PRINT: ISSN 0973-5070 ONLINE: ISSN 2456-6772
STUDIES ON
ETHNO-MEDICINE

Full text open access online (Since 2007)

Ethno Med, 18(1): 69-80 (2024)
PRINT: ISSN 0973-5070 ONLINE: ISSN 2456-6772
DOI: 10.31901/24566772.2024/18.01.668

GC-MS Based Identification of Bioactive Phytocompounds in Methanolic Extract of *Peperomia dindygulensis* Miq. and Their Antimicrobial Activities against Pathogens

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KEYWORDS Antibacterial. Genus *Pepreromia*. Metabolomic Profiling. Pharmacological Actions. Phytochemicals

ABSTRACT The genus *Peperomia* belongs to the family Piperaceae and has extraordinary ethnomedicinal significance. Characterising *Peperomia dindygulensis* Miq's bioactive ingredients was the objective of the current study. The gas chromatography and mass spectroscopy analysis of the methanol extract from this plant led to the identification of 30 compounds that principally contain steroids, sesquiterpenes, alkaloids, fatty acids, and fatty acid esters. Of these some important compounds such as trans-13-Octadecenoic acid, cis-Methyl 11-eicosenoate, methyl 13-phenyl-tridecanoate, 6-hydroxy-5,14,14-trimethyl-15,19-dioxapentacyclo [11.7.0.01,16.02,10.05,9]icos-12-en-18-one, obacunone and 7-Deacetoxy-7-hydroxy gedunin with higher area percentages revealed a large number of biological activities against pathogens. Also, these phytoconstituents have been linked to anti-cancer, anti-inflammatory, anti-microbial, anti-angiogenic, and antioxidant properties. The preliminary anti-microbial assay was carried out with five different extracts against four bacteria (*Staphylococcus aureus*, *Streptococcus mutans*, *Pseudomonas* and *Salmonella enterica*) and four fungal (*Candida albicans*, *Aspergillus flavus*, *Rhizopus oryzae* and *Aspergillus niger*) strains. Methanol extract of the whole plant showed the best activity against microbes while the remaining extracts showed moderate activity.