

**PRELIMINARY PHYTOCHEMICAL ANALYSIS OF LEAVES FROM *Vernonia zeylanica*,
Mimosa pudica AND *Tamarindus indica* USED IN SIDDHA MEDICINE FOR TREATING
SKIN DISEASES**

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Abstract

Skin is the largest organ in the human body, and it is the protective barrier. Allergies, irritants, genetic makeup, certain diseases, and problems in the immune system can cause skin disease. Leaves of three commonly used plants, namely *Vernonia zeylanica*(VZ), *Mimosa pudica*(MP) and *Tamarindus indica*(TI), are used in Siddha Medicine for skin disease. The objective of the present study was to analyse the phytochemicals present in VZ, MP and TI and to compare the phytochemicals present in three types of leaves qualitatively. The leaves were collected from Kaithady, Jaffna District. Then, the leaves were crushed separately using mortar and pestle following the traditional Siddha method. The extract was then separated and sent to the Department of Chemistry, University of Jaffna, for qualitative phytochemical analysis. Three types of extract were tested separately for phytochemicals like alkaloids, flavonoids, phenolic compounds, tannin, glucoside, saponins, terpenoids, protein and steroids using different test methods for qualitative analysis. This result shows that all three types of extract have no glycoside, which does not affect skin conditions. Alkaloids, Flavanoids, Phenolic compounds, Tannin, Saponin and Terpenoids were present in all three extracts. Proteins and steroids were present only in MP and TI. From the present study, it can be concluded that all three types of extract contain bioactive phytochemicals that can be useful in treating skin conditions. Comparatively, the TI leaf extract had more phytochemicals than the other two leaf extracts. This study justifies the presence of phytochemicals in the leaf extract of VZ, MP, and TI used in the treatment of skin disease.

Keywords: Phytochemical analysis, Skin disease, leaves, Siddha Medicine.