

Preliminary Phytochemical Screening and Antibacterial Activity of *Ficus racemosa*

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Siddha medicine is one of the traditional medicines in the world which treats not only the body but also the mind and the soul. Medicinal plants act a major role in this system. *Ficus racemosa* belongs to the family of Moraceae. It is called *Atti* in Tamil, Cluster fig in English, *Attikka* in Sinhala. An infusion of the bark is given for menorrhagia, haemoptysis and urinary diseases. The bark is also employed to extract poison from wounds caused by cats. Therefore aim of the study was to evaluate the antibacterial activity of decoction and ethanolic extract of bark of *F.racemosa* against *Staphylococcus aureus* (ATCC 25923), *Escherichia coli* (ATCC 25922), *Pseudomonas aeruginosa* (ATCC 27853) and *Enterococcus faecalis* (ATCC 291212) and to screen the phytochemicals of bark. The antibacterial activity was evaluated by using the standard cutwell diffusion method with Mueller Hinton Agar as the medium control was maintained. The diameter of the Zone of Inhibition (ZOI) was measured after incubation. Replicates were made for the entire procedure. Qualitative phytochemical analysis was done to test for the presence of phytochemicals. The decoction and ethanolic extract possess alkaloid, tannin, saponin, flavonoids, terpenoids, phlobatannins and cardiac glycoside. Ethanolic extract showed high degree of growth inhibition on both gram positive as well as gram negative bacteria ($13\pm0.15 - 21\pm0.23\text{mm}$). The decoction of *F.racemosa* didn't show inhibitory activity against *P.aeruginosa* and *E.faecalis* but it showed inhibitory activity against *S.aureus* and *E.coli* ($10\pm0.71 - 11\pm0.77\text{mm}$). The ethanolic extract of bark of *F.racemosa* has a great potential inhibitory activity against microorganism that can be used in treatment of infectious diseases caused by *S.aureus*, *E.coli*, *P.aeruginosa* and *E.faecalis*. Further study should be carried out against the wider spectrum of microorganisms.

Key words- Antibacterial activity, Phyto chemicals, *Ficus racemosa*