

**ETHNOMEDICINAL POTENTIAL OF *KHAYA SENEGALENSIS* (DESR) A. JUSS
(MAHOGANY) ON PATHOGENIC FUNGI OF VEGETABLES IN
SOKOTO METROPOLIS**

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ABSTRACT

The antifungal efficacy of *Khaya senegalensis* (leaf and bark) extracts was tested *in vitro* on three pathogenic fungi of vegetables in Sokoto metropolis, at different concentrations (1mg/1ml, 3mg/ml, 6mg/ml, 9mg/ml and 12mg/ml). The solvents used were water, acetone and Millet Steeped Water (MSW). The plant extracts were found to be effective in reducing the growth of the pathogenic fungi. Acetone and MSW extracts were more effective in inhibiting the growth of the test fungi than the aqueous extracts. MSW recorded highest percentage growth inhibition ($83.05 \pm 0.53\%$) of *Aspergillus niger*, followed by acetone extract ($79.01 \pm 0.53\%$) and aqueous extract had no inhibitory effect. The result also revealed that acetone leaf extracts of the plant had antifungal effect on growth of *M. racemosus* ($56.62 \pm 1.65\%$) and *Rhizopus oryzae* ($44.15 \pm 0.52\%$). The results indicate that the leaf and bark extracts of the plant have antifungal properties and could be used for the management of growth of these phytopathogenic fungi. MSW and acetone proved to be more effective in reducing the mycelia growth of the fungi than aqueous extract. MSW should be utilised as the solvent for extraction because of its effectiveness as extracting solvent and its availability at low cost.

KEYWORDS: Antifungal, *K. Senegalensis*, Plant Extracts, Pathogens, Vegetables