



Scholars Research Library

J. Nat. Prod. Plant Resour., 2013, 3 (5):13-17
(<http://scholarsresearchlibrary.com/archive.html>)



ISSN : 2231 – 3184
CODEN (USA): JNPPB7

Ethnobotanical uses of some plant barks used by Gondu tribes of Seethagondi grampanchayath, Adilabad District, Andhrapradesh, India

R. Suman Kumar*¹, C. Venkateshwar¹, G. Samuel² and S. Gangadhar Rao¹

¹Department of Botany, Osmania University, Hyderabad, Andhrapradesh, India

²Agriculture Extension, ANGRAU, Hyderabad, Andhrapradesh, India

ABSTRACT

Ethnomedicinal survey in Seethagondi grampanchayath of Adilabad district, Andhrapradesh, India, revealed that some less known medicinally important plants have been used by tribal community. In the present paper 16 plant species belonging to 16 genera and 12 families are described and the valid Scientific name, family, local name, habit, formulation, dosage, administration and feed diet were alphabetically enumerated. The tribal beliefs, knowledge, practices among the community for preventing or curing or lessening the disease are still in use. The tribes are now still dependent on such type of indigenous health care and there is an immediate need of documentation and conservation of such valuable knowledge and plants for future generations.

Keywords: Gondu tribes, Ethnobotany, Bark, Indigenous, Seethagondi, Adilabad

INTRODUCTION

The term ethnobotany was first coined by an American botanist John Harshburger, in 1896. Ethnobotany is based on the knowledge of plants by the local people and their usefulness as understood by the people of a particular ethnic group, since information concerning a particular plant varies from one ethnic group to another [1]. In the developed countries, 25 per cent of the medical drugs are based on plants and their derivatives [2]. Fortunately however, there is a revival of herbal medicine at the close of the 20th century [3], this is especially so with the rising cost of imported amplitude Medication. The objective of the present study is to mainly focus the hidden, unexplored, valuable knowledge with the tribal people. Secondly to aware the mankind about the value of vegetation and lastly to give further research scope in the field of ethnobotany and pharmacognosy to the next generations.

Study Area:

Adilabad is the northern most district of Andhra Pradesh State. This District is situated between 77°46' and 80° of the eastern longitudes and 18°40' and 19°5 of northern latitudes. Agriculture is the main occupation of the district with a geographical area of 16,01,616 hectares. Forest occupy about 43.18 per cent of total. The normal rainfall of the district is 1044 mm as against 634 mm of the state.

Seethagondi grampanchayath has a geographical area of 1913 hectares out of which cultivable area is 1296 hectares (67.77%). It comprises 575 households having 1983 (970:1013) population. It consists of two revenue villages i.e., Seethagondi and Peda Malkapur with a total number of 6 hamlets i.e. Old Somvarpet, New Somvarpet, Garkampet and Arkapally (Seethagondi) and China Malkapur and Kotwalguda (Peda Malkapur). The Gonds are the tribal community mostly found in the Gond forests of the central India. They are widely spread in the Chhindwara District of Madhya Pradesh, Bastar district of Chattisgarh and also in the parts of Maharashtra, Andhra Pradesh, and Orissa. The name by which the Gonds call themselves is Koi or Koitur which means unclear.

MATERIALS AND METHODS

Ethnobotanical studies were conducted particularly in isolated and dense forest where the tribal communities lives with their customs and rituals. During the ethnobotanical studies of the area the local herbalists, men, women of the tribal community were first visited, identified and gathered the information on different plants used by tribals (Fig 1,2).

**Fig 1: Author observing the bark collected from the forest****Fig 2: Author collecting the information from the tribals**

The present study was carried out by adopting methodology [4, 5] and medicinal uses of plants were compared with major published literature [6, 7, 8, 9, 10, 11, 12, 13, 14]

Regular visits to the hamlets of the Seethagondi grampanchayath were undertaken and gathered the required information during the years of 2009-2011. Details of information regarding plants used by tribes like local name, habit, growing season, plant part used, preparation of the part used, administration, feed diet were collected and shown in Table-1.

The actual field photographs of the wild plants and preparation of the used part were also taken (Fig-3, 4).

**Figure 3:- Full view photograph of wild plant- *Lannea grandis*****Figure 4:- The aqueous bark extract of plant-*Madhuca indica***

Table 1: Ethnobotanical uses of Stem bark of some plants used by “Gondu” tribes

S. No.	Botanical name /family	Vernacular name	Disease/ailment	Preparation/administration	Feed diet
1.	<i>Adina cordifolia</i> , Hook./ Rubiaceae	Battakadimichettu	Stops over periods in women	the bark is collected from the trunk of the tree with hand only (do not use any iron material). The bark is shade dried and 200gms of bark is grinded in 500ml of water to make a decoction. 10ml of this decoction is taken three times a day with empty stomach for 7 days.	Non-veg should be avoided
2.	<i>Albizia procera</i> , Benth / Leguminosae	Chindugachettu	Stops piles	tree trunk bark is collected, shade dried till it loses water content from it. Grind 50gms of bark in 50ml of water to make thick juice out of it. 15ml of this juice is taken daily in the morning before breakfast.	Spicy food should not be taken
3.	<i>Bombax ceiba</i> , Linn./ Malvaceae	Burugachettu	Sun stroke	100gms of Bark is ground in 200ml of water. 20 ml of this liquid is given three times a day for 3 days.	Cold water should not be taken
4.	<i>Butea monosperma</i> , Roxb Fabaceae	Modugachettu	To increase male vigour (sexual power)	the bark of the stem is peeled whenever needed the bark is cut into small pieces and chewed slowly for 5-10 minutes	Alcohol should not be taken
5.	<i>Cassia fistula</i> , Linn./ Leguminosae	Relachettu	Goiter	Grind 100gms of the collected bark in 50ml of water to make a semisolid solution. Apply required amount of this solution on the site three times a day for 15 days.	-----
6.	<i>Ceriscoides turgida</i> (Roxb.) Tirveng / Rubiaceae	Thogarumunuga	Tuberculosis	100 gms of bark is collected and grind in 50ml water, 50gms of agra sweet (khadichekkar) to make sweet syrup. One spoon daily three times for 30 days is taken	Spicy food should be avoided
7.	<i>Chloroxylon swietenia</i> , DC / Meliaceae	Thellavitrengi	Gastric ulcers	100gms of leaves collected and grinded with milk to make a syrup. 1 spoon of this syrup is taken in the morning for one week	Spicy food should be avoided
8.	<i>Eugenia jambos</i> , Linn./ Myrtaceae	Allaneredichettu	Stops chest pains due to acidity	the bark is collected from the trunk of the tree . The bark is shade dried and 100gms of bark is grinded in 1 glass of goat milk. 10ml of this milk is taken every day morning with empty stomach for 3 days.	Spicy food is avoided
9.	<i>Ficus racemosa</i> , Roxb / Moraceae	Medichettu	Tonsils/mumps	cut is made on the bark with stone, the milk from is collected directly. required quantity of milk is collected from the bark and applied daily 2 times morning and evening under jaws for 5 days.	Cold items should not be taken
10.	<i>Gmelina arborea</i> , Roxb / Verbinaceae	Gummateku	Sperm count increase	100gms of bark is grind in 50gms of sugar, 50ml of water and one spoon is given 4 times a day once in 3 days for 21 days	Alcohol should be avoided
11.	<i>Lanena grandis</i> , Roxb / Anacardiaceae	Dumpidichettu	To cure cuttings in injury	bark is collected, shade dried till it loses water content from it. Grind 200gms of bark in 150ml of water to make thick juice out of it. cloth is soaked in this decoction and this cloth is tied on the spot where the injury occurred, this has to be changed 2 times a day with new fresh soaked cloth.	Pulses should not be eaten
12.	<i>Madhuca indica</i> . J. F. Gmel./ Sapotaceae	Ippachettu	Obesity	500gms of bark is collected and shade dried. Grind with 200ml of water to make a thick solution. 3 spoons of this solution is taken two times a day for one month.	Spicy food, oil food and junk food should be avoided
13.	<i>Mangifera indica</i> , Linn / Anacardiaceae	Adavimamidi	Irregular periods	100gms of bark is collected grind in 100 ml of milk is given one tea cup daily for 7 days	Non-veg tea and coffee should be avoided
14.	<i>Soymida febriguga</i> , Adr. Juss / Meliaceae	Somi	Amoebic dysentery	50gms of the bark is grind in 50 ml of curd and is given one cup daily three times for 3 days	Spicy food should be avoided
15.	<i>Sterculia urens</i> , Roxb. / Sterculiaceae	Thapsichettu	During dog bites	50gms of bark is collected and grinded in 50ml water to make juice. small glass (100ml) of this juice is given 2 times a day for 3 days	Rice should not be taken during the medication period
16.	<i>Wrightia tinctoria</i> , R. Br./ Paala Kodishe/ Apocyanaceae	PaalaKodishe	Stops tumour formation in body	Bark is collected, shade dried till it loses moisture. Grind 50gms of bark in 50ml of water to make thick juice out of it. 20ml of this juice is given in the morning before breakfast with cow milk for 20-25 days.	Only vegetarian, no alcohol

Direct observation, casual interview and structured questionnaires were adopted to collect the information. The used plants were identified using various floras [15, 16, 17, 18]. The data thus collected was formatted and preserved carefully. Specimens of the used part were prepared (table-2) and deposited at Department of Botany, Osmania University, Hyderabad, Andhrapradesh, India.

Table 2: Specimen details of the collected plants

S. No.	Genus & Species / Author	Date of Collection	Site of collection	Name of the collector	Unique/ Voucher collection number
1.	<i>Adina cordifolia</i> , Hook./ Rubiaceae	28 th March, 2011	Chinnamalkapur Forest range	R. Suman Kumar (Author)	RSK-020
2.	<i>Albizia procera</i> , Benth / Leguminosae	25 th June, 2010	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-021
3.	<i>Bombax ceiba</i> , Linn./Malvaceae	19 th November, 2010	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-022
4.	<i>Butea monosperma</i> , Roxb Fabeaceae	25 th March, 2011	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-023
5.	<i>Cassia fistula</i> , Linn./Leguminosae	25 th January, 2012	Chinnamalkapur Forest range	R. Suman Kumar (Author)	RSK-024
6.	<i>Cerisoides turgida</i> (Roxb.) Tirveng / Rubiaceae	28 th July, 2010	Peddalkapur Forest range	R. Suman Kumar (Author)	RSK-025
7.	<i>Chloroxylon swietenia</i> , DC / Meliaceae	18 th January, 2012	Peddalkapur Forest range	R. Suman Kumar (Author)	RSK-026
8.	<i>Eugenia jambos</i> , Linn./ Myrtaceae	06 th April, 2011	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-027
9.	<i>Ficus racemosa</i> , Roxb / Moraceae	1 st October, 2009	Old Somwarpet Forest range	R. Suman Kumar (Author)	RSK-028
10.	<i>Gmelina arborea</i> , Roxb / Verbinaceae	29 th October, 2009	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-029
11.	<i>Lanea grandis</i> , Roxb / Anacardiaceae	21 st September, 2010	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-030
12.	<i>Madhuca indica</i> . J. F. Gmel./ Sapotaceae	14 th January, 2012	Peddalkapur Forest range	R. Suman Kumar (Author)	RSK-031
13.	<i>Mangifera indica</i> , Linn /Anacardiaceae	16 th February, 2011	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-032
14.	<i>Soymida febriguga</i> , Adr. Juss / Meliaceae	25 th February, 2010	Peddalkapur Forest range	R. Suman Kumar (Author)	RSK-033
15.	<i>Sterculia urens</i> , Roxb. / Sterculiaceae	19 th August, 2010	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-034
16.	<i>Wrightia tinctoria</i> , R. Br / Apocyanaceae	14 th April, 2009	Kotwalguda Forest range	R. Suman Kumar (Author)	RSK-035

RESULTS AND DISCUSSION

A comprehensive information on the indigenous uses and traditional practices of the plants used by the inhabitants of Seethagondi cluster. According to a report of the World Health Organization (WHO), three fourth of the World population cannot afford the products of the modern medicine and have to rely on the use of traditional medicine of plant origin[19]. In the present study 16 plants have been documented were the barks of these plants are used by Gondu tribes. Out of these all 16 are trees belonging to 16 genera and 12 families. Among these plants 6 species are cultivated and 10 are collected from the forest. From the present analysis and investigations, it reveals that stem bark is used in 10 ailments or diseases and in 6 disorder like Goiter, Amoebic dysentery, Sperm count increase Tuberculosis, Gastric ulcer etc. Maximum herbal formulations are single forms. In some of formulations Ghee, honey, sugar are used as preparations.

CONCLUSION

The present study includes that the tribes of Seethagondi grampanchayath have a detailed knowledge of medicinally important plants and their use in various simple to critical disease. The tribes living in and around the forest area are very much dependent on herbal practices due to lack of communication and cost of allopathy. And they have deep faith on their old methods of treatment and traditions. The method of using of plants and knowledge of practice has come down through generations. The ethnomedicinal plants at the study area gives a scope for further ethnopharmacognostic studies. Such proven plant species may be used in the formulation of new drugs against different ailments. Cultivation and conservation of such ethnomedicinal plants is in immediate need. Such indigenous practices and knowledge of plant resources should be documented and preserved before they disappear. The collective efforts of ethno-botanists, phytochemists, pharmacognostists and pharmacologists are needed to document and evaluate the efficacy and safety of the claims.

REFERENCES

- [1]. Tor-Anyiin T A, Shaato R, Oluma H O A, *J. Herbs, Spices Med. Plants*, **2005**, (10), 61-74.
- [2]. Principe P, *Monetising the pharmacological benefits of plants* (Publisher US Environmental protection Agency, Washington, D.C.) **1991**.
- [3]. Osai U, *Nig. J. Nat. Prod. Med*, **1998** (2), 16-17.
- [4]. Jain S.K, *Dictionary of Indian Folk Medicine and Ethnobotany*, (Deep Publications, New Delhi) **1991**.

- [5]. Mudgal V. A and Jain S. K, *A Handbook of Ethnobotany*, (Publisher Bhisensingh Mahendrapal Singh, Dehradun) **1999**.
- [6]. Ambasta S. P, *The useful Plants of India*, (Publication & Information Directorate, CSIR, New Delhi) **1992**.
- [7]. Anonymous, *The Wealth of India- Raw Materials* (Publication and Information Directorate, CSIR, New Delhi) **1948-1976**, Vol. I – XI.
- [8]. Asolkar L. V, Kakkar K. K and Chakra O. J, *Second supplement to glossary of Indian Medicinal plants with Active principles*. (National Institute of Science Communication, New Delhi) **1992**, Part I A-K
- [9]. Chopra R. N, Nayar S. L and I. C. Chopra, *Glossary of Indian Medicinal Plants*, (Council of Scientific and Industrial Research, New Delhi) **1956**.
- [10]. Chopra R. N., Chopra I. C. and B. S. Verma, *Supplement to the Glossary of Indian Medicinal Plants*, (Council of Scientific and Industrial Research, New Delhi) **1969**.
- [11]. Kapur L. D, *Handbook of Ayurvedic Medicinal Plants*, (CRC Press, London) **2001**.
- [12]. Kirtikar K. R and B. D. Basu, *Indian Medicinal Plants*, (Publisher L M Basu, Allahabad) **1933**, Vol. 1 -4
- [13]. Reddy S C, Gopal Krishna and V. S. Raju, *Research Journal of Botany* **2008**, 3 (2), 97-102.
- [14]. Sharma P P and Singh N P, *Ethnobotany of Dadra Nagar Haveli and Daman*, (Union Territories) (Publisher Botanical Survey of India, Kolkata) **2001**.
- [15]. Gaur R. D, *Flora of the district Garhwal northwest Himalayas (with ethnobotanical notes)*. Ph.D thesis, Srinagar, Garhwal. **1999**.
- [16]. Naithani B.D, *Flora of Chamoli* (Botanical Survey of India, Howrah, New Delhi) **1984** and 85. Vol I - II.
- [17]. Theodore Cooke, *The Flora of the Presidency of Bombay*, **1904, 1905, 1906**.
- [18]. Pullaiah T and Ravi Prasad Rao B, *Flora of Nizamabad, Andhra Pradesh India*, (Publisher Bhisensingh Mahendrapalsingh, Dehradun) **1995**.
- [19]. Rai L. K, Prasad Pankaj and Sharma E, *Biological Conservation*, **2000** (93), 27-33.