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**ANTIMICROBIAL ACTIVITY OF *Aspilia mossambicencis* LEAF
EXTRACT AND ITS SECONDARY METABOLITES.**

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ABSTRACT

The in vitro anti-microbial activity of methanol extracts of *Aspilia mossambicensis* (Compositae) and its phytochemical components were studied. The bacteria used for the antimicrobial analysis consisted of 4 clinical strains of both gram negative and gram positive bacteria namely: Staphylococcus aureus, Bacillus subtilis, Escherichia coli and Pseudomonas aeruginosa, and one fungal strain of Candida albicans

Nine of the conventional antibiotics from different classes namely Cefuroxime, Nitrofurantoin, Nalidixic acid, Norflaxacin, Ampicilin, Gentamycin, Cotrimoxazole, and Augmentin were used to compare their antimicrobial effect against *A Mossambicensis* methanolic leaf extract. The leaf extract proved to be a broad spectrum antimicrobial agent as there was an effect on all the micro-organisms studied. Three out of the nine conventional antibiotics showed better activity against the microbes in comparison to the leaf extract of *Aspilia mossambicensis* as shown in (figure 13). The highest effect was on Bacillus subtilis as shown on the results in (figure 7).

The phytochemical screening for the leaves of *Aspilia . mossambicensis* revealed the presence of alkaloids, saponin glycosides and catechol tannins but absence of plant sterols and flavonoid tannins and anthraquinone

This study shows that *Aspilia* is a potent antimicrobial agent and it can be used to develop an antibacterial drug as the bacteria are becoming resistant to the existing drugs and generally the experiments yielded results as per the objectives of the study.