

## ABSTRAK

Syifa'ul Aulia Putri

EFEKTIVITAS MASA APLIKASI LARVASIDA METOPREN TERHADAP  
KEMATIAN LARVA *Aedes aegypti*

1x + 66 Halaman + 5 Tabel + 6 Lampiran

Telah dilaporkan bahwa larva *Aedes aegypti* resisten terhadap larvasida temephos, sehingga diperlukan alternatif larvasida yang lebih efektif. Salah satunya adalah larvasida metopren, golongan *Insect Growth Regulator* (IGR). Tujuan penelitian adalah menganalisis efektivitas masa aplikasi metopren terhadap kematian larva *Aedes aegypti*.

Riset ini berjenis eksperimen dengan desain *Posttest-Only Control Group*. Objek kajian berupa larva *Aedes aegypti* instar III. Variabel bebas adalah masa aplikasi yang dikategorikan dalam minggu ke I, II, III dan IV, variabel terikat adalah jumlah kematian larva *Aedes aegypti* dan variabel pengendali adalah pH serta suhu media air. Setiap perlakuan digunakan 20 larva *Aedes aegypti* dan diulang tiga kali. Data dianalisis secara deskriptif.

Tingkat kematian larva bervariasi antar masa aplikasi, dengan kematian tertinggi terjadi pada minggu ke II dan rata-rata kematian mencapai 90%, yang menegaskan bahwa Metopren efektif sebagai larvasida *Aedes aegypti*.

Metopren dapat digunakan sebagai larvasida alternatif untuk mengendalikan larva *Aedes aegypti*.

Kata Kunci: *Aedes aegypti*, larvasida, metopren

Daftar Bacaan: 8 buku (2012 - 2024)

27 Jurnal (2019 - 2025)

## ABSTRACT

Syifa'ul Aulia Putri

*THE EFFECTIVENESS OF METHOPRENE LARVICIDE APPLICATION PERIOD ON THE MORTALITY OF *Aedes aegypti* LARVAE*

*1x + 66 Pages + 8 Tables + 6 Appendices*

*It has been reported that *Aedes aegypti* larvae are resistant to the larvicide temephos, so a more effective larvicide alternative is needed. One such alternative is the larvicide methoprene, which belongs to the Insect Growth Regulator (IGR). The objective of this study was to analyze the effectiveness of methoprene application periods on the mortality of *Aedes aegypti* larvae.*

*This research was an experiment with a posttest-only control group design. The research subjects were *Aedes aegypti* larvae at the third instar stage. The independent variable was the application period, categorized into weeks I, II, III, and IV. The dependent variable was the number of *Aedes aegypti* larvae deaths, and the control variables were pH and water temperature. Each treatment used 20 *Aedes aegypti* larvae and was repeated three times. The data were analyzed descriptively.*

*Larval mortality rates varied across application periods, with the highest mortality occurring in the second week, averaging 90%, confirming that Methopren is effective as an *Aedes aegypti* larvicide.*

*Methopren can be used as an alternative larvicide for controlling *Aedes aegypti* larvae.*

*Keywords: *Aedes aegypti*, larvicide, methoprene*

*References: 8 books (2012 - 2024)*

*27 journals (2019 - 2025)*