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# UJI ANTIMALARIA IN VIVO PRODUK DISPERSI PADAT ANDROGRAFOLIDA TERHADAP PLASMODIUM BERGHEI PADA MENCIT



FAKULTAS FARMASI UNIVERSITAS AIRLANGGA BAGIAN ILMU BAHAN ALAM SURABAYA 2004

## Lembar Pengesahan

## UJI ANTIMALARIA *IN VIVO*PRODUK DISPERSI PADAT ANDROGRAFOLIDA TERHADAP *PLASMODIUM BERGHEI*PADA MENCIT

### **SKRIPSI**

Dibuat untuk memenuhi syarat mencapai gelar sarjana farmasi pada Fakultas Farmasi Universitas Airlangga 2004

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#### ABSTRACT

The object of this research is to study the antimalarial effect of andrographolide formulated in solid dispersion system. The methode used here is modification Peter's test (The 4-day suppressive test of blood schizontosidal action).

Each male mice was infected by parasite suspension obtained from donor mice with parasitemia  $\geq 20$  %. Each mice received 0,1 - 0,2 ml parasite suspension intraperitoneally. Wait until parasitemia had reached 1 - 5 %, then mice were ready to be treated.

Andrographolide solid dispersion were weighed according to the planned doses and suspended in 0,5 % CMC Na. Andrographolide suspension was given daily from initial day after infection for four days by oral route. For seven days  $(D_0 - D_6)$  blood was taken from tail and then stained with Giemsa, and parasited red blood cells were counted.

The result showed that treated animals had lower parasitemia compaired to the untreated animals. Andrographolide formulated in solid dispersion system were active against *Plasmodium berghei*, it showed inhibition up to 76,72 %. ED<sub>50</sub> value was calculated from log dose / probit activity. ED<sub>50</sub> of andrographolide formulated in solid dispersion system was 3,49721 mg/kg body weight.

**Key words :** andrographolide solid dispersion, Plasmodium berghei, antimalarial