

# CHROMATOGRAPHIC STUDIES ON BELIAN EXTRACTIVES

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### CHROMATOGRAPHIC STUDIES ON BELIAN EXTRACTIVES

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This project is submitted in partial fulfillment of the requirements for the degree of Bachelor of Science with Honours (Resource Chemistry)

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### DECLARATION

No portion of the work referred to on this dissertation has been submitted in support of an application for another degree of qualification if this or any university of institution of higher learning.

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ABSTRACT

The determination and identification of belian (Eusideroxylon zwageri) component were

carried out. The components of the E. zwageri extractives were analyzed by using Gas

Chromatography Mass Spectrometry (GC-MS). TLC fraction was successfully done by

using the system solvent hexane: dichloromethane: ethyl acetate (2:4:1). The R<sub>f</sub> value of

the TLC analysis is 0.9. The percentage of crude extract yield obtained from the

extraction is  $8.23 \pm 0.0.6$  and the percentage of the moisture content of the E .zwageri

meal sample is  $10.30 \pm 0.06$ . From the component analysis the composition of the E.

zwageri extractive is identified like the most abundant aromatic compound, benzene-1, 2,

3-trimethoxy-5-[ 2-propenyl ] and p-xylene. Also detected is fatty acid compound and

alkanes.

Key words: Eusideroxylon zwageri, extractive, fractionation