SKRIPSI

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UJI AKTIVITAS EKSTRAK ETANOL 70% DAUN JAMBU BIJI (*PSIDIUM GUAJAVA* L) TERHADAP KADAR TNF-α DALAM SERUM TIKUS

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Lembar Pengesahan

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ABSTRACT

The Influence of 70% Ethanol Extract of Psidii Folium to TNF-α in Rats

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Psidium guajava L is one of traditional plant that use for medication. The previous study has reported that extract of psidii folium could be used to treat dengue haemorrhagic fever (DHF). Harijono Achmad (2001) have proved that extract of guava (*Psidium guajava* L.) leaf can increase the amount of trombocyte in DHF patient. But anti-DHF mechanism of extract, has not yet known. TNF-α is cytokine that exerts an interferon-like protective effect against viruses and augments expression of class I MHC molecules, potentiating CTL-mediated lysis of virally infected cell. Quercetine that suggest had activity as an antiviruses, used as a marker. The aim of this research is to know the influence of 70% ethanol extract of *Psidium guajava* L. leaf to TNF-α rats. Sample used in this research is 70% ethanol extract of guava leaf which have suspended in 0,5% CMC-Na solution and arranged in 3 doses : 2,698 mg/200 g BW; 5,396 mg/200 g BW, and 10,792 mg/200 g BW (each dose equivalent with 0,0662 mg, 0,1325 mg, 0,2650 mg quersetin respectively). The sample was given orally during 6 days successively, blood was taken by intracardial on seventh. Serum was taken to be measured with ELISA method to get the Optical Density (OD) of TNF-α. The result showed that 70% ethanol extract of guava leaf dose 2,698 mg/200 g BW and 10,792 mg/200 g BW have activity to increase TNF-α, and showed significant difference from the negative control. Meanwhile dose 5,396 mg/200 g BW extract of guava leaf wasn't showed significant difference from the negative control. We suggest furthermore research to know the active compound.

Keywords : *Psidium guajava* L., Dengue Haemorrhagic Fever, Tumor Necrosis Factor Alpha, viruses, class I MHC, Cytotoxic T Lymphocytes, Enzyme Linked ImmunobSorbent Assay.