## DISSERTATION PROJECT

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"Phytochemical Analysis \& Antimicrobial Activity of Peristrophe Bicalyculata"
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#### Abstract

Peristrophe Bicalyculata have been reported to have many insecticidal and anti-bacterial properties. For further investigation, the phytochemical, anti-microbial and anti-fungal studies were carried out on the leaf part of the plant. This plant has been used in treating various skin diseases. It is very useful in the treatment of T.B, Jaundice, Antiseptic and Anti-venom agent in the traditional system of medicine. The screening indicates the presence of various secondary metabolites such as tannins, alkaloids, flavonoids, glycosides, terpenoids, reducing sugars and saponins. Ethanolic and aqueous extracts were tested against five different microorganisms. Anti-fungal studies were carried out against two fungi named Aspergillus Niger and Candida albicans. Anti-microbial as well as anti-bacterial studies were carried out against Bacillus subtilis, Escherichia coli and Staphylococcus Aureus. Anti-microbial activity was carried out at $100 \mathrm{mg} / \mathrm{ml}$ concentration by Agar Well Diffusion method. The evaluation revealed the ethanolic extract was most effective against S.Aureus and Bacillus subtilis. No extract was active against Aspergillus Niger. Ethanolic extracts were most effective in bacteria than fungi. From the evaluation, the ethanolic extracts of Peristrophe Bicalyculata posses a good source of various new drugs for treating various pathogens and infections.


