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**Original Research Article** 

# Plant Species Formulations Used in Treatment of Different Ailments in Some Villages of Paderu Mandal, Eastern Ghats of India, Andhra Pradesh

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### Abstract

Present communication deals with the Ethnomedicinal practices for treating different ailments of mankind. The present study comprises a total of 44 no of ethno-medicinal formulae which provides information in detail on the therapeutic values of 29 plant species belonging to 27 genera and 21 families and covering 32 number of different ailments. Information on botanical details, method of preparation, administration of plant formulations, dosages and other details are presented herein. This data would aid as baseline information for investigators working on ethnobotany and ethnomedicine.

Keywords: Ethnomedicinal formulations, plant species, some ailments, Dosages, Paderu mandal, Eastern ghats of India.

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# **INTRODUCTION**

Ethnomedicine plays a vital role in rural India even though a lot of advancement is reported in modern medical system (Anonymous 2002). In the modern era, it is necessary for documentation and evaluation of this information for its commercial use, as ethnomedicinal treatments of plants is an important criteria being used by the pharmaceutical industries for arriving at new therapeutic agents (Cox and Balick, 1994). Murty and (2010)studied the Narasimha Rao ethnomedicinal properties of some plant species of Andhra Pradesh, Narasimha Rao and Murty (2014) documented important medicinal some applications of Mangrove plant species of Andhra Pradesh. Jayanth Babu et al., (2017 and 2018) presented the data on application of ethnomedicinal plants to treat ailments of bones and bone fractures. Narasimha Rao (2020) studied the flora of Mangrove Species utilized for ethnomedicinal practices in Gautami Godavari Estuary, AP. Jayanth Babu et al., (2020A; 2020B; 2020C; 2020D and 2020E) studied the plant species used for the treatment of arthritis, sports injuries, osteoarthritis and other ailments of Human beings. Jayanth Babu and Narasimha Rao (2021) explored the ethnomedicinal practices of Aegle marmelos in Eastern Ghats of India. In this present investigation data was collected on the usage of some medicinal plants to treat various ailments of mankind in different villages such as Lagisapalli, Kadeli,

Vanjangi and nearby places in Paderu mandal of Eastern Ghats of India, AP.

### **Study Sites**

The Eastern Ghats of India are a long chain of broken hills that pass mainly through three states namely Orissa, Andhra Pradesh and Tamil Nadu and run about 1750 km with an average width of about 100 kms between Mahanadi and Vaigai rivers along the East Coast of India. Paderu mandal lies in between latitudes 18° 18' 59"and longitudes 82° 40' 01" and the type of vegetation varies from semi-evergreen forests to scrub jungles. Tribes like Koyas, Kondareddis, Valmikis, Chenchus, Lambadas, Jatapus, Savaras, Bagatas, Porjas, Khonds, Yanadis and Yerukalas are inhabitants of the forest regions of Eastern Ghats of Andhra Pradesh region. In the present study data collected from the tribal or herbal doctors and local aged people residing in Lagisipalli, Kadeli, Vanjangi villages in Paderu Mandal, AP

### MATERIALS AND METHODS

Information on medicinal formulae and relevant details for treating various diseases was obtained through interacting with tribal doctors as well as native healers and village heads. Cross verified and ascertained in the field with the local doctors and tribal people in that region. The methodology was followed as described by

Jain (1999), Hemadri (1994), Martin (1995) and Jayanth Babu *et al.*, (2017 and 2018). Procedures for preparation of infusions, dosages and poultices used for curing different ailments followed by Jayanth Babu *et al.*, (2024).

# RESULTS AND DISCUSSION

This investigation comprises a total of 44 Formulae, 29 plant species belonging to 27 genera and 21 families have been identified as potential source for treating about 32 number of different types of ailments or Health exigencies. The scientific names of the species along with families, vernacular names, part(s) used, doses and mode of preparation are recorded as detailed below.

S.	Name of the plant	Name of the Health Exigencies;	Plant parts used; Dose; Method of preparation and
No	species, Family, Local name	Ailments; Diseases being addressed	usage.
1)	Mirabilis jalapa;	FOR CURING THE	For Curing Ailments 1 to 4 Mirabilis jalapa root tuber
-/	Nyctaginaceae; 4 'O	FOLLOWING AILMENTS Viz.,	5 gr + Asparagus root tubers 5 gr + Momordia dioica
	clock plant; Chandra	1) JAUNDICE of all types	root tuber 5 gr are taken and made in to fine paste by
	kantham; Poddu	including obstructive jaundice,	mixing with 100 ml of buttermilk, given orally in two
	dumpa;	Viral jaundice/ Hepatic jaundice,	split doses once in the morning in empty stomach and
2)	Asparagus racemosus;	white jaundice 2) Vubbu / Oodu kaamerlu /	in the evening before meals for a period of 6 days. Intake of OIL food and NON VEG are strictly avoided
	Asparagaceae;	white Jaundice, which is caused	for a period of 40 days.
	Shatavari; Bhimudi	due to a problem in kidneys	
	jada;	functioning by which	
		inflammation or swelling occurs	From the consist of a result (5) 0 (1) The Learner and
3)	Momordica dioica;	in the entire body.  3) Malarial fever	From the species of s.nos 1); 5) & 6) The Leaves and flowers are made into a paste to get 10 gr + Turmeric
3)	Cucurbitaceae;	4) Dysentery, Stomach pain	powder 2 gr. All are grinded well in a mortar to get a
	Aagakara; Spiny	5) Wounds healing; and	fine paste and is applied on wounds for I week for
	gourd; Adavi kaakara	6) Wounds of Herpes—a viral	healing.
		disease called locally "Salipi	
4)	Argemone mexicana;	rogam"  1) For curing venereal diseases	1) An incision is made in a ripened Banana fruit and 3
(4)	Papaveraceae; prickly	(STDs) like Syphilis); Gonorrhea;	to 4 drops of the yellow exudation of the Argemone
	poppy; Yellow	Hepatitis; & Herpes simplex ie.,	plant is inserted into the incision. This fruit is given to
	Mexican poppy; pichhi	"Salipi rogam".	the patient to consume orally in the early morning @
	kusuma. Swarna		one fruit per day for a period of 1 week.
	ksheeri,	2) For curing Jaundice completely.	2) Flowers of Argemone mexicana are dried, powdered and administered orally with water. Dose
			2.5 gr per day for 20 days.
		3) For curing scorpion sting.	3) Fresh root paste is placed on the place of sting for
			curing scorpion sting.
		4) For curing uncured wounds.	4) Whole plant's paste is applied daily externally for 1 week for curing uncured wounds.
		5) For curing digestive problems	5) Whole plant's paste 2 grams is made into a
		& for free urination	decoction using 100 ml of water and given internally.
5)	Ficus benghalensis;	1) For curing the rashes and	1) Tender leaves buds along with latex, turmeric
	Moraceae; Banyan	effected skin resulted due to	powder are grinded into a paste and applied externally
	tree; Marri	Herpes disease 2) For curing deeply cut wounds.	on the affected skin of Herpes disease 2) Latex is applied into the deep cut wound and
		2) For curing deepty cut wounds.	covered with leaf paste and bandaged.
		3) For Tooth decay.	3) Two drops of the plant's latex is applied on the
		•	decayed tooth.
		4) For curing ear ache	4) For subsiding pain in the ear 2 drops of latex is
		5) For auring poly wingting	applied in the ear
		5) For curing poly urination	5) Root bark 5 gr is pounded and a decoction is prepared using 100 ml of water. Given every day for
			15 days at bed time.
6)	Curcuma longa	FOR ENSURING NORMAL	Species of s.nos 6) Turmeric powder 1 tbsp + 7) T.
	Zingiberaceae;	AND FREE MOTION EVERY	chebula powder 1 tbsp. + 8) T. ammi powder half
	Turmeric; Pasupu	DAY WITHOUT ANY SIDE	tbsp., are mixed well together and grinded well by
7)		EFFECTS;	adding adequate water to make a homogeneous paste.  Dose: This total quantity of mixture is divided into 3
7)			Dose. This total qualitity of fillxture is divided fillo 3

S.	Name of the plant	Name of the Health Exigencies;	Plant parts used; Dose; Method of preparation and
No	species, Family, Local name	Ailments; Diseases being addressed	usage.
8)	Terminalia chebula; Combretaceae; Karaka; Trachyspermum ammi; Apiaceae; Ajowan; Vaammu;	(This total quantity of mixture is sufficient for the use of 3 persons (OR) 1 person for 3 days).	equal parts and given orally in the night at bed time with 1 glass of water.
9)	Syzygium cumini; Myrtaceae; Neredu; Jaman;	For stopping the Motions or Loose motion     For curing all types of Urinary problems.	1) Bark paste 3 to 5 grams or bark powder is mixed well in 1 glass of butter milk given to consume orally. May be repeated 2 to 3 times in a day, for 1 or 2 days.  2) Syzygium seeds are collected, dried well under sunlight, made into a fine Powder, given to the patient @ 2 to 3 grams per day in the early morning in an empty stomach with water for 40 days.
10)	Derris indica; Fabaceae; Pongamia; Kanuga; Pepper nigrum;	For curing Malarial Fever effectively.	Pongamia Seed – 10 gr along with pepper seed 2.5 grams are powdered finely and mixed well. One gram of this powder is administered orally along with water 3 times a day or just before the commencement of malarial fever. Given like this for 3 days.
	Piperaceae; Black pepper; Miriyalu		
12)	Michelia champaca; Magnoliaceae; Sampangi chettu;	For curing Malarial fever effectively.  2) For curing bed wetting problem in children.	1) Michelia champaca tree bark – 10 gr along with pepper seed 3 grams are powdered finely and mixed well. One gram of this powder is administered orally along with water 3 times a day or just before the commencement of malarial fever. Repeated like this for 3 days.  2) 15 gr of Bark is pounded well soaked in 100 ml of water and boiled well to get a decoction of 60 ml given
			thrice in a day for a period of 3 to 4 days for curing bedwetting problem.
13)	Sesbania grandiflora; Fabaceae; Avisa;Egyptian pea;	For curing Night Blindness	A fry / curry is prepared using 50 gr of green tender leaves, flowers or tender pods and given to the Night blindness patients every day to eat with their food for a period of 21 days.
14)	Carthamus tinctorius; Asteraceae; Kusuma; Saf- flower oil plant,	For curing Jaundice	The flowers are made into a powder and administered orally with water @ 2.5 gr per day X 21 days.
15)	Tagets erecta; Asteraceae; Banthi. African or American Mari gold bearing orange- yellow flowers.	1) For curing Ear ache, pus secretion from ear, wounds in the Ears. 2) To stop the bleeding immediately from the cut wounds and for healing the wounds.	1) Leaves juice is slightly heated and few drops of the juice in lukewarm state is applied in the ear using a filler.     2) Leaves juice is applied in the cut incision to stop the blood immediately and bandaged by covering the Leaves on the wound
16)	Musa paradisiaca; Musaceae; Banana. Arati chettu	For eradicating all types of harmful bacteria and worms, if any available in the intestines	15 gr of banana roots are taken and with 100 ml of water a decoction is prepared to get 60 ml concentrate. This decoction is given thrice in a day for 3 weeks before meals.
17)	Aegle marmelos; Rutaceae; Maaredu; Bilvam	1) For healing the Ulcers and erosion in the inner walls of the stomach, duodenum as well in the intestines.  2) FOR CURING ALL TYPES	1) 15 gr of Maredu fresh leaves are collected and a decoction is prepared by boiling in 100 ml of water to get a concentrate of 60 ml. This decoction is added with 5 ml of honey and given orally in 3 equal split doses in a day in an empty stomach for 21 days to 40 days.  *Note; DIET being prescribed: Intake of Rice gruel 250 ml to 500 ml in the morning and evening in empty stomach for 40 days.  2) 2 to 3 kgs fresh green leaves of Maredu are
		OF SKIN DISEASES	collected / plucked from the tree early in the morning before sunrise, dried in a shade under sunlight for a few days, powdered finely and stored in an airtight

S. No	Name of the plant species, Family, Local name	Name of the Health Exigencies; Ailments; Diseases being addressed	Plant parts used; Dose; Method of preparation and usage.
			container. Given early in the morning, to the patient in an empty stomach along with lukewarm water, for 40 days @ 5 to 10 grams of this powder depending on the intensity, for a period of 40 days, The diet prescribed is cooked white rice mixed in hot water and consumed. Nothing is to be consumed other than this. All types of skin diseases including leprosy in the early stages could be cured.
18)	Butea monosperma; Fabaceae; Moduga; Palash; Flame of the Forest	For curing Hydrocele without any surgery	Adequate quantity of Butea flowers are pounded and the paste is applied as a coating over hydrocele and over it the fresh flowers are also placed and tied with a loin cloth tightly. The same process is repeated for 10 days as explained above. Intake of water is not advised in the nights.
19)	Tamarindus indica; Fabaceae; Chinta; Tamarind.	For Curing Hydrocele without any surgery.	Tender leaves of Tamarindus are grinded into a paste and are applied as a coating over hydrocele in the night time and tied with a loin cloth tightly. The same process is repeated as explained above every day for 7 days. Intake of water is not advised in the nights.
20)	Azadirachta indica; Meliaceae; Neem; Vepa;	For curing Fevers of any type     For curing Poly Urination	1) Neem tree inner green bark 30 gr is grinded well in a mortar to get a fine paste, mixed in one liter of water boiled well to get an extract of 500 ml screened and preserved by transferring into a clean vessel or bottle. Administered orally three times a day @ 60 ml per dose by mixing with 5 to 6 nos black peppers powder.  2) A mature tree bark fine powder 5 gr is mixed in 5 gr of jaggery and 60 ml of Cow's milk given to the patient to consume orally twice in a day for 40 days for 40 days.
21)	Vitex negundo; Verbenaceae; Vaavil 5 leaved chaste tree	For curing Malarial Fevers	Fresh green leaves 50 gr are grinded well in a mortar to get a fine paste and mixed in 500 ml of water boiled well to get an extract of 300 ml, screened and preserved by transferring it into a clean vessel or bottle. Administered orally three times a day @ 50 ml per dose by mixing with 50 ml of milk and 5 gr of sugar/ Jaggery.
22)	Nyctanthes arbortristis; Oleaceae. Parijatham or Coral jasmine;	For curing Fevers with Chills and severe body pains.	Nyctanthes plant's small tender leaves 10 to 14 nos are grinded into a fine paste in a mortar using 20 ml of ginger juice and made into a fine paste. Administered orally in two split doses in a day, morning and evening, followed by intake of Luke warm water.  Repeated the same procedure for 21 days.
23)	Ocimum sanctum; Lamiaceae; Tulasi; Sacred Basil;		Ocimum leaves 10 gr + Neem plant leaves are made in to a fine paste; Add Black pepper seed powder 10 gr and grinded again + Borax (Veligaram, or Tankanam is heated on a small earthen plate on a fire till it
A.	Azadirachta indica; Meliaceae; Neem; Vepa;	For curing Malarial Fever effectively;	becomes puffed up. 2.5 gr of heated and puffed borax is made into a fine powder and added to the above mixture of ocimum, neem, and pepper again grinded well using water. Made into pills of each 1 gram and
В.	Pepper nigrum; Piperaceae; Black pepper; Miriyalu		given @ 1 pill in the morning and 1 pill in the evening for a few days.
24)	Smilax zeylanica; Smilacaceae; kummari baddu, Kondadantena; Ushba.	Urinary system disorders;     Venereal diseases like     Gonorrhea, Syphilis;	FOR, No 1) &2) ailments, 50 ml of decoction prepared with 5 grams of root paste and is given to be consumed per 1 day X for 15 days.
		<ul><li>3) Gouty arthritis and Arthritis,</li><li>4) Skin diseases, wounds healing</li></ul>	FOR, No 3) & 4) ailments, Whole plant powder 5 gr is taken and 50 ml of decoction is prepared and

S. No	Name of the plant species, Family, Local name	Name of the Health Exigencies; Ailments; Diseases being addressed	Plant parts used; Dose; Method of preparation and usage.
25)	Pueraria tuberosa Fabaceae; Nela gummudu and  A) Asparagus racemosus;	5) For enhancement of sexual Vigor in males	administered orally for 15 days. Root paste adequately is applied on painful and swollen joints as well on wounds and for curing abscesses also skin ailments like eczema  FOR no 5) problem, Smilax root's paste 100 grams +  Asparagus root tuber paste 100 gr + Pueraria - tuber's paste 100 gr are, mixed with honey & ghee and is given to be consumed orally with milk at bed time @ 5 grams per day for a period of 40 days.
26)	Momordica charantia; Cucurbitaceae; Bitter gourd; Kaakara	For Controlling HYPERTENSION	30 ml of leaves pure juice is administered orally early in the morning in empty stomach for a period of 21 days for controlling Hypertension.
27)	Senna auriculata; Fabaceae; Tangedu;	For curing Poly Urination	Root bark powder 2.5 gr is mixed in Goat's ghee or Cow's ghee given to consume orally twice in a day for a period of 40 days to address this problem permanently.

## **CONCLUSIONS**

This information provides baseline data for future generations who will work on these aspects and in depth as well the required chemical studies would be important for finding out the compounds that are responsible for curing the different ailments of mankind.

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