Anti-oxidant potential of _Tinospora cordifolia_ methanolic extracts and its fractions

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According to Ayurveda, _Tinospora cordifolia_ Miers (Menispermaceae) used as a rejuvenator and it is also routinely prescribed to treat fever, diabetes and skin diseases. The present study was aimed to estimate the antioxidant potential of methanolic extract of the stem of _T. cordifolia_ and its subsequent fractions. Dried stem material was extracted with methanol (TCM) and partitioned with petroleum ether (TCP), dichloromethane (TCD), butanol (TCB) and water successively. Antioxidant potential of initial methanolic extracts and its fractions was estimated by 5 different methods like DPPH, ABTS and total antioxidant activity, etc. Methanolic extract and butanol fractions showed highest scavenging activity with an IC50 value of 17.01 µg/ml and 13.4 µg/ml, respectively, whereas other fractions shown poor activity in DPPH radical scavenging activity. IC50 values for other methods were also calculated, of the all methods butanol fraction showed the maximum activity than other fractions. Therefore, the findings of the present study support the fact that _T. cordifolia_ is a promising source of antioxidant agent and suggest its further investigation. The obtained results provide a support for its potential application in food system as an antioxidant and as a nutraceutical in biological systems.

Biography
Saleemulla Khan is an Assistant Professor, Selection Grade, in Manipal College of Pharmaceutical Sciences, Manipal University, Manipal. He earned PhD from Manipal University in Pharmaceutical Sciences in 2012. He has been working in the area of development of herbal dietary supplements for the management of osteoporosis and diabetes mellitus. He is a recognized PhD guide and has about 32 national and international publications to his credit and authored 4 chapters in different books.

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