



Phytochemical Screening of *Sesbania Bispinosa*.

¹Vaishnavi G. Jadhav, ²Sushant Kokane,

¹M. Pharm 2nd year, ²Assistant Professor in Pharmaceutical Chemistry Department

¹Pharmaceutical Chemistry, ²Pharmaceutical Chemistry

¹Appasaheb Birnale College of Pharmacy, Sangli, Maharashtra, India, 416416.

ABSTRACT:

In gift study, ethanolic extraction, phytochemical investigation of leaves of legume bispinosa was done. consistent with preliminary phytochemical tests; flavonoids, Isoflavonids, alkaloids, glycosides, viscus glycosides, proteins and amino acids, lignin, carbohydrates, cartenoids, phenoplast compounds were gift in ethanolic extracts of leaves of legume Bispinosa.

KEYWORDS: Extraction, Phytochemical Screening of leaves of legume Bispinosa.

1.INTRODUCTION: flavouring drugs is additionally referred to as herbalism. it's the study of healthful plants, their uses, effects and also the role in care system. flavouring plant plays major role in care system worldwide. In Indian history, the healthful fields was principally depends on this ancient flavouring healthful plants. The flavouring drugs is additionally known as phytomedicine or therapy.⁽¹⁾

TB and cancer ar chronic diseases. If artificial medicine utilized in treatment of such diseases could has side-effects on patients, additionally results in several risk factors. however if flavouring medicine utilized in treatment, have minimum aspect effects.⁽²⁾

the globe Health Organisation (WHO) estimates that eightieth of the population of some Asian and African countries presently use flavouring drugs for a few facet of primary health care.

2.MATERIALS AND METHODS:

2.1Collection, drying, authentication of leaves of legume Bispinosa plant:

2.1.1Collection and authentication of plant material: legume bispinosa plant was collected from Kadamwadi, Sangliwadi, Sangli. The plant was known and documented by mister. Vikas B. Awale sir (Associate academic and H.O.D. of Botany) at Patangrao kadam Mahavidyalay, Sangli.

2.1.2Drying of leaves of legume Bispinosa: Leaves were separated from collected plant. Leaves were allowed to shade dry at temperature. once finishing the drying method, the leaves were coarsely fine.⁽³⁾

2.2 Extraction of leaves of legume *Bispinosa* :

2.2.1 Pet ether extraction: Pet ether extraction was done by soxhlet equipment. regarding forty weight unit dried powder was extracted by four hundred milliliter of Pet ether. Temperature of heating mantle was set below the boiling purpose of Pet ether. once lightweight inexperienced solvent was ascertained in thimble, extraction method was stopped. Fat was faraway from leaves of legume *Bispinosa* by exploitation Pet ether as a solvent. The extract was crammed in an exceedingly glass bottle, packed it, tagged it and keep it at temperature. Powder was allowed to dry on paper.

2.2.2 Chloroform extraction: Chloroform extraction was done by soxhlet equipment. regarding forty weight unit dried powder was extracted by four hundred milliliter of chloroform. Temperature of heating mantle was set below the boiling purpose of chloroform. once colourless solvent was ascertained in thimble, extraction method was stopped. pigment was faraway from leaves of legume *Bispinosa* by exploitation chloroform as a solvent. The extract was crammed in an exceedingly glass bottle, packed it, tagged it and keep it at temperature. Powder was allowed to dry on paper.

2.2.3 Ethanolic extraction: once drying the powder that was treated with chloroform was once more treated with ethyl alcohol (40 weight unit powder and four hundred milliliter ethanol). once colourless solvent was ascertained in thimble, the ethyl alcohol extraction method was stopped. All extract was crammed in glass bottle, packed it, tagged it and keep it at temperature. ^(4,5)

| Sr. No. | Tests | Observation | Inference |
|---------------------------------|--|--|-----------|
| Flavonoids | | | |
| 1. | Alkaline reagent test | Yellow fluroscene | +ve |
| 2. | Lead acetate test | A yellow ppt | +ve |
| 3. | Ferric chloride test | A green ppt | +ve |
| 4. | Conc. H ₂ SO ₄ | An orange ppt | +ve |
| Iso flavonoids | | | |
| 1. | Extract + KOH | Yellow colour | +ve |
| 2. | Extract + conc. H ₂ SO ₄ | Yellow colour | +ve |
| Alkaloids | | | |
| 1. | Dragendroff's test | A reddish brown ppt | +ve |
| 2. | Hager's test | A creamy white ppt | +ve |
| 3. | Mayer's test | A creamy white/ yellow ppt | +ve |
| 4. | Wager's test | A brown /reddish ppt | +ve |
| Glycosides | | | |
| 1. | Modified Borntrager's test | A rose pink to blood red colour solution | +ve |
| 2. | 10% NaOH test | A brick red ppt | +ve |
| 3. | Aqueous NaOH test | A yellow colour | +ve |
| Cardiac glycosides | | | |
| 1. | Bromine test | A yellow ppt | +ve |
| 2. | Baljet test | A yellow orange colour | +ve |
| Carbohydrates | | | |
| 1. | Barfoed's test | A red ppt | +ve |
| 2. | Molish test | A violet ring | +ve |
| 3. | Seliwanoff's test | A rose red colour | +ve |
| 4. | Resorcinol test | A rose colour | +ve |
| Proteins and amino acids | | | |
| 1. | Millions test | A white ppt | +ve |
| 2. | Xanthoproteic test | A yellow colour solution | +ve |
| Lignin | | | |
| 1. | Lebal test | A olive green colour | +ve |
| 2. | Furfuraldehyde test | A red colour | +ve |

| | | | |
|-------------------|--|---------------------------------|-----|
| Phenolic compound | | | |
| 1. | Iodine test | A transient red colour | +ve |
| 2. | Ferric chloride test | Dark green/ bluish black colour | +ve |
| 3. | Lead acetate test | A white ppt | +ve |
| Cartenoids | | | |
| 1. | 1 gm extract + 10 ml chloroform | A blue colour at the interface | +ve |
| | Vigorously shaken and filtered. | | |
| | Filtrate + conc.H ₂ SO ₄ | | |

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