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Evaluating and comparing anti-fungal constituents from *Annona senegalensis* methanol extract using LC-MS and fitness test techniques

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A nnona senegalensis soft tissue plants parts has been used as ethno-medicine in various regions of Africa for curing various fungal infections. Liquid chromatography coupled with mass spectrometry and fitness test techniques were used to determine the anti-fungal constituents from the methanol extract which was found to have anti-fungal activities giving an inhibitory zone of 9.667±0.557 mm in comparable with gentamycin giving inhibition zone of 15 mm after 24 hrs when bio-assayed on cultured Melassezia globosa. The unpurified extract was analyzed for anti-fungal bioactive chemical constituents by standardized high resolution LC-MS technique and the peaks of the components were compared with LC retention times and the apparent mass spectrum both in negative and positive modes with respect to Merck historical database of isolated natural products. The isolated compounds were characterized with 1D and 2D NMR spectrometry. Among the isolated chemical constituents, LC-MS data did not match other constituents shown by FT profile thus challenging LC-MS techniques in evaluating bioactive chemical components from natural products.

Biography

Ochieng Anthony studied pure and applied chemistry,, a PhD scholar and is currently a Senior Chemistry Lecturer at Faculty of Science, Sumait University in Tanzania .He is also a co-author of determinations of acidic pharmaceutical components in analgesic drugs using wet classical techniques. His current researches focuses on natural products and evaluating their medicinal values, pharmaceutical analysis, cosmetology, Macrocyclic compounds and their applications in drug targeting, and using statistical thermodynamics in evaluating physical constants. He is a member of Kenya Chemical society, American Chemical Society, GNDU & I Chemical Society, Royal Chemical Society, a Reviewer with Journal of chemical a material science and has over 15 years lecturing Chemistry in various higher academic institution and seven years working in managerial technical positions in pharmaceutical(Lab & Allied, Cosmos Pharm, Ranabaxy), Textiles(OCM) and cosmetics(Interconsumer Ltd) industrial sectors.

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