<u>OR-82</u>

Isolation and Purification of Chemical Marker from *Zingiber zerumbet* Rhizome from Indonesia

Dedi Hanwar^{*}, Andi Suhendi, Broto Santoso, Ika Trisharyanti D K and Rosita Melannisa

Faculty of Pharmacy, Muhammadiyah University of Surakarta, Indonesia; E-mail: hanwarums@yahoo.com

A chemical marker from the rhizomes of *Zingiber zerumbet* was extracted, isolated and purified using methanol extraction and Vacuum Liquid Chromatography (VLC) method. The sample was extracted with methanol and concentrated followed by fractionation with ethyl acetate and methanol. Ethyl acetate soluble fraction and methanol soluble fraction was subjected to silica gel column chromatography to afford nine fractions. Gradient elutions were carried out using n-hexane-ethyl acetate (8:2, 7:3, 6:4, 5:5, and 3:7 vol./vol.), ethyl acetate 100%, ethyl acetate-methanol (5:5 vol./vol.) and finally methanol 100%. The isolated and purified chemical marker crystals were subjected to High Performance Liquid Chromatography (HPLC) to confirm the purity. Purification of the chemical marker gave a white crystal with 97.96% purity and allegedly as 5-hydroxyzerumbone.

Keywords: Zingiber zerumbet, isolation, zerumbone.