

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.<br>Okti R. Mafruhah, MSc., Apt<br>Dimas Adhi Pradana, MSc., Apt.<br>Fithria DA. Suryanegara, MSc., Apt.<br>Ari Wibowo, S.Farm., Apt<br>Arba Pramudita Ramadani, MSc., Apt.<br>Oktavia Indrati, S.Farm., Apt. |

**Penerbit**

Jurusan Farmasi Fakultas Matematika dan Ilmu Pengetahuan Alam  
Universitas Islam Indonesia

**Alamat Penerbit**

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

## **ISOLASI DAN IDENTIFIKASI SENYAWA GOLONGAN XANTON DARI KULIT BUAH MANGGIS ( *Garcinia mangostana* L.)**

Ivan Surya Pradipta<sup>1</sup>; Titi W Nikodemus<sup>2</sup>; Yasmiwari Susilawati<sup>2</sup>

<sup>1</sup> Fakultas MIPA, Jurusan Farmasi, Universitas Islam Indonesia, Yogyakarta

<sup>2</sup> Fakultas Farmasi, Universitas Padjadjaran, Bandung

E-mail : ivanpradipta83@yahoo.com

### **ABSTRACT**

A research on the isolation and identification of xanthone from the fruit rind of mangosteen (*Garcinia mangostana* L.) was carried out. Extraction was done using maceration with methanol – water solvent and fractionation with n-hexane and ethyl acetate solvent. Column chromatography with silica gel as the stationary phase and n-hexane – ethyl acetate (7 : 3) as the mobile phase was used for the isolation. From the ethyl acetate fraction was obtained GM II-1 isolate ( $R_f$  0,61 ; n-hexane – ethyl acetate 7 : 3 as mobile phase) which showed a colour change from reddish brown to yellow under UV light 366 nm after spraying with  $AlCl_3$ . Identification of the isolate with UV spectrophotometry gave maximum absorptions at wavelengths 241,5, 257,5, 317, 364,5 nm. GC - MS indicated that GM II-1 isolate had a molecular weight of 259, the isolate was presumed to be a xanthone.

Keywords: xanthone, *Garcinia mangostana* L., mangosteen, isolation, identification