

PENGARUH PEMBERIAN EKSTRA SIRSAK ( ANNONA MURICATA LINN)  
TERHADAP KEMATIAN LARVA ANOPHELES ACONITUS.

(2005 - Skripsi)

**Oleh:** SULASTRI -- E2A303201

Pengendalian vektor malaria masih ditekankan pada penggunaan insektisida kimia. Penggunaan insektisida kimia yang berulang-ulang dapat mengakibatkan resistensi vektor, matinya hewan lain yang bukan sasaran dan pencemaran lingkungan. Oleh karena itu dicari cara lain yaitu dengan menggunakan insektisida hayati salah satunya adalah dengan menggunakan tanaman sirsak (*A. muricata* L.) yang mempunyai kandungan senyawa aktif annonain, tanin, alkaloid. Penelitian ini bertujuan untuk menguji apakah ekstrak akar sirsak (*A. muricata* L.) dapat menyebabkan kematian larva *Anopheles aconitus*. Metode penelitian ini menggunakan rancangan eksperimen dengan desain "Post test only control group design". Pada konsentrasi terendah (0,01%) menyebabkan kematian larva *An. aconitus* sebesar 8,35% dan pada konsentrasi tertinggi (0,4%) semua larva *An. aconitus* mati. Hasil uji Anava menyatakan bahwa terdapat perbedaan rata-rata kematian larva pada berbagai tingkat konsentrasi ekstrak akar sirsak (*A. muricata* L.) Uji LSD (Least Significant Different) menunjukkan bahwa tidak semua pasangan nilai rata-rata kematian larva *An. aconitus* berbeda secara signifikan. Kesimpulan ekstrak akar sirsak (*Annona muricata* Linn) dapat membunuh larva *An. aconitus*, konsentrasi yang dapat memematikan larva *An. aconitus* pada LC 50 sebesar 0,15% dan LC 90 sebesar 0,27%, ada perbedaan rata-rata kematian larva *An. aconitus* pada berbagai tingkat konsentrasi ekstrak akar sirsak (*A. muricata* L.) secara signifikan ( $p < 0,05$ ).

**Kata Kunci:** *Anopheles aconitus*, akar sirsak (*Annona muricata* Linn), Lethal Concentration 50 (LC 50), Lethal Concentration 90 (LC 90).

*THE EFFEECT OF GIVING SOURSOP ROOT EXTRACT  
TO THE DEATH OF Anopheles aconitus LARVAE.*

*Abstract*

*The control of malaria vector is still emphasized on the usage of chemical insecticides, which repeatedly can cause vector resistance, death of other animals which is not target and population. Therefore, it must be looked for other way to control malaria vector that is by using natural insecticide, one of them is by using soursop plant (A. muricata L.) which have active compound containing annonain, tannin and alkaloid. This research is intended to do a test whether soursop root extract (A. muricata L.) Can cause death of Anopheles aconitus larvae. This research method is using experimental plan with "Post test only group design". The result shows that there are death of An. aconitus larva after giving of soursop root extract (A. muricata L.) The lowest concentration (0,01%) cause death of An. aconitus larva 8,35% and the highest concentration (0,4%) all An.aconitus larva are dead. Result of Anava test expressed that there are differences of the average of larva death at various extract concentrations level of soursop root extract (A. muricata L.) The LSD (Least Significant Differences of the average of larva death at various extract concentrations level of soursop root extract ( A.muricata L.) The LSD (Least Significant Different) test indicate that not all couple average of value death of An. aconitus larvae are different significantly. The conclusion of this research is the soursop root extract (A.muricata L.) can kill An. aconitus larva. The concentration that is able to kill An.aconitus of the average of larva's An. Aconitus death at various extract concentration of soursop root extract (A.muricata L.)*

*Keyword : Anopheles aconitus, soursop (Annona muricata Linn) root extract, lethal concentration 50(LC 50), Lethal Concentration 90 (LC 90)*