

- HAEMORRHAGIC FEVER

- DENGUE

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SKRIPSI

DESI RAHMANITA

**PENGARUH PEMBERIAN FRAKSI *n*-HEKSANA,
ETIL ASETAT, DAN METANOL DAUN JAMBU BIJI
(*Psidium guajava* L.) TERHADAP TNF- α PADA SERUM
TIKUS DENGAN METODE ELISA**



**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA**

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

2004

LEMBAR PENGESAHAN

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**Dibuat untuk memenuhi syarat mencapai gelar sarjana farmasi
pada Fakultas Farmasi Universitas Airlangga Surabaya
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ABSTRACT

INFLUENCE OF N-HEXANE, ETHYL ACETATE, AND METHANOL EXTRACT OF GUAVA LEAF (*Psidium guajava* L) ON TNF- α IN MOUSE SERUM WHICH ANALIZED WITH ELISA

Guava leaf has been known in society for its benefits in therapy. Recent studies by Harjono A. proved that guava leaf extract increase the thrombocyte level in dengue haemorrhagic fever (DHF) patients with thrombocytopenia in unknown mechanism. The degree of TNF- α is equivalent with severe of this disease. TNF- α itself is mediator in all immune response. TNF- α has a function in potentiating MHC class I in expressing antigen as a signal to activate lymphocyte TCD8⁺. Activation TCD8⁺ to complex antigen-MHC class I in cell surface will make possible for body to recover from infectious disease. The mechanism of which is attack and destroy cell infected. From the previous research, ethanol extract of guava leaves can increase TNF- α . The aim of this research is to know the influence of guava leaf in each fraction of *n*-hexane, ethyl acetate, and methanol on TNF- α mouse serum.

In this study, guava leaf extracted with *n*-hexane, ethyl acetate, and methanol. Each fraction then given orally to mouse during six days. CMC-Na 0,5 % is given as control group. In seventh serum taken intracardial and measured with double sandwich ELISA to get the optical density. The result is the significance decrease of *n*-hexane and ethyl acetate optical density (OD) compare with control group while methanol doesn't have significance influence on TNF- α . It can be concluded that *n*-hexane and ethyl acetate extract can decrease TNF- α in mouse serum while it has benefits from the low TNF- α level serum is preventing cell necrosis which is possible occurred in high level of TNF- α serum.

Key words : *Psidium guajava* L, guava, TNF- α , ELISA, *n*-hexane, ethyl acetate, methanol, DHF