

Phytochemical Screening, Anti-Microbial and Mineral Determination of *Bryocarpus coccineus* Root

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Abstract : The research involved phytochemical screening, antibacterial activities and mineral determination by flame photometry of the crude extract of *Bryocarpus coccineus* schum indeed were carried out. The result of Phytochemical screening reveal tha saponins, alkaloids, cardiac glycosides, and anthraquinones were present. This suggests that the plant extract could be used as anti-inflammatory and anti-bleeding agents. Estimation of mineral content shows that the crude extract of *B. coccineus* contains 0.73 (Na⁺), 1.06 (K⁺) and 1.98 (Ca⁺) which justifies its use to be safe for hypertensive patients and could be used to lower blood pressure. The antibacterial properties of aqueous and ethanol extract were studied against some bacteria; *pseudomonas aeruginosa*, *Escherichia coli*, *Bacilus subtilis*, *Klebsilla penmuoniae* by disc diffusion method. The aqueous extract showed significant activity against the organisms while the ethanol at concentrations 5-10mg/ml ethanol extract showed significant zone of inhibition against the organisms, *E. coli*, (19 mm), *B. cereus* (12 mm), *P. aeruginosa* (11 mm), *K. pnemuoniae* (11 mm). Minimum inhibitory concentration (MIC) was carried with considerable effect of inhibition on the organisms. The MIC values observed were 1, 24, 16 and 19 mm against *E. coli*, *B. cereus*, *P. aeruginosa* and *K. pnemuoniae* respectively. Therefore, the plant could be a potential source of antibacterial agent although more pharmacological and clinical study may be recommended.

Keywords : phytochemicals, microorganisms, screenings, mineral ions

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