

ABSTRAK

UJI AKTIVITAS LARVASIDA EKSTRAK ETANOL DAUN KENITU (*Chrysophyllum cainito* L.) TERHADAP VEKTOR MALARIA (*Anopheles sundaicus*)

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Malaria merupakan penyakit menular yang disebabkan oleh parasit *Plasmodium* dan ditularkan melalui gigitan nyamuk *Anopheles* betina. Pengendalian populasi nyamuk selama ini masih banyak bergantung pada penggunaan insektisida kimia yang dapat menimbulkan resistensi serta pencemaran lingkungan. Oleh karena itu, diperlukan alternatif larvasida alami yang ramah lingkungan dan efektif. Penelitian ini bertujuan untuk mengetahui kandungan fitokimia daun kenitu (*Chrysophyllum cainito* L.) serta mengetahui aktivitas larvasida ekstrak etanol daun kenitu terhadap larva *Anopheles sundaicus*. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan konsentrasi 100, 150, 200, 250, 300 ppm, dan kontrol negatif, sebanyak empat ulangan. Aktivitas larvasida ditentukan berdasarkan tingkat mortalitas larva instar III pada berbagai konsentrasi ekstrak yang diamati pada 6, 12, 24, 48, 72, dan 96 jam setelah perlakuan. Uji fitokimia dianalisis secara deskriptif kualitatif dan data mortalitas dianalisis menggunakan *Analysis of Variance* (ANOVA). Hasil penelitian uji fitokimia menunjukkan bahwa ekstrak etanol daun kenitu positif mengandung senyawa alkaloid, flavonoid, tanin, saponin, terpenoid, dan fenolik. Jumlah mortalitas larva pada jam ke-96, sebesar 43,75% pada konsentrasi 100 ppm dan 35,00% pada 300 ppm. Hasil uji ANOVA menunjukkan tidak terdapat perbedaan yang signifikan antar perlakuan yang menunjukkan bahwa aktivitas larvasida ekstrak etanol daun kenitu terhadap larva *Anopheles sundaicus* tergolong rendah. Dengan demikian, ekstrak etanol daun kenitu tidak efektif sebagai larvasida terhadap larva *Anopheles sundaicus* pada rentang konsentrasi 100–300 ppm hingga 96 jam pengamatan.

Kata kunci: *Anopheles sundaicus*, daun kenitu, larvasida, fitokimia

ABSTRACT

TESTING THE LARVICIDAL ACTIVITY OF ETHANOL EXTRACTS FROM KENITU LEAVES (*Chrysophyllum cainito* L.) AGAINST MALARIA VECTORS (*Anopheles sundaicus*)

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Malaria is an infectious disease caused by the Plasmodium parasite and transmitted through the bite of the female Anopheles mosquito. Mosquito population control has largely relied on the use of chemical insecticides, which can lead to resistance and environmental contamination. Therefore, there is a need for natural, environmentally friendly, and effective larvicides. This study aims to determine the phytochemical composition of kenitu leaves (*Chrysophyllum cainito* L.) and to assess the larvicidal activity of kenitu leaf ethanol extract against *Anopheles sundaicus* larvae. The study employed a Completely Randomized Design (CRD) with concentrations of 100, 150, 200, 250, 300 ppm, and a negative control, with four replicates. Larvicidal activity was determined based on the mortality rate of third-instar larvae at various extract concentrations, observed at 6, 12, 24, 48, 72, and 96 hours after treatment. Phytochemical tests were analyzed using qualitative descriptive methods, and mortality data were analyzed using Analysis of Variance (ANOVA). The results of the phytochemical tests showed that the ethanol extract of kenitu leaves was positive for alkaloids, flavonoids, tannins, saponins, terpenoids, and phenolics. The results of the ANOVA test showed no significant differences among treatments, indicating that the larvicidal activity of the ethanol extract of kenitu leaves against *Anopheles sundaicus* larvae was low. Thus, the ethanol extract of kenitu leaves was not effective as a larvicide against *Anopheles sundaicus* larvae at concentrations ranging from 100 to 300 ppm over a 96-hour observation period.

Keywords: *Anopheles sundaicus*, kenitu leaves, larvicide, phytochemistry