

## **Screening of some Kenyan Medicinal Plants for Antibacterial Activity.**

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### **Abstract**

Eleven medicinal plants used by traditional healers in Machakos and Kitui District were screened, namely: *Ajuga remota* Benth, *Aloe secundiflora* Engl, *Amaranthus hybridus* L, *Cassia didymobotrya* Fes, *Croton macrostachyus* Del, *Entada leptostachya* Harms, *Erythrina abyssinica* DC, *Harrisonia abyssinica* Oliv, *Schkuhria pinnata* O. Ktze, *Terminalia kilimandscharica* Engl and *Ziziphus abyssinica* Hochst for potential antibacterial activity against four medically important bacterial strains, namely: *Bacillus cereus* ATCC 11778, *Escherichia coli* ATCC 25922, *Micrococcus lutea* ATCC 9341 and *Pseudomonas aeruginosa* ATCC 27853. The antibacterial activity of methanol extracts was determined as the minimum inhibitory concentration (MIC). The plant extracts were more active against Gram-positive (G+) than Gram-negative (G-) bacteria. The positive controls were streptomycin and benzylpenicillin for G- and G+ bacteria, respectively, both had a significant MIC at <1mg/mL. The most susceptible bacteria were *B. cereus*, followed by *M. lutea*, while the most resistant bacteria were *Ps. aeruginosa*, followed by *E. coli*. The present study supports the use of these plants by the herbalists in the management of bacterial ailments. *H. abyssinica* and *T. kilimandscharica* showed the best antibacterial activity; hence these plants can be further subjected to phytochemical and pharmacological evaluation.