

Traditional Knowledge of Native People in Narsipatnam Division, Visakhapatnam District, Andhra Pradesh, India

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Abstract

An ethnomedicinal survey was conducted among the tribal community residing in Narsipatnam Division, Visakhapatnam district, Andhra Pradesh. In the present ethnomedicinal survey, it was observed that Native tribal traditional medicinal practitioners use medicinal plant parts for treatment of ailments. A total of 30 plant species belonging to, 28 genera and 21 families of ethnobotanical interest were reported. For each species the following ethnobotanical information were provided: botanical name, vernacular name, family, and their use in treatment of diseases. It would be of interest to examine the plants parts used by the tribal healers in a scientific manner towards discovery of useful drugs.

Keywords: Traditional Knowledge, Medicinal Plants, Native Tribal People of Narsipatnam Division, Visakhapatnam District.

INTRODUCTION

In India, the use of plants for medicinal treatment dates back to 5000 years. It was officially recognized that 2500 plant species have medicinal value while over 6000 plants are estimated to be explored in traditional, folk and herbal medicine [1]. Ethnobotany is the study of the utilitarian relationship between human beings and vegetation in their environment, including medicinal uses [2]. Herbal drugs obtained from plants are believed to be much safer; this has been proved in the treatment of various ailments [3]. Drugs obtained from plant are believed to be much safer and exhibit a remarkable efficacy in the treatment of various ailments [4]. The folk medicinal traditions play a reflecting and prominent role in human and environment interaction [5]. Ethnobotany is the study of the interaction between plants and people, with a particular emphasis on traditional tribal cultures. The indigenous knowledge on medicinal plants appears when humans started and learned how to use the traditional knowledge on medicinal plants [6]. In many countries of Africa, Asia and Latin America people depend on traditional knowledge and medicinal plants to meet some of their primary health care needs. For instance in Africa up to 80% of the population use traditional medicine for primary health care [7]. Ethnobotanical investigation has led to the documentation of a large number of wild plants used by tribal for meeting their multifarious requirements [8]. Andhra Pradesh State is ethnobotanically well-explored; most of the work done was during 1985-2002. The work so far done in the field of ethnobotanical resources by different workers to help the modern World as well as local communities in the rein disappearing knowledge and returning it to local communities in Andhra Pradesh [9-13].

MATERIALS AND METHODS

During the period of 2015-2016 explorations were conducted in Narsipatnam Division, Visakhapatnam District, Andhra Pradesh, India for ethno medicinal plants used for various ailments by local tribes. Information gathered by conducting interviews, personal discussions, group discussions with local tribal doctors, village elders, old and young men and women. Ethno medicinal plants were collected and identified with the help of floras and literature [15-16]. Approximately 70 percent of all the work is done by women and female children. This includes work related to agriculture, forest produce collection and domestic chores. Men are primarily responsible for plowing the fields and carrying vegetables to the shandy (weekly market). During the period of study, door to door visits were made to identify local people with specialized knowledge on use of medicinal plants. Plants were collected with noting their local names, parts used and ethno medicinal uses. The samples of recorded herbs, shrubs, and trees were identified with the help of previous literature and regional floras.

RESULTS AND DISCUSSION

The results of the present survey are presented in Table 1. A total of 30 plant species belonging to, 28 genera and 21 families of ethnobotanical interest were reported. For each species the following ethnobotanical information were provided: botanical name, vernacular name, family, and their use in treatment of diseases. The dominant families of

ethnobotanical importance are Fabaceae (4 species), Astaraceae and Moraceae (3 species each), Caesalpiniaceae (2 species), Mimosaceae (2 species) and remaining families have single species. The medicinal plants based on their use in treatment of different diseases were found to be very valuable such as Pregnancy, Constipation, Boils, Ulcers, Eczema, and Stomach-ache etc. Most of the herbal remedies are taken externally in the form of extract and decoction. From Srikakulam District reported 63 ethnomedicinal plants for Women diseases [14]. From Visakhapatnam District 455 ethnomedicinal plants reported for various disease used by local tribes [15]. Conservation of biological resources and of the indigenous traditional knowledge is essential for sustainable development and managing of natural resources the world over. The history of indigenous knowledge as an old as the human race. This knowledge has always been very important for the people who generate it. It is a matter of survival for them. Many scientists, researchers and environmentalists all over the world are now striving to explore, know, Document and use the resource base knowledge for the welfare of the wider human race.

Table - 1. Ethnomedicinal plants used by tribal people of Narsipatnam Division, Visakhapatnam district

Name of the plant	Family	Common Name	Habit	Mode of Administration
<i>Abrus precatorius</i> L.	Fabaceae.	Guruginja.	Woody Twiner	Seeds are poisonous, used by the tribal people to avoid pregnancy.
<i>Alternanthera sessilis</i> (L.) R. Br.	Amaranthaceae	Ponna ganti	Herb	The herb is used for indigestion. The whole plant is used in constipation.
<i>Buchanania lanzan</i> Spr.	Anacardiaceae.	Sara, Morli	Tree	Stem bark paste with castor oil is applied on boils and ulcers.
<i>Butea superba</i> Roxb.	Fabaceae	Tiga moduga	Climber	Root paste is applied externally for eczema.
<i>Caesalpinia bonduc</i> (L.) Roxb.	Caesalpiniaceae	Gacha kaya	Straggler	Roots are used for dysentery and stomach-ache
<i>Calamus rotang</i> L.	Arecaceae	Pemu	Tufted Shrubs	Plant is used in cough, bronchitis, dysentery, and skin diseases.
<i>Canthium parviflorum</i> Lam	Rubiaceae	Chinnabalugu	Shrub	Boiled leaves are eaten to reduce constipation
<i>Capparis zeylanica</i> L.	Capparidaceae	Aridonda,	Shrub,	Root bark in sesamum oil is boiled and filtered. The cooled filtrate is poured into ear
<i>Dalbergia paniculata</i> Roxb.	Fabaceae	Poria patchari	Small Tree	Leaf paste used for swellings
<i>Delonix regia</i> Boj. ex Hook.	Ceasalpiniaceae	Turayi		Flowers are ground to paste with pinch of salt is administered for dysmenorrheal.
<i>Dodonaea viscosa</i> (L.) Jacq.	Sapindaceae.	Bandaru	Shrub	Leaf juice is administered for epilepsy.
<i>Eclipta prostrata</i> L.	Asteraceae.	Gunta kalagaraku	Herb	Leaf extract mixed with sugar candy and buttermilk and administered in the early morning for one week to treat jaundice
<i>Elytraria acculis</i> L	Acanthaceae	Yeddadugu	Herb	Root used for cough and Rabies
<i>Entada pursaetha</i> Dc	Mimosaceae	Gilla Teega	Climber	Bark paste used for rheumatic pains.
<i>Erythrina stricta</i> Roxb	Fabaceae	Mullu Moduga	Tree	The flower is used for antidote to poison
<i>Ficus benghalensis</i> L.	Moraceae.	Marri	Tree	Root extract used for menstrual problems
<i>Ficus religiosa</i> L.	Moraceae	Raavi.	Tree	Stem bark is used for dysentery and menstruale complaints
<i>Garuga pinnata</i> Roxb.	Burseraceae.	Garuga.	Tree	Stem bark paste is used for bone fractures.
<i>Helicteres isora</i> L	Sterculiaceae.	Chemali Nara	Shrubs	Root used for snake bite
<i>Hugonia mystax</i> L	Linaceae.	Pisangi	Shrubs	Root used for diabetes and stomachache
<i>Soyimida febrifuga</i> (Roxb.) A. Juss.	Meliaceae	Somida	Tree	Poultice of the bark is applied externally till cure for Rheumatism
<i>Streblus asper</i> Lour.	Moraceae	Baranika Chettu	Tree	1 spoonful of stem bark extract is administered with honey twice a day for 2 days for Dysentery.
<i>Syzygium cumini</i> L.	Myrtaceae	Neredu	Tree	5 ml of stem bark extract is administered orally twice a day for 3days for cough.
<i>Vernonia cinerea</i> (L.) Less	Asteraceae	Saha Devi	Herb	A spoonful of root decoction mixed with 2 black

<i>Vitex negundo</i> L.	Verbenaceae	Vavilli	Shrub	pepper fruits is administered once a day for 6 days for Malarial Fever.
<i>Wrightia tinctoria</i> (Roxb.) R. Br	Apocynaceae	Ankudu	Tree	Leaves are made into paste and the paste is applied over the head to cure Headache.
<i>Xanthium strumarium</i> L.	Asteraceae	Maraluteega	Shrubs	Bark along with <i>Cuminum cyminum</i> and garlic is used to reduce weight for Obesity.
<i>Xylia xylocarpa</i> (Roxb.) Taub.	Mimosaceae	Konda Tangedu	Tree	10ml of root extract is given orally twice a day for 45 days for cancer
<i>Zingiber officinale</i> Rose.	Zingiberaceae	Allamu	Herb	2 spoonfuls of root bark extract is administered orally twice a day for 15 days to cure gonorrhea.
<i>Zizyphus oenoplea</i> (L.) Mill.	Rhamnaceae	Parimi	Shrub	Used in digestive tonics.
				Root made into paste and is administered orally along with ghee for 6 days to cure herpes.

CONCLUSION

The new generation is not very much interested in the indigenous methods of treating diseases. They are even not very concern about the importance of these herbal plants and its medicinal value. The growing disinterest in the use of the folk medicinal plants and its significance among the younger generation of the tribals will lead to the disappearance of this practice. Educated younger generation of the tribals should be encouraged by the Government to protect and cultivate these valuable herbal plants before they get lost due to the impact of modernization and urbanization and also due to deforestation.

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REFERENCE

- [1]. Huxley A; Green Inheritance: The World Wildlife Fund Book of India, Collins/Harvel, London, 1984.
- [2]. Hershberger J W; The purposes of ethnobotany. Bot Gaz, 1896; 21:146-154.
- [3]. Mitalaya KD, Bhatt DC, Patel NK, Didia SK. Herbal remedies used for hair disorders by tribals and rural folk in Gujarat. Indian Journal of Traditional Knowledge, 2003; 2:389-392.
- [4]. Siddhiqui MAA, John AQ, Paul TM. Status of some important medicinal and aromatic plants of Kashmir Himalaya. Advances in Plant Sciences, 1995; 8:134-139.
- [5]. Chopra RN, Nayar SL, Chopra LC, Glossary of Indian Medicinal Plants. Council of Scientific and Industrial Research, New Delhi. 1956.
- [6]. Emiru B, Ermias A, Wolde M, Degitu E et al. Management, use and ecology of medicinal plants in the degraded dry lands of Tigray, Northern Ethiopia. Journal of Horticulture and Forestry 2011; 3(2): 32-41.
- [7]. Pal D.C, Jain S.K; Tribal Medicine. NayaProkash, Calcutta, 1998; 1-317
- [8]. Anonymous; Ethnobiology in India: A Status Report. Ministry of Environment & Forests, Govt. of India, New Delhi, 1990; 1 - 68 pp.
- [9]. Arunee Kumar K, Satyanarayana G & Nisteswar K; Medicinal plants of Kakinada (East Godavari district, Andhra Pradesh). Indian Medicine, 1990; 2: 29-32.
- [10]. Rao V.L.N, Busi B, Dharma Rao B, Seshagiri Rao Ch & Venkaiah M; Ethnomedicinal practices among Khonds of Visakhapatnam district, Andhra Pradesh. Indian Journal of Traditional Knowledge, 2006; 5 (2). 217-219.
- [11]. Ravishankar T & Henry A.N; Ethnobotany of Adilabad district, Andhra Pradesh, India. Ethnobotany, 1992; 4: 45-52.
- [12]. Reddy K.N & Subbaraju G.V; Ethnobotanical medicine for rheumatic diseases from Eastern Ghats of Andhra Pradesh. Recent Trends in Plant Sciences, 2005; 128-138.
- [13]. Vijayakumar R & Pullaiah T; Medicinal plants used by the tribals of Prakasham district, Andhra Pradesh. Ethnobotany, 1998; 10: 97-102.
- [14]. Aruna K, Syamala D, Rao J.P, Suneetha J, Venkaiah M; Ethno medicinal plants used by Jatapu Women in Eastern Ghats of Andhra Pradesh, India. The Journal of Ethnobiology and Traditional Medicine, 2015; 124, 958-969.
- [15]. Padal S.B, Murty P.P, Rao D.S & Venkaiah M; Ethnobotanical Studies on Paderu Division, Visakhapatnam District, Andhra Pradesh, India. Journal of Phytology, 2010; 2(8); 70-91.