

Antimicrobial Activity of Nauclea lotifolia (African Peach) Crude Extracts against Some Pathogenic Microorganism

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Abstract : The phytochemical screening and antimicrobial activity of Nauclea lotifolia fruit, leaf and stem-bark extracts at various concentration of (20.0,10.0, 5.0, and 2.5 mg/ml) were evaluated against some pathogenic microorganisms such as Escherichia coli, Klebsiella pneumoniae, Salmonella typhi, Staphylococcus aureus, Aspergillus niger and Candida albicans. The antimicrobial activity was assayed using agar well diffusion method. The result obtained show appreciable inhibitory effort of acetone, aqueous and methanolic extracts of Nauclea lotifolia. However, result obtained was less active compared to that of the control antibiotic (Ciprofloxacin). The minimum inhibitory concentration (MIC) was determined using serial doubling dilution method and ranged from 5.0-10.0mg/ml, while the minimum bactericidal concentration (MBC) was determined by plating various dilution of extracts without turbidity and the result ranged from 5.0-7.5mg/ml. The phytochemical screening revealed the presence of alkaloid, anthraquinones, flavonoids, resin, steroid and saponin. The activities of the plant extract therefore justify their utilization in the treatment of various ailments associated with the test organism.

Keywords : Nauclea, lotifolia, antimicrobial, pathogens, saponin, extract

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