ABSTRACT

Medicinal herbs are moving from fringe to mainstream use with a greater number of people seeking remedies and health approaches free from side effects caused by synthetic chemicals. Recently, considerable attention has been paid to utilize eco-friendly and bio-friendly plant based medicinal products for the prevention and cure of different human diseases. It is documented that 80% of the world’s population has faith in traditional medicine. People uses wild plants in many types of different ways to meet their basic needs such as food, shelter and clothing, Plants are used as a medicine for treatment of internal and external diseases. Medicinal plants survey on the Paniya, Kurumba, and Toda tribes on Nilgiri hills Tamilnadu India. In this survey of medicinal plants 43 plants belongs to the 24 families were recorded. They are Onagraceae, Liliaceae, Sapindaceae, Fabaceae, Euphorbiaceae, Arecaceae, Solanaceae, Acanthaceae, Lamiaceae, Asteraceae, Araceae, Piperaceae, Malvaceae, Poaceae, Apocynaceae, Amaranthaceae, Apiaceae, Menispermaceae, Zingiberaceae, Rutaceae, Asphodelaceae, Berberdaceae, Erecaceae, Myrtaceae. The maximum plants were used from the family Solanaceae (6) and Euphorbiaceae(4). The maximum plant parts used in medicine preparation were leaf, seed followed by whole plant, fruit bulb, root, shoot and rhizome.

KEYWORDS: Tribes, Medicinal plants, Uses, Diseases.

INTRODUCTION

Medicinal herbs are moving from fringe to mainstream use with a greater number of people seeking remedies and health approaches free from side effects caused by synthetic chemicals. Recently, considerable attention has been paid to utilize eco-friendly and bio-friendly plant
based medicinal products for the prevention and cure of different human diseases. It is documented that 80% of the world’s population has faith in traditional medicine. India officially recognize over 3000 plants for their medicinal value in rural 70% of the population dependent on the traditional system of Ayurveda medicine. The traditional use can provide valuable clues for the selection, preparation and indications for use of herbal formulation basically states from the survey of tribal population (Abubacker et al., 2018).

People uses wild plants in many types of different ways to meet their basic needs such as food, shelter and clothing. Plants are used as a medicine for treatment of internal and external diseases (Lamuel et al., 2016).

Medicinal plants also called medicinal herbs, have been discovered and used in traditional medicine practices since prehistoric times. Plants synthesis hundreds of chemical compounds for functions including defense against insect, fungi, diseases and herbivorous mammals. Tribes live in harmony with nature in the Nilgiri Hills. Nilgiri district is rich not only in floristic elements but also for its ethnic and cultural diversity. The Nilgiris district popularly known as the “Blue mountains” harboring indigenous and exotic flora of excellent therapeutic potential. Tribes are scattered from parts and interior of forest and hills. They live in varied ecological habitats in the district as such they are well acquainted with medicinal flora. Tribes are well versed in herbal therapeutic they employ a wide range of Botanicals for curative purpose. They are endowed with skills in discerning the character of various plants and flowers and their beneficial properties in this studies (Logesh et al., 2017).

The Western Ghats comprises four taluks namely, Udhagamandalum, Coonoor, Kotagiri and Gudalur. The Nilgiri is inhabited by aboriginal tribal groups. Tamilnadu constitute 36 Tribal communities of which six primitive are living in the Nilgiri district they are Toda, Kota, Paniyan, Irula, Kurumba and Kattunayaka. The present study survey of medicinal plants used by three tribal communities they are Paniyas, Kurumbas and Todas. (Arul Manikandan, 2005).

Among the six tribes the Paniyas are a short dark skinned tribe with broad noses and such curly hairs. They speak corrupt patios of Tamil and Malayalam, live the dirty little huts made of Bamboo wattle plastered with mud and thatched with grass. Lamuel et al., (2016) (Plate-2).
The Kurumbas who live in the midrange of the Nilgiris entertain a confusing and mysterious identity several factors add to the popularity these tribe people. The tribes themselves are sometimes called Kurumba and sometimes confused with other tribes similar names like Kuruman. The Kurumbas engaged in the collection and gathering of forest products mainly wild honey and wax. Loges et al., (2016) (Plate-3).

The Todas are known by several names like Tudas, Tudavans and Todar. They are found only in Nilgiri district. The name Toda is supposed to be derived from the word ‘tud’ the sacred Tud tree of Todas. Toda people are white (fair) in colour being tall, strong built and well-shaped. Loges et al., (2016).

MATERIALS AND METHOD

Study Area

The Nilgiri district is located in the North Western corner of Tamilnadu state in South India and the district has geographical are of 2,543 Sq.kms. It is located between 11’ 10’’ and 11’45’’ N latitudeand 76 ’14’’ and 77’2’’ E longitude. It is bounded on the North by Karnataka, North west by Kerala state, on the South East by Coimbatore district and in the North East by Erode district Tamilnadu. (Abubacker et al., 2018) (Plate-1).

Ethno medicinal information was collected from settlements located in the Nilgiri district. Field work has been conducted in the settlements area of (Atti-Nadugani, Gudalur, Ooty) in the Nilgiri district of tamilnadu India. Open-ended discussion with Tribal healers was held to elicit most of the data on plant drugs that are popular and most commonly used within them.
Bilateral discussion include both plant-based and diseases-based exchange of information with the community people in respect of folk practices. (Logesh et al., 2017).

During the survey oral questions were asked to the tribes with the aid of local people to get correct information about the medicinal plants (Abubacker et al., 2018).

A detailed survey was conducted which involved five households in the village. The information given their utilization, collected through personal interview with in villages of different age group and sex, the patients as well as the key informers, locally called the Vaidyas. (Lamuel et al., 2017).

The information’s were collected from the elderly persons, Who still remember some of the medicinal plants which have started vanishing clue to their access to modern medicines. The fields were conducted between (March 2018-March 2019).

The information about plants and their local names, parts of plant used for preparation of drug for administration were documented. The information gathered from them was again crosschecked with the other residents of the same community (Lamuel et al., 2017). In enumeration, the correct name of the species is followed by its local name and family. A brief description of the plants is also arranged for easy reference.

Paniyas Tribe used by the following plants

1. **Scientific name** - *Oenotherabiennis* (L) Scop
   **Family** - Onagraceae

   **Medicinal uses**
   - Americans tribes as stimulate to treat laziness and against over fatness
   - The root externally to treat piles and boils

2. **Scientific name** - *Asparagus racemosus* Willd.
   **Family** - Liliaceae

   **Medicinal uses**
   - It is used to gastric ulcers and indigestion
   - The roots are used to producing tonic
3. Scientific name – *Cardiospermum halicacabum* L.  
**Family** – Sapindaceae

**Medicinal uses**
- It is used in the treatment of rheumatism nervous diseases, stiffness of the limbs and snake bite.

4. Scientific name – *Acacia concinna* DC.  
**Family** – Fabaceae

**Medicinal uses**
- It is fruits are very well known for use as natural hair Shamboo.
- Used to skin disorders itching and psoriasis, pimples for used paste

5. Scientific name – *Ricinus communis* L.  
**Family** – Euphorbiaceae

**Medicinal uses**
- It is seed extract has strong antioxidant effects
- It is used to irritation in eyes.
- It is used to chronic of stomach pain. it is used to piles.

6. Scientific name – *Borassus flabellifer* L.  
**Family** – Arecaceae

**Medicinal uses**
- The roots are cooling restorative and diuretic
- The “neera” and toddy are good for controlling gastric troubles and ulcers.
- It is very fibrous and nutrients.

7. Scientific name – *Solanum pseudocapsium* L.  
**Family** – Solanaceae

**Medicinal uses**
- *Solanum pseudocapsium* is a poisonous plant, yet it is used in traditional medicine topically for the treatment of boils and gonorrhea.
• And orally as male tonic for abdominal pain.

8. Scientific name - JusticiaadhatodaL.
Family - Acanthaceae

Medicinal uses
• It is used to treatment of cough and other respiratory ailments
• Vasaka has anti-inflammatory properties.
• Vasaka it is helps in clarity of voice

9. Scientific name - Mimosa pudicaL.
Family - Fabaceae

Medicinal uses
• Its leaves causes increase in blood sugar in body
• Mimosa is useful in treating various ailments
• The roots used for faster healing of cuts wounds

10. Scientific name - Leucasaspera(Wild)
Family - Lamiaceae

Medicinal uses
• It is useful in skin diseases
• It reduced malarial fever,

Family - Asteraceae

Medicinal uses
• It is used to wound healing properties
• It can also cause allergic reactions

12. Scientific name - Amorphophalluspanifolius(Dennst) Nicolson.
Family - Araceae
Medicinal uses
- It is used to wound healing
- It is used to vomiting, cough, bronchitis

13. Scientific name - *Piper longum* L.
Family - Piperaceae

Medicinal uses
- And also used to important constituent in digestive formulations
- It is used in dyspepsia, abdominal pain and diuretic splenopathy, asthma and fever

14. Scientific name - *Solanum virginianum* (L.)
Family - Solanaceae

Medicinal uses
- A whole plant is valued as an expectorant and diuretic.
- It is used for cough asthma colic fever, toothache

15. Scientific name - *Artemisia argyi* H. Lev. & Vaniot
Family - Asteraceae

Medicinal uses
- It is used in the treatment of sterility, functional bleeding of uterus
- And also used to dysmenorrhea, cough and asthma

16. Scientific name - *Solanumnigrum* (L)
Family - Solanaceae

Medicinal uses
- The plant are used as an emollient and analgesic to treat itch, burns and neuralgic pains
- The fruit is considered to be a cure for diabetes

17. Scientific name - *Sidacordifolia* (Linn).
Family - Malvaceae
Medicinal uses

- Promote the growth of hair
- It is quite effective for piles

Family - Poaceae

Medicinal uses

- It is a nerving tonic and reduces anxiety
- The herb protects the liver and shows antimicrobial action

19. Scientific name - *Datura metel* Linn.
Family - Solanaceae

Medicinal uses

- It relieves itching
- It is used to relieve fever

Family - Apocynaceae

Medicinal uses

- It has been a traditional remedy for various ailments, including diabetes, malaria, and snake bites
- It helps lower blood sugar levels

Kurumba Tribes

1. Scientific name - *Alternanthera sessilis* (L).R.Br.ex DC.
Family - Amaranthaceae

Medicinal uses

- As a herbal medicine, the plant has diuretic, cooling, tonic, and laxative properties
- The plant is also believed to be beneficial for the eyes

Family - Apiaceae
Medicinal uses
• It is used to treat various disorders and minor wounds
• It is used to contact dermatitis and skin irritation

Family - Euphorbiaceae

Medicinal uses
• It is used to stomach-ache, dysentery, cough and fever
• The leaves and sometimes resin applied externally to wound, ulcer, sores and boils

4. Scientific name - *Manihotesculenta* Crantz,
Family - Euphorbiaceae

Medicinal uses
• It is used to head ache
• Cassava is the ineffective as an anti-cancer agent

5. Scientific name – *Cosciniumfenestratum*(Geotgh) Coleb.r
Family - Menispermaceae

Medicinal uses
• The root of *Cosciniumfenestratum* is considered to be a bitter tonic
• Used in dressing wounds, treating ulcers and used as stomachic and antiseptic

Family – Poaceae

Medicinal uses
• An infusion of needle grass is drunk for diabetes
• Bamboo extract is used to treat various inflammatory condition

7. Scientific name – *Psophocarpustetragonolobus*(L).DC.
Family – Fabaceace
Medicinal uses
- It is prevents the occurrence of various cancer types
- It is prevents vision problems
- It helps to prevent and asthma & it helps to prevent Thayroid

Family - Liliaceae

Medicinal uses
- It controls irregular menstruation
- The bulb is used for dropsy cure

Family - Zingiberaceae

Medicinal uses
- It is an antidote to the snakebite
- It keeps the skin soft and smooth
- It improves skin completion and reduces dark circles

Family - Rutaceae

Medicinal uses
- It may benefit for immune system
- Grape fruit may help prevent insulin resistance and diabetes
- It is used to control the pressure

11. Scientific name - *Ocimumfenuiflorum*L.
Family - Lamiaceae

Medicinal uses
- Tulsi is a natural headache relieve which can also relieve migraine pain
- Tulsi is age -old ingredients for treating fever
12. Scientific name - *Capsicum annuum* L.
Family - Solanaceae

Medicinal uses
- It is used to head aches
- It is used to ulcers
- Reduced high blood pressure

13. Scientific name – *Justicia gendarussa* Burm.f
Family – Acanthaceae

Medicinal uses
- A decoction is used in the treatment of chronic rheumatism
- The leaves is taken internally in the treatment of pains in the head

14. Scientific name - *Euphorbia cotinifolia* L.
Family - Euphorbiaceae

Medicinal uses
- It is used externally to treat infected nails
- And used to wound healing properties

15. Scientific name – *Eupatorium coelestium* L.
Family - Asteraceae

Medicinal uses
- It is used to dengue fever
- It contains toxic compounds that can cause liver damage

Family - Lamiaceae

Medicinal uses
- It is used to cold
- It is reduced to fever
17. Scientific name - Aloe vera (L). Burm.f
Family - Asphodelaceae

Medicinal uses
- Aloe vera is good for irritated or inflamed skin
- It is used to lower blood sugar level

TODAS TRIBES
1. Scientific Name - Mohoniabealei(Foutune) carrier.
Family - Berberdaceae

Medicinal uses
- It is reduced fever
- It is used orally in the treatment of various enteric infections especially bacterial dysentery

2. Scientific Name - Setariaviridis(L.)P. Beauv.
Family - Poaceae

Medicinal uses
- It is used in the treatment of dyspepsia, poor digestion and food stagnancy in the abdomen
- It is used to treatment and fever

3. Scientific Name - SolanumnigrumL.
Family - Solanaceae

Medicinal uses
- Used in dysentery, stomach complaints and fever
- The juice of the plant is used on ulcers and other skin deseases
- Traditionally the plant used to tuberculosis

4. Scientific Name - VacciniumuliginosumL.
Family - Erecaeceae

Medicinal uses
- It is Antiseptic astringent carminative
• An infusion of the leaves and sugar have been given to mother a few days after child birth in order to help her regain her strength

5. Scientific Name – RutagraveolensL.
Family - Rutaceace

Medicinal uses
• It has been used to treat many neuromuscular problems and to stimulate the onset of menstruation
• Rue is recommended for home gardens to repel snakes

6. Scientific Name - Syzygiumcumin(L)Skeels.
Family - Myrtaceae

Medicinal uses
• The seeds reduce blood sugar levels and are useful in the treatment of diabetes
• Fruits are used as a relief for colic and treat diarrhea

PLATE-5: The Plants are Documented by Paniyas tribes.


*Acacia concinna* DC. *Ricinus communis* L. *Borassus flabellifer* L.
Solanum pseudocapsicum L.  Justicia adhatoda L.  Mimosa pudica L.  

Leucas aspera (Wild)  Chromolaena odorata (L)R.M.King&H.Rob  Amorphophallus paeoniifolius (Dennst)Nicolson.  

Piper longum L.  Solanum virginianum L.  Artemisia aryi H.Lev&Vaniot.  

Solanum nigrum L.  Sida cordifolia (Linn).  Vetivera zizanioides(Linn).
PLATE-6: The plants are documented by Kurumbas tribes.


*Centella asiatica* (L).

*Manihot esculenta* Crantz. *Coscinium fenestratum* *Bambusa vulgaris*


*Psophocarpus tetragonolobus* *Urginea indica* *Curcuma aromatica*

(L).DC. (Roxb)kunth. Salisb.
PLATE-7: The plants are documented by Toda tribes.

*Citrus paradise* Macfud.  *Ocimum fenuiflorum* L.  *Capsicum annuum* L.

*Justicia gendarussa* Burm. f.  *Euphorbia cotinifolia* L.  *Eupatorium coelestium* L.


Table I: List of Medicinal Plants used by the Tribes Paniyas Kurumbas and Todas.

<table>
<thead>
<tr>
<th>S.no</th>
<th>Scientific name</th>
<th>Family</th>
<th>Plant `parts</th>
<th>Diseases</th>
<th>Mode of Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>Oenotherabiennis</em></td>
<td>Onagraceae</td>
<td>Whole plant</td>
<td>Piles &amp; boils</td>
<td>Internal</td>
</tr>
<tr>
<td>2</td>
<td><em>Aaparagusracemosus</em></td>
<td>Liliaceae</td>
<td>Root</td>
<td>Diarrhea</td>
<td>Internal</td>
</tr>
<tr>
<td>3</td>
<td><em>Cardiospermumhalicacabum</em></td>
<td>Sapindaceae</td>
<td>Leaf</td>
<td>Snake bite</td>
<td>Internal</td>
</tr>
<tr>
<td>4</td>
<td><em>Acaciaconcinna</em></td>
<td>Fabaceae</td>
<td>Fruit</td>
<td>Skin disoeder</td>
<td>External</td>
</tr>
<tr>
<td>5</td>
<td><em>Ricinuscommunis</em></td>
<td>Euphorbiaceae</td>
<td>Root</td>
<td>Jaundice</td>
<td>Internal</td>
</tr>
<tr>
<td>6</td>
<td><em>Borassusflabellifer</em></td>
<td>Arecaceae</td>
<td>Fruit</td>
<td>Ulcer</td>
<td>Internal</td>
</tr>
<tr>
<td>7</td>
<td><em>Solanumpsedocapsium</em></td>
<td>Solanaceae</td>
<td>Fruit</td>
<td>Boils &amp; gonorrhea</td>
<td>Internal</td>
</tr>
<tr>
<td>8</td>
<td><em>Justiciaadhatoda</em></td>
<td>Acanthaceae</td>
<td>Leaf</td>
<td>Cough</td>
<td>Internal</td>
</tr>
<tr>
<td>9</td>
<td><em>Mimosa pudica</em></td>
<td>Fabaceae</td>
<td>Root</td>
<td>Wound healing</td>
<td>Internal</td>
</tr>
<tr>
<td>10</td>
<td><em>Leucasaspera</em></td>
<td>Lamiaceae</td>
<td>Leaf</td>
<td>Malarial fever</td>
<td>Internal</td>
</tr>
<tr>
<td>11</td>
<td><em>Chromolaenaodorata</em></td>
<td>Asteraceae</td>
<td>Leaf</td>
<td>Wound healing</td>
<td>External</td>
</tr>
<tr>
<td>12</td>
<td><em>Amorophophalluspaenifolius</em></td>
<td>Araceae</td>
<td>Fruit</td>
<td>Stomach pain</td>
<td>Internal</td>
</tr>
<tr>
<td>13</td>
<td><em>Piper longum</em></td>
<td>Piperaceae</td>
<td>Fruit</td>
<td>Asthma &amp; fever</td>
<td>Internal</td>
</tr>
<tr>
<td>14</td>
<td><em>Solanumvirginianum</em></td>
<td>Solanaceae</td>
<td>Fruit</td>
<td>Fever, toothache</td>
<td>Internal</td>
</tr>
<tr>
<td>15</td>
<td><em>Artemisia argyi</em></td>
<td>Asteraceae</td>
<td>Leaf</td>
<td>Cough &amp; fever</td>
<td>Internal</td>
</tr>
<tr>
<td>16</td>
<td><em>Solanumnigrum</em></td>
<td>Solanaceae</td>
<td>Wholeplant</td>
<td>Diabetes</td>
<td>Internal</td>
</tr>
<tr>
<td>17</td>
<td><em>Sidacordifolia</em></td>
<td>Malvaceae</td>
<td>Root</td>
<td>Bronchitis, piles</td>
<td>Internal</td>
</tr>
</tbody>
</table>

*Solanum nigrum L.*  
*Vaccinium uliginosum L.*  
*Ruta graveolens L.*  
*Syzygium cumini(L)Skeels.*
Medicinal plants survey on the Paniya Kurumba and Toda tribes in Nilgiri hills Tamilnadu India (Plate 1 – 3). In this survey of medicinal plants 43 plants belongs to the 24 families were recorded. The are Onagraceae, Liliaceae, Sapindaceae, Fabaceae, Euphorbiaceae, Arecaceae, Solanaceae, Acanthaceae, Lamiaceae, Asteraceae, Araceae, Piperaceae, Malvaceae, Poaceae, Apocynaceae, Amaranthaceae, Apiaceae, Menispermaceae, Zingiberaceae, Rutaceae, Asphodelaceae, Berberdaceae, Erecaceae, Myrtaceae(Table1). Theyare Onagraceae(1), Liliaceae(2), Sapindaceae(1), Fabaceae(3), Euphorbiaceae(4), Arecaceae(1), Solanaceae(6), Acanthaceae(2), Lamiaceae(3), Asteraceae(3), Araceae(1), Piperaceae(1), Malvaceae(1), Poaceae(3), Apocynaceae(1), Amaranthaceae(1), Apiaceae(1), Menispermaceae(1), Zingiberaceae(1), Rutaceae(2), Asphodelaceae(1), Berberdaceae(1), Erecaceae(1) Myrtaceae(1).
Table 2: Plant parts used by the Paniya, Kurumba and Toda tribes.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Plant Parts</th>
<th>No Of Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Root</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Fruit</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Seeds</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Leaf</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Whole plant</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Shoot</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Bulb</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Rhizome</td>
<td>1</td>
</tr>
</tbody>
</table>

From above the table 2 maximum plant parts used in medicine preparation are leaf followed by fruit seeds root, whole plant, shoot, bulb and Rhizome.

DISCUSSION

Medicinal plants survey on the Paniya Kurumba and Toda tribes in Nilgiri hills Tamilnadu India (Plate 1 – 3). In this survey of medicinal plants 43 plants belongs to the 24 families were recorded. They are Onagraceae, Liliaceae, Sapindaceae, Fabaceae, Euphorbiaceae, Arecaceae, Solanaceae, Acanthaceae, Lamiaceae, Asteracea, Araceae, Piperaceae, Malvaceae, Poaceae, Apocyanaceae, Amaranthaceae, Apiaceae, Menispermacae, Zingiberaeae, Rutaceae, Asphodelaceae, Berberdaceae, Erecaceae, Myrtaeae (Table1). They are Onagraceae(1), Liliaceae(2), Sapindaceae(1), Fabaceae(3), Euphorbiaceae(4), Arecaceae(1), Solanaceae(6), Acanthaceae(2), Lamiaceae(3), Asteracea(3), Araceae(1), Piperaceae(1), Malvaceae(1), Poaceae(3), Apocyanaceae(1), Amaranthaceae(1), Apiaceae(1), Menispermacae(1), Zingiberaeae(1), Rutaceae(2), Asphodelaceae(1), Berberdaceae(1), Erecaceae(1) Myrtaeae(1). The maximum plants were used from the family Solanaceae (6) and Euphorbiaceae (4).

The maximum plant parts used in medicine preparation were leaf, seed followed by whole plant fruit, bulb root and shoot (Table 2). The tribes are used to the plant parts leaf, root, fruit, shoot and bulb. The leaf is highly used in the traditional medicine.

The Paniyas tribes used the plants for various disease like (Piles, boils, snake bite, skin disorder, jaundice, ulcer, gonorrhea, cough, wound healing, malarial fever, stomach pain, Asthma, Toothache, diabetes, Bronchitis, reduce- anxiety, itching, heart disease.
The Kurumbas tribes used plants for (eye problem, drowsiness, dysentery, ulcers, diabetes, cancer, thyroid, dropsy, snakebite, pressure, fever, rheumatism, wound healing, dengue fever, cold blood sugar level. Thetodas tribes used plants for fever, ulcer, cold, diabetes.

The medicinal plants play major role and constitute the back bone of the traditional medicine(Jadhav and Bhutani, 2003). Plant extracts are paying much attention in these days for drug discovery and development because of no side effects(Umraosingh et al., 1990). Hence, studies were directed and gradually shift towards popular plant products for biologically active ingredients to cure some ailments and plays a vital role in drug development and discover.(Yemane et al., 2017) (Abubacker et al., 2014).

REFERENCES