INTRODUCTION
The use of plants for healing purposes predates human history and long been used as a resource of therapeutic agents worldwide also can claim those are origin of much modern medicine. Plants are utilized in native medicines to treat several diseases and are one of the main sources for active molecules in the discovery of new drugs in the modern era. Plants are invaluable sources of pharmaceutical products and plants are recognized for their ability to produce a wealth of secondary metabolites and mankind has used many species for centuries to treat a variety of diseases. Natural bioactive compounds are the ultimate source for innovative therapeutic agents.

Ethno pharmacologists, botanists, microbiologists and natural product chemists are searching novel bioactive metabolites which could be developed as new pro-drugs for treatment of infectious diseases and other biomedical challenges including drug resistance among various infectious microbes.

The increasing demand for herbal medicines, both in the developing and developed countries, has inevitably led to maintaining the quality and purity of herbal raw materials and finished products. WHO, therefore, acknowledged that Pharmacognostical standards should be proposed as a protocol for the authentication and quality assurance of herbal drugs.

Hypericum hookerianum belongs to family Hypericaceae is a small tree or shrubs with posses many Phytoconstituents such as hypericin, pseudohypericin, flavanoids, flavones etc. The most popular plant of this genus is the Hypericum perforatum L. (Saint John’s Wort)9

MATERIALS AND METHOD
Collection and authentication: The plant Hypericum hookerianum Wight&Arn was collected in and around the Nilgiri district, Tamilnadu. The taxonomical identification of plant was authenticated by Dr.Rajan, Field Botanist, Bandishola, Ooty, Tamilnadu.

Description of plants botanical information:
Botanical name Hypericum hookerianum Wight&Arn
Synonym Hypericum leschenaultii
Family Hypericaceae

Reagents and Chemicals: All reagents and chemicals used for testing were analytical grade obtained from Fisher Chemicals Ltd., Mumbai, SD Fine Chemicals Limited, Mumbai and Qualigens Chemicals, Mumbai.

Pharmacognostical studies: Pharmacognostical studies are includes organoleptic characters and microscopical features of the plant. Morphology description includes size, shape, colour, odour, taste, features of the plant and the microscopical studies include transverse section and powder analysis of leaves and stem were carried out. The fresh and dried leaves and stems of Hypericum hookerianum were used for the same.

Morphological studies: The morphological studies used find the closely related species and use to study the external texture and sensory characters such as colour, odor, taste, size, shape etc. The fresh leaves and stems of Hypericum hookerianum was used for the morphological studies and reported.4,5

Microscopical Studies: The leaves and stems of Hypericum hookerianum was boiled and fixed in F.A.A. (Formaldehyde: Acetic acid: Alcohol) and processed for microtomy (Paraffin Method) and sectioned, stained of slides prepared following by Johnson method. The leaves were cleared in chloral hydrate, stained with phloroglucinol and concentrated HCl and
mounted with glycerin and observed under a compound microscope and the findings were reported. The dried fine powdered materials of leaves and stems were used to evaluate the powder analysis by Brain and Turner and Kokate methods and the present characters were found and reported. Physiochemical studies: Physicochemical values such as percentage of ash values, extractive values and moisture content were determined according to the official methods prescribed in Indian Pharmacopoeia. Fluorescence analysis was carried out by the method of Kokoski and Sharma.

### RESULTS AND DISCUSSION

Macroscopy: Leaves are simple alternate stipulate petiolate. Leaves with petiole 1-4 mm; blade narrowly lanceolate to oblong-lanceolate or broadly ovate, main lateral veins 2,3 or 4 paired, apex acute to rounded with entire margin. Inflorescence 1-5-flowered, nearly round-topped, Pedicels 3-16 mm. The leaves are dark to light greenish in colour with slight odour and the taste characteristic in taste, size 2.5 – 3.5 cm (w) and 3.5 – 5.5 cm (L).

The bark is externally brownish and internally light reddish brown in color. It occurs in the curved or sometimes flat
pieces. It has mucilaginous taste which is followed by bitter sensation, odor is characteristic with fibrous fracture available in various size and shape.

Microscopy

Leaf: The transverse section of the leaf found that the presence of anamocytic stomata, epidermal cells often contain oil cells, guard cell with many chloroplast in lower epidermis and absence of stomata in upper epidermis. Palisade cells are arranged to subadjacent to upper epidermis with very long cells, in midrib upper surface consists of one layered epidermal cells, cuticles are coloured, Collenchymatous are less greenish with less contents and innermost colourless. Xylem vessels are radially arranged, phloem cells are arranged with more dark contents.

Stem: Outermost is a cork of many layers inner crushed cortex with collenchymas cells, secondary phloem with dark contents and found broad

Table 3: Ash values

<table>
<thead>
<tr>
<th>Ash value</th>
<th>Leaf powder</th>
<th>Stem powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ash value</td>
<td>8.3%\textsubscript{i_w}</td>
<td>10.11%\textsubscript{i_w}</td>
</tr>
<tr>
<td>Acid insoluble ash</td>
<td>2.6%\textsubscript{i_w}</td>
<td>.10%\textsubscript{i_w}</td>
</tr>
<tr>
<td>Water soluble ash</td>
<td>2.10%\textsubscript{i_w}</td>
<td>2.86%\textsubscript{i_w}</td>
</tr>
</tbody>
</table>
Table 4: Extractive value

<table>
<thead>
<tr>
<th>Extractive value</th>
<th>Leaf extract</th>
<th>Stem extract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>16.5% w/w</td>
<td>14.5% w/w</td>
</tr>
<tr>
<td>Methanol</td>
<td>21.5% w/w</td>
<td>18.4% w/w</td>
</tr>
</tbody>
</table>

secondary xylem part, wood diffuse porous with wide fibrous vessels.

Powder characteristics:
Leaf: From the leaf powder were observed presence of mesophyll cells, epidermal cells, epidermal hairs, epidermis with stomata, oil cells, xylem and phloem.
Stem powder: The typical secondary wood bit with dark brown colour anthocyanins are heavy fibers are thick walled, cork cells, secondary xylem and phloem were observed.

REFERENCES