

PENGARUH PEMBERIAN EKSTRAK DAUN MENGGKUDU (*Morinda citrifolia*) TERHADAP TINGKAT KEMATIAN LARVA *Aedes aegypti* INSTAR III *IN VITRO*

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak daun mengkudu (*Morinda citrifolia*) terhadap tingkat kematian larva *Aedes aegypti* instar III dan konsentrasi yang tepat mematikan larva *Aedes aegypti* sebesar 50% (LC50) dan 95% (LC95). Jenis penelitian ini adalah eksperimental. Subjek penelitian ini adalah larva *Aedes aegypti* instar III sebanyak 875 ekor. Subjek dibagi dalam 1 kelompok kontrol dan 6 kelompok perlakuan dengan masing-masing 4 kali ulangan dengan taraf konsentrasi 0% (Kontrol), 10%, 15%, 20%, 25%, 30%, 35% (perlakuan). Pengumpulan data dilakukan dengan cara menghitung jumlah kematian larva *Aedes aegypti* instar III setelah pemaparan selama 24 jam. Data tersebut diolah dengan analisis Anava dan analisis probit. Dengan Uji Anava, maka H_0 ditolak, atau dengan kata lain terdapat pengaruh ekstrak daun mengkudu terhadap tingkat kematian larva *Aedes aegypti* instar III. Dari analisis probit didapatkan LC_{50} sebesar 22,38% dengan aplikasi minitab. Berdasarkan hasil penelitian diatas dapat disimpulkan bahwa ekstrak daun mengkudu (*Morinda citrifolia*) berpengaruh terhadap tingkat kematian larva *Aedes aegypti* instar III *in vitro* dengan LC_{50} sebesar 22,38% dan LC_{95} sebesar 38,72%.

Kata Kunci : Ekstrak daun mengkudu, *Aedes aegypti*, instar III

**THE EFFECT OF NONI'S EXTRACT LEAVES (*Morinda citrifolia*) ON
THIRD INSTAR *Aedes aegypti* LARVA'S MORTALITY *IN VITRO***

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ABSTRACT

The aims of the study are to determine the influence of noni extract leaves on third instar *Aedes aegypti* larva mortality and the 50% lethal concentration (LC₅₀) and 95% lethal concentration (LC₉₅). The study was experimental laboratory. The subject of research was 875 third instar larvae. The sample was divided into 1 control group and 6 experimental groups, each had 4 repetitions with concentration reached 0% (control), 10% ; 15% ; 20% ; 25% ; 30% ; 35%. The results were achieved on the third instar *Aedes aegypti* death sum after 24 hour. The results were analyzed by ANOVA and probit analysis. $F_{count} > F_{table}$ has been obtained by the anova test, which means H_0 is rejected, or in the other word, it shows that the influence noni's extract leaves (*morinda citrifolia*) on third instar *aedes aegypti* larva's mortality *in vitro* was present. The LC₅₀ is 22.38% and LC₉₅ is 38.72% by probit analysis used Minitab application. The study show that noni's extract leaves (*morinda citrifolia*) have influence for third instar *Aedes aegypti* larva's mortality *in vitro* with LC₅₀ 22.38% and LC₉₅ 38.72%.

Keywords: noni's extract leaves, *Aedes aegypti*, third instar.