

Ethnobotany of Stem Bark of Some Medicinal Plants of Adilabad District, Telangana State, India

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Abstract:

The paper enumerates 56 medicinal plants belonging to 47 genera families. Whose stem Barks are used for ethnobotanical purpose by the primitive Tribes Groups of Adilabad district Telangana state India, three plant species 70 practices were found to be new

Key words: Ethnobotany, Stem bark, Primitive Tribal groups, Adilabad district

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I. Introduction:

Bark is the outer hard layer covering the of the plant from ethnobotanical plant. From ethnobotanical point view it has immense importance in day-to-day life of the people thought the world. Ethnobotanical uses of different plants were studied several workers (Ambashta 1986. Banerjee 1977, Caius 1935, chopra.et.al 1969.Islam 200, Rao et.al 2000. Rao and Reddi 2010and Rao et.al 2006), the utility of bark for making ropes, cordges, dyes. resine, medicines etc. in different parts of the country by different tribal inhabitants was been done so for on the uses of bark obtained from different parts of different species of the district.

Adilabad is famous for its rich cultivation of cotton. Hence, Adilabad is also referred as "White Gold City". It is located about 304 kilometres (189 mi) north of the state capital, **Hyderabad**, 150 kilometres (93 mi) from **Nizamabad** and 196 kilometres (122 mi) from Nagpur

The district derives its name from Adilabad, its headquarters town which was named after the ruler of Bijapur, Ali Adil Shah. The district was for long not a homogenius unit and its component parts were ruled at different periods by nasties namely, the Mauryas, Staavahanas, Vakatakas, Chaludyasof Badami, Rashtrakututs, Chalukyias of Kalyani, Mughals, Bhosle Rajes of Nagpur and Asaf Jahis, besides the Gond Rajas of Sirpur and Chanda. Originally this was not full-fledged district but a sub-district named Sirpur-Tandur which was created in A.D. 1872 with Edlabad (Adilabad), Rajura and Sirpur as its constituent talukas. In 1905, an independent district with headquarters at Adilabad was formed. Due to the district's reorganization in October 2016, Adilabad was divided into four districts: Adilabad, KumramBheem Asifabad district, Mancherial district, and Nirmal district.Red and black soil are both found in Adilabad district though black soil predominates, accounting for almost 72% of the soil in the district. The mineral resources are mainly limestone and manganese ore.

II. Material and Methods

Ethnobotanical survey of the inhabited areas of the district was conducted during 20017-19 covering all seasons. Information was obtained through field interviews with traditional healers. The medicinal uses and mode of administration were gathered from tribal medicine men and herbalists and compared with relevant literature. Each medicinal practice was verified and cross-checked. Plant specimens were collected, identified and deposited in he Herbarium of the Department of Botany, Osmania university Hyderabad. Ethnomedicinal plant species used by the for curing various diseases are listed below in alphabetical order with botanical and local names and English names, uses and the methods of preparation and administration of the drugs.

S.no	Botanical name	Family name	Vernacular name	Part used	Ailment	Formulation
1.	Acacia nilotica (L.) Willd.	Mimosaceae	Nalla thumma	Black babul	Piles	Stem bark paste mixed with half cup of water is administered once a day till cure. *Swelling of eyes: Boiled stem bark paste is applied on the eyebrows.
	Aegle marmelos (L.) Correa	Rutaceae	Bael tree	Bark paste	indignation	Bark paste mixed with half cup of water is administered twice a day till

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						cure
Aganosma caryophyllata (Roxb. ex Sims) G. Don	Apocynaceae	Saluvamada Chettu	Stem bark	Malaria, fits, chicken pox, witchcraft and antidote to poison	Stem bark along with that of <i>Grewia tiliifolia</i> mixed with old tamarind stored for 3 years is ground with crab and the skin of monitor lizard (Veranus) is made into tablets and administered orally daily twice	
Alangium salvifolium (L. f.) Wang.	Alangiaceae	Ooduga chettu	Stem bark Stone mango	Neurological weakness	Stem bark paste mixed with root paste of <i>Achyranthes aspera</i> is administered twice a day till cure	
Alstonia scholaris (L.) R. Br	Apocynaceae	Edakulapala	Bark paste Galactagogue	Galactagogue	Devil tree Galactagogue: Bark paste is administered with half cup of water.	
Alstonia venenata R. Br	Apocynaceae	Pala mandhu chettu	Dried stem bark s	Scabies and boils	Dried stem bark powder mixed with coconut oil is applied on the affected parts.	
Annona reticulata L.	Annonaceae	Ramaphalam	Stem bark	Sciatica	Stem bark paste with that of <i>Jatropha curcas</i> and root pastes of <i>Clerodendrum viscosum</i> and <i>Solanum torvum</i> mixed with half cup of water is administered daily twice till cure.	
Artocarpus heterophyllus Lam	Moraceae	Jack fruit	Stem bark	Body pains	Stem bark paste mixed with half cup of water is administered twice a day for 2 days	
				Dysentery	Stem bark paste mixed with that of <i>Syzygium cumini</i> is administered with half cup of water twice a day for 2 days.	
				Wounds	Stem bark paste is applied on affected parts. Latex is used for bird-trapping	
Azadirachta indica A.Juss	Meliaceae	Yepa chettu	Stem bark	Dysentery	Stem bark paste mixed with half cup of water is administered twice a day for 2 days.	
				Stomach pain	Stem bark paste along with tuberous pastes of <i>Acorus calamus</i> and <i>Rauvolfia serpentina</i> mixed in half cup of water is administered twice a day for 2 days.	
Bambusa arundinacea (Retz.) Roxb	Bambusaceae	Bongu veduru	Thorny bamboo	Diabetes	Tender stems are eaten as curry once a day till cure	
				Piles	Stem bark ground with roots of <i>Asparagus recemosus</i> is administered in 5 mg once a day for 3 days	
Bauhinia purpurea L	Caesalpiniaceae	Pink bauhinia	Stem bark	Asthma	Stem bark paste mixed with half cup of water is administered twice a day for 5 days.	
				Dysentery	Stem bark paste mixed with half cup of water is taken twice a day till cure	
Bauhinia vahlii Wight & Arn	Caesalpiniaceae	Addachettu	Stem bark	ropes, mats (Other uses)	fibre is used in the preparation of traditional ropes, mats and cordage	
Boehmeria flatyphylla Jacq	Urticaceae	Karagadi chettu	Stem bark	Tonsils	Stem bark paste is applied on the affected parts. Uses: Stem bark fibre is used for ropes.	
Bombax ceiba L	Bombacaceae	Boorugu	Silk cotton tree	Sprains	Stem bark paste is applied on affected parts.	
Callicarpa arborea L	Verbenaceae	Badigachettu	Stem bark	Helminthiasis	Stem bark paste along with tuber paste of <i>Rauvolfia serpentina</i> mixed with half cup of water is administered twice a day till cure	
Careya arborea Roxb	Barringtoniaceae	Kummadi	Stem bark	Jaundice Ward off evil spirits	Stem bark paste mixed with half cup of water is administered thrice a day for 2 days.	
					Stem bark is kept in the copper foil and buried in front of the house to ward off evil spirits	
Casearia elliptica	Flacourtiaceae	Girugudu	Stem bark	Muscular	Stem bark paste mixed with a cup of	

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	Willd				pain	water is administered twice a day till cure
	Celastrus paniculatus Willd	Celastraceae	Palleru thivva	Black oil tree	Burning sensation	Stem bark paste mixed with half cup of water is administered twice a day
	Cipadessa baccifera (Roth) Miq	Meliaceae	Paradonda,	Stem bark	Allergy	Stem bark paste mixed with half cup of water is administered twice a day
					Emetic	Stem bark paste is given once
					Fever	Stem bark paste along with leaf paste of <i>Cassia occidentalis</i> is administered daily twice for 3 days.
					Jaundice	Stem bark paste along with tuberous paste of <i>Mirabilis jalapa</i> mixed with half cup of water is administered twice a day for 3 days.
	Clerodendrum philippinum Schr	Verbenaceae	Phidithiki mokka	Stem bark	Jaundice	Stem bark paste along with <i>Mirabilis jalapa</i> tuber paste is administered twice a day for 2 days
	Dalbergia paniculata Roxb	Fabaceae	Chitakura chettu	Stem bark	Toothache	Stem bark paste is applied on effected teeth and brush the teeth with tender shoots once a day for 3 days.
	Dalbergia volubilis Roxb	Maredu tivva	Maredu tivva	Stem bark	Blood dysentery	paste mixed with half cup of water is administered thrice a day for 2 days
					Menorrhagia	Stem bark paste mixed with half cup of water is administered twice a day till cure.
	Dillenia indica L	Dilleniaceae	Revadachettu	Stem bark	Piles	Stem bark pounded with paddy is cooked and administered in one glassful in the morning and evening till cure.
	Diospyros sylvatica Roxb	Ebenaceae	Pilli chettu	Stem bark	Fits	: Stem bark paste mixed with half cup of water is administered on full moon day followed by half-moon and full moon days
	Euphorbia ligularia Roxb.	Euphorbiaceae	Akujemudu	Stem bark	Arthritis	Stem bark paste mixed with coconut oil is applied on affected parts till cure
					Ulcer in stomach	Stem bark paste, cooking oil and one egg is given with <i>Panicum sumatrense</i> once a day for 3 days
	Euphorbia nivulia Buch	Euphorbiaceae	Akujamudu	Stem bark	Back pain	Stem bark paste mixed with half cup of water is administered twice a day for 3 days.
	Ficus microcarpa L.f	Moraceae	Pittamarri	Stem bark	Stomach pain	Stem bark paste along with half cup of water is administered twice a day for 2 days
	Ficus racemosa L	Moraceae	Medi Chettu	Stem bark	fig Dysentery	Stem bark paste mixed with half cup of water is administered twice a day for 3 days
					Cuts and wounds	Stem bark paste is applied on the affected parts
	Ficus religiosa L	Moraceae	Ravi chettu	Stem bark	Leucorrhoea	Stem bark paste, bark pastes of <i>Pterocarpus marsupium</i> and <i>Oroxylum indicum</i> mixed with root paste of <i>Mirabilis jalapa</i> are administered with half cup of water daily twice for 2 days
	Ficus tinctoria Forst. f. subsp. parasitica (Willd.)	Moraceae	Tella barnika	Stem bark	Dysentery	Stem bark paste mixed with half cup of water is administered twice a day for 3 days
	Gardenia latifolia Ait. Rubiaceae	Rubiaceae	Korukod	Stem bark	Cuts	Stem bark paste is applied on affected parts
					Dysentery	Stem bark paste along with half cup of water is administered twice a day for 2 days
					Sorcery	Stem bark paste mixed with half cup of water is administered orally twice for one day only
	Glycosmis pentaphylla (Retz.) DC	Rutaceae	Konda gilugu	Stem bark	Leucorrhoea	Stem bark paste along with that of <i>Oroxylum indicum</i> is administered with half cup of water twice a day for 3 days.

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					Piles	Stem bark paste mixed with half cup of water is administered daily once for 3 days
	Grewia tiliaefolia Vahl	Tiliaceae	Nela syamanth	Stem bark	Cuts	Stem bark paste is applied on the affected parts
	Holarrhena pubescens (Roxb. ex Fleming) Wall	Apocynaceae	Kodicipala	Stem bark	Dysentery	Stem bark paste mixed with half cup of water is administered twice a day for 2 days
	Homalium nepalense (Wall.) Benth	Flacourtiaceae	Chedu chettu	Stem bark	Puerperal fever	Stem bark paste made into tablets of 10 gm each is administered thrice for one day only
	Kydia calycina Roxb	Malvaceae	Pothada chettu	Stem bark	Heart pain	Stem bark paste along with that of <i>Erythrina variegata</i> is ground and administered with water twice a day till cure
	Lansea coromandelica (Houtt.) Merr	Anacardiaceae	Gumpena	Stem bark	Bone fracture	Stem bark paste along with that of <i>Listea deccanensis</i> is plastered on the fractured area. The bandage is changed for every 2 days.
	Mimusops elengi L.	Sapotaceae	Pogada	Stem bark	Dysentery	Stem bark paste mixed with half cup of water is administered twice a day till cure.
	Oroxylum indicum (L.) Vent	Bignoniaceae	Pumpena	Stem bark	Easy delivery	Stem bark paste mixed with half cup of hot water is given at the time of delivery
					Jaundice	Stem bark paste and root pastes of <i>Cassia occidentalis</i> and <i>Rhinacanthus nasutus</i> are administered with curd twice a day till cure
					Leucorrhoea	Flowers and stem bark are ground and made into tablets of 50 g each and administered one tab daily twice till cure.
	Phyllanthus emblica L	Euphorbiaceae	Usiri chettu	Stem bark	Dysentery	Stem bark along with that of <i>Terminalia chebula</i> is boiled in one litre of water until it is reduced to one or three spoons of decoction. One spoon of this decoction is taken twice a day till cure
	Plumeria alba L	Apocynaceae	Lakshmi poolu	Stem bark	Anti-emetic	Stem bark paste mixed with root paste of <i>Argemone mexicana</i> is administered with half cup of water daily twice till cure
	Plumeria rubra L	Apocynaceae	Yerra champangi	Stem bark	Stomach pain	Stem bark mixed with that of neem is administered with half cup of water twice a day for 2 days
	Pongamia pinnata (L.) Pierre	Fabaceae	Ganuga	Stem bark	Contraceptive	Stem bark along with that of <i>Cipadessa baccifera</i> and a pinch of salt are ground and administered with three spoons of water thrice a day
	Pterocarpus marsupium Roxb	Fabaceae	Yegisa	Stem bark	Dysentery	Stem bark paste mixed with <i>Punica granatum</i> tender leaf paste is administered with half cup of water twice a day.
	Randia spinosa (Retz.) Poir	Rubiaceae	Mangachettu	Stem bark	Abortion	Stem bark paste mixed with half cup of water is administered only once to abort pregnancy up to 3 months
	Schefflera stellata (Gaertn.) Harms	Araliaceae	Purugodi	stem bark	Uses	If the young bride becomes lean after intercourse, she will be administered with stem bark soaked in half glass of water twice for one day only. If this is done, she will become normal.
	Sesbania grandiflora (L.) Poir		Tella sumintha	stem bark	Dysentery	Stem bark paste is administered along with half cup of hot water twice a day till cure.
	Solanum erianthum D.Don	Solanaceae	Pitta chettu	stem bark	Anti-emetic	Stem bark paste mixed with half cup of water is administered thrice a day for 2 days
	Solanum torvum Sw	Solanaceae	Kondusti	Stem bark	Fits	Stem bark ground with that of <i>Jatropha curcas</i> , roots of <i>Calotropis procera</i> , <i>Boerhavia diffusa</i> , <i>Solanum</i>

						<i>nigrum and Teprosia purpurea</i> are administered with half cup of water twice a day till cure
	<i>Sterculia urens</i> Roxb	Sterculiaceae	Kovila chettu	Stem bark	Amoebic dysentery	Gum along with stem bark paste of <i>Bombax ceiba</i> mixed with curry of ladies finger is eaten thrice a day for 2 days
	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Neredu	Stem bark	Ulcers in stomach	Ulcers in stomach: Stem bark along with that of <i>Mangifera indica</i> , <i>Terminalia alata</i> and <i>Moringa oleifera</i> are ground and mixed with half cup of water is administered twice a day for 3 days.
	<i>Terminalia alata</i> Roth	Combretaceae	Nallamaddi	Stem bark	Malaria	Twenty g of stem bark mixed with 100 ml of water is given in small doses thrice a day for 3 days
	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn	Combretaceae	Tellamadhi	Stem bark	Boils and blisters	Stem bark paste is applied all over the body and 50 mg of bark paste is given orally once a day till cure
	<i>Woodfordia fruticosa</i> (L.) Kurz	Lythraceae	Arepuvvu	Stem bark	Jaundice	Stem bark paste mixed with tuberous paste of <i>Rauwolfia serpentina</i> is administered with half cup of water twice a day for 2 days.
	<i>Wrightia tinctoria</i> (Roxb.) R. Br	Apocynaceae	Ankudu	stem bark	Headache:	Leaf and stem bark are ground and applied on the forehead. A spoonful of paste is administered orally.
	<i>Zanthoxylum armatum</i> DC	Rutaceae	Konda kasivinda	Stem bark	Scabies	Stem bark paste is applied on affected parts.

III. Results And Discussion:

The present study yielded 56 species covering 45 genera and 31 families used by the Primitive Tribal Groups of Adilabad district to cure human ailments and in their in daily use. The common ailments cure by them are abdominal pain, abortion, allergy, amoebic dysentery, anti-emetic, antidote to poison, arthritis, asthma, back pain, boils, blisters, blood dysentery, body pains, bone fracture, burning sensation, chicken pox, contraceptive, cough, cuts, diabetes, dysentery, easy delivery, fever, fits, galactagogue, headache, heart pain, heel cracks, helminthiasis, jaundice, leucorrhoea, malaria, menorrhagia, mental disorders, muscular pain, neurological weakness, phlem, piles, puerperal fever, rib muscle pain, sprains, scabies, sciatica, sorcery, stomach pain, swelling of eyes, toothache, tonsils, tumours, tuberculosis, ulcers, weakness, witchcraft, wounds, ward off evil spirits and witch craft with a total of 83 practices. *Aganosma caryophyllata*, *Diospyros melanoxylon* and *Homalium nepalense* and 70 practices were found to be new (Jain 1991 and Kirtikar and Basu 2003). Of the 31 families Apocynaceae was found to be dominant with 7 species followed by Fabaceae (6), Moraceae (5), Rutaceae and Euphorbiaceae (3 each) and others with 1-2 species. Of the 56 species of the present study, 17 were common with those reported earlier in North-east India and the families Fabaceae, Moraceae and Euphorbiaceae were dominant in both the areas (Islam, 2000). Thus, bark plays an important role in day-to-day life of the primitive tribal groups of the region in curing various ailments and for other purposes.

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