

- GUAJAVA
- EXTRACTS

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**PENGARUH PEMBERIAN EKSTRAK ETANOL 70 %  
DAUN JAMBU BIJI (*Psidium guajava L.*) TERHADAP  
INTERLEUKIN-3 PADA TIKUS**



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PERPUSTAKAAN  
UNIVERSITAS AIRLANGGA  
SURABAYA

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

**2003**

## LEMBAR PENGESAHAN

# PENGARUH PEMBERIAN EKSTRAK ETANOL 70 % DAUN JAMBU BIJI (*Psidium guajava L.*) TERHADAP INTERLEUKIN-3 PADA TIKUS

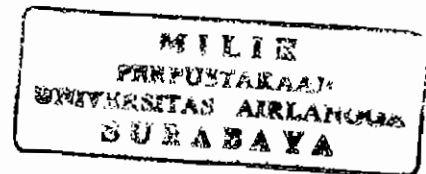
## SKRIPSI

Dibuat untuk memenuhi syarat mencapai gelar Sarjana Farmasi pada  
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## ABSTRACT

### **The Influence of 70% Ethanol Extract of *Psidium guajava*. L Leaf on The Rat Interleukin-3**

The influence of 70 % ethanol extract of *Psidium guajava*. L leaf on the rat interleukin-3, was studied. The extract of *Psidium guajava*.L leaf is known can increased trombocyte in dengue hemorrhagic fever (DHF) patient. Interleukin-3 (IL-3) also known as multi CSF, stimulates pluripotent stem cells to produce all types of hematopoeitic cells such as trombocyte. Quercetin is a plant-derived polyphenolic flavonoid found in *Psidium guajava*.L leaf. Quercetin have antioxidant properties and can inhibit growth factors and cytokines. So, in this studied, quercetin would does taken compound. The dose of 70 % ethanol extract Psidii folium was 2,724 mg /200 g BW on rat; 5,407 mg /200 g BW on rat and 10,813 mg /200 g BW on rat.

The influence of 70% ethanol extract of *Psidium guajava*. L leaf on the rat interleukin-3 was studied by ELISA *assay*. The sample was given orally during 6 days successively, and blood was taken by intracardial on seventh. Serum was taken to be measured with ELISA method to get the optical density (OD) of IL-3. A quantitative determination of antigen (interleukin-3) concentration is obtained by absorbance measurement of the colored reaction product using a spectrophotometric microwell reader (ELISA reader). The optical density (OD) of interleukin-3 samples is lower than interleukin-3 controls. The result showed that the ethanol 70 % extract of *Psidium guajava*.L doesn't have activity to increase interleukin-3. Therefore many research activities should be done in order to know another mecanism of trombopoesis and the active compound.

**Keywords :** Extract, *Psidium guajava* L, Quercetin, Interleukin-3, ELISA.

