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

BIOACTIVE CONSTITUENTS FROM THE LEAVES OF *MELASTOMA MALABATHRICUM* L.

Deny Susanti^{1*}, Hasnah M. Sirat², Farediah Ahmad³, Rasadah Mat Ali³

¹Department of Biomedical Science, Faculty of Science, International Islamic University Malaysia, 25200 Kuantan, Malaysia.

²Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia

³Medicinal Plant Division, Forest Research Institute Malaysia, 52109 Kepong, Kuala Lumpur, Malaysia

*e-mail: deny@iiu.edu.my

ABSTRACT

Phytochemical and bioactivity studies of the leaves of *Melastoma malabathricum* L. (Melastomataceae) have been investigated. The *n*-hexane extract yielded α -amyrin, patriscabatrone and auranamide, ethyl acetate extract gave quercetin and quercitrin, and methanol extract gave quercitrin and kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)glucoside. The crude extracts and isolated compounds were screened for their antioxidant and cytotoxic activities. The antioxidant assay was carried out by FTC and DPPH radical scavenging method. Kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)glucoside, quercetin and quercitrin showed strong activities with inhibition more than 90% in the FTC method. Quercetin was found to be the most active as radical scavenger in DPPH method with IC₅₀ of 0.69 μ M. α -Amyrin and kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)glucoside demonstrated the strongest activities in the anti-inflammatory assay of TPA mouse ear oedema with IC₅₀ of 0.11 and 0.34 mM/ear, respectively.

Keywords: Antiinflammatory, Antioxidant, Flavonoids, Melastomataceae, *Melastoma malabathricum*, Terpenoid