

P-13**Aldehydes from Stem of *Vitex Rotundifolia***Siti Khadijah Sulaiman¹, Nor Hadiani Ismail¹ and Fadzureena Jamaludin²¹Faculty of Applied Sciences, University Teknologi MARA, 40450, Shah Alam, Selangor; ²Forest Research Institute Malaysia, Kepong, Selangor Darul Ehsan (FRIM)

Dichloromethane extract of the *Vitex rotundifolia* stems was subjected to *in vitro* anti-inflammatory tests using xanthine oxidase inhibitory assay and lipoxygenase inhibition assay. The extract showed 54.6% inhibition against xanthine oxidase using NDGA as a positive control however did not exhibit any inhibitory activity against lipoxygenase. Further separation of the extract successfully yielded two aldehydic compounds identified as 6-hydroxy-4-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-7-methoxy-3,4-dihydro-2-naphthaldehyde and 7,8-dimethoxy-4-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-3,4-dihydro-2-naphthaldehyde. Both compounds were isolated after repeated column chromatography using DCM:EtOAc:MeOH (9:0.5:0.5) as solvent system and further purified using Preparative Thin Layer Chromatography (PTLC). Structure elucidation was accomplished using spectroscopic methods, mostly Nuclear Magnetic Resonance spectroscopy.

Keyword: *Vitex rotundifolia*, xanthine oxidase inhibitory, aldehydes.
