mahkota dewa setelah waktu pengamatan 1 jam (Nilai P = 0,001) dan 2 jam (Nilai P = 0,002). Pada penelitian ini, efek toksik yang efektif terjadi pada konsentrasi 25% setelah 1 jam diberi perlakuan.

Kata kunci : Larva Nyamuk *Culex* sp., Mahkota dewa (*Phaleria macrocarpa* (Scheff.) Boerl.), Toksisitas

ABSTRACT

The crown of god (*Phaleria macrocarpa* (Scheff.) Boerl.) able to grow and develop in tropical countries such as Indonesia. Some previous studies have said the crown of the god has a lot of chemical compounds, one of which is essential oil that has the potential to kill mosquitoes. Population of *Culex* sp. More than any other type of mosquito. *Culex* sp. The study aimed to look at the toxic effects of the crown of god extract on the *Culex* sp. larvae in concentrations of 5%, 10%, 15% and 25% based on observation time (0 seconds, 30 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes, 1 hour and 2 hours). *Thepost test only controlled group design* research design design with research subjects used *Culex* sp. larvae. Into the petri dish containing extract of the crown of god stem with a concentration level added *Culex* sp. larvae. *Mann-Whitney* method was used to analyze the research data, the results said that the difference in the percentage of *Culex* sp. larvae that died after being treated with the extract of the crown of god stem after an observation time of 1 hour (P value = 0.001) and 2 hours (P value = 0.002). In this study, the effective toxic effect occurred at a concentration of 25% after 1 hour of treatment.

Keyword : *Culex* sp. Larvae, The crown of god (*Phaleria macrocarpa* (Scheff.) Boerl.), Toxicity