A STUDY ON PHYTOCHEMICAL AND CHROMOTOGRAPHIC
ASSAY ON TRAGIA INVOLUCRATA

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ABSTRACT
The present study was under taken to evaluate phytochemical and spectral analysis of crude macerated extracts of fresh plant of Tragia Involucrata Linn Fam Eupherbiaceae Crude macerated extract of methanolic (MME),hexane were used for the phytochemical and spectral activity. The phytochemical investigation reveals the presence of tannins, flavnoids, saponins, terpenoids and reducing sugars. Column Seperation was carraied by various concentrations (100,200,300,400µg/ml) of crude extract which determines the number of compounds present. Spectral studies was carried by using Mass, NMR, IR spectras. Further studies are in progress to isolate the active principle responsible for the activity.

Keywords: Tragia Involucrata, Eupherbiaceae, Phytochemical investigation, Spectral activity.

1.INTRODUCTION
The whole plant of Tragia Involucrata Linn belonging to the family Eupherbiaceae. Tragia Involucrata is a fast growing, soft stemmed vine reaching 10m length. It’s thick semisuccelent and heart shaped leaves have a mild flavor and spiny texture, leaves have narrow and pointed at apex young stems on and leaves are markedly fleshy[1]. Tragia Involucrata grows well under full sunlight in humid climates. Growth is slow, fat 3.5 grams carbohydrate 54grams fiber 9gram ash 19gram, minerals-calcium 3000mg phosphorous, 0mg iron ,0mg magnesium 50mg thiamine[B1],0.7mg riboflavin B2,1.5mg niacin,7.5mg B6,Cl
200mg major components identified from volatile oil were 1-methoxypropane,(Z)-3-hexen-1-ol, 3-methoxyphenyl acetate, acetoepheneone,4-vinylguaiacol, isophytol, and phytol.

The major headspace components are ethylbenzene, o-xylene, limonene[2]. Tragia saponins ABC and D, triterpens oligo glycoclydes, together with beta vulgarosides' and spinacosidec from fresh areal paths. Its leaves are known for being rich in kerotine and vitamin-A. Flowers are pale yellowish, fruits are pale yellow and flushy. Their pigments are soluble in water and offer great tinctural powder, which makes them a potential source of natural dye. Anthocyanins are glycosylate from anthocyanidins all anthocyaninds are composed of 2 or 3 parts: the basic structure which is a glycon(anthocyanidine), sugars and remaining substances and frequently an acyl group[3].

The most common order of sugar frequency is glucose rhamnose, xylose, galactose, arabinose and fructose. However in some cases anthocyanidine can be glycosylated. The glycosylation can occur in positions 3,5,7 as the most common once are linked to hydroxyls in positions 3 and 5 and the least common to hydroxyl[4]. chromotography (TIC, HPLC) with beta cyanin standards. Roots are employed as rubefacient poultice of leaves used to reduce local swelling sap is applied to acne eruptions to reduce inflammation decoction of leaves used for its mild laxative effects. Leaves applied to boils and ulcers to hasten suppuration sugared juice of leaves used for cathoral affliction. This is very popular medicine used by ayurvedic healers for hamerages skin deceases sexual weakness ulcers and as laxative in children and pregnant women.

2. MATERIALS AND METHODS

2.1. Collection and authentication

Plant materials

The whole plant of Tragia Involucrate Linn were collected one local areas of Anantapur in the month of September the plant was identified and authenticated by Dr.MoulAli, Professor, Department of Botany, Govt. Degree College Anantapur, Andhra Pradesh.

2.2. Drugs and Chemicals

HCL, Mayer’s reagent and Wagner’s reagent(S.D fine Chem Pvt., Boisar), Mayer’s reagent and Wagner’s reagent, ether, Dragendorff’s reagent(IDPL India), Ehrlich’s reagent (5% p-dimethylaninobenzaldehyde), 25% of Ammonium Hydroxide, 0.5% potassium hydroxide(S.DFine Chem Pvt.Ltd,India), Trim-Hill reagent(Oxford lab,India), 0.2% Copper
Sulphate, Antimony chloride, Ferric Chloride solution, Alcoholic Thymol SD Fine Chemicals Ltd., Mumbai, India. All other chemicals used were of analytical grade unless and otherwise stated.

The plant was crushed using motor pestle. Crushed material of Tragia Involucrata (200g) was kept for maceration with 50ml of distilled water and 50ml of methanol for 7 days. The extract was filtered by using muslin cloth and also using whatmann filter paper no.1, the extract was concentrated keeping on water bath then dry and weight both they extracts were dark greenish in color and pungent odour. The percentage yield of NME and EEE were 0.835% w/w and 1.104% w/w respectively.

Methanolic extract (maceration for 2 Hours). The plant was crushed using motor and pestle. Crushed material of Tragia Involucrata (200g) was kept for maceration with 100ml of methanol for 2 hours. The extract was filtered using whatmann filter paper no.1 and also using muslin cloth, the extract was concentrated keeping on water bath, then dried and weight. The methanolic extract was the greenish in colour and pungent powder, the percentage yield was 0.835% w/w.

3. SCREENING METHODS

3.1. Preliminary phytochemical screening

Preliminary phytochemical screening was carried out by standard methods [5]. The screening covered mainly alkaloids glycosides, steroids, terpenes, flavanoids saponin, tannins, proteins and reducing sugars. The presence of phytochemicals constituents are reported in table 1.

4. RESULTS AND DISCUSSION

Table-1: Photochemical screening of aqueous and methanolic extracts of Tragia Involucrata. Linn

<table>
<thead>
<tr>
<th>Extract of Tragia Involucrata</th>
<th>Terpenoids</th>
<th>Alkaloid</th>
<th>Reducing sugar</th>
<th>Tannins</th>
<th>Gums</th>
<th>Glycoside</th>
<th>Flavonoids</th>
<th>Saponins</th>
<th>Proteins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroalcoholic (7 days macerated)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Methanolic (7 days macerated)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Methanolic (1hr macerated)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>-</td>
<td>+</td>
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</tbody>
</table>

Preliminary phytochemical screening for the extracts methanolic extract and ethanolic extracts reveals the presence of tannins, flavonoids, saponin, terpenoids and reducing sugar.
are tabulated in table 1. Tannins are proven to show the anthelmintic activity [6]: chemically these tannins are polyphenolic compound[7], are reported that some synthetic phenolic compounds interfere with energy of helminth parasites by uncoupling oxidative phosphorylation[8].

5. CONCLUSION
It can be concluded that the present report confirms that the methanolic extract of Tragia Involucrata Linn shows potent anthelmintic activity. Phytochemical screen reveals that the presence of which are reported for that anthelmintic activity by various researches in natural products. Further plan of work includes isolation, purification and characterization of tannins for the whole plant of Tragia Involucrata Linn.

6. ACKNOWLEDGEMENTS
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7. REFERENCES
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