

Study on the phytochemical constitution of *Albizzia lebbeck* Benth

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The macroscopic character of the leaf, physical constant values, extractive values, behaviour of powder with different chemical reagents, fluorescent character under ultra violet light after the treatment with different reagents of the powdered leaf of *Albizzia lebbeck* Benth (Leguminosae) were studied to fix some pharmacognostical parameters. Preliminary phytochemical screening on the methanol extract of the plant were also performed with the view to identify the plant character in future research.

Key words : Phytochemistry, Alkaloids, Medicinal plant, *Albizzia*, Flavonoid.

INTRODUCTION

In angiosperm Leguminosae is considered to be the second largest family *Albizzia lebbeck* (subfamily: Mimosasea) is predominantly used in the rheumatic treatment. The leaf extract of *Albizzia lebbeck* mixed with cow's milk is given as a immediate remedy for Rheumatism. It is widely distributed majestic deciduous tree with a spreading crown equal to its height. Kasthuri *et al.* (2000) analyzed anticonvulsive activity of *Albizzia lebbeck* from experimental animals. Une *et al.* (2001) studied the chemical ingredients and pharmacological profile of different part of *Albizzia lebbeck*. The drug extracted from *Albizzia lebbeck* is used to treat bronchial asthma. It occupies an important place in Indian system of medicines (Tripathi *et al.*, 1982). Some steriogenic effects of *Albizzia lebbeck* in Guinea pigs were identified (Tripathi *et al.*, 1982). Almost all the part of the plant is used for various ailments like rheumatism inflammations, Ophthalmic, depurative and restorative Leprosy and Leucoderma. The present investigation deals with studies on some important pharmacognostical profiles of the leaf and its powdered form being reported here.

MATERIALS AND METHODS

Albizzia lebbeck was collected from in and around Coimbatore. For the pharmacological analysis, the leaves of *A. lebbeck*, were taken, shade dried and powdered in Willey mill and passed through 40mesh sieve and processed for powder analysis and stored in an air tight container for further use

Reagents: All the reagents were of analytical grade and obtained from S.D. fine chemicals Ltd. Mumbai.

Microscopic studies of the plants were observed

(Iyenkar and Nayak, 1975) and organoleptic evaluation (colour, odour, taste, texture of the plant powders were observed and regarded (Jackson and Snowdown, 1968) water soluble extractive values was detennined by the process of maceration. Other extractive values were detennined by successively starting from petroleum ether (60°C-80°C) Benzene, chlorofonn, methanol by using soxlet extraction were obtained after evaporation solvent under reduced pressure. The physical constant values were detennined by phannacopical methods (Anonymous, 1966) Fluorescence property of the powder was studied under daylight and UV-light. (Kokoshi, 1958 and Chase and Pratt, 1949) physical constants and chemical reaction of powder (Anonymous, 1970).

Preliminary phytochemical screening were carried out for alkaloids flavonoids, steroids, resin, phenolic compounds, proteins, amino acids, gums and mucilage's and fats (Harbourne, 1973)

RESULTS AND DISCUSSION

The organoleptic evaluation of the leaves of *Albizzia lebbeck* given (Table 1). In fluorescence analysis, the colour was observed under daylight and UV light. They varied widely across the lights applied shown in (Table2). Total ash content of the plant are given in (Table 3). The powder was treated with various chemical reagents and the colour changes observed was presented in the (Table

Table 1 : Organoleptic evaluation

Attributes	<i>Albizzia lebbeck</i> -leaf
Colour	Parrot green
Odour	Aromatic
Taste	Bitter
Texture	Hard