

Research Fellows and Research Projects

Department of Science and Technology (DST) – National Research Foundation (NRF) Centre in Indigenous Knowledge Systems (CIKS)

RESEARCH FOCUS AREA: TRADITIONAL MEDICINE /BIODIVERSITY



Full Name: Mashudu Ramashamba

Country of Research: South Africa

Research Topic: Antifungal activity and chemical profiles of selected medicinal plants used in Vhembe district, Limpopo, South African

Institutional Affiliation: University of Venda

Research Supervisor: Dr Annox Nndivhaleni Masevhe

Research Background/Summary

The aim of the study is to investigate the antifungal activity and chemical profiling of selected medicinal plants. Five plant species are selected, which are *Combretum imberbe* (Wawra), *Diospyros mespiliformis* (Hotch.ex A.DC.), *Maytenus senegalensis* (Lam.), *Maerua angolensis* (DC.), and *Clematis brachiata* (Thunb.), Literature review will be done on each plant focusing on the antifungal activities. Leaves will be used to prepare extracts using distilled water and

acetone, TLC fingerprinting will be used to detect the presence of chemicals on plant extracts. Plant extracts will be tested against five fungal's species. The antifungal activity will be conducted using micro dilution and bioautograph assays, clotrimazole will be utilized as positive control. The plants extracts will be tested for antioxidants activity using DPPH (2,2- diphenyl-1-picryl hydrazyl) qualitative assays and plant extracts will also be tested for cytotoxic using MTT assay (metabolism and neutral red uptake).

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