Africa City of Technology

2nd International Conference on Applied Biotechnology

(ICAB-2010)

ICAB-2010
Posters Program
October 25-27, 2010
Friendship Hall, Khartoum

Extraction, Fatty Acid composition and antimicrobial activity of Nahar (Mesua Ferrea) Seeds' Oil

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Abstract

Nahar (Mesua ferrea Lin.) is a species in the family Guttiferae (Clusiaceae). The previous work done by the same author has shown that Mesua ferrea seeds' oil extract (from both the kernels and the hulls) had a remarkable growth inhibition against Escherichia coli, pseudomonas aeruginosa, Staphylococcus aureus and bacillus subtilis. This present work was thus aimed at studying the effect of some parameters, such as extraction time, temperature and solvent type on oil yield, using soxhlet apparatus, and also to determine the fatty acid composition of the oil using Gas Chromatography/ Mass spectroscopy detector as well as to determine the minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MCB) of the nahar seeds' oil using agar disc diffusion and micro broth dilution methods.

Keywords: Extraction parameters, Dilution method, GC/MSD, Minimum Inhibitory Concentration (MIC), Minimum Bactericidal Concentration (MCB), Soxhlet,