



Documentation of the herbal healing practices (Traditional knowledge) from the indigenous people of Ariyalur District in Tamil Nadu, India.

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Abstract

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The medicinal plants possessing varied medicinal properties have long helped the people to be energetic and healthy. To assess and study their potential medicinal value an investigation was carried out in five places of Ariyalur district in Tamil Nadu, involving the indigenous people. It was inferred that the tribal herbal healers have been using these plants since time immemorial. These medicinal plants were used both externally and internally. For example small branchlet of *Azadirachta indica*, *Jatropha gracifolia*, *Acacia nilotica*, prop root of *Ficus bengalensis* and root of *Achyranthus aspera* have been used as tooth brushes. *Withania obtusifolia* is used for treating back pain, arthritis, boils, swellings, nerve disorder, infertility, diabetes, obesity. It is also useful as an aphrodisiac and for improving the general immunity. Several such valuable traditional and indigenous practices are part of the customs and ceremonies of our tribal people and this is an effort to document and report such wonder medicines and their uses for the benefit of common people. Our hope is that this effort will help in increasing the use of natural medicine in our day to day life health care and follow up to our traditional herbal healers.

1.Introduction

The use of medicinal plants is as old as human civilization. India has a glorious traditional health care system based on plants, which dates back to Vedic era (Shiva and Neelakandan, 2001). The science of ethno botany has recently received much attention. On the other hand, knowledge of the people associated with the traditional folk practices using wild plants are now fast disappearing due to modernization and gradual migration

to mainstream medicines. Hence, there is an urgent need to study and document this precious indigenous and traditional knowledge for our posterity (Panimalar, 2005).

The vast majority of the Indian population is dependent on traditional medicine for primary health care, and with the recent revival of interest in plant medicines across the globe and consequent pressure on precious herbal resources, it makes sense to rationalize the use of medicinal plants through scientific documentation,



screening and validation (Padmesh et al., 1981). Among the many medicinal plants Aloe vera, Abrus precatorius, Cissus quadrangularis, Cassia auriculata, Coccinia cordifolia, Hemidesmus indicus, Lawsonia inermis, Terminalia chebula, Tridax procumbens and Withania obtusifolia are commonly used for different ailments the Irular tribes.

2. Materials and Methods

This study was designed to analyse and document the traditional and indigenous knowledge of the Irular tribes community of Ariyalur district in Tamil Nadu. The survey was conducted in five different places of Ariyalur district viz, Ariyalur, Jeyangondam, Poiyur, Sendurai, and Udaiyarpalyam. About hundred respondents were interviewed for their knowledge and mode of use of medicinal plants. Information was recorded by using a questionnaire which was specially prepared for this study, with the following details, viz.,

- 1) Name
- 2) Age
- 3) Community
- 4) Occupation
- 5) Knowledge about medicinal plants
- 6) Collection place (source)
- 7) How and when to harvest
- 8) Mode of use
- 9) Supplement of nutrition
- 10) Source of knowledge
- 11) Use if singly / with materials
- 12) Method of using
- 13) Maintain the secrete of use or not
- 14) Sell or own use
- 15) Any other remarks

The above said method of exploration was conducted with representatives drawn from various age groups and discussed about opinion to document their traditional and indigenous knowledge for conservation, proper documentation and utilization of their own valuable informations.

Table. 1

S. No	Village Name	More than 50 years		30-50 years		Less than 30 years	
		Person surveyed	Answered relatively	Person surveyed	Answered relatively	Person surveyed	Answered relatively
1.	Ariyalur	30	13	40	7	30	5
2.	Jeyangondam	30	12	40	7	30	4
3.	Poiyur	30	15	40	10	30	7
4.	Sendurai	30	11	40	7	30	3
5.	Udaiyarpalyam	30	12	40	4	30	2

The information was collected by following the questionnaire in an informal way during interactions to avoid nervousness among the

3.Results and Discussion

Among the 5 different places and 3 different age group at Poyyur people answered relatively higher compared to other places. Among the different age group more than 50 year old persons gave highest information compared to middle and young age (Table. 1). The following are some of the uses and advantages of medicinal plants revealed by the respondents.

A) Food substrate

I. Herbal chutney

Herbal solid chutney is prepared from the tender cactus shoots of 1st to 3rd internodes of bone-setter, *Cissus quadrangularis* Linn. For this the sides are to be peeled and fried along with tamarind, salt, onion, garlic etc. And ground in to chutney. It acts as an appetizer, cleans the stomach and is a good source of calcium and iron.

II. Food substitute

The consumption of *Dioscorea pentaphylla* and *Dioscorea hispida* tubers as breakfast and dinner food substitute makes them, energetic and diuretic.

Shajeela et al., (2010) documented ethno-medicinal knowledge of Kanikkar and Palliyar tribals of Southern parts of Western Ghats, Tamil Nadu use wild plants for food and supplement their diet with *Alocasia macrorrhiza* (L.) G.Don, *Amorphophallus paeoniifolius* (Dennst.) Nicolson var. *campanulatus* (Blume ex Decne.) *Dioscorea alata* L., *Dioscorea*

respondent. After collection of data it was analyzed with the help of relevant existing literature.

pentaphylla L. var. *pentaphylla*, *Dioscorea spicata* Rith, *Nymphaea rubra* Roxb. Ex Salisb., *Xanthosoma segittifolium* (L.) Schott etc. some of the wild food plants are used to treat various ailments also. Similar findings were reported by Sasi et al., (2011) and he has documented indigenous knowledge on wild edible plant resources from the tribe Irular of Kotagiri in Nilgiri Hills and reported that they are partially or fully dependent on the wild resources for their nutritional requirements.

B) Oral administrations

I. Tooth brush

The small branchlet of *Azadirachta indica*, *Jatropha gracifolia*, *Acacia nilotica*, prop root of *Ficus bengalensis* and root of *Achyranthus aspera* have been used as tooth brushes for strengthen and clean kept shining the teeth.

II. Herbal mouth freshener

The 10-20g of *Abrus precatorius* Linn. leaves have to be chewed and its juice has to be gargled out. This acts as a mouth freshener and cures bad breath.

Ethnomedicinal uses of 111 plant species belonging to 100 genera and 49 families used by the ethnic group, Valaiyans of Alagar Hills of Madurai district, Tamil Nadu, India and their traditional modes of treatment of diseases and various ailments like skin diseases, cold and



cough, reducing body heat, ulcer, stomach related problems, fever, jaundice, diabetes etc. were reported by Ganesan et al., (2008). The traditional knowledge provides a background of medicinal importance. This rich knowledge should be highly regarded as a cultural and ethnobotanical heritage from the indigenous people (Maleki and Akhani 2018).

D) External applications

I. Shampoo and body odour

The 15-25g of the young leaves of *Cassia auriculata* Linn. are made into a paste and used as shampoo. This flower is used to reduce body odour. When it is consumed for once in 15 days.

II. Biological tincture iodine

The leaf juice of *Tridax procumbens* Linn. is called as biological tincture iodine and is used for healing wounds when taken in either paste or juice form.

Muthuselvan and Manikandan (2005) noticed ethno medicinal data (collected between August 2002 and February 2003) on 15 plant species used by the Irular tribes of Tagadam Reserve Forest (Coimbatore, Tamil Nadu, India), of which 11 are first hand: *Argyreia pomacea*, *Asparagus racemosus*, *Caesalpinia bonduc*, *Crotalaria verrucosa*, *Datura metel*, *Ocimum gratissimum*, *Opuntia stricta*, *Pleiospermium alatum*, *Rivea hypocrateriformis*, *Trianthema decandra*, *Zaleya decandra* and *Toddalia asiatica*. The medicinal plants such as *Adhatoda vasica*, *Aerva lanata*, *Aloe vera*, *Ipomoea reniformis*, *Asparagus racemosus*,

Catharanthus roseus, *Decalepis hamiltonii* etc. were high demand and essential for primary healthcare of tribes in Nilgiris (Panneer Selvam 2017).

D) Plant Based Uses

I. Country winter cherry

The root portion of *W. obtusifolia* Tackh. is recognized as folk remedy for curing a number of diseases. The roots of *W. obtusifolia*, can be taken in, in the form of herbal soup, powder or paste. This herbal soup is used to cure back pain in day to day life. The herbal paste cures pain, arthritis, boils and reduces swellings. Regular consumption of 5g of root powder cures nervous disorder, infertility, diabetes besides reducing obesity. It is an aphrodisiac and useful in improving the general immunity.

An exploration was undertaken for identification of medicinal plants frequently used by forest fringe people of Nayagram Range under Midnapore West Forest Division of South West Bengal. A total of 75 species having medicinal value could be identified and documented the uses of the plant components against different diseases (Nilanjana Das and Chattopadhyay, 2003).

II. Deep sleep

Consumption of 5-10g of leaves of *Lawsonia inermis* Linn. acts as a cooling agent and inhaling the fragrance of flowers will induce deep sleep. Application of its leaf paste in palms acts as a coolant to the body.

Mishra and Agarwal, (2004) reported that the 40 ethno-medicinal tree species occurring in this area with

their correct botanical name followed by their vernacular names and ethno-medicinal uses were documented. Dubey et al., (2009) studied ethno-botanical knowledge of various tribal and folk communities of Vindhya region of Madhya Pradesh was carried out during the various seasons. Detailed first hand information on ethno-medicinal uses of *Dellenia pentagyna* Roxb., an endangered tree species, was collected, which accounts for many ethnical uses in the study area. The tribal and folk communities use the various part of it for the treatment of their different ailments and diseases, viz. delivery (bark), bone fracture (leaf), body pain (root), piles (leaf), diabetes (bark), diarrhea and dysentery (bark), etc. The similar study showed that many people in the studied area still continue to depend on medicinal plants at least for the treatment of primary healthcare (Priyadharshana et al., 2019).

4. Conclusion

The above discussions amply reveal of the indigenous & traditional knowledge of local people based on the available medicinal plants, to meet the health care requirement of growing world population. Valuable traditional knowledge is still available with tribes as well as rural ethnic society's level. We have to explore them, document and spread in proper manner so as to reach the end users. This will pare the way for the use of our traditional herbal healers knowledge's in our day to day life for health care purposes. Medicinal plants are most economical means to rural health care system. The traditional healers have been reducing in

numbers so the traditional knowledge have been disappearing now days. The younger generation should be interested to carry the traditional knowledge. Therefore, documentation of the traditional knowledge and different types of naturally available medicinal plants and their usages in our normal life very essential and the same information should be passed to our younger generation..

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