

PHARAMCOGNOSTIC STUDIES OF *ACALYPHA INDICA*, *ACALYPHA WILKESIANA MILK WHITE* AND *ACALYPHA WIKESIANA TRICOLOR*

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ABSTRACT

In the present study, an attempt was made to investigate the Pharmacognostic studies of *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor*. The leaves of the above plants were taken for the study of Pharmacognostic Studies in Evaluation of *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor*.

Keywords: *Acalypha indica*, *Acalypha wilkesiana milk white*, *Acalypha wilkesiana tricolor*.

INTRODUCTION

Herbal medicine – It is also called botanical medicine or phytomedicine-refers to using plants seeds, flowers, roots for medicinal purpose. Herbalism has a long tradition of use of outside of conventional medicine. Euphorbiacea family contains about 2100 species of plants they are known as spurge they all produce mostly white latex which exude when cut. It contains the species *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor*.

EXPERIMENTAL SECTION

Plant Materials

The leaves of plants *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor* were Authenticated and were collected from Bapatla college of Pharmacy Campus Bapatla Andhra Pradesh, India. during the month August 2014.

Solvent Extraction

The leaves of *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor* were collected, washed, dried and powdered separately. 50g of dried powder of the leaves was weighed and transferred into a conical flask and it was macerated with sufficient amount

of ethanol for about a week days. The whole mixture was filtered and filtrate was collected, concentrated in a china dish on a hot plate till the residue was obtained. The extract was collected, labelled and stored for further experimental use.

PHARMACOGNOSTIC STUDIES

TRANSVERSE SECTION OF *ACALYPHA INDICA*, *ACALYPHA WIKESIANAMILKWHITE*, *ACALYPHA WILKESIANATRICOLOR*

EXPERIMENTAL PROCEDURE

Fresh potato taken and small pieces cut in a rectangular shape. The mid rib of the lamina cut with a blade. The section cut by sand witching the leaf and potato. Slicing of the section cutting thin slice of potato. Sweeping sections off the razor with a hair brush was done. Placing them on a watch glass with water. The best, thin section of selected (part taken) is transferred on to clean glass slide. Two drops of phloroglucinol is added and dried for 1min.9. Then HCl (2 drops) added and dried for 1min. The section observed under microscope.

The section obtained layer of plants *Acalypha indica*, *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor* were cleared in chloral hydrate, mounted with glycerin and observed under a compound microscope. The

presence absence of the cells were observed: epidermal cells, stomata and epidermal hairs trichomes . The transverse sections of the fresh leaves of three plants were taken and observed.



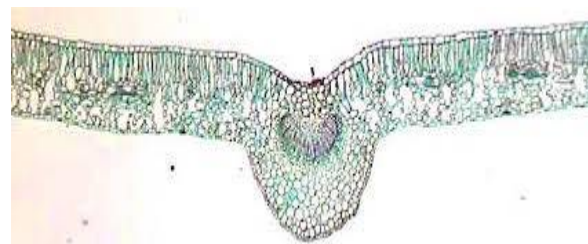
Acalypha indica



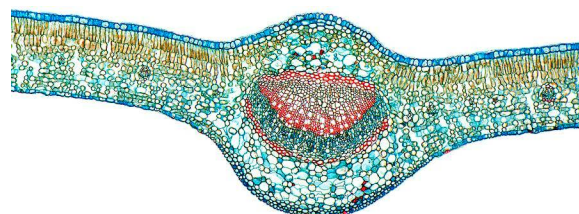
Acalypha wilkesiana milk white



Acalypha wilkesiana tricolor



Transverse section of Acalypha indica



**Transverse section of Acalypha wilkesiana
milkwhite**



**Transverse section of Acalypha wilkesiana
tricolor**

RESULTS AND DISCUSSION

The Pharmacognostic Studies of the different parts of Plant *Acalypha indica* *Acalypha wilkesiana milkwhite* and *Acalypha wilkesiana tricolor* were studied. The observations of the Cells were recorded in view of study differentiation of species of the plants of the family Euphorbiaceae. The presence absence of the cells were observed: epidermal cells, stomata and epidermal hairs were observed as shown in figures The transverse sections of the fresh leaves of three plants were taken and observed

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