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Evaluation of the antibacterial activity of some medicinal plants used in Saudi folk medicine

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The objective of this study was to test the in vitro antimicrobial effect of three aqueous and methanol extracts of known Saudi medicinal plants (*Achilleum biebersteinii* Afan, *Commiphora molle* and *Rhazya stricta* Decne) used in folk medicine in Northern district of Saudi Arabia. The antibacterial activity of the examined plants was studied against clinical isolates of negative (*Escherichia coli* and *Pseudomonas aeruginosa*) and positive (*Staphylococcus aureus* and *Streptococcus pyogenes*) bacteria using disk diffusion technique. The results demonstrated that the three tested methanol extracts have possessed potential antibacterial activity against gram-positive bacteria more than gram-negative bacteria. The concentration of the methanol extract seems to be of high significance role during the evaluation. The aqueous extract of the three medicinal plants under investigation have minimal non significant effect as antibacterial against the clinical isolates of both positive and negative bacterial strains. However, the methanol extract of *Achilleum biebersteinii* surpass the other plants extracts in the antibacterial activity. In conclusion, the methanol extracts of the tested plants especially of *Achilleum biebersteinii* commonly used by the indigenous peoples of the northern district of Saudi Arabia could be considered as an alternative source of new antibiotic after further studies.

Biography

Maha M Hady has completed her PhD at the age of 27 years from Cairo University and postdoctoral studies from Cornell University Faculty of Agriculture and Life Science, USA. She was the Head of Department of Nutrition and Clinical Nutrition, Cairo University since 2011. Participated in a two research projects titled "Nutrition and Immune Status" and "Effect of specified environmental factors on immunity", funded by USA under No. H-2-9 and 345 of NARP's projects (National Agricultural Research Project). She has published 45 papers in reputed journals and International conferences. She supervised more than 23 Master and PhD thesis in Nutrition and Clinical Nutrition.

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