ANTIMICROBIAL ACTIVITY OF *EMILIA DISCIFOLIA* LEAF EXTRACTS AGAINST STANDARD LABORATORY TEST MICROORGANISMS

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ABSTRACT

Emilia discifolia is a species of plants in the family Asteraceae and is classified as a medicinal plant due to its antimicrobial activities. The aim of the study was to evaluate the antimicrobial activity of Emilia discifolia against standard laboratory test micro-organisms and to assess the availability of phytochemical compounds. The extract of Emilia discifolia was first prepared by washing, drying and crushing it to powder. The extract was then serial diluted to four-folds. Different laboratory test micro-organisms (Candida albicans, Escherichia coli and Staphylococcus aureus) were spread plated in different media and paper disks prepared from Whatman filter paper dipped in the extract concentration and placed on plates containing different isolates. After incubation, zones of inhibition were measured and recorded. The results showed that zones of inhibition were bigger in E. coli as compared to S. aureus and C. albicans, they also displayed key phytochemical compounds found on the plant extract. Further studies can therefore be done for further knowledge on the antimicrobial activity of Emilia discifolia.

Key words: phytochemicals, antimicrobial, herbal medicine