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## Research Article

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### Studies on Ethno-medicinal plants used by the Irulas tribes of Nellithurai Beat, Karamadai Range of Western Ghats, Tamil Nadu, India.

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#### ABSTRACT

An ethnobotanical plant survey was carried out to collect the information about the medicinal plants found in Nellithurai Beat and used by the native Irulas tribe of Karamadai Range, Western Ghats of India. The information was collected on the basis of personal interviews and questionnaires with elderly traditional healers. The investigation revealed that 80 plant species belonging to 36 families are commonly used in the treatment of different diseases. The documented ethnomedicinal plants were mostly used to cure asthma, skin diseases, wound healing, diarrhoea, Anti-inflammatory, snake bite, jaundice and Anti-cancer. The medicinal plants used by the tribals are arranged alphabetically, and followed by their botanical name, family name, vernacular name (Tamil), parts used and their corresponding diseases. Generally, fresh part of the plant was used for the preparation of medicine.

**Keywords:** Ethnomedicines, Nellithurai beat, Irulas, ethnomedicinal plants.

#### ARTICLE INFO

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#### 1. Introduction

Nature has been a good source of medicinal agents for thousands of years and an impressive number of modern  
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drugs have been isolated from natural sources many based on their use in traditional medicine. Various medicinal

plants have been used for years in daily life to treat diseases all over the world. Medicinal plants are in integral component of alternative medical care. For millennia, Indian people traditionally played an important role in the management of biological resources and were custodians of related knowledge that they acquired through trial and error over centuries. India has a rich wealth of medicinal plants and the potential to accept the challenge to meet the global demand for them. Ayurveda, Naturopathy, Unani, Siddha and Folk medicine are the major healthcare systems in Indian society, which fully depend upon natural resources<sup>9</sup>. India is rich in ethnic diversity and indigenous knowledge that has resulted in exhaustive ethnobotanical studies<sup>7</sup>. Many quantitative and qualitative field surveys have documented on detailed utility of specific plants for many aboriginal groups such as Kadars, Kanikars, Irulas, Malasars, Todas and Kotas<sup>1</sup>. Folk lore and traditional knowledge is in the process of degeneration due to disruption of forest covers, uprooting of tribal population due to industrialization [4, 17]. Perhaps since, stoneage, plants are believed to have healing powers on man<sup>13</sup>. The World Health Organization (WHO) has estimated that 80% of the populations of developing countries still rely on traditional medicines, mostly plant drugs for their primary health care needs<sup>15</sup>.

The medicinal plant sector has traditionally occupied a pivotal position in the sociocultural, spiritual and medicinal areas of rural and tribal families. To avoid the occurrence of toxic side effects on a long-term usage of synthetic drugs during treatment of chronic disease, herbal drugs are being used widely<sup>16</sup>. Therefore proper documentation of traditional knowledge is needed. Hence, the present study is an attempt to identify the important herbaceous medicinal plants and their uses in different therapies by the tribals from Nellithurai Range of Forest. The Irula tribals are a small pastoral community spread all over the Nilgiri Biosphere Reserve, Tamil Nadu, India [11].

#### Setting and the people

Our Indian tribal tour now reaches the Southern part of India by the Irula tribes. These Irula tribes of India are also known by different names Evarallan, Erukala, Irava, Irular, Iruliga, Iruligar, Korava and Kadchensu are some of the prominent names of these Indian tribes.

#### Irula Tribals

Irulas are an ethnic group of India. They inhabit the area of the Nilgiri Mountains in the states of Tamil Nadu and Kerala, India. The word 'Irular' derived from Tamil word called 'Irul' which means 'darkness'. 'Irular' means those who are in darkness. Curly hair and dark complexion is their prominent feature. According to Tamil Nadu Government there were 36 identified tribal groups which are more than one lakh. Now there are only 23,116 Irula households in Tamil Nadu.

Traditionally, the main occupation of the Irulas has been snake and rat catching. They also work as laborers (coolies) in the fields of the landlords during the sowing and harvesting seasons or in the rice mills. Fishing is also a major occupation. Early 20<sup>th</sup> century anthropological

literature classified the Irulas under the Negrito ethnic group. The ancestors of these people are supposed to have come to India from Africa. The principle languages of the Irulas are Tamil and Telugu.

Government developed schemes were not reaching the Irulas Tribes. Irulas possess rich knowledge about medicinal plants and its uses. It was observed that Irulas use many valuable wild plant species to treat diseases, such as psoriasis, asthma, indigestion, diabetes, paralyze, genital disorders, snake & scorpion bites, dog bites, toothache, abortion, dysentery, swollen neck, cough, cold, headache, fever, high BP, stomach ache, rheumatism, leucorrhea, jaundice, burns, cuts and wounds, dandruff, kidney stones, epilepsy, bone fracture, syphilis, swelling, sprain, mouth ulcer, de-worming, nose bleeding, body heat, stomach ulcer, hair growth, throat infections, dehydration, vomiting, liver disease, ear pain and eye infections. This knowledge usually transferred from generation to generation through word of mouth. Presently, there is gradual decline in the traditional healing practices among Irula younger generation. There is an urgent need to document the irulas knowledge on ethnomedicinal practice.

## 2. Materials and Methods

### Description of the Study Area

The present study area is confined to a major range in the Nellithurai Beat of the Western Ghats that is rich in Biodiversity and indigenous population. It is located in the Western Ghats of Karamadai Range of Coimbatore District, Tamil Nadu, India. The area of investigation approximately lies 11° - 18' latitude and 76° - 53" longitude from a portion of Karamadai Range. The study area has twelve villages which comes under Nellithurai Panchayat beat. The total area is about 6207 Hec. long. The study concentrates on four villages. Each village is found in different elevations from 820-910 MSL. Temperature ranges from 21°C to 30°C during Feb 2015 to April 2015. The annual average rain fall ranges from 1000 to 1100 mm.

### Ethnobotanical Survey

The field work was conducted in four villages around Nellithurai Panchayat beat areas during Feb-2015 to April - 2015 as part of a study of Ethnobotanical wealth of Irula Tribals in Tamil Nadu. More than 101 families and nearly 304 members of Irulas are living in the study area. During the stay, their daily activities were closely observed and interpersonal contacts were established by participating in several of their social and religious ceremonies such as marriages, rituals and curing sessions. There are four informants between the ages of 48 to 72 in the study area. Among them 2 were farmers and 2 were regular tribal practitioners.

### Interviews with tribal practitioners

Ethnobotanical data were collected from the local tribal people. The ethnobotanical data (local name, mode of preparation, medicinal uses) were collected through questionnaire, interviews and discussions among the tribal practitioners in their local language. Our questionnaire allowed descriptive responses on the plant prescribed, such as part of the plant used, medicinal uses, detailed

information about mode of preparation (i.e : decoction, paste, powder and juice). The observations collected during field visits were put to group discussion. The medicinal plants were identified, photographed and sample specimens were collected for preparation of herbarium. Voucher specimens have been deposited in the herbarium of Department of Botany, Vellalar College for Women, Erode, Tamil Nadu, India.

### 3. Results and Discussion

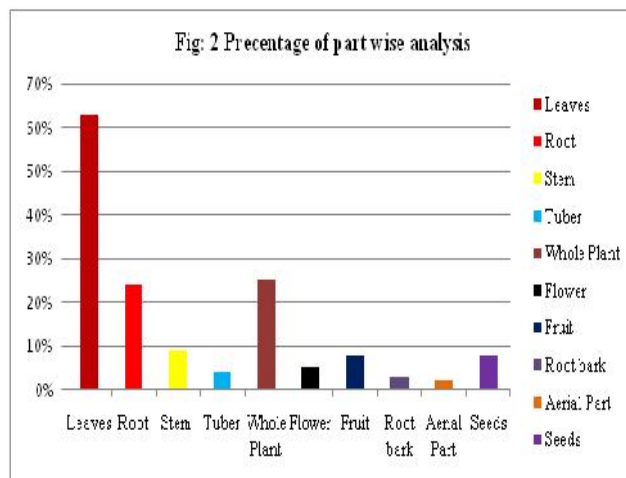
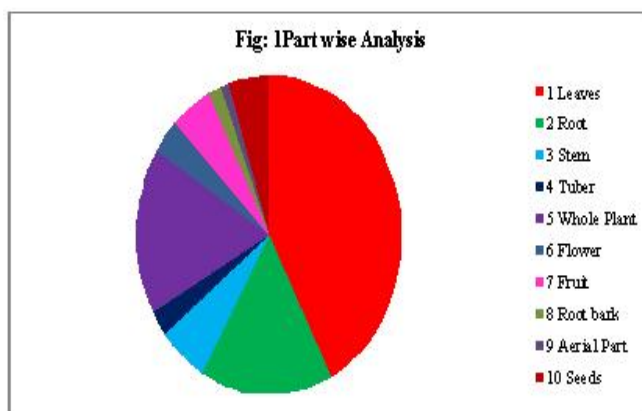
The present investigation indicates a high level of consensus of traditional knowledge of medicinal plants within Irulas community. The results of this study show that a large number of medicinal plants are traditionally used by the tribal community of Nellithurai beat for the treatment of various diseases or health disorders of man. In this study, 80 plant species were reported and arranged alphabetically by the botanical name. Vernacular name (Tamil), family, parts used and their administration have also been given (Table 1).

The reported species belong to 67 genera and 36 families with a highest representative of nine species belong to the family Amaranthaceae and six species belong to the family Acanthaceae and 5 from Caesalpiniaceae. The families Malvaceae, Euphorbiaceae, Lamiaceae have four species each. The family Solanaceae has three species. The families Liliaceae, Fabaceae, Nyctaginaceae, Capparidaceae, Asclepiadaceae, Menispermaceae, Vitaceae, Cucurbitaceae, Boraginaceae, Dioscoreaceae, Scrophulariaceae and Portulacaceae have two species each, whereas the rest of 12 families have one species each. The informations collected from this study are in agreement with the previous reports [8, 12].

Ethnomedicinal plants listed in Table-1 were used in more than 30 types of diseases. Maximum number of 15 species were used to cure asthma followed by 8 species were used to cure skin diseases and wound healing (Kani tribals in Tirunelveli hills of Tamil Nadu were using 14 plants for the treatment of skin diseases [2] and South Africa used 38 plant species for the treatment of Wounds [10]), 7 species used to cure diarrhoea, 6 species used to cure anti inflammation, 4 species used to cure Snake bite, 3 species used to cure Jaundice, 2 species were used as anti cancerous and 1 species was used to treat Antileprotic, menstrual disorder, Cough and Chest pain, Diaphoretic, Digestive disorder, Diuretic, Dysentery, Fungal diseases, Joint pain, Piles, Poisonous, Rheumatism, Scabies, Small pox, Stone disorder, Swelling, stimulate hunger and Ulcer. Leaves

were the most widely used plant part, which accounted for 50 species out of 80 reported medicinal plants in this study. Whole plant stood in second, followed by Root (19 species), Stem (7 species), Seed and fruit (6 species), Flower (4 species), Tuber (3 species), Root bark (2 species) and Aerial part (1 species) (Fig.1&2) Many previous reports [10] are in agreement with the present study.

The majority of the remedies were prepared in the form of juice from freshly collected plant parts. The paste was usually prepared by pounding or crushing the plant parts in a stone made mortar and pestle. Water was mostly used to dilute the juice. The plant materials were used in fresh form or in dried form and most of the plants to be used as a remedy were stored for later use in the dry state, which allowed their utilization throughout the year. This was in accordance with the work of [Ignacimuthu, *et al.* 2006]. Photographs of few surveyed species were given in Plate-1.



**Table 1:** List of Ethnomedicinal plants used by the Irulas tribes of Nellithurai beat in Karamadai Range of Western Ghats, Tamil Nadu.

S.No	Botanical Name	Habit	Family Name	Local Name	Parts Used	Medicinal Usage
1.	<i>Abutilon indicum</i> G.Don.	Woody Herb	Malvaceae	Thuthi	Leaves	Anti inflammatory in piles, skin Eruptions
2.	<i>Acalypha fruticosa</i>	Shrub	Euphorbiaceae	Ceeras edi	Roots	Febrifuge, gonorrhoea,

	Forsk.				Leaves Stem and Root	Whooping cough Constipation, eye infection.tooth ache
3.	<i>Acanthus ilicifolius,Linn.</i>	Shrub	Acanthaceae	Sea holly	Leaves, roots	Rheumatism,Purgative and as a anti – inflammatory
4.	<i>Adathoda vasica, Nees,</i>	Herb	Acanthaceae	Adatodai	Leaves &Roots	Expectorant, Broncho- dialator
5.	<i>Aerva lanata Juss.</i>	Herb	Amaranthaceae	Sirupeelai	Whole plants	Diuretic,anthelmintic
6.	<i>Aerva tomentosa Forsk.</i>	Herb	Amaranthaceae	-	Flowers and Seeds	Rheumatism,head ache,swellings
7.	<i>Ageratum conyzoides, L.</i>	Shrub	Asteraceae	Sethupunt halai	Leaves	Skin diseases, itches and sores.
8.	<i>Aloe vera L.</i>	Herb	Liliaceae	Katthazha i	Leaves	Purgative, jaundice,menstural disorders, skin diseases
9.	<i>Alternanthera sessilis, R. Br.ex Dc.</i>	Herb	Amaranthaceae	Ponnakan ni	Leaves	Anti ulceratives, excessive acidity in the body
10.	<i>Alysicarpus rugosus, Dc.</i>	Herb	Fabaceae	Red money wort	Whole plant	Worms, diarrhoea, swelling, cystitis,.
11.	<i>Amaranthus caudatus, L.</i>	Herb	Amaranthaceae	Thanduke erai	Leaves	Astringent, anthelmintic and diuretic.
12.	<i>Amaranthus graecizans,L.</i>	Herb	Amaranthaceae	Sirukeerai	Whole plant	Digestive system without being assimilated
13.	<i>Amaranthus polygamus, L.</i>	Herb	Amaranthaceae	Korralu	Leaves and Roots Seeds	Good detoxin  Aphrodisiac
14.	<i>Anaphalis beddomei, Hk. F.</i>	Subshrub	Compositae	Pearl	Whole plant	Fever, cough, diarrhea.
15.	<i>Andrographis paniculata Nees.</i>	Herb	Acanthaceae	Siriyana gai	All parts	Snake poison, fever, Skin diseases
16.	<i>Anisomeles malabarica R.Br.</i>	Herb	Lamiaceae	Payemirat ti	Whole plant Leaves	Anti spasmodic, emmenagogue, Diaphoretic,rheumatic pains Dyspepsia,colic
17.	<i>Asparagus racemosus, Willd.</i>	Climber	Liliaceae	Neer vekkaea	Tuber & root	Nervous disorders, dyspepsia, tumors, scalding of urine, throat infections, tuberculosis, cough bronchitis, general debility.
18.	<i>Azima tetraacantha, Lam.</i>	Shrub	Salvadoraceae	Sangliai	Leaves	Cold and cough
19.	<i>Barleria mysorensis, Heyne ex roth.</i>	Shrub	Acanthaceae	Kundan	Whole plant	Anti septic, fever, cough
20.	<i>Blepharis boerhaaviaefolia Pers.</i>	Under shrub	Acanthaceae	-	Leaves  Root  Fruit Seeds	Wound healing, ulcers, nasal hemor Rhage,asthma, throat inflammation, Ascitis, liver and spleen disorders, Dysmenorrhoea Urinary disorder,kidney stone Used for dysuria Diseases of nervous system and Aphrodisiac

21.	<i>Boerhaavia diffusa L</i>	Herb	Nyctaginaceae	Mookkara ttai	Roots Leaves	Asthma, jaundice, diuretic, dyspepsia Blood purifier, relieve muscular pain
22.	<i>Boerhaavia verticillata Poir.</i>	Herb	Nyctaginaceae	-	All parts	Fever, dysentery, skin diseases, poison bites, wound healing, piles and rheumatism
23.	<i>Calotropis procera, R.Br.</i>	Shrub	Euphorbiaceae	Pellerukku	Root bark	Digestive disorders, Diarrhoea, constipation, stomach ulcers, tooth ache.
24.	<i>Capparis diversifolia,</i>	Herb	Capparidaceae	-	Leaves	Fever, Cold
25.	<i>Capparis zeylanica, L.</i>	Shrub	Capparidaceae	Adhandai	Root	Dysentery and diarrhea
26.	<i>Caralluma bicolor Ramach, S. Joseph, H. A. John &amp; C. Sofiya</i>	Herb	Asclepiadaceae	Kattalae	Shoot	Wound healing
27.	<i>Cardiospermum helicacabum L.</i>	Herb	Sapindaceae	Mudakkatan	Leaves	Rheumatic arthritis, fevers Skin diseases, poison bite
28.	<i>Cassia auriculata, Linn.</i>	Herb	Caesalpiniaceae	Aavaram	Leaf and flower	Diabetes, joint and muscle pain (rheumatism), eye infections (conjunctivitis), constipation, liver Disease, urinary tract diseases
29.	<i>Cassia occidentalis L.</i>	Herb	Caesalpiniaceae	Peyaverai	Seeds and leaves Leaf  Seed Root Fruit Whole plant	Cutaneous diseases Aphrodisiac, alexeteric, cure cough, hiccough, asthma, "kapha" and "vata", sweetish, bitter, stomachic, cure "tridosha" fevers, good for sore throat, Biliousness Blood tonic, excellent diuretic, cough, Whooping cough Ringworm, elephantiasis, scorpion Sting, snake bite Ascites. Purgative, tonic, febrifuge, sore eyes, skin diseases
30.	<i>Cassia sophera, L.</i>	Small shrub	Caesalpiniaceae	Sulari	Whole plant	Bronchial asthma, respiratory dyspnoea, catarrhal type of asthma
31.	<i>Cassia tomentosa, Willd.</i>	Herb	Caesalpiniaceae	Butter cup bush	Leaves	Antifungal, antimicrobial, eczema and intestinal parasites.
32.	<i>Celosia polygonoides, Retz.</i>	Herb	Amaranthaceae	Pannai keera	Whole plant	Wound healing, cold, heaviness of head, diarrhea, snake-bite, jaundice and reduce body heat.
33.	<i>Centella asiatica, Urb.</i>	Slender creeper herb	Apiaceae	Vallarai	Leaves	Wound healing
34.	<i>Cissampelos pareira L.</i>	Climber	Menispermaceae	Malai Thangivair	Root Leaves	External application-wound healing, Fistula, antidote

						Internally used for anorexia, indigestion, Blood purification, anti inflammation
35.	<i>Cissus quadrangularis</i> L.	Rambling Shrub	Vitaceae	Pirandai	Stem & Leaves Root, Leaf & Stem	Bone breakage, appetizer  Dyspepsia, indigestion And piles
36.	<i>Cissus vitiginea</i> , L.	Climber	Vitaceae	Perandai	Whole plant	Anti-inflammatory
37.	<i>Coccinia grandis</i> , Voigt.	Climber	Cucurbitaceae	Kovakai	Fruit	Leprosy, fever, asthma, bronchitis, jaundice.
38.	<i>Coldenia procumbens</i> Linn.	Herb	Boraginaceae	-	Herb and Leaves	Antirheumatic
39.	<i>Commelina bengalensis</i> L.	Herb	Commelinaceae	Kanavazhi	Leaves Whole plant	Antiseptic Epilepsy, eyelid infection and skin rash
40.	<i>Crotalaria retusa</i> , L.	Herb	Fabaceae	Gilugilup pai	Whole plant	Cough, fever, treatment of eczema, dyspepsia.
41.	<i>Cucumis trigonus</i> , Roxb.	Climber	Cucurbitaceae	Thumattik ai	Root	Purgative, snake bite, less irritation
42.	<i>Cyclea peltata</i> (Lam.) Hook. F. & Thoms.	Climber	Menispermaceae	Appatta	Whole plant	Wound healing, antidote, kushthaghna.
43.	<i>Digera muricata</i> , Mart.	Herb	Amaranthaceae	Theyya	Leaves	Fever, gastrouble, body swelling.
44.	<i>Dioscorea oppositifolia</i> , L.	Herb	Dioscoreaceae	Riya	Tuber	Stomach and spleen, cancer of uterus
45.	<i>Dioscorea pentaphylla</i> , L.	Climber	Dioscoreaceae	Mulveliki zhangu	Tuber	Increase body immunity.
46.	<i>Euphorbia serpens</i> , Kunth.	Herb	Euphorbiaceae		Leaves	Anticancer, antimicrobial
47.	<i>Euphorbia thymifolia</i> L.	Herb	Euphorbiaceae	-	Leafy stem Leaf and Seed  Whole plant	Diuretic Astringent, anthelmintic and laxative Dysentery, enteritis, diarrhoea venereal Diseases
48.	<i>Hugonia mystax</i> , L.	Herb	Linaceae	Sudalithal ai & Mothiraka nni	Leaves	Cure dysentery.
49.	<i>Hybanthus</i> <i>enllaespermus</i> , (L.) F.V. Muell	Prostrate herb	Violaceae	Chinna kongu poo.	Leaves	Reduce excessive body heat.
50.	<i>Kickxia elatine</i> , (L.) Dumort.	Herb	Scrophulariaceae		Stem	Haemostatic, wound healing, bleeding
51.	<i>Leonotis nepataefolia</i> R.Br.	Tall herb	Lamiaceae	-	Whole plant  Leaf Flower heads	Anti oxidant, anti cancer, rheumatic Pains, tonic Scalds burns, ring worm, skin diseases Fever

					and Seeds	
52.	<i>Leucas pubescens</i> , Benth.	Herb	Lamiaceae	Kuvalaya m	Leaves	Antipyretic, antifungal, antimicrobial
53.	<i>Lindernia caespitosa</i> , (Blume) G. Panigrahi	Herb	Scrophulariaceae	Panigrahi	Whole plant	Fever, cough, cold, anti inflammatory
54.	<i>Malvastrum</i> <i>coromandelianum</i> , (L.) Gracke	Herb	Malvaceae	Kalakara dai	Leaves	Cure blisters.
55.	<i>Marsilea minuta</i> ,	Herb	Marsileaceae	Neeraara keerai	Stem, leaves and root	Anticonvulsive, nervous system
56.	<i>Mimosa pudica</i> L.	Herb	Mimosaceae	Thotta Surungi	Leaves and Roots	Stomachic, piles, muscular pains
57.	<i>Mollugo pentaphylla</i> , Linn.	Herb	Aizoaceae	Cirucerup pati	Leaves	Anti inflammatory, analgesic and antipyretic
58.	<i>Ocimum canum</i> , Sims.	Herb	Lamiaceae	Nai thulasi	Leaves	Malaria, Fever, digestive and cardio tonic
59.	<i>Oxalis corniculata</i> , L.	Herb	Oxalidaceae	Puliyarai	Leaves	Stomach pain
60.	<i>Parthenium</i> <i>hysterophorus</i> , L.	Herb	Asteraceae	-	All Parts Root	Febrifuge, and emmenagogue Dysentery, promising remedy against hepatic amoebiasis, pharmacologically active against neuralgia and certain types of rheumatism
61.	<i>Pavonia zeylanica</i> Cav.	Herb	Malvaceae	Chitramut ti	Root  Leaves	Antipyretic, haemorrhage, dysentery, inflammations, intestinal problems Eye diseases
62.	<i>Phyllanthus virgatus</i> , Forst	Herb	Euphorbiaceae	Siru Nelli	Leaves	Reduce excessive Body heat.
63.	<i>Physalis angulata</i> , L. Var. <i>Angulata</i> .	Herb	Solanaceae	Potolai	Fruit	Anti microbial and anti fungal
64.	<i>Polygonum glabrum</i> , Willd.	Herb	Polygonaceae	Paregudi	Root, Young shoot	Piles, Jaundice, constipation
65.	<i>Portulaca oleracea</i> L.	Herb	Portulacaceae	Paruppuk erai	All parts	Kidney problems, cardiovascular Diseases
66.	<i>Portulaca wightiana</i> , Wall.	Herb	Portulacaceae	Paruppuk erai	All parts	Kidney problems, cardiovascular Diseases
67.	<i>Psilotrichum nudum</i> , Moq.	Herb	Amaranthaceae	-	Leaves	Fever, Cold
68.	<i>Ruellia prostrata</i> , Poir.	Herb	Acanthaceae	Kirantinay an	Leaves	Fever, asthma, and cold
69.	<i>Sarcostemma</i> <i>brevistigma</i> W&A.	Trailing shrub	Asclepiadaceae	Kondapal a	Aerial part	Asthma
70.	<i>Scutellaria violacea</i> , L.	Herb	Lamiaceae	Kattuthula si	Flower, leaves	Asthma, cough and fever
71.	<i>Secamone emetic</i> , R.Br.	Herb	Apocynaceae	Angaraval li	Laeves	Nervous disorder
72.	<i>Senna tora</i> , (L.) Roxb.	Herb	Caesalpiniaceae	Oosi thagarai	Leaves	Anti cholesterolemic, antispasmodic, carminative.
73.	<i>Sida cordifolia</i> , L.	Herb	Malvaceae	Palampasi	Root- bark	Fever, facial paralysis
74.	<i>Solanum americanum</i> , Mill.	Herb	Solanaceae	Kakae dagu	Leaves	Cutaneous disorders, inflammation, ring worm



75.	<i>Solanum virginianum</i> , L.	Herb	Solanaceae	Kandakat hiri	Fruit	Diuretic and expectorant, cough, asthma, chest pain.
76.	<i>Spermacoce hirta</i> , L.	Herb	Rubiaceae	Amman paccarici	Fruit and leaves	Diarrhea
77.	<i>Stachytarpheta indica</i> , Vahl.	Herb	Verbenaceae	Seemaina yuruvi	Leaves	Fever, cold, asthma and dysentery
78.	<i>Trichodesma zeylanicum</i> , R. Br.	Herb	Boraginaceae	Kalutaikk ali	Leaves	Folklore medicinal uses
79.	<i>Viscum trilobatum</i> , Talb.	Herb	Loranthaceae	Ottuttutti	Leaves	Home remedy for cough and cold
80	<i>Zaleya decandra</i> , (L.) Burm. F.	Herb	Portulacaceae	Koni dagu	Leaves	Diabetes, liver damage.



Azima tetracantha, Lam.



Cassia occidentalis, L.



Cissus vitifolia, L.



Dioscorea pentaphylla, L.



Euphorbia serpens, Kunth.



Kickxia latifolia, (L.) Dumort.



Physalis angulata, L.



Solanum virginianum, L.



Trichodesma zeylanicum, R.Br.

Figure 3: Snapshots of some of the surveyed species.

#### 4. Conclusion

This study shows that knowledge and usage of herbal medicine for the treatment of various ailments among Irulas is still in practice. It may be surprised to observe that the modern systems of medicine are only modification of these old formulations. In conclusion, there is an obvious need for documentation and conservation of wild medicinal plants are the only way to preserve the knowledge on the plant resources.

#### 5. References

- [1] Abraham, Z. Ethnobotany of the Todas, the Kotas and the Irulars of Nilgiris, In: Glimpses of Indian Ethnobotany, edited by S.K. Jain, Oxford and IBA

Publishing Co., New Delhi, **1981**. 308-320.

- [2] Awadh A, Ali N, Al-rahwi K, Lindequist U: Some medicinal plants used in Yemeni herbal medicine to treat Malaria. *African journal of Traditional, Complementary and Alternative Medicines* 2004, 1:72-76.
- [3] Ayyanar M, Ignacimuthu S: Ethnomedicinal plants used by the tribals of Tirunelveli hills to treat poisonous bites and skin diseases. *Indian Journal of Traditional Knowledge* 2005, 4:229-236.
- [4] Chakraborty, N.K. and Bhattacharjee, A.. Some common ethnomedicinal uses for various diseases



- in Purulia district, West Bengal, Indian Jour. of Tradi. Know., 2006. 5(4):554-558.
- [5] Grierson DS, Afolayan AJ: An ethnobotanical study of plants for the treatment of wounds in the Eastern Cape, South Africa. *Journal of Ethnopharmacology* **1999**, 67:327-332. Damle L: Do not scoff that cough. *Heritage Amruth* **2006**, 2(1):05-10.
- [6] Ignacimuthu, S., Ayyanar, M., and Sankara Sivaraman, K. Ethnobotanical investigations among tribes in Madurai District of Tamil Nadu(India). *Journal of Ethnobiology and Ethnomedicine*. **2006**. 2: 1-7.
- [7] Jain, S.K. **1991**. Dictionary of Indian Folk Medicine and Ethnobotany, Deep Publications, New Delhi.
- [8] Jain SK: Ethnobotany in Modern India. *Phytomorphology Golden Jubilee Issue: Trends in Plant Sciences* **2001**:39-54.
- [9] Joana Camejo-Rodrigues, A., Lia Ascensão, B.M., Àngels Bonet, C. and Joan Vallès, C. An ethnobotanical study of medicinal and aromatic plants in the Natural Park of “Serra de São Mamede” (Portugal), *J. of Ethnopharmacology*, **2003**. 89, 199–209.
- [10] Mahapatra AK, Panda PK: Ethno-pharmacological knowledge of Juang and Munda tribes of eastern India. *International Journal of Sustainable Development and World Ecology* **2002**, 9(2):151-158.
- [11] Marshall, William E.. Travels amongst the Toda, or the study of a primitive tribe in South India, London: Longmans, Green and Co. **1873**. 269.
- [12] Natarajan B, Paulsen BS, Korneliussen V: An Ethnopharmacological Study from Kulu District, Himachal Pradesh, India: Traditional Knowledge Compared with Modern Biological Science. *Pharmaceutical Biology* **2000**, 38(2):129-138.
- [13] Sandhya Rani, A. and Jaganmohan Reddy, K.. Folklore medicinal uses of some indigenous plants among the Tribes of Telangana Region, A.P, India, *Ad. Plant Sci.*, **2009**, 22(1): 199-204.
- [14] Sen, S.A, Chakraborty, R.A. and De, B.B.. Challenges and opportunities in the advancement of herbal medicine: India's position and role in a global context, *Journal of Herbal medicine*, **2011**. 1(3-4): 65-75.
- [15] Sur, P.R., Sen, R., Halder, A.C. and Bandyopadhyay, S. Ethnomedicine in the Ajodhya hills region of the purullia district, West Bengal, India, *Jor. Econ. Taxon. Bot., Addl. Ser.* **1992**.10, 333.
- [16] Umapriya, T., Rajendran, A., Aravindhana, V., Binu Thomas and Maharajan, M. Ethnobotany of Irular tribe in Palamalai Hills, Coimbatore, Tamil Nadu, *Indian J. of Natural Products and Resources*, **2011**. 2(2): 250-255.
- [17] Xavier TF., Kannan M., Lija L., Auxillia A., Rose AK. and Kumar SS.. Ethnobotanical study of Kani tribes in Thoduhills of Kerala, South India, *Jou. Ethnopharmacol*, **2014**. 152(1), 78-90.