

PRELIMINARY SECONDARY METABOLITES SCREENING AND GC-MS

ANALYSIS OF PLANT EXTRACT OF *TRIDAX PROCUMBENS* (L)

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ABSTRACT

Tridax procumbens Linn. is a weed found throughout India. It is reported to be composed of useful phytochemicals for medicinal purpose. In the present study, preliminary phytochemical screening of *T. procumbens* stem, leaf and callus cultures were carried out. Using TLC presence of two Sterols like β -sitosterol, stigmasterol and three flavonoids viz., Kaempferol, Quercetin and Luteolin, were identified. They were evaluated by their color, RF value, TLC behavior, melting point, and IR spectral studies Quantitative analysis revealed the presence of 5.88 mg/g.dw of total sterols, and 3.51 mg/gdw of total flavonoids. GC-MS analysis detected the presence of 33 useful compounds. In the leaf extract highest peak area (%) 14.65, was obtained by ethyl oleate and the lowest peak area (%) 0.46 was obtained by 9-Octadecenamide. Whereas, in stem extract the highest peak area (%) 14.24 was obtained by Tetracontane and the lowest peak area (%) 0.49 was obtained by 2, 8-Dimethyl-2-(4, 8, 12-Trimethyltridecyl)-6-CH. The total ion chromatogram showing the peak identities of the compounds have been identified using NIST library in the plant species. The presence of various bioactive compounds justifies the use of this plant in the modern system of health care for developing a novel drug.

KEYWORDS: *Tridax procumbens*, TLC, GC-MS, Flavonoids, Sterols