

An Ethnobotanical studies of medicinal plants of Ahobilam Reserve forest in kurnool district, Andhra Pradesh, India

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Abstract: This study represents a systematic attempt to explore the knowledge of the native people about plants, which they use to cure diseases. And it is an attempt towards conserving the local knowledge of people to plants. The present study represents a part of a wider ethnobotanical survey conducted indifferent localities of Ahobilam reserve forest during August –September 2017. The present paper deals 40 plants from 69 families, which are therapeutically, used against different diseases, such as cough, cold, dysentery, diarrhoea, ulcers, diabetes, male and female weakness, snake-bite and skin disorders are covered. Part of the plants used, mode of drug administration in different ailments are discussed.

Keywords: Ehanobotany, Chencuss, gudem, Ahobilam Reserve forest.

Introduction

India is a mega biodiversity country not only with rich source of medicinal plants, but also with valuable information on traditional medical practices. Medicinal plants and Traditional medicine plays an important role in the health care system of most developing countries. According to the World Health Organization (WHO) about 65–80% of the world's population in developing countries depends essentially on plants for their primary healthcare due to poverty and lack of access to modern medicine [1]. Ethnobotany is broadly defined as the study of the relationship between plants and people [2]. It usually focuses on the interaction of indigenous plants and the local inhabitants. Man uses wild plants to supply medicine, crafts and cosmetics to rural and urban areas. In addition, wild plants are a source of income and employment particularly in the rural areas [3,4]. World Health Organization estimates indicate that 80% of the population (mostly in developing countries) still relies on plant-based medicines for primary health care [3]. The age-old tribal knowledge of plants is an important aspect of ethnobotanical research. The tribal tracts are the store house of information and knowledge on the multiple uses of plants. Over the last century, ethnobotany has evolved into scientific discipline that focuses on the people-plant relationship in a multidisciplinary manner, incorporating not only collection and documentation of indigenous uses but also ecology, economy, pharmacognosy, public health and other disciplines. Presently, ethnobotany has become increasingly valuable in the development of healthcare and conservation programs in different parts of the world.

Methodology

The study area of ethnobotanical survey

Ahobilam, one of the famous temple sanctity area of South India (Fig.1), is located in Andhra Pradesh. The Ahobilam forest is divided into upper and lower Ahobilam. It is situated between long. 78°23'— 78°56'E and lat. 14°55'—15°24'N. It has an average elevation of 327 meters (1076 feet). All plant specimens were collected during the maturity stage with the help of forest guards, local vaidyas and knowledgeable persons so as to ascertain the correct identification of plants and also to obtain information on their habit and habitat. Samples of medicinal plants were collected for scientific identification and herbarium preparation following standard procedures [5]. The medicinal plants are identified with the help of the floras [6] and finally confirmed with the herbarium of S.K University, Anantapur. The collected plants are stored in the Herbarium of Osmania College, Kurnool. Data was collected on the specific parts of the plants used, collection, processing and preparation of drug, dosage administration.

Results and Discussion

Data collected through ethnobotanical survey included plant species with their vernacular names, habit, family, plant part used and (Table 1). The 11 were herbs, 20 were shrubs and 11 were trees. The most commonly represented families were Fabaceae, Asclepiadaceae (4 sp), Acanthaceae, Caesalpinaceae (3sp), Capridaceae, Memispermaceae (2sp) and remaining families are with (1sp). The plant parts used widely to treat human health problems included root, stem, leaves and others. The most commonly used plant parts for herbal preparations in the area were leaves (57.14%), root (85.71%) and whole plant (35.71%),

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Table.1. List of medicinal Plants Used by tribal people

S.No	Scientific name	Ver name	Habit	Family	Part used	Medicinal use
1	<i>Abutilon indicum</i>	tutturubenda	H	Malvaceae	Leaves	demulcent, rheumatism
2	<i>Althaea rosea</i> (L.) Cav	japali theetham	S	Malvaceae	root	astringent
3	<i>Abrus precatorius</i>	guriginja	S	Fabaceae	root	cough, cold
4	<i>Aristolochia indica</i>	Nall eswari	S	Aristolocaceae	Root	scorpion bite, moggotted wounds
5	<i>Ammania buccifer</i>	agnijawal	H	Lytraceae	whole plant	snake bite
6	<i>Andrographis paniculata</i>	nelavemu	H	Acanthaceae	whole plant	fever, cough, bronchitis, diabetic
7	<i>Argyria nervosa</i> (Burm.f.) Boj-hurt	samudrapala	S	Convolvulaceae	root	rheumatism
8	<i>Bauhinia variegata</i>	madapaku	T	Fabaceae	Flowers	laxative, leucoderma, vaginal discharge
9	<i>Butea monosperma</i> (Lamak)	Moduga	T	Fabaceae	seed	anthelmintic, herpetic, aphrodisiac
10	<i>Cassia italica</i>	nelavemu	S	Caesalpinaceae	whole plant	jaundice, allergy, measles
11	<i>Caesalpinia bonduca</i> (L.) Roxb	gaccha	S	Caesalpinaceae	seed	
12	<i>Costus speciosus</i> (J.Koinig) smith	Koingi	H	Costaceae	Rhizome	anti-inflammatory, antiarthritic activity
13	<i>Cissampelos pareira</i>	advibanka teega	S	Menispermaceae	Root	antiperiodic, purgative, snake-bite
14	<i>Cardiospermum halicabum</i>	buddha kakara	S	Sapindaceae	root	laxative, rheumatism, piles
15	<i>Calotropis gigantea</i>	Tella gilledu	S	Asclepiadaceae	Root	
16	<i>Capparis sepriaria</i>	nall uppi	S	Capparidaceae	stem bark	tuberculosis
17	<i>Cassia fistula</i>	rela	T	Caesalpinaceae	leaves	bone fracture

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18	<i>Cardiospermum halicacabum</i>	budda kakara	S	Sapindaceae	root	laxative, rheumatism, piles
19	<i>Cissus vitigiana</i> L	adavi draksha	T	Vitaceae	stem	repellent
20	<i>Cadba fruticosa</i>	sekurirhi	S	Capparadacea	leaves	oral cortaseptic, antifertility
21	<i>Corallocarpus epigaeus</i>	pamudonda	S	Cucurbitaceae	Root tuber	snake bite
22	<i>Coldenia procumbens</i> L.	papavinasana m	H	Ehretiaceae	leaves	rhematic swellings
23	<i>Decalepis hamiltonii</i>	nannari	S	Asclepiadacea	Root powder	antidiabetic, blood purifier, appetizer
24	<i>Gyrocarpus americana</i>	tella poliki	T	Hernandiaceae	stem bark	cancer
25	<i>Gymnema sylvestre</i> (Retz).r.Br	podapatri	S	Asclepiadacea	leaves	anitdibitic, liver tonic, cardiotoxic
26	<i>Helicteres isora</i> L	gubada	T	Sterculiaceae	seed, root	diabetic,
27	<i>Hyptis suaveolens</i> (L.) Poit.	danti tulasi	H	Labiatae	Leaves	antispasmodic, anti-rheumatic
28	<i>Helicteres isora</i> L.	gubada	S	Sterculiaceae	seed, root	diabetic,
29	<i>Leonitis nepetifolia</i> (L.) R.Br.	ranaberi	H	Labiatae	whole plant	febrifuge
30	<i>Justicea adathoda</i>	addasaram	T	Acanthaceae	leaf	antispasmodic, asthma.
31	<i>Rhinacanthus nasutus</i> (L) Kurz	nagamalle buddha	S	Acanthaceae	root	anti tumour
32	<i>Physalis minima</i> L.	bhusha	S	Solanaceae	fruit	diuretic
33	<i>Pterocarpus marusupium</i>	yegi	T	Fabaceae	Heart wood	leucoderma, urine astringent
34	<i>Strynos nuxvomica</i>	Mushti	T	Strychnaceae	wood, root	fever, rheumatism
35	<i>Tiiacora acuminata</i> (Lam)	kappa theega	S	Menispermaceae	root	scorpion bite
36	<i>Tragea plukenetii</i> R. sm	duradagendaku	H	Euphorbiaceae	root	scorpion bite
37	<i>Tinospora cordifolia</i>	tippa teega	S	Tiliaceae	stem	jaundice, chronic fever
38	<i>Terminalia bellirica</i> (Gaertn.)Roxb	Tani	T	Combrataceae	Fruit stem	Fruit powder mixed with honey is used as laxative.
39	<i>Writia tinctoria</i> (Roxb.) r.Br	palkodisa	T	Apocynaceae	bark	skin diseases
40	<i>Wlatheria indica</i>	peddagurja	H	Asclepiadacea	leaf	snake bite
41	<i>Wlatheria indica</i>	nallbenda	H	Sterculiaceae	root	internal haemorrhage, thirst
42	<i>Xanthium indicum</i>	shankeswari	H	Asreraceae	whole plant	diabetic,