

PHYTOCHEMICAL ANALYSIS OF STEM BARK EXTRACTS OF PTEROCARPUS MILDBRAEDII (HARMS) USING ADVANCED GAS- CHROMATOGRAPHY-MASS SPECTROSCOPIC TECHNIQUES

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ABSTRACT

Since time immemorial, man utilized herbs for their medicinal and nutritive value. Traditionally, the stem bark extract of *Pterocarpus mildbraedii* are used in the treatment of Malaria and digestive disorder in some West African countries including Nigeria. They are believed to possess anti-inflammatory and antioxidant as well as anti-microbial properties. This research aims to phyto-chemically characterize the Ethyl-Acetate stem bark extract of *Pterocarpus mildbraedii* using GC-MS (Model-QP 2010 Plus Spec). Phyto-compounds were identified using NIST Ver. 2.0 Year 2005 Library. The recorded bioactivity were based on Dr Duke`s Phytochemical and ethno-botanical databases. The GC-MS identified Phyto-chemical principles such as Triacetin, Dodecanoic acid, Isoelemicin, n-Hexadecanoic acid, 9, 12-Octadecadienoic acid, Oleic acid and Stigmasterol. Presence of these bioactive phyto-compounds can serve as a finger print for extended research.

Keywords: *Pterocarpus mildbraedii*, GC-MS, Phytochemical, anti-oxidant, anti-microbial, anti-inflammatory.