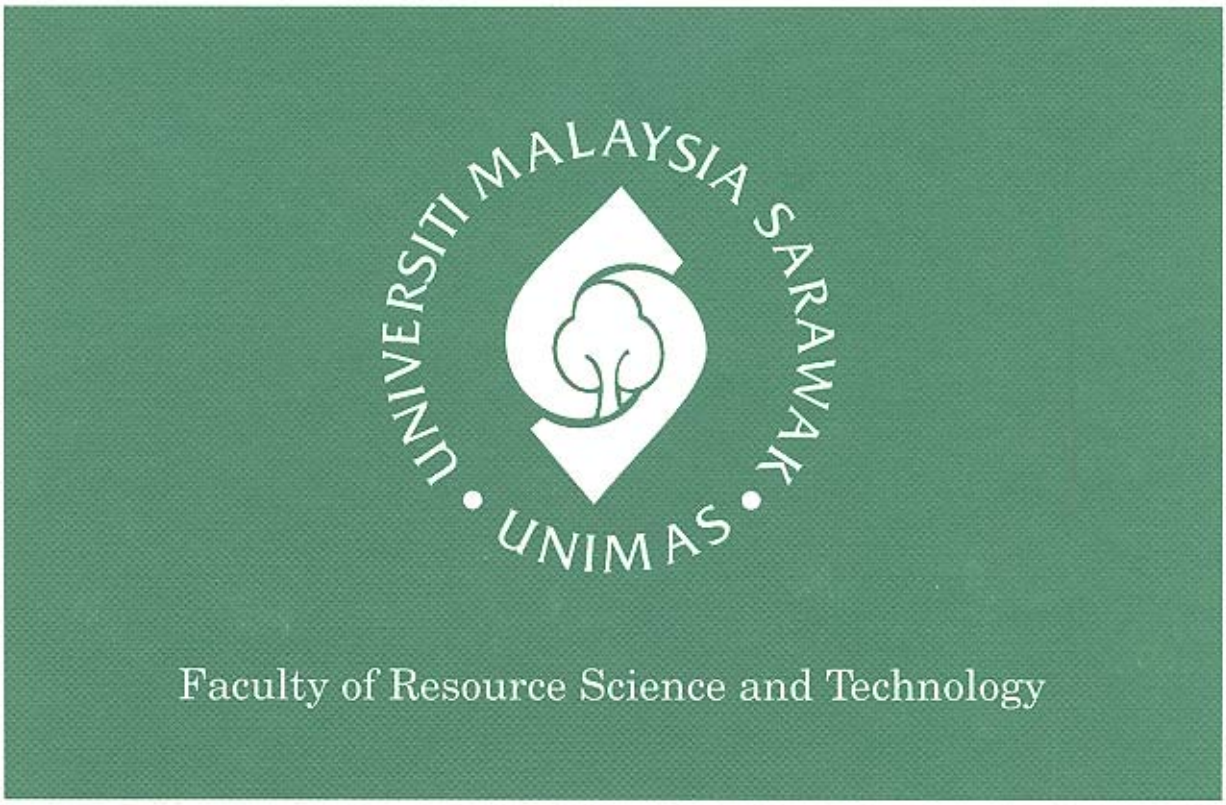


# CHROMATOGRAPHIC STUDIES ON BELIAN EXTRACTIVES

Massita Binti Awang



Bachelor of Science with Honours
(Resource Chemistry)
2004

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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 )

**Faculty of Resource Science and Technology**
**UNIVERSITY MALAYSIA SARAWAK**
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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 $R_f$ value of the TLC analysis is 0.9. The percentage of crude extract yield obtained from the extraction is 8.23 ± 0.0.6 and the percentage of the moisture content of the *E .zwageri* meal sample is 10.30 ± 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