

## Antifungal Activity of Medicinal Plants Used Traditionally for the Treatment of Fungal Infections and Related Ailments in South Africa

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**Abstract :** The current study investigates the antifungal properties of crude plant extracts from selected medicinal plant species. Eight plant species used by the traditional healers and local people to treat fungal infections were selected for further phytochemical analysis and biological assay. The selected plant species were extracted with solvent of various polarities such as acetone, methanol, ethanol, hexane, dichloromethane, ethyl acetate and water. Leaf, roots and bark extracts of *Maerua juncea* Pax, *Albuca seineri* (Engl & K. Krause) J.C Manning & Goldblatt, *Senna italica* Mill., *Elephantorrhiza elephantina* (Burch.) Skeels, *Indigofera circinata* Benth., *Schinus molle* L., *Asparagus buchananii* Bak., were screened for antifungal activity against three animal fungal pathogens (*Candida albicans*, *Aspergillus fumigatus* and *Cryptococcus neoformans*). All plant extracts were active against the tested microorganisms. Acetone, dichloromethane, hexane and ethanol extracts of *Senna italica* and *Elephantorrhiza elephantina* had excellent activity against *Candida albicans* and *A. fumigatus* with the lowest MIC value of 0.02 mg/ml. Bioautography assay was used to determine the number of antifungal compounds presence in the plant extracts. No active compounds were observed in plant extracts of *Indigofera circinnata*, *Schinus molle* and *Pentarrhinum insipidum* with good antifungal activity against *C. albicans* and *A. fumigatus* indicating possible synergism between separated metabolites.

**Keywords :** antifungal activity, bioautography, ethnobotanical survey, minimum inhibitory concentration

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