

ANTIBACTERIAL ACTIVITIES OF SELECTED MEDICINAL PLANTS FROM NANDI COUNTY, KENYA

Abstract.

Medicinal plants are used by the local people to treat different human diseases since time immemorial. The efficacy of most of these plants has not been determined. The present study was therefore conducted at Nandi County to determine antimicrobial activities of seventeen selected medicinal plants that are commonly used to treat infectious diseases caused by bacteria. The plants were collected from the field and dried in a room at 25°C. The samples were ground into powder and the components extracted using methanol. Plant extracts were tested against ten standard and clinical isolates of human pathogenic bacteria, using disc diffusion and broth dilution methods. The solvents used for extraction were used as negative control while Gentamycin was used as positive controls. In vitro antimicrobial assays indicated that four plant extracts exhibited antimicrobial activity in which the highest activity was observed from root bark extracts of *Albicia coriaria*, *Acacia lahai*, *Olinia rochetiana*, *Leucas calostachys* and stem bark of *Sygium cordatum* against *S. aureus* among others. This study demonstrated support for the claimed antimicrobial uses of the plants in the traditional medicine probably due to the phytochemicals present. Isolation and purification of bioactive chemical constituents from the active crude plant extracts can be obtained to supplement conventional drugs.

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