

# SOME PLANTS FOR HUMAN HEALTH FROM TELANGANA STATE, INDIA C. MANOHARACHARY<sup>1</sup>, D. NAGARAJU<sup>2</sup> AND T. ARAVINDA<sup>3</sup>

<sup>1</sup>Mycology and Molecular Plant Pathology Laboratory, Department of Botany, Osmania University, Hyderabad – 500007, Telangana, India<sup>2</sup>Department of Botany, Govt. Degree College, Eturnagaram-506165, Distt. Warangal, Telangana, India.<sup>3</sup>Telugu Academy, Hyderabad, Telangana, India. Email-:cmchary@gmail.com Date of online publication: 31st March 2017

The utilization of medicinal plants is known since times immemorial. The present paper deals with some plants that have been in use of tribal and rural people of Telangana to maintain their health for the last 100 years or more. **Keywords:** Health, rural people, tribal, Telangana.

Plants have been one of the important sources of medicines ever since the dawn of human civilization. The utility of medicinal plants played important role in Ayurveda, Unani, Siddha and also in modern medicine. According to the World Health Organization (WHO), almost 80% of world population utilizes drugs derived from medicinal plants for their health security (UNESCO 1996; Rates 2001; Fabricant and Farnsworth 2001). Africa, India and other countries have rich floristics vielding herbal drugs. The world market includes herbal drugs, pharmaceuticals, fragrances, flavors, dyes and other ingredients and their marketing exceeds several billion dollars per year (Hoareau and Dasilva 1999).

The science of life and it's related knowledge is the indigenous system of medicine (Ayurveda) dates back to 1500-800 BC. Since Aryan's time people were worshipping natural resources like plants, water, forest, fire, air, earth etc. Yajurveda has dealt with many plants that are used in rituals. Atharvana veda has mentioned the role of medicinal plants in treating diseases. Ayurveda is the most ancient and scientific treatise on medicine and disease and is the branch of Atharvana veda. The majority of medicinal plants yield qualitative herbal drugs which have been in use since times immemorial. However medicinal plants as raw material suffer from over exploitation, extinction, adulteration, unhealthy processing, storage problems, identification and marketing. Other systems of medicine also use medicinal plants as resource material.

Since ancient times herbal drugs have been used as a source of medicine. The widespread use of herbal remedies and healthcare preparations were mentioned. The use of traditional medicine and medicinal plants in most developing countries has been widely observed (Biradar 2015, Chopra *et al.* 1996, Jain and Mudgul 1999, Manoharachary and Rajithasri 2014, Putrovska 2012, UNESCO, 1996, Vartak and Madhav 1980). The present paper deals with some plants which are in use for human health from Telangana state.

## Topography and climate of collection places

Telangana State is situated on the Deccan Plateau, in the central stretch of the eastern seaboard of the Indian Peninsula (Between 15°50'-19°55' N and 77°14'-78°50' E). The state has got 10 districts (Figure 1) covering an area of 133,103 km. The most important rivers of the province are Musi, Krishna, Manjira and Godhavari. It has become 29th state of India on 2nd June 2014. Dry deciduous, scrub Jungle forests and mixed forest types are distributed in Districts of Rangareddy, Khammam, Medak, Mahabubnagar, Warangal, Nizamabad and Adilabad. The annual rainfall is between 900 to 1500 mm in Northern Telangana and 700 to 900 mm in Southern Telangana, from the southwest monsoons. Various soil types include chalkas, red sandy soils, dubbas, deep red loamy soils, and very deep black cotton Soil. Telangana is a semi-arid area and has a predominantly hot and dry climate. Summers start in March, and reach peak in May with an average high temperatures to the  $42^{\circ}C(108^{\circ}F)$ 



Figure-1. TELANGANA: Area Map of Sample Collection Site

range. The monsoon arrives in June and lasts until September with about 755 mm (29.7 inches) of precipitation. A dry, mild winter starts in late November and lasts until early February with little humidity and an average temperatures of  $22-23 \degree C (72-73 \degree F)$ 

### **MATERIALS AND METHODS**

Plants have been collected (2015-2016) from different places viz. Amrabad, Bhadrachalam, Kothagudem, Mannanoor, Narsapur, Vikarabad of Telangana state. Their herbaria have been prepared by following the method of OUPH(Osmania University Plant Herbarium) Bridson and Foreman (1998) and deposited at Botany Department, Osmania University, Hyderabad along with Accession number. Data on the utility of plants by rural people and Ayurvedic doctors have been collected by personal interview. The questionnaire included name of the person, sex, age, occupation, social and economic background, health and hygienic conditions, ailment, plant habitats and parts used, dose pattern, duration of time taken for ailment's recovery etc. name of the person, social and economic background, sex, age, ailment, health and hygienic conditions, occupation, plant parts used, duration of time used, time take for ailment recovery, diet, habitats etc. Around 60 people are interviewed from Amrabad, Bhadrachalam, Kothagudem,

Mannanoor, Narsapur, Vikarabad of Telangana state and total number interviewed is 600.

### **RESULTS AND DISCUSSION**

The use of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka and Thailand. In China about 40% of the total medicinal consumption is attributed to traditional tribal medicines.

People use medicinal plants for the treatment of various ailments on the basis of indigenous knowledge passed to them generation after generation. They use medicinal plants on the advice of elders such as wise men, herbalists, religious teachers and traditional practitioners, (Anonymous, 1976). Among the plant parts: leaves, aerial parts, fruits, bark, flowers, rhizomes, roots, tubers, rinds, seeds and bulbs are commonly used.

From Table-1 it is evident that the utility of plants varied. Diversity exists not only in plants but also in their utilization for different ailments. In some cases the whole plant has been found useful while in others the plant parts (root, leaves, stem, bark, oil, flowers, fruits, corm and seed) seems to have been used as curative agents. Variation exists in their

S.No	Name	Family	Place of	Date	Accession	Utility
			Collection &		No.	
			Part used			
1.	Aristolochia indica	Aristolochiaceae	Vikarabad	6-2-2016	OUPH 121	Blood purifier,
	Linn.		Root, Leaves			control skin
		G 1		5.1.0016	011011100	diseases
2.	<i>Cassia fistula</i> Linn.	Caesalpiniaceae	Mannanoor	5-1-2016	OUPH 122	Cures
			Stein, Bark			eczema
3	Indigofera tinctoria	Fabaceae	Bhadrachalam	3-12-2015	OUPH 123	Cures Kidney
5.	Linn.	Tubuccuc	Whole plant	5 12 2015	00111125	stones, epilepsy.
			······································			Urinary disorders
4.	Oxalis corniculata	Oxalidaceae	Narsapur	22-12-2015	OUPH 124	Remedy for
	Linn.		Whole plant			indigestion,
						diarrhoea, piles,
		D1 1	N	16 10 2015	011011105	Antiinflammatory
5.	Plumbago zeylanica	Plumbaginaceae	Mannanoor	16-12-2015	OUPH 125	Cures
	LIIIII.		KOOL			hemorrhoidal
6.	Pongamia pinnata	Fabaceae	Vikarabad	6-2-2016	OUPH 126	Rheumatism.
	Pierre		Seed oil			Skin diseases
7.	Vernonia cineria	Asteraceae	Vikarabad	6-2-2016	OUPH 127	Diuretic purified
	Less.		Whole plant			blood good for
						eyes
8.	Achyranthus aspera	Amaranthaceae	Bhadrachalam	3-12-2015	OUPH 128	Diuretic, laxative,
0	Linn.	C	Whole plant	16 12 2015	OUDU 120	purgative
9.	Caratospermum	Sapindaceae	Amrabad Whole plant	16-12-2015	OUPH 129	Hair growth,
10	Vitex negundo Linn	Verhinaceae	Vikarabad	14-07-2016	OUPH 130	Vermifuge
10.	r nex negundo Enni.	Whole plant	v ikurubudi	1107 2010	00111150	nervine tonic.
						Rheumatism
11.	Terminalia bellarica	Combritaceae	Bhadrachalam	28-07-2016	OUPH 131	Asthama, cough,
	(Gaertn) Roxb.		Fruit			dysentery
12.	Gmelina arborea	Verbenaceae	Bhadrachalam	28-07-2016	OUPH 132	Cardiotonic, lung
12	Roxb.	A	Roots, Fruits	16 12 2015	OUDIL 122	Intection
13.	Eclipta alba Linn.	Asteraceae	Amrabad	16-12-2015	OUPH 133	Eye diseases,
14	Centella asiatica	Aniaceae	Bhadrachalam	28-07-2016	OUPH 134	Improves
11.	(Linn) Urban	riplaceae	Leaves, Flowers	20 07 2010	00111151	memory, purified
	() = = = =					blood
15.	Aerva lanata (Linn.)	Amaranthaceae	Amrabad	16-12-2015	OUPH 135	Kidney stones,
	Juss		Flowers, Roots			Diabetes, Anti-
					011011.10.6	inflammatory
16.	Butea monosperma	Fabaceae	Narsapur	22-12-2015	OUPH 136	Cures veginal
	(Lam.) Taub		Bark, Flowers,			diseases, Dye
17	Sida cordifolia Linn	Malvaceae	Narsapur	22-12-2015	OUPH 137	Uterine disorders
17.		Warvaccac	Root	22-12-2015	00111137	Oterine disorders
18.	Evolvulus alsinoides	Convolvulaceae	Bhadrachalam	28-03-2016	OUPH 138	Febrifuge,
	Linn.		Whole plant			Vermifuge
19.	Glycine max Merr.	Fabaceae	Kothagudem	5-1-2016	OUPH 139	Thrombosis,
			Oil, seed			Protein,
						Estrogenic,
20	Amount on to - 11	A #0.2.2.2.	V otho and and	5 1 2016	OUDU 140	Diarrhoea
20.	Amorpnophallus paeoniifolius	Araceae	Corm	3-1-2010	OUPH 140	Obesity, Piles
	Nicolson		Com			

 $\begin{tabular}{ll} Table-1. Traditionally using plants, for various ailments in human beings * \end{tabular}$ 

\* Subject to Scientific documentation.

utility for different ailments. The plants used for human health varies in their systematic position, and the similar conclusions have also drawn by Manoharachary and Nagarju (2016). However the plants are reported for the first time from Telangana as they are in use for human health since many years by tribals, hill region people and rural folk

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