



Study of antimicrobial along with antioxidant property of *Cymbopogon citratus* oil extracted by solvent extraction method

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Abstract : *C.citratus* is an herb belonging to the family Poaceae. *C.citratus* has lemon like odour because of presence of citral, a Cyclic monoterpene. *C.citratus* is fast growing, perennial aromatic grass. Lemongrass is native to South India, Sri-lanka, America and Asia. *C.citratus* is extensively used in Ayurvedic medicine and also in pharmacological activities such as anti-amoebic, anti-diarrhoeal, anti-fungal, anti-inflammatory properties. The oil obtained from leaves of *C.citratus* by the method of solvent extraction. The oil consisted of 18 components.

Keywords: *C.citratus*, *C.citratus* oil, antimicrobial, phytochemical, antioxidant, pharmacological activity.

Introduction:

There are hundreds of medicinal plants that have a long history of curative properties against various diseases and ailments. However, screening of plant for their activity is very essential and needs urgent attention in order to know the value of plant. The rich knowledge base of countries like India in medicinal plant and health care has led to been the interest by pharmaceuticals companies to use this knowledge as a resource for research and development in the pursuit of India in form of crude. At this junction it is of interest to determine the scientific basis for the traditional use of these plants.

The specie *Cymbopogon citratus*, known as lemon-grass, is a producer of essential oil with commercial value (Lewinsohn et al., 1998). It presents antifungal properties (Khan and Ahmad, 2012; Irkin and Korukluoglu, 2009; antibacterial properties (Cimanga et al., 2002), diuretic action (Gálvez et al., 1998), anticarcinogenic role (Puatanachokchai et al., 2002), gastroprotection mechanisms (Fernandez et al., 2012) and protective effect against parasites (Santoro et al., 2007).

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