



A study on Antidermatophytic Potential of *Ocimumtenuiflorum* Essential Oil and Chemical Composition Evaluation

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Abstract:The Dermatophytes engage in an important role in the atmosphere. They invade the keratinophilic substrates with causing the superficial infections. The certain augmentation in the infection in the human, there is urgent need to search out a new therapeutics or remedies from nature. In the presented study, the chemical composition of *Ocimumtenuiflorum*'s volatile oil and its anti-dermatophytic potential was evaluated against isolated Dermatophytes species from Jaipur (India). The Clear pale yellowish colored oil containing 40 volatile components was extracted & analyzed using Hydro Distillation Process and GC & GC-MS methods. The main constitutions were obtained as β -Caryophyllene (38.90%) and Eugenol (19.63%) in the oil and it revealed excellent inhibition activity against test fungal organisms with presence of Maximum Inhibition Zone of 37 mm against *T. mentagrophytes*(KU578106) as well as 31.67 mm for *M. gypsiu* and 28.33mm for *M. nannum* as compared to standard. The results studied in the present research, helps to look out new natural therapeutic drugs from *Ocimumtenuiflorum* as an anti-dermatophytic agent than the standard.

Keywords:Dermatophytes;*Ocimumtenuiflorum*; Volatile; Hydro Distillation; β -Caryophyllene.

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