

- HEMORRAHAGIC FEVER

- THROMBOCYTOPEANIA

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SKRIPSI

NOVA NORMASARI

**PENGARUH PEMBERIAN FRAKSI N-HEKSANA,
ETIL ASETAT, DAN METANOL
DAUN JAMBU BIJI (*PSIDIUM GUAJAVA L*)
TERHADAP KADAR GM-CSF PADA TIKUS**

**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
2004**

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ABSTRACT

THE INFLUENCE OF N-HEXANE, ETHYL ACETATE AND METHANOL EXTRACTS OF GUAVA LEAF (*PSIDIUM GUAJAVA L.*) ON THE GM-CSF'S CONCENTRATION IN RAT

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Clinical signs of DHF (Dengue Haemorrhagic Fever) is thrombocytopenia. Thrombocytopenia can be caused by the disturbance of thrombopoiesis (production of trombocyte). GM-CSF (*Granulocyte-Macrophage Colony Stimulating Factor*) stimulates thrombopoiesis by stimulating differentiation of megacaryocyte (trombocyte marker), so GM-CSF can be used for marker the increasing of trombocyte.

Extract of guava (*Psidium guajava L.*) leaf can increase the amount of trombocyte in DHF patient by thrombocytopenia (Harjono A, 2001). The aim of this research is to know the influence of guava leaf extract on the GM-CSF's concentration in thrombopoiesis. This research used extract *n*-hexane, ethyl acetate, and methanol of guava leaf based on polarity of compound in guava leaf. The extract is given orally to rat, during 6 days successively. The doses of guava leaf extract are *n*-hexan 0,5901 mg / 200 g BW; etyl acetate 1,3547 mg / 200 g BW; and methanol 2,5418 mg / 200 g BW. They are suspended in 0,5% CMC Na solution. On seventh day, blood is taken intracardial. Serum is taken from blood to be measured with ELISA (Enzyme Linked ImmunoSorbent Assay) method to get OD (Optical Density) of GM-CSF.

The result showed that extract *n*-hexane gived significance difference with control, it means that extract *n*-hexane of guava leaf can increase on the GM-CSF's concentration. Extract etyl acetate and methanol did not give the significant difference. We suggest furthermore research to isolate the active compound in guava leaf that increase GM-CSF's concentration.

Keywords : *Psidium guajava L.*, Dengue Haemorrhagic Fever, Thrombocytopenia, Granulocyte-Macrophage Colony Stimulating Factor, Enzyme Linked ImmunoSorbant Assay.