



Analysis of In Vitro Antioxidant Potential of Five Different Solvent Fractions of Methanolic Leaf Extract Along with Identification of Specific Phytochemicals of *Trichosanthes dioica* And *Typhonium trilobatum* (Less Focussed Edible Medicinal Herb)

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Abstract: Polyphenols and flavonoids, a subclass of phytochemicals are able to scavenge free radicals by H-atom transfer and thus able to reduce the noxious effects due to oxidative stress. Phytochemicals are secondary metabolites of plant which possesses medicinal value and they can modulate a wide range of physiological function. So, modern research has been focussed to identify bioactive compounds from plant source. *Trichosanthes dioica* and *typhonium trilobatum* are two edible plant which have promising place in traditional medicine but lack of scientific evidence remain them less focussed. The objective of present study is to identify the specific phytochemicals of them and radical scavenging potential of that phytochemicals. The crude methanolic leaf extracts of samples are fractionate by five different solvent of increasing polarity and in vitro antioxidant activity in term of DPPH, ABTS radical scavenging potential, Ferric reducing ability potential (FRAP), total antioxidant capacity (TAC) of each fraction were measured. Each fraction subjected to thin layer chromatography to identify the specific phytochemicals. Result suggests that both the samples are potential source of antioxidant due to the presence of specific phytochemicals such as gallic acid and quercetin confirmed by TLC. Among different solvent fraction most active is diethyl ether followed by aqueous and ethyl acetate. It suggest that most active phytochemicals of these plants are moderately followed by highly polar. These findings may help the future studies to isolate natural antioxidant and formulate drug from the samples.

Keywords: Antioxidant, Free radical, Phytochemicals, DPPH, Thin layer chromatography.