



Phytochemical Evaluation and Antibacterial Activity of Fruit Extract of *Solanum surattense* Burm F. against Some Pathogenic Bacteria

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Abstract : The objective of this study was to evaluate phytochemical constituents and antibacterial activity of hydroalcoholic extract of *Solanum surattense* fruit against some gram-positive and gram-negative bacterial strains. The evaluation of antibacterial activity was carried out by using the disc diffusion method, determination of minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC). Ciprofloxacin was used as positive control. Hydroalcoholic extract of *Solanum surattense* fruit containing alkaloids, flavonoids, phenol, saponins, terpenoids, glycosides, sterols, proteins and tannins. Efficacy data analysis showed that hydroalcoholic extracts of fruit of *Solanum surattense* (1 mg/ml) inhibited the growth of *Staphylococcus aureus*, *Bacillus subtilis*, *Escherichia coli* and *Salmonella typhi* with mean diameters of inhibition zones being 24, 25, 28 and 30 mm respectively. On the other hand, minimum inhibitory concentration and minimum bactericidal concentration value of 0.062 and 0.25 mg/ml, 0.062 and 0.25 mg/ml, 0.312 and 0.125 mg/ml, 0.156 and 0.0312 mg/ml were recorded against *Staphylococcus aureus*, *Bacillus subtilis*, *Escherichia coli* and *Salmonella typhi* respectively. Hydroalcoholic extracts of *Solanum surattense* fruit have potent antibacterial activity against the different tested bacterial strains. This activity supports their use in treatment of infections caused by such resistant bacteria.

Key words : *Solanum surattense*, phytochemical analysis, antibacterial activity, Inhibition zones, MIC and MBC.

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