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Antifungal Evaluation of Alcoholic Extract of *Euphorbia zeylanicum*

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Abstract : This study was to evaluate *extracts of Euphorbia zeylanicum* for anti-fungal activity, cactus-like plant of the family *Euphorbiaceae* commonly called shend by the people in sangli district. The stem-bark and latex of this plant were extracted using 50%-methanol, water and absolute methanol. Antifungal effect of the extracts was evaluated using the Time kill assay. Strains of *Aspegillus, Rhizopus, Mucor, Rodotorula, Geotricum, Basidiobolus, Trichophyton, Microsporum, Epidermophyton* and *Candida* species were used as test fungi for the study. The extraction of the stem-bark yield 18%,15% and 25% for absolute methanol, water and 50% methanol, respectively, while the latex yield 13%, 12% and 15% for absolute methanol water and 50% methanol extracts respectively. There was a significant difference in the growth inhibition by the 50% methanol extracts of the stem-bark and latex (P=0.5) with significant means of 5.361 and 7.1086 respectively. *Candida albicans* was the most susceptible of the yeasts tested (MIC_{90} 0.313 mg/ml) and significant mean of, 0.896 and *M. gypseum the least* susceptible of the dermatophytes tested significant mean 14.641. In the time kill assay, the results showed that *T. mentagrophytes, M. gypseum and E. floccosum* cells were killed by the higher concentrations (4 MIC and 2 MIC) of the plant extracts. The plant extracts showed broad spectrum of activity against fungi tested.
Keywords : Evaluation, antifungal, time kill assay, Euphorbia zeylanicum extracts.

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