



ETHNO BOTANICAL SURVEY OF MEDICINAL PLANTS BY NAIKPOD TRIBES OF SURBIRYAL VILLAGE, NIZAMABAD DISTRICT, TELANGANA, INDIA

A Pradeep Kumar^{*1} and Prof. Nirmala Babu Rao²

¹Research Scholar, Department of Botany, University College for Women, Koti, Hyderabad-
500 095, Telangana, India.

²Professor, Department of Botany, University College for Women, Koti,
Hyderabad- 500 095, Telangana, India.

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*Correspondence for

Author

A Pradeep Kumar

Research Scholar,
Department of Botany,
University College for
Women, Koti, Hyderabad-
500 095, Telangana, India.

ABSTRACT

The present study documents the since ages, herbs are being used for treating different ailments in different parts of world by different communities. The present ethno-botanical explorations conducted in Surbiryal village of Naikpod tribes Nizamabad district resulted in the information on the plants used in treating many diseases. .for which about 32 plant species belonging to 25 families is used of these, maximum spices belongs to Acanthaceae with 2 spices

Convolvulaceae, Mimosaceae, Euphorbiaceae and Lamiaceae with 2 spices each. This information collected from Naikpod tribes. People of this region possess good knowledge of plants in treating different ailments viz., Snake bite, Malaria, diabetes, hernia, Bone fracture, Scorpion sting, Diarrhea, Jaundice, Leprosy, and Asthma. But their continuous and progressive exposure to modernization may result in extinction of the rich heritage of knowledge in the course of time majority of preparation are from whole plants and following leaves, root, bark, fruits, flowers, seeds, etc. the study emphasizes the potentials of the ethnobotanical research and the need for the documentation of knowledge pertaining to the medicinal plant utilization for the greater benefit of mankind.

KEYWORDS: Surbiryal, Naikpod, Nizamabad, Ethno Botany, Medicinal Plants, Naikpod Tribes.

INTRODUCTION

Ethno botanical use of plants has been known since ancient time and Ethno medicine which is a subfield of Ethno botany or medical anthropology is receiving great attention in recent years throughout the world (Aruneekumar & Niteswar K.1990). The practice of Ethno medicine is a complex multi-disciplinary system constituting the use of plants, spirituality and the natural environment and has been the source of healing for people for millennia (Hemadri K.1987). In India the native people are exploiting a variety of herbals for effective curing of various ailments. The plant parts used, preparation and administration of drugs vary from one place to other (Hemadri K. Shastravettalanu1994).

Study area

Nizamabad District is located in the north-western region in the state of Telangana, India. It is located at 18°41'N 78°6'E . The District is bounded on the north by Adilabad District, east by Karimnagar District, south by Medak district and west by Bidar District of Karnataka and Nanded district of Maharashtra. The geographical area is 7956 Sq. Kms i.e. 19, 80,586 acres spread over 923 villages in 36 mandals. Major rivers, such as, Godavari and Manjeera crosses Nizamabad district with some other streams Kalyani, Kaulas, Peddavagu also exist in the district. The forest is covering area of 1.67 lacs hectares (4, 18,450 acres) forming 22% of the total geographical area of the district. The forests fall under the category of Southern Tropical dry deciduous type. Thick forest belt produces major population of Dalbergia, Tectona, Terminalia, Rhynchosia species. The forest produce, which includes timber, fuel, bamboo and Diospyros leaves, yields good revenue. Mangoes and Custard apples grow well in the district. Forest Dwellers: As per 2001 census the total population of the district is 23.55 lacs. Of these tribal population is 1.65 Lacs. Lambada, Naikpod, Yerukalas are major tribal groups in the area. Of these, Lambada is found most abundant throughout the area. Besides these tribal groups, several other communities are residing as forest dwellers.

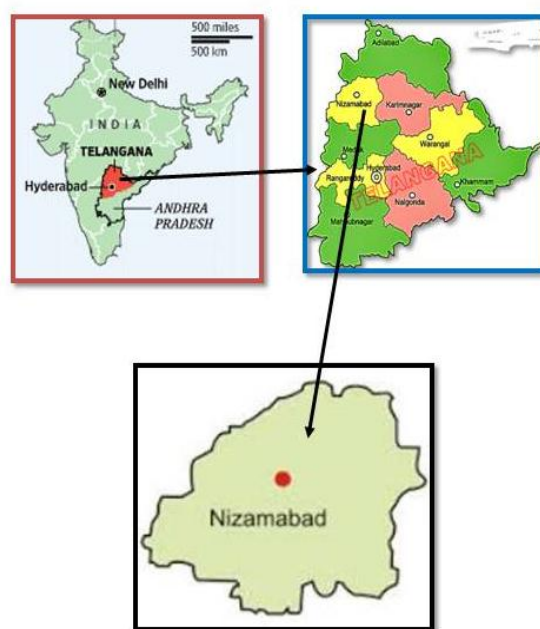


Fig: 1 showing study area

Methods of survey

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period 2010 - 2012. Data presented here is based on personal observations and interviews with traditional healers (Viz. medicine men, hakims and old aged people) and methodology used is based on the methods available in literature Jain (1989) and Jain and Mudgal (1999). Ethnobotanical information gathered was documented in datasheets prepared. For collection of plant material, local informer accompanied to authors. Plant identification was done by using regional flora and flora of adjoining districts, Cooke (1958) and Pullaih and Rao (1995). Medicinal uses of plants were compared with major published literature Ambasta (1992), Anonymous (1948-1976), Asolkar et.al. (1992), Chopra et. al., (1956 & 1969), Jain (1991), Jain (1996), Jain (1999), Kapur (2001), Kirtikar & Basu (1933), Pradhan et. al., (2005), Reddy et. al (2007 & 2008), Reddy (2008) and Sharma & Singh (2001).

Enumeration

The present ethno-botanical explorations conducted in Surbiryal village resulted in the traditional plant uses of 32plants species belonging to 25 families. Following data includes botanical name of species, family, local name, plant part used, disease, method of preparation of medicine and mode of administration and details about its application.

Table: 1

S.No	Scientific name Local Name Family Name	Plant part used	Disease	Mode of Administration
1	<i>Elytraria acaulis</i> (L.f.) Lindau Nela marri acanthaceae	Root	Insect bite	Root paste with garlic and salt is applies externally during insect bite, root extract is administered orally thrice.
2.	<i>Alangium salvifolium</i> (L.f.) Wangerin Ooduga Liliaceae	Bark	Wounds	Bark decoction taken orally before going to bed for 3-4 days
3.	<i>Andrographis paniculata</i> (Burm.F.) Nees Acanthaceae Nelavemu	Whole plant	Malaria,	Leaf juice with piper nigrum seeds powder is given one week after meals.
			Diabetes	Regular taking of plant powder taken after meal controls diabetes.
4.	<i>Argemone Mexicana</i> L. Pichikusuma Papavaraceae	Fruit	Eye disease	3 to 4 drops of fruit juice put in eye weakly twice for 3 weeks
5.	<i>Capparis zeylanica</i> L. Adonda Capparaceae	Fruits	Diabetes & Indigestion	Whole fruits prepare curry
6.	<i>Cassytha filiformis</i> L. Paachiteega Lauraceae	Whole plant	Bone fracture	Pant powder mixed with turmeric and oil then applied affected area.
7.	<i>Cocculus hirsutus</i> (L.)W. Theob. Menispermaceae Dusariteega	Whole plant	Leprosy	One small glass of extract of whole plant taken early morning with empty stomach for 30days
8.	<i>Bryophyllum pinnatum</i> (Lam.) Oken Crusulaceae Ranapala	leaves	Paralysis	Dry root juice 30 ml is given orally for one month.
9.	<i>Ipomoea obscura</i> (L.) Ker Gawl. Convolvulaceae Gollagiddiaku	Leaves	Diarrhea	Leaf juice is mix with milk taken early morning empty stomach 2 weeks.

10.	<i>Martynia annua</i> L. Martyniaceae Telukondi Chettu	Fruit	Scorpion sting	Fruits paste is prepare with coconut oil and applied.
11.	<i>Balanites aegyptica</i> (L.) Delile Zygophyllaceae Gara chettu	Root	Hernia	Root paste applied externally twice a day until cure hernia.
12.	<i>Aerva lanata</i> (L.) Juss. Amaranthaceae Pindi kura	Leaves	Kidney stones	50-60ml extract with 1 teaspoon seeds of <i>Cuminum cyminum</i> and sugar taken orally once a day for 10-15 days to dissolve kidney stones
13.	<i>Mimosa pudica</i> L. Ahipathi Mimosaceae	Leaves	Snake bite	Leaf Paste Is Applied over Snake bite.
14.	<i>Cyperus rotundus</i> L. Cyperaceae Thunga	Tubers	Scorpion bite	Dried tubers are pasted and applied topically on bitten site of scorpion.
15.	<i>Ampelocissus latifolia</i> (Roxb.) Planch. Vitaceae Adavi draksha	Leaves	Dysentery	Leaf juice mix with cow urine and add sugar taken after meals.
16.	<i>Euphorbia tirucalli</i> L. Euphorbiaceae Kada jamudu	Latex	Warts	Latex applied externally twice a day till cure.
17.	<i>Cordia macleodii</i> Hook. Boraginaceae Iriki	Bark	Bone fracture	Bark pieces tied to join the broken bones
18.	<i>Dodonea viscosa</i> Jacq. Sapindaceae Pulivavili	leaves	Bone fracture	Paste of leaves with <i>curcuma longa</i> rhizome and oil applied externally and bandaged with bamboo strips and cotton cloth

19.	<i>Acalypha indica</i> L. Euphorbiaceae Kuppi	Whole plant	Jaundice	<i>Acalypha indica</i> and <i>momordica charantia</i> whole plants taken in 1:1 ratio and extract is given for 10 days doses of 5 and 3 table spoons for adults and children.
20.	<i>Catunaregam spinosa</i> (Thunb.) Tirveng. Rubiaceae Manga	Flowers	Hair fall	Flowers are used like hair tonic in case of hair fall occurs in patches
21.	<i>Solanum virginianum</i> L. Solanaceae Vakudu	Root	Kidney stone	Root powder is mixed with a curd and it is taken once a day up to 7days.
22.	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn. Combretaceae Tellamaddi	Bark	Chest pain	Half teaspoon dry bark powder taken with water twice a day for week.
23.	<i>Plumbago zylanica</i> L. Plumbaginaceae Chitramalamu	Whole plant	Lose motions	Whole plant crushed and taken with Ghee.
24.	<i>Mucuna pruriens</i> (L.) DC. Fabaceae Dulagondi	Root	Paralysis	Dry root juice 30ml is given orally for one month.
25.	<i>Leucas aspera</i> (Willd.) Link Lamiaceae Tummi	Leave	Jaundice	50gm of leaves are crushed well water is given orally once a day for 5-8 days.
26.	<i>Vernonia ceneria</i> (L.) H.Rob. Asteraceae Sahadevi	Whole plant	Menstrual disorders	Powder of the whole plant is administered in the form of tablets for regular menstrual cycle in women.
27.	<i>Acacia chundra</i> (Rottler) willd. Mimosaceae Sandra	Bark	Leprosy	Bark ground with leaf base of neem and the paste apply on ulcers of leprosy.
28.	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey Cucurbiataceae Shivalingam	Seeds	Promote Fertility	Half teaspoon of seeds taken once a day for 10-20 days.
29.	<i>Ocimum tenuiflorum</i> L. Lamiaceae	Leaves	Asthma	Fresh leaves of thulasi,

	Thulasi			momordica, acalypha are crushed and prepared pills, daily 2 pills are given for one week to cure asthma.
30.	<i>Justicia adhatoda</i> L. acanthaceae addasaram	Leaves	Cough, Asthma	Leaf extract administrated orally in 2 spoons a day for one week.
31.	<i>Boerhavia diffusa</i> L. Nycataginaceae Atikamamidi	Whole plant	Anemia	Whole plant extract mixed with cow milk and sugar candy and administers orally in spoonful twice a day for a month.
32.	<i>Evolvulus alsinoides</i> (Linn.) Linn. Convolvulaceae Vishnukantha	Whole Plant	Hernia	Dried plant powder mix with goat milk administered in 2 spoons twice for day about 3 months.

RESULTS AND DISCUSSIONS

Information gathered from naikpod tribes from surbiryal village Nizamabad district indicates that the tribal's people of this region possess good knowledge of herbal drugs. Majority of the plant species used in Human disease are from families Acanthaceae with 2 spices Convolvulaceae, Mimosaceae, Euphorbiaceae and Lamiaceae. One spices families capparaceae, crasulaceae amaranthaceae, vitaceae, sapindaceae solanaceae combritaceae, plumbaginaceae fabaceae, asteraceae, cucurbitaceae nyctaginaceae liliaceae ,papavaraceae cyparaceae etc. majority of preparation are from leaves (9), whole plant(8), bark (4), root (4) fruit (3) etc. these plants treating different ailments viz., Snake bite, Malaria, diabetes, hernia, Bone fracture, Scorpion sting, Diarrhea, Jaundice, Leprosy, Asthma , Anemia , cough, fertility, motions, chest pain, Dysentery, hair fall, eye disease and Insect bite. To test the scientific validity of the herbal preparations or drugs, clinical studies are required. This can establish therapeutic properties of these preparations for safe use.

CONCLUSION

The rural communities are very much prone to these ailments because of one of the prominent reasons as virtually no existing health care installations. This forced the rural

people of the study area to adopt their own traditional herbal medicine for their healthcare. Rural community's practitioners and older people of Krishna district utilize a number of plant species grown around their homes for several medicinal uses. However, the younger generation by ignoring their ancestral traditional medicine is inclining towards the allopathic medicine. Since, several bioactive compounds are being extracted from traditional medicinal plants; they are in great demand in pharmaceutical industries. The photochemical analysis and pharmacological investigations of traditional medicinally important plants by taking in view their proper conservation too, would help in developing novel drugs to treat ailments.

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