

Jurnal Ilmiah
FARMASI

(Scientific Journal of Pharmacy)



JURNAL ILMIAH FARMASI
(SCIENTIFIC JOURNAL OF PHARMACY)

PIMPINAN UMUM/ PENANGGUNG JAWAB
Dekan Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Islam Indonesia

WAKIL PIMPINAN UMUM/ WAKIL PENANGGUNG JAWAB
Ketua Jurusan Farmasi FMIPA UII

MITRA BESTARI

1. Prof. Dr. Wiryatun Lestariana, Apt
2. Prof. Dr. Zullies Ikawati, Apt
3. Prof. Dr. Sudibyo Martono, Apt
4. Dr. Tedjo Yuwono, Apt
5. Prof. Dr. Dachriyanus, Apt
6. Prof. dr. Iwan Dwiprahasto, MMedSc, PhD
7. Prof. Dr. Lukman Hakim M.Sc., Apt
8. Prof. Dr. Achmad Fudholi, DEA, Apt
9. Prof. Dr. Ibnu Gholib Gandjar, DEA., Apt

DEWAN EDITOR

Ketua : Saepudin, M.Si., Apt
Sekretaris : Rochmy Istikharah, M.Sc., Apt.
Anggota : Vitarani Dwi Ananda Ningrum, M.Si., Apt
Okti R. Mafruhah, MSc., Apt
Dimas Adhi Pradana, MSc., Apt.
Fithria DA. Suryanegara, MSc., Apt.
Ari Wibowo, S.Farm., Apt
Arba Pramudita Ramadani, MSc., Apt.
Oktavia Indrati, S.Farm., Apt.

Penerbit

Jurusan Farmasi Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Islam Indonesia

Alamat Penerbit

Jurusan Farmasi FMIPA UII
Jl. Kaliurang Km. 14,4 Yogyakarta 55584
Telp. (0274) 896439 ext. 3047
Email: jif@uii.ac.id

ISOLATION AND IDENTIFICATION OF FLAVONOIDS FROM WATER FRACTION OF SECANG WOOD (*Caesalpinia sappan*. L) WITH THIN LAYER CHROMATOGRAPHY AND UV-VIS SPECTROPHOTOMETRY METHODS

Lolyta Fournia Sari, Suparmi, Asih Triastuti

Program Studi Farmasi Universitas Islam Indonesia

ABSTRACT

Aim of this research was to determine chemical structure of flavonoid from water fraction of Sappan wood. The flavonoid was isolated by Soxhlet extraction using methanol and infundation. First, the detection of flavonoid was done using Thin Layer Chromatography (TLC) with stationary phase silica gel GF 254 and mobile phase ethyl acetate : acetic acid 15 % (9:1 v/v) smoked by NH_3 , and detected under UV 366 nm, showed 5 spots with R_f 7, 50, 61, 68, and 80. Preparatif TLC was done to water fraction, dissolved in methanol and detected with UV-Vis spectrophotometry using diagnostic reagents NaOH, NaOAc, NaOAc+ H_3BO_3 , AlCl_3 , AlCl_3+HCl and compared with references. In fraction 1, 2, and 5 showed isoflavon with 7-OH, substitution oxygen in position six. In fraction 3 showed isoflavon with 7-OH, substitution oxygen in position six, 6,7 diOH in A ring, and *o*-diOH in 6,7 or 7,8. In fraction 4 showed isoflavon with 7-OH, substitution oxygen in 6, *o*-diOH in 6,7 or 7,8 and 5-OH.

Key Words: *Caesalpinia Sappan*. L, Flavonoid, TLC, UV-Vis Spectrophotometry