

Phytochemical Analysis and GC-MS Profiling in the Flower of *Plumeria alba*

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Abstract:

Therapeutic properties of the medicinal plant are due to the presence of phytochemical constituents. The phytochemical constituents of *Plumeria alba* flower were investigated by phytochemical screening assays and gas chromatography-mass spectrometry (GC-MS). The phytochemical screening of hexane, dichloromethane, ethyl acetate, butanol, and aqueous extracts of *P. alba* flower showed it contains a various concentration of saponins, flavonoids, tannins, steroids, volatile oil and phenolic compounds. Several major chemical constituents that were identified is squalene, bis(2-ethylhexyl) phthalate, methyl (methyl 4-O-methyl- α -d-mannopyranoside) uronate and tricyclo [7.2.0.0(2,6)] undecan-5-ol, 2,6,10,10-tetramethyl-(isomer 2) by using GC-MS technique.

Keywords: Bioactive compound; GC-MS; Phytochemical screening; Plant extraction; *Plumeria alba*

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