

- FLAVONOIDS  
- GUAJA  
- SPECTROPHOTOMETRY, ULTRAVIOLET

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# SKRIPSI

VARIATI ZULFAH

**VALIDASI METODE DAN PENETAPAN KADAR  
FLAVONOID TOTAL DALAM EKSTRAK ETANOL  
DAUN JAMBU BIJI (*PSIDIUM GUAJAVA* L) SECARA  
SPEKTROFOTOMETRI UV-Vis**



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN ILMU BAHAN ALAM  
SURABAYA  
2004**

**MILIK  
PERPUSTAKAAN  
UNIVERSITAS AIRLANGGA  
SURABAYA**

Lembar Pengesahan

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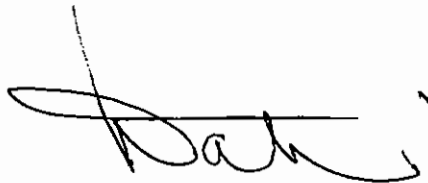
**Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Farmasi Pada  
Fakultas Farmasi Universitas Airlangga  
2004**

**Oleh :**

**Variati Zulfah  
NIM : 050012217**

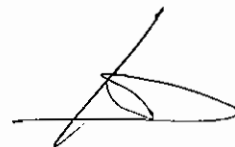
**Skripsi ini telah disetujui :  
Tanggal Agustus 2004**

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PERPUSTAKAAN  
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## ABSTRACT

### VALIDATION METHOD AND DETERMINATION OF TOTAL FLAVONOID FROM ETHANOLIC EXTRACT OF GUAVA LEAF (*PSIDIUM GUAJAVA* L) BY UV-Vis SPECTROPHOTOMETRIC

Variati Zulfah

*Psidium guajava* Linn is one of traditional medicine that commonly used. Based on references and research Psidii Folium contains flavonoid which is useful for medication. To ensure the quality, consistency and accuracy of the marker compound of Psidii Folium, analysis with a high validity method need to be proceed.

This project used 50%, 70% and 96% ethanol extract. Determination of total flavonoid was carried out by qualitative and quantitative analysis. Standard and sample spectrum was compared for qualitative analysis, while validation method and flavonoid concentration determination was carried out for quantitative analysis using UV-Vis Spectrophotometer.

Result of this project include linierity with linier regression :  $y = 0.0798x + 2.0732 \cdot 10^{-3}$  and  $r = 0.9999$ . Limit of detection 0.0183 mg. Limit of quantitation = 0.0609 mg. For sample 50% extract ethanol contains 3.17% flavonoids, accuracy 97.16% recovery, and precision with CV = 2.37%. For sample 70% extract ethanol contains 3.93% flavonoids, accuracy 97.58% recovery, and precision with CV = 2.43%, whereas sample 96% extract ethanol contains 4.39% flavonoids, accuracy 92.51% recovery, and precision with CV = 3.15%. This indicate that analytical method is based on UV-Vis Spectrophotometer fulfilled the requirement of validation method.

The resulting data is expected will be used to determination of total flavonoid in order to develop phytopharmaceutical product by the first sample of guava leaf..

Keyword : *Psidium guajava*, Total Flavonoid, , UV-Vis Spectrophotometric