

UJI EFEKTIFITAS INSEKTISIDA BISTAR 10 WP TERHADAP ANOPHELES  
ACONITUS PADA PERMUKAAN DINDING TEMBOK, PAPAN DAN BAMBU TAHUN  
2004

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Beberapa hal yang penting dalam epidemiologi Malaria adalah hubungan antara Host(manusia), Agent (penyebab penyakit) dan *Environment* (lingkungan). Manusia disebut sebagai *host intermediate* dimana siklus aseksual parasit Malaria terjadi, sedangkan nyamuk malaria disebut *host definitif* dimana siklus seksual parasil malaria berlangsung inssktisida Bistar 10 WP telah dipublikasikan dan direkomendasikan untuk pengendalian *Anopheles sp* dengan dosis 0,025 gram per yang pengujinya dilakukan di India dengan menggunakan nyamuk (pengujian WHOPES Phase II).

Penelitian bertujuan umum untuk menilai perbedaan efektifitas daya bunuh Insektisida Bistar 10 WP terhadap nyamuk *Anopheles aconitus* pada permukaan dinding tembok, papan dan bambu. Jenis penelitian Eksplanatif dengan metode Eksperimental Semu. Sampel penelitian ini merupakan dinding papan dan dinding bambu. Hipotesis yang diuji ada dua : 1). Ada perbedaan jumlah nyamuk *Anopheles aconitus* mati setelah kontak dengan Insektisida Bistar 10 WP pada sebagai perbedaan waktu pelaksanaan Bio-assay. Analisa data akan diuji dengan Anova yang dilanjutkan dengan LSD menggunakan SPSS 10. Kesimpulan hasil penelitian: 1). Pada dinding Tembok, Insektisida Bistar 10 WP efektif mulai hari pertama pengamatan sampai dengan minggu ketiga, sedangkan pada pengamatan minggu keempat Bistar tidak efektif lagi karena kematian rata-rata nyamuk hanya mencapai 73,33% (kurang dari 80%). 2) Pada dinding Papan, Insektisida Bistar 10 WP terbukti efektif mulai pengamatan hari pertama sampai dengan minggu keempat, karena jumlah rata-rata kematian nyamuk mencapai 80%. 3) pada dinding Bambu. Isktisida Bistar 10 WP terbukti masih efektif mulai pengamatan hari pertama sampai dengan minggu keempat, karena jumlah rata-rata kematian nyamuk mencapai 80 %. 4). Dari hasil Uji Statistik terbukti tidak ada perbedaan yang bermakna rata-rata jumlah nyamuk yang mati pada permukaan berdinding tembok, papan dan bambu setelah disemprot dengan insektisida bistar pada pengamatan hari pertama sampai dengan minggu keempat. ( $F=0.677$  nilai  $p$  pemparan dalam uji bio assay 60 menit).

**Kata Kunci:** Isktisida Bistar 10 WP, *Anopheles aconitus*, Tahun 2004.

**EFFECTIVIY TEST OF INSECTISIDE OF BISTAR 10 WP TOWARD ANOPHELES ACONITUS ON CEMENT-PLASTER SURFACE, WOOD AND BAMBOO 2004**

**Abstract**

Several important things in epidemiology of Malaria are relation between Host (human), agent (caused of disease) and environment. Human called as host intermediate, where nonsexual cycle of Malaria parasite was occurring Insecticide of Bistar 10 Wp has been published and recommended for Anopheles sp control with dose is 0,025 grams per m<sup>2</sup> that the testing was conducted in India with using Anopheles culicifacies mosquito (Test of WHOPES Phase II).

This experiment has general aim to evaluate the difference of killing power affectivity of Insecticide of Bistar 10 WP has been published and recommended for Anopheles sp control with dose is 0,25 grams per m<sup>2</sup> that the testing was conducted in India with using Anopheles culicifacies mosquito (Test of WHOPES Phase II).

This experiment has general aim to evaluate the difference of killing power affectivity of Insecticide of Bistar 10 WP toward Anopheles aconitus mosquito on cement-plaster surface, wood and bamboo. Type of experiment is explanatory with typical experiment method.

Samples of this experiment are cement plaster surface, wood and bamboo. Hypothesis that was tested was two, that is: 1) There is a difference of amount of Anopheles aconitus mosquito that was dead after contact with Insecticide of Bistar 10 WP in every wall surfaces that was syringed, 2) There is a difference of amount of Anopheles aconitus mosquito that was dead by ANOVA, continued with LSD using SPSS 10.

Conclusion of experiment result: 1) On cement plaster surface, insecticide of Bistar 10 WP still effective from the first day of experiment until the third week, whereas in observation of the fourth week, Bistar not effective anymore because mosquito death rate is only 73,33% (less than 80%). 2) On wood surface, insecticide of Bistar 10 WP was proven still effective from the first day of experiment until the fourth week, because mosquito death rate is 80%. 3) On bamboo surface, insecticide of Bistar 10 WP was proven still effective from the first day of experiment until the fourth week, because mosquito death rate is 80%. 4) From statistical test result was proven there is no significant difference of dead mosquito average in room with cement palster, wood or bamboo after spraying with insecticide of bistar in observation from the first day until the fourth week. ( $F=0,677$  value of  $p=0,513$  bigger than 0,05, so,  $H_0$  was accepted and  $H_a$  was refused).

**Keyword :** Insecticide of Bistar 10 WP, Anopheles aconitus, 2004