

- ANTIMALARIA
- PLASMODIUM.

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SKRIPSI

SUMA DINA MAHDIYANTI

**UJI ANTIMALARIA *IN VIVO* ISOLAT
ANDROGRAFOLIDA DARI *ANDROGRAPHIS
PANICULATA* NEES TERHADAP *PLASMODIUM
BERGHEI* PADA MENCIT**

**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA**



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN ILMU BAHAN ALAM
SURABAYA
2004**

Lembar Pengesahan

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BERGHEI* PADA MENCIT**

SKRIPSI

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mencapai Gelar Sarjana Farmasi pada Fakultas Farmasi
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ABSTRACT

Malaria become a threat to the health of human, which infected more than 300 million of people and caused mortality 1-1,5 million people every year. The increasing of this situation caused by the resistance of *Plasmodium falciparum* to the antimalarial drugs. One of the effort to fight malaria is looking for new antimalarial drugs, which could be started by looking for plants that are traditionally used as antimalarial herbs. *Andrographis paniculata* Nees has been used in traditional medicine against malaria. This plant contain diterpen lactone andrographolide as a lead compound.

This research is an advanced research which diterpene lactone isolate of this plant is known has *in vitro* antimalarial activity. The purpose of this research is to find out the *in vivo* antimalarial activity of andrographolide isolate from *Andrographis paniculata* Nees.

Peter's test (*The 4-day suppressive test of blood schizontocidal action*) were used for screening of drugs for antimalarial activity. The isolate was suspended with 5% DMSO and 0,5 CMC Na at doses 40, 20, 10, 5, 3, 2 mg/kg body weight. The isolate were administered daily from initial day after infection for four days by oral route. Observation was done by counting number of parasites per 5000 erythrocyt in Giemsa stained thin blood films from D₀-D₆.

The result of the *in vivo* antimalarial activity of andrographolide isolate against *Plasmodium berghei* has found to have an IC₅₀ = 3,82190 mg/kg body weight.

Keywords : *Andrographis paniculata* Nees, andrographolide, antimalarial, *Plasmodium berghei*, Peter's test