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PHYTOCHEMICAL ANALYSIS AND BIOEVALUATION OF DIFFERENT EXTRACTS/ FRACTIONS OF BARK OF MORINGA OLEIFERA

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Abstract—The introduction of synthetic pesticides drastically reduced the use of botanical extracts but their use has raised a number of ecological and environmental problems. There is a lot of hope that plant based pesticides will take us a long way in fighting the dangers associated with conventional pesticides. They are hailed for having a broad spectrum of activity, being easy to process and use, having a short residual activity and for not accumulating in the environment or in fatty tissues of warm blooded animals. Moringa oleifera is referred by a number of names such as horse radish tree, drumstick tree, ben oil tree, miracle tree, etc. Its roots are laxative, expectorant, diuretic and good for inflammations, throat, bronchitis, piles, cures stomatitis, urinary discharges and obstinate asthma. Various compounds like alkaloids, glycosides, flavonoids, steroids, terpenoids, saponins, tannins and anthraquinone are reported from the whole plant but the bark is reported to contain alkaloids, phytosterols and glucosinolates. Bark of Moringa oleifera was collected, washed, shadow dried, chopped into small pieces and then extracted with hot methanol. The extract was fractionated into different solvents and concentrated under reduced pressure to obtain the viscous mass. Thin layer chromatography of the methanolic extract was performed, which showed the presence of several compounds in the extract. The extract and fractions were evaluated for antifungal activity by poisoned food technique at different test concentrations.