



GC-MS profiling of bioactive components from aqueous extract of *Pterocarpusmarsupium*

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Abstract: Medicinal plants are sources of important therapeutic aids for alleviating human ailments. *Pterocarpusmarsupium* belongs to the family Fabaceae is well known in Indian system for its traditional uses. The present investigation was carried out to determine the possible bioactive components of aqueous bark extract of *Pterocarpusmarsupium* using GC-MS analysis, while the mass spectra of the compounds found in the extract was matched with the National Institute of Standards and Technology (NIST) library. The results of the GC-MS analysis have provided different peaks determining the presence of 27 phytochemical compounds. The major phytochemicals present in the extract are 2-Pentanone, 4-hydroxy-4-methyl, Furan-2-one, 3,4-dihydroxy-5-[1-hydroxy-2-fluoroethyl], Benzoic acid, 2,6-bis[(trimethylsilyl)oxy]-trimethylsilyl ester, α -D-Mannofuranoside, methyl, Phthalic acid, di(oct-3-yl) ester, 1-Monolinoleoylglyceroltrimethylsilyl ether, Ethyl iso-allocholate and Milbemycin b, 13-chloro-5-demethoxy-28-deoxy-6,28-epoxy-5-(hydroxyimino)-25-(1-methylethyl) with different therapeutic activities. The presence of these bioactive compounds justifies *Pterocarpusmarsupium* is an excellent source of phytochemical which helps to treat various diseases and health complications in human beings. However, isolation of individual phytochemical constituents might be useful to formulate a novel drug.

Keywords : *Pterocarpusmarsupium*, GC-MS analysis, bioactive components, aqueous extract, NIST library.

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