

**RESISTENSI NYAMUK *Aedes aegypti* TERHADAP INSEKTISIDA
CYPERMETHRIN PADA DAERAH ENDEMIS DAN NON ENDEMIS DI
KABUPATEN GROBOGAN**

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ABSTRAK

Resistensi nyamuk *Aedes aegypti* terhadap insektisida menjadi salah satu kontributor dari meningkatnya angka kejadian Demam Berdarah Dengue (DBD). Penelitian ini bermaksud mengetahui perbedaan status resistensi nyamuk *Aedes aegypti* terhadap insektisida cypermethrin pada daerah endemis dan non endemis di Kabupaten Grobogan.

Penelitian ini berjenis eksperimental dengan *post test only control group design*. Subyek penelitian nyamuk *Aedes aegypti* yang diambil dari daerah endemis dan non endemis di Kabupaten Grobogan. Tiap-tiap nyamuk dari dua daerah tersebut dibedakan menjadi dua kelompok, kontrol (tanpa paparan cypermethrin) dan perlakuan (dipapar cypermethrin 0,05%). Resistensi nyamuk *Aedes aegypti* terhadap insektisida *cypermethrin* diuji dengan metode *susceptibility test*. Perbedaan persentase kematian nyamuk *Aedes aegypti* di daerah endemis dan non endemis antara kelompok kontrol dan perlakuan dianalisis dengan uji Kruskal Wallis dilanjutkan dengan uji *Mann Whitney*.

Persentase kematian nyamuk *Aedes aegypti* pada kelompok kontrol baik untuk daerah endemis maupun endemis adalah 0%, sedangkan pada kelompok perlakuan untuk di daerah endemis sebesar $86,0 \pm 8,3\%$ dan untuk daerah non endemis sebesar $93,0 \pm 8,02\%$. Terdapat perbedaan persentase kematian nyamuk *Aedes aegypti* antara kelompok kontrol dan perlakuan baik di daerah endemis maupun non endemis ($p=0,015$). Kematian nyamuk *Aedes aegypti* di kelompok perlakuan antara daerah endemis dan non endemis tidak berbeda bermakna ($p=0,240$).

Kesimpulan: Tidak ada perbedaan status resistensi dari daerah endemis dan non endemis di kabupaten Grobogan.

Kata Kunci: *Cypermethrin* 0,05%, Resistensi Nyamuk *Aedes aegypti*.

THE INSECTICIDE SUSCEPTIBILITY STATUS OF AEDES AEGYPTI MOSQUITO IN ENDEMIC AND NON ENDEMIC AREAS GROBOGAN REGENCY

ABSTRACT

Background : *The Insecticide Susceptibility status of Aedes aegypti mosquito become one of some factors that contribute to the increased Dengue Hemorrhagic Fever (DHF) incidence. This research aimed to compare the susceptibility of Aedes aegypti mosquito to the cypermethrin insecticide at endemic and non endemic area in Grobogan Regency.*

Method : *This was an experimental research with post test only control group design. Subjects of study were Aedes aegypti mosquitoes that taken from endemic and non endemic areas in Grobogan Regency. Each mosquito of the two regions was divided into two groups: control (without cypermethrin exposure) and treatment (exposure to cypermethrin 0.05%). Aedes aegypti mosquito resistance to cypermethrin insecticide was identified by susceptibility test method. Aedes aegypti mosquitoes in the area endemic and non endemic between the control and treatment groups were analyzed by Kruskal Wallis test followed by Mann Whitney test.*

Result : *The percentage of Aedes aegypti mosquito mortality in control group for endemic or endemic area were 0%, while in treatment group for endemic area $86.0 \pm 8.3\%$ and for non endemic area $93.0 \pm 8,02\%$. There was a no statistically significant difference in the presentase of dead Aedes aegypti mosquito between two groups ($p < 0,005$).*

Conclusion: *There was no differens in the level susceptibility from endemic and non endemic areas Grobogan regency*

Keywords: *Cypermethrin 0.05%, Aedes aegypti Resistance.*