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Phytochemial Screening, Anti-Microbial, and Minerals Determination of Leptadenia Hastata

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Abstract : This project involved screening for antibacterial activity, phytochemical and mineral properties of Leptadenia hastata by flame photometry. The result of phytochemical screening reveals that the presence of flavonoids, tannins, saponins, alkaloids, steroidal, and anthraquinones while the cardiac glycoside was absent. This justifies the plant been used as anti-bleeding and anti-inflammatory agents. The result of flame photometry revealed that 1.85 % (Na), 0.65% (K) and 1.85 % (Ca) which indicates the safe nature of the plant extract as such could be used to lower high blood pressure. The antibacterial properties of both the aqueous and ethanolic extract were studied against some bacteria, Escherichia coli, Bacillus Cercus, Pseudomonas aeruginas, and Enterobacter aerogegens, by disc diffusion method and the result reveals that there are very good activities against the organism while the ethanolic extract at concentration 1.0 – 1.2 mg/ml. the ethanolic extract showed in considerable zone inhibition against bacteria's; Escherichia coli, Bacillus Cercus, pseudomonas aeruginosa andklebsellapnemuoniae. Minimum inhibitory concentration (MIC) and minimum Bacterial concentration (MBC) were conducted with fairly good significant effect of inhibition on the organism, therefore, plant extract could be a potential source of antibacterial agent.

Keywords : antibacterial activity, Leptadenia hastata, infectious diseases, phytochemical screening
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