

**ETHNO BOTANICAL SURVEY OF MEDICINAL PLANTS IN KHAMMAM
DISTRICT, ANDHRA PRADESH, INDIA.**

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ABSTRACT : Ethnobotanical surveys were conducted in four different indigenous groups in Khammam District of Andhra Pradesh. The herbal practitioners in the study area were interviewed and information on medicinal plants was collected from the traditional healers called Vaidyars. This survey covers 96 medicinal plants belonging to 44 families that are used for the treatment of various diseases in a traditional way. Traditional approach was evaluated scientifically with some selected plant extracts to cure many diseases. Several plant extracts like *Gymnema sylvestre*, *Syzygium cumini*, *Tephrosia purpurea* have proved their efficiency in treating many diseases like Diabetes mellitus and skin diseases. The present survey provides the information about various medicinal plants which were not recognized for their medicinal value. These plants are the natural remedies for treating many of the diseases This survey provided information about 96 plants with medicinal properties. This survey had been performed on the plants commonly used by the indigenous people for treating various diseases they had been encountering. All the information gathered from the indigenous people and the herbal practitioners helped to bring several medicinal plants to limelight which on further proceedings proves their therapeutic properties.

Keywords: Medicinal plants.traditional uses.Ethnic group.Herbal medicins

INTRODUCTION

Since the origin of life on earth man has been in harmony with the nature. The nature provides a lot of knowledge about plant wealth. Traditionally this information has been passed from generation to generation which has being practiced by the

Indigenous group of people of different areas. These group of people possess the distinct food habits, culture, which reflects the traditional medicine. Even today, this herbal medicine is in practice to cure variety of diseases. Hence research on these plants is of utmost importance to detect more number of properties about these plants. This herbal medicine has been practicing in rural areas for different diseases. Implication of the knowledge of those indigenous people into practice helped the researchers to develop the present formulation into a better approach with more therapeutic effect. This survey is conducted to make a place for many unrecognized medicinal plants in clinical trials. Many studies have been conducted on these plants in different areas in order to evaluate their properties. About 72 plants were discovered which are very useful to treat various snake bites. This research led us to work on more plants which play a key role in treating various diseases. The plants like *Dridilla retusa* (nara mamidi) used to treat fractured bones and *Seme carpus* (nallajilledu chettu) used to treat skin diseases and *Cissus quadrangularis* (Nalleru teega) used to treat dog bite. The present study reveals many plants with their medicinal properties. Some of the plant extracts like *Gymnema*, *Tephrosia* from the above survey were taken and their interactions has been studied. Further proceedings on these plants may probably reveal many properties that can cure various diseases. These plants are the basics for the traditional Ayurvedic system which does not show more side effects.

Collection of Medicinal plants

The present investigation was conducted using questionnaire in rural areas situated around Bhadrachalam, Khammam District of Andhra Pradesh. The study areas are situated in the western parts of Andhra Pradesh. The main aim of this study is to collect the oral information about the medicinal plants from the natives who were being practicing from generations together.

Identification of plants

The information recorded was further ascertained or cross checked by consulting the beneficiaries villagers and other traditional physicians. The plant specimens were also identified according to different references concerning the medicinal plants of South India . The medicinal information given in this paper includes botanical term family local name parts used and their therapeutic use. No monetary compensation has been given to the traditional healers for providing the medicinal information.

List of Medicinal plants in India and the sources of ethanopharmacological information.

S.No	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
1	Hollarrhena pubescens	Apocynaceae	Ankudu chettu	bark	Bark paste	Holarasine B	Body pains, Arthritis
2.	Bauhinia vahli	Fabaceae	Adda teega	roots	Root paste	Astragalolol, beta sitosterol	Uterine stimulant
3	Mimosa pudica	Fabaceae	Atthi patthi	Whole plant	paste	Alkaloid mimosine	
4	Ricinus communis	Euphorbiaceae	Amudam	leaves	Leaves paste	-	Jaundice
5	Bauhinia ramosa	Fabaceae	Are	Dried flower	powder	astragalolol	Gonnerhea
6	Madhuka langifolia	Sapotaceae	Ippa	bark	Bark juice	Alkaloids, beta carotene	Stomach pain
7	Aristolachia indica	Aristolachiaceae	Eswari	root	paste	Aristinic acid tardolyt	Antidote Skin diseases
8	Achyranthus	Amaranthaceae	Uttareni	Whole plant	paste	Ecdysterone Betaine vit c	Antidote tooth ache
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
9	Embelica officinalis	Phyllanthaceae	Usiri	Fruits	Fruit juice	Pedunculagin Proline,	Anamia indigestion
10	Terminalia Arjuna	Combretaceae	Erumaddi	bark	Bark juice	Chebolic acid	Cardiac diseases
11	Ptarocarpus marsupium	Fabaceae	egisa	stem	stem juice	Propterol, marsupian	diabetes
12	Terminalia chebula	Combretaceae	Karaka	Dried fruits	powder	Ellagic, chebulagic	Breast cancer
13	Cassia occidentalis	Leguminaceae	Kasintha		paste	Anthraquinones, aloe emodin	Skin diseases
14	Momordica charantia	Cucurbitaceae	Kakara	leaves	Leaves juice	Pectin saponins	Jaundice Alcohol withdrawal
15	Pongamia pinnata	Leguminaceae	Kanuga		juice	Beta sitosterol Hirgonic acid	Skin diseases
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
16	Sapindus	Sapindaceae	Kunkudu	fruits	Fruit juice	Tetracyclic triterpenoids	Treating dandruff
17	Holarrenea antidysentrica	Apocynaceae	Kodisa	bark	Bark paste	Norconessine, isoconessine	arthritis
18	Lannea coromandelica	Anacardiaceae	Gampena	bark	bark paste	Dihydroflavonoids D-galactose	Wound healing
19	Tridax procumbens	Asteraceae	Gaddi chamanthi	leaves	Leaves paste	Phlobatannins	Wound healing
20	Caseiria elliptica	-	girmudi	fruit	fruit	-	Anti helminthic
21	Eclipta alba	Compositae	guntagalagra	leaves	leaves	Stigma sterol, daucoesterol	Beri beri
22	Abrus precatoris	Leguminaceae	Kundumani	roots	unknown		
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
23	Lawsonia	Lyrthraceae	Gorinta	leaves	juice	Lawsonic gallic acid	Skin diseases
24	Euphorbis hipta	euphorbiaceae	chitrapala	leaves	juice	-	Scabies
25	Plumbago zeylanica	plumbaginaceae	chitramulam			Plumbagin, beta sitosterol	Leprosy typhoid arthritis
26	Colocasia	Araceae	chamadumpa	leaves	leaves	oxalates	For kidney stones
27	Psidium guava	Myrtaceae	jama	leaves	leaves	Ascorbic acid	Mouth freshner
28	Calatropis	Apocynaceae	jilledu	bark	powder	Sucrose, terpene derivatives	syphilis
29	Tectona grandis	Lamaceae	teku	bark	juice	Hydroxy lapacol	dysmenorrhoea
30	Stercula urens	Sterculaceae	Tapasi koyila	bark	powder	Galactose, rhamnolol	
31	Pipervetel	piperaceae	tamalapaku	leaves	leaves	4-allyl resorcinol	Skin diseases
32	Terminalia bellerica	Combretaceae	thani	Bark seeds	Juice of bark	Tannins, flavonoids	indigestion
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
33	Nelumbo nucifera	Nelumbonaceae	Thamara chettu	leaves	leaves	Gallic acid, ellagic acid	For ringworm
34	Butea superba	Fabaceae	Teega moduga	Root & bark	juice	Beta sitosterol	Piles, stomach pain, Aphrodisiac
35	Diospysos melanoxylon	Ebenaceae	tuniki	leaves	Leaves juice	1,4- naphtoquinones	For diarrhoea

S.No	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
36	Ocimum sanctum	Lamiaceae	tulasi	leaves	Leaves juice	Tannins, thymol	Skin diseases, cough
37	Wrightia tinctoria	Apocynaceae	Tedlapala	Root or bark	juice	Beta imirine, sitosterol	Body pains
38	Acacia leucocephalia	Mimosaceae	Tella tumma	Bark	powder	Galactose, aravinose	Tuberculosis
39	Mucuna prurita	Fabaceae	Durada gondi	leaves	powder	Isoquinoline alkaloids	toothache
40	Pergalaria dumia	Apocynaceae	Dhushtapu teega	leaves	powder	-	Gonerrhea, asthma
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
41	Coccinia grandis	Cucurbitaceae	dondaku	leaves	juice	-	Ear pain
42	Dridilla retusa	Annonaceae	Nara mamidi			Di terpenes	Fractured bones
43	Datura metel	Solanaceae	ummetha	Leaves	juice	Scopolamine, hyosine	Skin diseases
44	Seme carpus	Anacardiaceae	Nallajeedichettu	seeds	powder	Phenolic compounds	Skin diseases
45	Acacia nilotica	Fabaceae	Nalla tumma	bark	Bark juice	Galactose, aravinose	Oralcavity diseases
46	Cissus quadrangularis	Vitaceae	Nalleru teega	plant	paste	Keto sterol, ascorbic acid	Dog bite
47	Hygrophilia auriculata	Acanthaceae	Neeru gochi	leaves	juice	-	lucoderma
48	Holoptecia integrefolia	Ulmaceae	Nemali chettu	bark	paste	friedelin	Piles wounds, Skin diseases
	Plant species	family	Common name	Parts used	direction	Chemical constituents	Uses
49	Jatropha curcus	Euphorbiaceae	nepalam	bark	paste	Toxalbumin, trypsin inhibitor	arthritis
50	Schyzygium	Myrtaceae	nerudu	fruits	Ripe fruits	Gallic acid, ellagic acid	Excessive urination.
51	Phyllanthus niruri	Phyllanthaceae	Nela usiri	wholeplant	juice	Hypo phyllanthin	jaundice
52	Solanum suraltense	Solanaceae	Nela vakudu	seeds	Smoke of seeds	coumarins	toothache
53	Andrographis paniculata	Acanthaceae	Nela vemu	leaves	powder	-	Snakebite, Skin diseases
54	Dalbergia paniculata	Fabaceae	Paccha are	Bark	juice	Dalpanitin	dysmenorrhea
55	Echenocarpus frutescens	Apocynaceae	palateega	Root bark	juice	Benzocosanyl arachidate	Asthma
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
56	Areva lanata	Amaranthaceae	Pindi chettu	Leaves	juice	Aervine, methyl aervine	Dissolves kidney stones
57	Asparagus racemosus	Asparagaceae	Pilla peesara	corm	juice	saponins	Menstrual problems
58	Altermanthira sessilis	Amaranthaceae	Ponnaganti kura	Root bark		Stigma sterol	Toothache
59	Streblus asper	Moraceae	barinka	latex	Stem latex	Beta sitosterol, salicylic acid	Toothache
60	Ficus hispida	Moraceae	Brahma medi	latex	latex	Phenols ,tannins	tuberculosis
61	Chloroxylon smitenia	Rutaceae	bhilludu	-	-	Coumarin, xanthyletin	arthritis
62	Bombax ceiba	Bambacaceae	buruga	bark	juice	flavonoids	Reduces tumors
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
63	Carica papaya	Caricaceae	boppaya	latex	latex	Retinol	Skin diseases
64	Hibiscus rosasinensis	Malvaceae	mandara	leaves	leaves	Suberic acid	Wound healing
65	Mangiferus indica	Anacardiaceae	mamidi	bark	juice	Amino acids, xanthenes	diarrohea
66	Aegle marmelos	Rutaceae	maredu		juice	Marmelosin, marmesin	Asthma blood motions
67	Moringa	Morigaceae	munaga	Leaves latex	juice	proanthocyanidin	jeshtha
68	Acalypha indica	Euphorbiaceae	muripinda	leaves	juice	aurantiamide	Snake bite
69	Strychnous nux vomica	Loganiaceae	mushti	bark	powder	Brucine, strychnine	Snake bite
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
70	Ficus racemosa	Moraceae	medichettu		juice	ficustriol	Burning micturition
71	Argemone mexicana	Ppaveraceae	rakkisa	latex	latex	sanguinarine	Gonerrheaconjunctivitis
72	Bryophyllum	Crassulaceae	ranapala	leaves	juice	riboflavin	Breast tumors
73	Hybanthus suffricticosus	Violaceae	ratnapurusha	Whole plant	juice	Terpenes, anthroquinones	Nerve stimulant
74	Ficus religiosa	Moraceae	Ravi chettu		juice	Tannins, alkaloids	Obesity decreases
75	Cassia fistula	Fabaceae	Rela	Bark leaves	powder	Naphthaquinones	Jaundice constipation
76	Parthenium hysteroforum	Asteraceae	Vayyari bhama		juice	Sesquiterpenes	Reduces bleeding

S.No	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
77	Vitex nigunda	Lamiaceae	vavili	leaves	juice	Beta pinene, para cymene	Goiter, epilepsy
78	Tephrosia purpurea	Fabaceae	vempali	leaves	juice	Isoflavones, chalcone	Scabies, antidote
79	Bamboosa arundinacea	Graminae	veduru	leaves	juice	Cellulose, resins	Post labor pains
80	Dichrostachys cinerea	Fabaceae	veluturu	Bark	powder	Phenols, tannins	Reduces menstrual flow
81	Azardirachta indica	Meliaceae	vepa	Leaves bark	juice	7-Azardirachtin, sallannin	Skin diseases
82	Centella asiatica	Mackinlayaceae	Saraswati aku	Leaves	juice	Vallerin, Asciasctoside	neurosis
83	Annona squamosa	Annonaceae	seetaphalam	leaves	paste	Sennin, squamosin	Wound healing
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
84	Hemedesmus indicus	Apocynaceae	Sugandha phala	Whole plant	juice	Coumarin, para methoxy salicylic aldehyde	Purifies blood
85	Adiantum lanulatum	Pteridaceae	Hamsa padi	Leaves	juice	Astragalin, adiatone	Jaundice
86			Athukula teega		paste	-	Bone fractures
87			Kallupongara kura	leaves	Smell of leaves	-	Reduces intoxication
88			Konda jeelakarra	root	juice	-	Liver diseases
89	Hollarhena antidysentrica	Apocynaceae	kodisapala	bark	powder	-	amoebiasis
90			Gajurotta	Leaves	paste	-	Wound healing
	Plant species	family	Common name	Parts used	direction	Chemical constituents	uses
91			gundugorugudu				Snake bite
92			Chitapata teega	leaves	juice		antidote
93			parika	leaves	juice		Ringworm infection
94			Puli adugu	leaves	paste		Skin diseases
95			Pydu prathi		juice		Neuro disorders
96			Bandi gurijaku	bark	juice		diarrhoea

CONCLUSION

Based on the above observations all the 96 plants have proven to cure at least one disease. These are the traditionally used plants in rural areas around Khammam district Andhra Pradesh, India. More work has to be carried out on these plants to evaluate more properties. Some of the above plants are not yet been recognized. This survey tried to make everybody being known about the natural asserts of our nature.

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