PRELIMINARY PHYTOCHEMICAL SCREENING, GC-MS AND HPTLC ANALYSIS OF DIFFERENT EXTRACTS OF *IPOMOEA PES- TIGRIDIS*

**M. Mithila1,** **Narmada Vallakeerthi1\*, A. Ravinder Nath1, P. Muralidhar Reddy2\***

¹Department of Pharmacy, Pharmaceutical Analysis and Quality Assurance, University College of Technology(A), Osmania University, Hyderabad, Telangana – 500007, India

2Department of Chemistry, University College of Science, Osmania University, Hyderabad, Telangana– 500007, India.

**1First Author:[mithila.malagam96@gmail.com](mailto:mithila.malagam96@gmail.com)**

**\*1, 2 Corresponding authors:** [**rishikravi@gmail.com**](mailto:rishikravi@gmail.com)**, pmdreddy@gmail.com**

**Abstract**. The main aim of this work is to know the phytochemical constituents from different extracts of ipomoea pes tigridis by preliminary examination and GC-MS and HPTLC analysis. Soxhlet apparatus was used for the extraction process. Extracts such as hexane extract which is non-polar, ethyl acetate which is medium polar and methanol which polar solvent were used. All these three solvents were used for preliminary examination and GC-MS, HPTLC analysis. Preliminary examination revealed the presence of carbohydrates, alkaloids, steroids in heaxane extract and presence of flavonoids, tannins, fixed oils, in methanol extract. TLC profiling was done, Different raios of mobile phase was used for three extracts for HPTLC analysis. GC-MS revealed the presence of more than 10 compounds in each extract. GC-MS analysis reveaed the presence of sigmasetrol, lupeol, gamma gurjuenepoxide, pthalic acid, 5-choletasne-3-ol, 24-methyl, eicosanoic acid in methanol extract. Ethyl acetate extract under GC-MS analysis it revealed the presence of 3,4 altrasan, 4H thiopyran-4one,1,1 dione. Hexane extract from GC-MS analysis revealed the presence of 4H-thiopyran-4-one, 1-1-dioxide, Silane, [(cholestane-3yl) oxy] trimethyl, 2H- pyran-2,6 (3H)- Dione, dihydro, 2- amino -4 hydroxypetridine-6-carboxylic acid. This study revealed the presence of many bioactive components which lead to the scope for drug discovery.

**Keywords:** Preliminary examination, Soxhlet extraction, TLC, GC-MS, HPTLC

References:

[1] R. Annalakshmi, S. Mahalakshmi, A. Charles, and C. S. Sahayam, “GC-MS and HPTLC analysis of leaf extract of Madhuca longifolia (Koenig) Linn,” *Drug Invention Today*, vol. 5,

[2] E. Shawky *et al.*, “HPTLC and GC/MS Study of Amaryllidaceae Alkaloids of Two Narcissus Species,” *Chem Biodivers*, vol. 12, no. 8, pp. 1184–1199, Aug. 2015, doi: 10.1002/CBDV.201400309.

[3] G. Melappa and M. Govindappa, “Phytochemical Investigations of Methanol Leaf Extracts of Randia spinosa Using Column Chromatography