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STUDY OF PHYTOCHEMICAL SCREENING OF FLOWER EXTRACT OF *BLUMEA LUSERA*.

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ABSTRACT:

The present paper deals with photochemical screening of flower extract of *Blumea lusera.* A Phytochemical screening is the scientific process of analyzing, examining, extracting, experimenting, and thus identifying different classes of phytoconstituents present in various parts of the plant. Plant sample flowers of *Blumea lusera* were collected and crushed to powder form, and then taken in the soxhlet apparatus for hot extraction with organic solvents. Secondary metabolites viz, alkaloids, tannins, flavonoids and sterol and terpenoids were screening in different extracts i.e Pet. ether extract, Chloroform extract, Methanol extract, Water extract. In flower of *Blumea lusera* negative screening recoded secondary metabolities alkaloids, tannina in Pet.ether extract and Chloroform extract. But tannin and flavonoids negative screening in Methanol extract a Water extract. Positive screening recoded secondary metabolities alkakoids and Sterols & terpenods in Methanol extract Water extract and only alkaloids recorded in Methanol extract.

KEYWORDS:

FLOWER EXTRACT, PET. ETHER, CHLOROFORM, METHANOL, WATER AND *BLUMEA LUSERA*.

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INTRODUCTION

Phytochemical screening is the scientific process of analyzing, examining, extracting, experimenting, and thus identifying different classes of phytoconstituents present in various parts of the plant. Organic pigments are large and often complex organic molecules responsible for the different colours of plants and foods. Besides giving the vegetable their characteristic colour, they are also responsible for critical plant functions. The different variations of colours are due to combinations of pigments. A spectrum of beautiful natural colours ranging from yellow to black exists in the above sources. These colours are exhibited by various organic and inorganic molecules (pigments) and their mixtures are due to the absorption of light in the visible region of 400-800 nm. This absorption of light depends on the structure or constituents of the colouring pigment/ molecules contain various chromophores present in the dye yielding plant to display the plethora of colours1. The use of natural products together with their therapeutic properties is as ancient as human civilization and for a long time, mineral, plant and animal products were the main sources of drugs2.Among the all natural dyes, plant-based pigments have wide range of medicinal values. Many of the plants used for dye extraction are classified as medicinal and some of these have recently been shown to possess remarkable antimicrobial activity. Natural dyes are not only used to impart colour to an infinite variety of materials such as textiles, paper, wood etc. but also they are widely used in cosmetic, food and pharmaceutical industry.

MATERIALS AND METHODS

Phytochemical screening of *Blumea lusera;*

The flowers of *Blumea lusera* were collected and crushed to powder form, and then taken in the soxhlet apparatus for hot extraction with organic solvents. The samples were shade dried and soxhlated with methanol and then separated with different organic solvents. The powdered form of *Blumea lusera* was poured into the two separate beakers containing methanol and pet ether for cold extraction.

1. TEST FOR ALKALOIDS:

Samples were taken with petroleum ether extract in a test tube and add 2-3 drops of Dragendroff's reagent (potassium bismuth iodide solution) appearance of pale yellow colour indicates that absence of alkaloids in this extract. Again perform the same experiment with chloroform, methanol and water extract in another test tube appearance of pink colour indicates that absence of alkaloids in these extracts. Appearance of brown colour indicates that presence of alkaloids.

2. TEST FOR TANNINS:

Samples were takenwith petroleum ether and add few drops of ferric chloride solution, pale yellow colour

appears, in chloroform extract yellow colour appears in methanol and water extract appearance of brownish black colour indicates the absence of tannins in samples.

3. TEST FOR FLAVONOIDS

Samples were taken with petroleum ether in a test tube then add few fragments of magnesium ribbon and drop wise add concentrated hydrochloric acid, absence of colour means absence of flavonoids in this extract, same test were repeated with chloroform extract of *Blumea lusera* and also absence of colour. In methanol and water extracts appearance of reddish colour shows the presence of flavonoids in extracts.

4. TEST FOR STEROLS AND TERPENOIDS:

Treat the petroleum ether and chloroform extract of *Blumea* with few drops of conc. sulphuric acid then shake well, no colour appears in these two indicates disappearance of sterols and triterpenoids. Further same treatment of methanol and water extract was done and appearance of reddish colour in the lower layer means presence of steroids appearance of yellow colour in the lower layer indicates presence of terpenoids.

RESULT

Our result reveled that flower extract of *Blumea lusera* secondary metabolites alkaloids positive screening in Methanol extract and Water extract, alkaloids in Pet.ether extract and Chloroform extract not recorded screening. Sterols & terpenods positive screening recorded in Water extract and in Pet.ether extract, Chloroform extract and Methanol extract not screening. Among tannins and, flavanoids, sterols not recorded screening in all extracts,

TABLE - PHYTOCHEMICAL SCREENING OF FLOWER EXTRACT OF *BLUMEA LUSERA*.

S.No	Secondary metabolites	Test	Pet. ether extract	Chloroform extract	Methanol extract	Water extract
1	Alkaloids	(Dragendroff's test)	-	-	+	+
2	Tannins	(Ferric chloride test)	-	-	-	-
3	Flavanoids	(Shinoda test)	-	-	-	-
4	Sterols & Terpenods	(Salkowaski test)	-	-	-	+

Note, + positive, - Negative.

CONCLUSION

Phytochemical screening of flower extract of *Blumea lusera*

1. Negative screening recoded of all secondary metabolities alkaloids, tannina in Pet.ether extract and Chloroform extract. But tannina and **flavanoids** negative screening in Methanol extract a Water extract.

2. Positive screening recoded secondary metabolities alkakoids and Sterols & terpenods in Methanol extract a Water extract and only one alkaloids recorded in Methanol extract

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