INTISARI

Demam berdarah dengue (DBD) hingga saat ini merupakan penyakit menular yang menjadi masalah kesehatan Nasional dan membutuhkan penanganan serius. Penyakit yang disebarkan oleh *Aedes aegypti* dan *Aedes albopictus* sebagai vektor belum diketemukan vaksinnya sehingga dilakukan upaya untuk menemukan cara penanggulangannya. Pada saat ini pencarian insektisida alami untuk memutus siklus hidup vektor sedang dikembangkan karena penggunaan insektisida sintetis dapat menimbulkan masalah, seperti terjadinya resistensi vektor dan pencemaran lingkungan.

Penelitian ini bersifat eksperimental murni dengan jenis rancangan *post test only control group design* yang bertujuan untuk mengetahui daya larvasida ekstrak etanol dan perasan daun mimba terhadap larva *Aedes aegypti* instar IV dan besarnya daya larvasida yang ditimbulkan.

Penelitian dilakukan dengan menggunakan 20 ekor larva *Aedes aegypti* instar IV yang ditempatkan pada setiap cawan petri dan diberi perlakuan dengan ekstrak etanol dan perasan daun mimba (*Azadirachta indica* A.Juss) konsentrasi tiap cawan petri adalah 64%, 32%, 16%, 8%, 4% dengan volume 20 ml. Replikasi dilakukan 3 kali pada setiap konsentrasi ekstrak etanol maupun perasan daun mimba. Pengamatan dilakukan dengan menghitung jumlah larva yang mati pada waktu 4jam, 8jam, 16jam, 24jam, 32jam, dan 64jam. Kandungan kimia daun mimba dideteksi dengan Kromatografi Lapis Tipis dan uji tabung.

Hasil penelitian menunjukkan harga LC_{50} ekstrak etanol pada waktu 24 jam terhadap larva *Aedes aegypti* instar IV sebesar 20,44%, sedang perasannya sebesar 29,87%. Pengamatan waktu yang dibutuhkan untuk kematian larva pada ketiga konsentrasi (64%, 32%, dan 16%) masing–masing adalah 6,33 jam, 12,5jam , dan 44,8jam untuk perlakuan ekstrak etanol, sedangkan pada perasan masing-masing 15,99jam, 27,66jam, dan 43,99jam.

Kandungan senyawa daun mimba berdasarkan uji tabung adalah saponin dan flavonoid.Golongan flavonoid yang terdapat dalam daun mimba salah satunya adalah rutin berdasarkan uji Kromatografi Lapis Tipis. Rutin menghasilkan bercak berwarna kuning pada lempeng selulosa yang tampak pada UV 365 nm.

ABSTRACT

Until now, Dengue Haemorrhagic Fever (DHF) is an infectious disease that becomes National healthy problems and need serious handling. This disease that spreads by *Aedes aegypti* and *Aedes albopictus* as a vector, and hasn't found the vaccine yet , so it is necessary having an expedient to find the solution. At this time, the existence of the natural insecticide that is used to cut vector's life cycle has been developing, because the using of the syntetic insecticide can cause troubles, like the occurs of resistence vector and the enviroment's pollution.

This experiment has pure experimental character with the post test only control group design methode to aim at knowing the capacity of larvacide ethanol extract and what has been squeezed out from neem leave with an instar IV of *Aedes aegypti* larva and the large of the larvacide's capacity that is came out.

The experiment had done by using 20 instar IV of *Aedes aegypti* larvas that were placed on every petri disk and given a treatment with ethanol extract and what had been squeezed out from neem leave (*Azadirachta indica* A.Juss). Concentration on every petri disk was 64%, 32%, 16%, 8%, 4% with 20 ml of volume. Replication had done for 3 times on every concentration of ethanol extract and also what had been squeezed out from neem leave. The inspection had done by counting the amount of the dead's larva in 4 hours, 8 hours, 16 hours, 24 hours, 32 hours, and 64 hours. The, chemical contents of neem leave was detected by Thin Layer Chromatography and tube test.

The result of the experiment showed the value of LC_{50} ethanol extract with instar IV of *Aedes aegypti* larvas as much as 20,44%, and the squeeze was 29,87 %. The inspection of time that was needed to the dead's larva in the three of the concentrations (64%, 32%, and 16%) every concentration needed 6,3 hours, 12,5 hours, and 44,8 hours for the treatment of the ethanol extract, whereas in every squeeze was 15,99 hours, 27,66 hours, and 43,99 hours.

Based on tube test the contents of neem leave was saponin and flavonoid. One of flavonoid groups that was found in neem leave was rutin based on thin layer chromatography test. Rutin produced a yellow spot marked in cellulose plate that was seem in UV 365 nm.