ANTIBACTERIAL ACTIVITIES OF HYDRO DISTILLATION EXTRACT AND CRUDE EXTRACTS OF Mikania micrantha LEAVES

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ABSTRACT

ANTIBACTERIAL ACTIVITIES OF HYDRO DISTILLATION EXTRACT AND CRUDE EXTRACTS OF Mikania micrantha LEAVES

The present research was conducted to determine and to compare the antibacterial activities of hydro distillation extract and crude extracts of *M. micrantha* leaves. The extracts were assayed for antibacterial activity against two types of Gram positive bacteria which are *Staphylococcus epidermidis* and *Staphylococcus aureus* and another two types of Gram negative bacteria which are *Escherichia coli* and *Klebsiella pneumoniae* using disc diffusion method. Chloramphenicol was used as the positive control. Among all of the extracts, only methanol extract succeed at inhibiting the growth of these four bacteria and showed concentration dependent activity against all the tested bacteria. The extract showed varies levels of antibacterial activity on different test strains. The methanol extract was found to be more effective against Gram positive bacteria as compared to Gram negative bacteria which due to the presence of outer membrane that functions as an effective barrier in those species. *S. epidermidis* was the most susceptible strain by showing the biggest inhibition zone while *K. pneumoniae* was resistant to the extract by showing smallest inhibition zone.