



Program and Abstracts

The 2nd International Conference of
the Indonesian Chemical Society 2013

IC  **CS 2013**

Research in Chemistry for Better Quality of Environmental

Universitas Islam Indonesia, Yogyakarta, Indonesia
October, 22 - 23th 2013

Abdul Kahar Muzakir, Conference Hall
Universitas Islam Indonesia (UII), Yogyakarta.
Kampus Terpadu, Jl. Kaliurang KM 14,5 Sleman, Yogyakarta.

Cytotoxic Activity Against P-388 Murine Cells from the Seeds of Gewang (*Corypha Utan Lamk*)

Leny Heliawati^{1,3}, Agus Kardinan², Tri Mayanti¹, Roekmi-ati Tjokronegoro¹

¹Graduate School, Padjadjaran University, Bandung
²Indonesian Spice and Medicinal Crops Research Institute
³Pakuan University, Bogor (leny_heliawati@yahoo.co.id)

Abstract

Gewang (*Corypha utan* Lamk.) is a plant that grows wild in savanna area of East Nusa Tenggara (NTT). Gewang fruit is traditionally used by the people of Timor, NTT, as fish poison. This empirical fact gives an early indication of the presence of active toxic compounds in the Gewang plant. The purpose of this study was to isolate the active compounds in seed and knowing Gewang cytotoxic activity against cancer cells P-388 murine leukemia. Isolation methods started with maceration of Gewang seed with methanol. Methanol extract was then separated and purified by chromatography methods. The resulted isolates was evaluated by cytotoxicity test against Murin leukemia cancer cells P-388 and characterized using UV spectrometer, FTIR, and NMR (¹H NMR, ¹³C NMR, 1D NMR and 2D NMR). Isolation obtained was brownish white solids as much as 50 mg and based on the results of the characterization indicated that isolates was suspected as Resveratrol compound with the formula of C₁₄H₁₃O₃. Result of cytotoxicity test against Murin leukemia cancer cells P-388 showed IC₅₀ value = 4,0 ppm which is meant that the compound can be categorized as very active compound, hence it has good prospects as anticancer.

Keywords: *Corypha utan* Lamk, Murin cell leukemia P-388, Isolation, Resveratrol.



UNIVERSITAS ISLAM INDONESIA

Certificate

Present to

Leny Heliawati


as


Presenter

The 2nd International Conference of the Indonesian Chemical Society 2013 (ICICS 2013)

Auditorium Abdur Kahar Muzakir Universitas Islam Indonesia (UII)
Yogyakarta, 22 - 23rd October 2013

ICICS 2013


Dr. Muhammad A. Martoprawiro
President
Indonesian Chemical Society


Yandi Syukri, M.Si., Apt.
Dean of Faculty of Mathematics
and Natural Sciences


Riyanto, Ph.D.
Organizing Committee
Chairman

