

## Ethnobotanical survey of medicinal plants from Sankari, Salem district, Tamil nadu, India.

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### ABSTRACT:

From the olden days plants and its secondary metabolites are used in various divisions of medicine and used to cure various disease and disorders. And we knew few plants by observing its morphological and organoleptical characters but so many plants are yet unidentified. Though our ancestors had left us some knowledge about plants which have medicinal activity. The earliest mention of medicinal use of plants in Hindu culture was found long year ago in 'Rig Veda' which was written between 4500 to 1600 BC. In this present study Ethnobotanical survey was carried out in Sankari, Salem district, Tamilnadu, India. Traditional uses of 72 plant species spread all over Sankari were described in this study. This present study reveals that these plants plays an vital role in the primary health care of the people.

**KEYWORDS:** Ethnobotany, Medicinal plants, morphology, organoleptic, Rig Veda, Ancestors, Sankari.

### I. INTRODUCTION:

Ethnobotany is the study of a regions plants and their practical uses through the traditional knowledge of a local culture and people. The ethnobotany is the study of interactions between plants and people with a particular emphasis on traditional tribal culture. According to the world health organization(WHO), about 65 to 85% of the worlds population in developed countries depends essentially on plants for their primary health care due to poverty and lack of access to modern medicine. An ethnobotanist thus strives to document the local customs involved in the practical uses of local flora for the aspects of life, such as plants as medicines, foods, intoxicants and clothing. Richard Evans Schultes, often referred to father of ethnobotany.

The knowledge of medicinal plants as been accumulated in the course of many countries based on different medicinal systems such as Ayurveda, Unani and Siddha. In India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular source of medicine. During the last few decades there has been a increasing interest in the study of medicinal plants and their traditional uses in different part of the world.

The idea of ethnobotany was first proposed by the early 20<sup>th</sup> century botanist John William Harshberger. Ethnobotany is not new to India because of its rich ethnic Diversity. There are over 400 different tribals and other ethnic groups in India. The tribals constitute about 7.5% of about India's population. During the last few decades there has been an increasing interest in the study of medicinal and their traditional use in different parts of India and there are many reports on the uses of plants in traditional healing by either tribal people or indigenous community of India. Apart from the tribal groups, many other dwellers and rural peoples also posses unique knowledge about the plants. Research interest and activities in the area of ethno medicine have increased tremendously in the last decade. Since the inception of the discipline, scientific research in ethno medicine has made important contribution to the understanding of traditional medical knowledge and practice. The detonation of the ethno medicine literature has been motivated by an increased awareness of the consequences of the recognition of native health concepts as a means of maintaining ethnic identities, the search for new medical treatments and technologies. Species like *Pterocarpus santalinus*, *Coscinium fenestratum*, *Janakia aryalpathra*, *Cycus circinalis* and *Saussurea costus* are critically endangered in the wild are found in the Eastern Ghats. Tribes dwelling in remote places

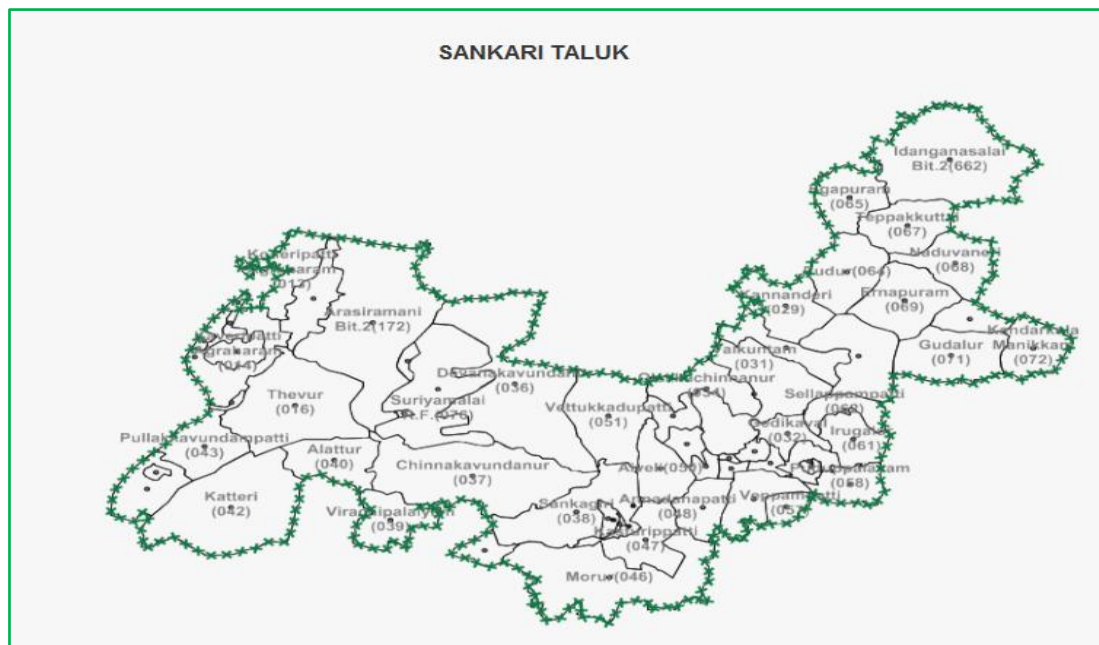
depends on the forest that includes a rich diversity of flora and fauna to meet their livelihood and healthcare needs. Since, the interest in traditional medicine has been increasing, explore the traditional knowledge particularly in developing country. Therefore, collection of ethno botanical information and documentation of traditional knowledge has gained priority in the perspective of drug development. India has more than 427 tribal communities with a rich diversity of indigenous traditions. However, traditional knowledge base and practices have been marginalized due to political and socioeconomic reasons. Of late, interest in traditional medicine has been increasing and ethno botanical studies have been initiated to explore the knowledge base from various tribal groups across the country. Knowing the importance of ethno medicine, this survey was conducted in the Salem district and aimed to report the prevalence, role and the necessity of the consideration of conservation status of knowledge of these traditional medicinal plants.

## II. MATERIALS AND METHODS: Sankari, Tamil Nadu, India

The latitude of Sankari, Tamil Nadu, India is **11.477696**, and the longitude is **77.873886**. Sankari, Tamil Nadu, India is located at India country in the Cities place category with the gps coordinates of 11° 28' 39.7056" N and 77° 52' 25.9896" E.

A small city of Sankari is located in Salem district, central Tamil Nadu, about 34 miles from the city of Erode and about 26 miles from the city of Tiruchengode. The settlement has got its name form Sankagiri Hill, situated nearby. It is estimated that the city's current population is close to 135,000 people. The city's economy is a combination of industrial and agricultural sectors, with a few small steel and concrete producing plants located in Sankari. The main attractions of the area include an old historic fort. The map of study area of Sankari, Salem district, Tamil Nadu, India was showed in figure 1. The minimum annual rainfall of Sankari is about 800 mm.

The temperature will be between a **maximum of 30°C (86°F) and a minimum of 22°C (71.6°F)**. The ethnobotanical data were collected using discussions with the local people of Sankari, Salem district. People of this region can easily understand Tamil and can also communicate in that language. In order to document the utilization of medicinal plants, a total field survey was carried out in this area. Field visits were conducted several times. The investigation was carried out where the population was dense. Intensive botanical explorations were undertaken in selected places of Sankari, Salem district to find out various medicinal plants used for different ailments in the form of leaves, stems, flowers, fruits and seeds.



### III. RESULT AND DISCUSSION:

Herbal remedies are considered as the oldest forms of health care known to mankind on this earth. Prior to the development of modern medicine, the traditional systems of medicine that have evolved over the centuries within various communities are still maintained as a great traditional knowledge base in herbal medicines. The results of the survey are presented in table 1 and the plants are arranged in the tabular column. The present investigation comprises of 72 plant species. For each species botanical name, common name and their applications were provided.

In India, there are about 54 million indigenous people of different ethnic groups inhabiting various terrains. These indigenous groups possess their own distinct culture, religious rites, food habit and have a rich knowledge of traditional medicine. Even today, indigenous and

certain local communities practiced herbal medicine to cure a variety of diseases, with plants particularly used as folk medicine to treat fever, skin problems, cough, headache, diarrhoea, fertility problems, stomach aches, wounds, diabetes, constipation, asthma, digestion problems, leprosy, ulcerations, insect bites, snake bites.

The consumption, management and valuation of wildplants are central aspects of the traditional knowledge in many human populations. Thus, plants gathering, the diffusion and conservation of knowledge within the community are traditional practices that have contribution to the subsistence of many cultures. In most of the societies the medical system coexists with several traditional systems. These traditional medical systems are generally based on the uses of natural and local products which are commonly related to the people's perspective on the world and life.

**Table 1:** Ethnobotanical survey of medicinal plants from Sankari, Salem district, Tamil Nadu, India.

No	Common Name (in Tamil)	Botanical Name	Application
1	Agathi	Sesbania grandiflora	fever, kills intestinal worms
2	Amukkira	Withania somnifera	fever
3	Avuri	Indiagofera tinctoria	kills intestinal worms
4	Adu theenda palai	Aristolochia bractiata	kills intestinal worms
5	Annasi	Ananas comosus	stimulant for hunger, for constipation, promotes digestion
6	Adatodai	Adhatoda vasica	diseases of
7	Echchu	Phoenix sylvestris	diabetes, fever
8	Ell	Sesamum indicum	increases milk secretion
9	Garlic	Alium sativum	stimulant, expectorant
10	Inji	Zingiber officinale	promotes digestion
11	Kaliyana murungai	Erythrina indica	increases milk secretion
12	Karuvel	Acacia nilotica	diseases of respiratory tract
13	Karisalankanni	Eclipta alba	for constipation

14	Kuppaimeni	<i>Acalypha indica</i>	cold and cough, kills intestinal worms
15	Karisalankanni	<i>Eclipta prostrata</i>	strengthens liver
16	Mavilingu	<i>Crataeva religiosa</i>	fever
17	Malai vembu	<i>Melia azadirach</i>	kills intestinal worms
18	Mathulai	<i>Punica granatum</i>	kills intestinal worms
19	Ma	<i>Mangifera indica</i>	kills intestinal worms
20	Milagu	<i>Piper nigrum</i>	cold and cough
21	Manjal	<i>Curcuma longa</i>	cold and cough
22	Nelli	<i>Phyllanthus emblica</i>	decreases body temperature
23	Naval	<i>Eugenia jambusa</i>	diabetes
24	Nuna	<i>Morinda tinctoria</i>	fever
25	Nochchi	<i>Vitex negundo</i>	fever
26	Nanthiyavattam	<i>Tabernaemontana divaricata</i>	kills intestinal worms
27	Pagarkai	<i>Memordica charntia</i>	kills intestinal worms
28	Seetha	<i>Annona squamoza</i>	wounds / ulcers
29	Seiyakkai	<i>Acacia concina</i>	cold and cough wounds / ulcers
30	Sundai	<i>Solanum torvum</i>	cold and cough
31	Sarakkonrai	<i>Cassia fistula</i>	fever
32	Musumusukhai	<i>Mukia maderaspatana</i>	vertigo, asthma, ulcer
33	Thumbai	<i>Leucus aspera</i>	cold and cough
34	Thoothuvalai	<i>Solanum trilobatum</i>	cold and cough
35	Thulasi	<i>Ocimum sanctum</i>	diseases of the respiratory tract
36	Sirukurinjan	<i>Gymnema sylvestris</i>	stimulant for hunger
37	Vilvam	<i>Aegle marmelos</i>	fever, digestion
38	Vishnukrandi	<i>Evolvulus alsinoides</i>	fever

39	Vembu	Azadirachta indica	intestinal worms malarial fever skin diseases
40	Vellarikkai	Cucumis sativus	decreases body temperature
41	Vengayam	Allium cepa	cold and cough
42	Vengai	Pterocarpus marsupium	wounds / ulcers
43	Vendayam	Trigonella feenugracum	increases milk secretion
44	Alari	Nerium odoratum	for constipation
45	Amman pachcharisi	Euphorbia hirta	decreases body temperature
46	Illuppai	Bassia longifolia	decreases body temperature
47	Karunjchirakam	Nigella sativa	induces labour pain during delivery
48	Mulmoongil	Bambusa arundinacea	for leprosy, skin diseases, astringent, laxative, cooling
49	Vaagai, Siridam	Albizzia lebbeck	astringent, asthma, expectorant, leprosy
50	Thekku	Tectona grandis	astringent, cooling, constipation, bronchitis, hyper- acidity
51	Kattuchirakam, cittilai	Vernonia anthelmintica	astringent, anti-inflammatory, fever, expectorant
52	Karpuram	Cinnamomum camphora	aphrodisiac, anti- inflammatory, asthma, expectorant, diarrhoea
53	Elumitchai	Citrus limon	aids digestion, for constipation, cough, laxative, antiseptic, bronchitis
54	Korai	Cyperus rotundus	cooling, astringent, anti inflammatory, scabies, skin disease
55	Sooriyakanthi	Helianthus annus	strengthening teeth, leprosy, ulcer, skin diseases, bronchitis
56	Pushkaramoolam	Inula racemosa	antiseptic, digestion ulcer, cough, asthma, bronchitis

57	Vellaikadambu	Neolamarckia cadamba	astringent, ulcer, digestive, diarrhoea, expectorant, fever, vomiting
58	Perichangai	Phoenix dactylifera	expectorant, cooling, bronchitis, cough, burning sensation
59	Vettiver	Vetiveria zizanioides	water purifier
60	Marudhani	Lawsonia inermis	leprosy, skin diseases, premature falling & greying of hair
61	Sadhapilai	Ruta graveolens	Ruta graveolens
62	Elakkai Elettaria	cardamomum	stimulant, expectorant
63	Pirandai	Cissus quadrangularis	Chronic Ulcers
64	Pudhina	Mentha arvensis	digestion, cough
65	Lemon grass	Cymbopogon caesius	insect bites
66	Karumilagu	Piper nigrum	cold and cough
67	Thippili	Piper longum	cold and cough, fever
68	Sukku	Zingiber officianale	headache, dry cough
69	Krishna thulasi	Ocimum americanum	bronchitis
70	Lavangam	Eugenia caryophyllata	aphrodisiac, expectorant, toothache
71	Jathikkai	Myristica fragrans	constipation
72	Vasambu	Acorus calamus	stimulant, decongestant

#### IV. CONCLUSION:

The survey indicates that, the study area has plenty of medicinal plants to treat a wide spectrum of human ailments. Earlier studies on traditional medicinal plants also revealed that the economically backward local and tribal peoples of Tamil Nadu prefer folk medicine due to low cost and sometimes it is a part of their social life and culture. Through in this ethnobotanical survey, the availability and presence of many medicinal plants have been investigated and verified. We suggested that these plants can be used as drugs by pharmacologically unexplored areas of India, which may be utilized for the better human health.

In such cases, laboratory investigations and clinical trials are suggested to validate the therapeutic properties of these herbal preparations for effective and safe use. This present study also provides an ethnobotanical data of the medicinal plants used by the local people to cure different diseases and disorders. Moreover, it may promote a practical use of medicinal plants and the focus must be on its pharmacological validation. This study offers a model for studying the relationship between plants and people, within the context of traditional remedies is obviously ensure therapeutical efficacy. A study in south India revealed that in Allopathy medicine system 1.3% people are dying due to



adverse drug reactions this can be definitely minimized by using medicinal plants.

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