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Research article

## ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED BY TRIBALS IN NALLAMALLA FOREST AREA OF KURNOOL DISTRICT, ANDHRA PRADESH

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**ABSTRACT:** An ethnobotanical study was conducted to gather the information of medicinal plants used by tribals in Nallamalla forests of Kurnool district, Andhra Pradesh. Information was gathered from 150 people: 70 female and 80 males, using semistructured questionnaire. Of which, eight were male local healers. The informants, except the healers, were selected randomly and no appointment was made prior to the visits. Hundred medicinal plants used as a cure for 50 ailments were documented. They are distributed across 54 families and 93 genera. The most frequently utilized plant part was the leaf (44%). The largest number of remedies was used to treat gastrointestinal disorder and parasites infections followed by external injuries. The administration routes are oral, external, nasal, and ear. This probably indicates a high incidence of these types of diseases in the region, possibly due to the poor socio-economic and sanitary conditions of this people. The medicinal plants that are widely used by the local people or used as a remedy for a specific ailment have higher Fidelity Level values than those that are less popular or used to treat more than one type of ailments.

**Key words:** Ethnobotany, Medicinal plants, Nallamala Forests, Andhrapradesh

### INTRODUCTION

Nallamalla forest areas in Kurnool district has rich in forest areas different tribal inhabitants in different isolated hill pockets. Nallamalla forest of Kurnool district A.P area is one of the ecological sensitive forest places covering forest products produced by different biological sources. Kurnool, the earliest while capital of Andhra Pradesh and one of the four district of Rayalaseema region, the district situated between the Northern latitudes of 14°54' and 16°18' and eastern longitude of 76°58' and 79°34'. The Nallamalla are group of low hill range, in the part of eastern ghats of between latitude 15° 13' 16' 30' N, and longitude 78° 30' -80° 10'E, in Kurnool, Mhaboobnagar and prakasam district of Andhra Pradesh [1]. These areas mainly occupied by chenchus, yerukulas, sugalis or lambadis tribal groups. They have traditional knowledge of phytotherapy by using potential medicine from plants to cure many diseases. The tribal inhabitants from Kurnool district A.P. area used to collect different forest products based on their ethnobotanical knowledge pass from their ancient culture and ethnic practices. Many of the tribal depends for their economy mainly on forest products. These are inter-connected with their habits such as gathering of tubers, medicinal herbs [2].

### NALLAMALLA FOREST AREA IN ANDHRA PRADESH

#### Topography

The district is bounded by mahaboob Nagar District, tungabhadra river and Krishna river on the northern side, Guntur and prakasham district on the eastern side, bellary district of Karnataka on the western side and cuddapah and anantapur districts on the sourn side. It has a total geographical area of 17,658 sq.Km. It has divisions with 54 mandals as per the reorganization of the district administration.

## Soils and climate in the area

The soil of nallamalai Kurnool region is red with calcareous shale's. This region is abundant medicinal plants because of its rich soil, congenial eco climate conditions undulated topography from 90 m below to 1320 m above sea level. Soil erosion has been identified as one of the worst problems in this area.

## MATERIALS AND METHODS

Field study was conducted in the Nallamala Forest area of kurnool district, Andhra Pradesh. Ethnomedicinal information on the plant species was collected through interviewing local people. The informants were local healers, priests and Vaidhyas. Herbal cure for most of common ailments like cuts, pains, fever, headache, wounds, listers and sprains were known to all local inhabitants [3-7]. The main tribal groups in this region are Chenchu and Erukala. The specimen were identified with the help of Gamble's "Flora of presidency of Madras" and other local floras, recent, monographs using salient features. The identification was further confirmed by the comparison with that of authenticated specimens, housed at Sri Krishnadevaraya University, Anantapur, A.P. Madras Herbarium (MH, Coimbatore). The specimen were deposited in S.S.B.N.Degree and P.G college Herbarium, Anantapur, A.P.

## RESULTS AND DISCUSSION

The present work documented 100 plant species belonging to 54 families (Table 1) under 93 genera that are traditionally being used in Nallamala forest area. This information was collected from 100 people in which 70 female and 80 male who are local community people. The herbal remedies are effective against gastrointestinal disorders, fever, jaundice, stomach disorders, headache, skin disorders, tooth pain, hair growth, antidote for poisonous insects, liver complaints etc. The list of uses by medicinal plants collected were tabulated (Table.2). Among the selected species ethnomedicinally the maximum contribution was recorded for Shrubs (36%) followed by Herbs (35%), Trees (27%) and climbers (2%) (Figure 1). Among the selected species, parts used wise contribution was maximum for leaf (44%) followed by Stem (22%) Root (20%) and Seed (14%) (Figure 2). This survey showed that the local tribals are more familiar about the uses of medicinal plants available in Nallamala forest region. These tribal communities are depending on medicinal plants to heal disorders instead of modern medicine. The information is passing from one generation to the next generation within the communities. Documentation of these species which are enrich in medicinal values is required which can be further studied for human welfare.

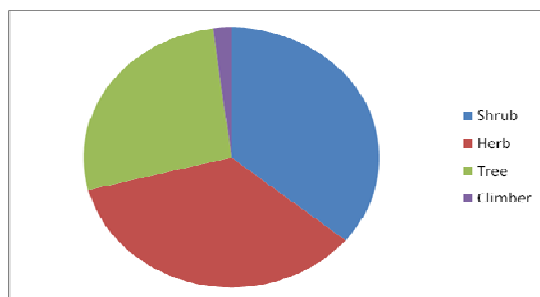


Figure 1: Habit pattern of Plant species.

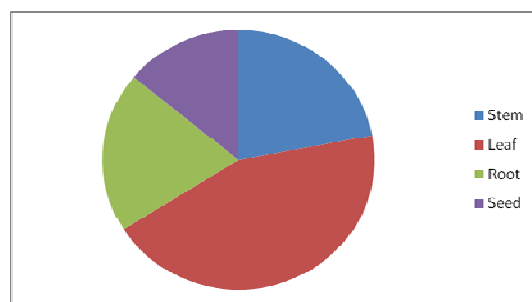


Figure 2: Plant part's used pattern of Plant species

**Table 1: Family wise analysis**

S.No	Name of the Family	Number of plants collected
1	Acanthaceae	1
2	Aizoaceae	1
3	Amaranthaceae	5
4	Anacardiaceae	1
5	Anthericaceae	1
6	Apocynaceae	3
7	Araceae	1
8	Aristolochiaceae	1
9	Asclepiadaceae	1
10	Asteraceae	6
11	Asclepiadaceae	1
12	Bombacaceae	1
13	Burseraceae	1
14	Caesalpinaceae	1
15	Capparaceae	3
16	Celastraceae	1
17	Combretaceae	1
18	Cochlospermaceae	1
19	Convolvulaceae	2
20	Combretaceae	3
21	Dilleniaceae	1
22	Dipterocarpaceae	1
23	Euphorbiaceae	5
24	Ebenaceae	2
25	Fabaceae	5
26	Hydrocharitaceae	1
27	Lamiaceae	5
28	Laminaceae	1
29	Leguminosae	2
30	Linaceae	1
31	Loranthaceae	1
32	Malvaceae	1
33	Melastomataceae	2
34	Menispermaceae	1
35	Mimosaceae	1
36	Moraceae	2
37	Nyctaginaceae	1
38	Ochnaceae	1
39	Oleaceae	3
40	Pedaliaceae	1
41	Poaceae	1
42	Plumbaginaceae	1
43	Rhamnaceae	1
44	Rubiaceae	5
45	Rutaceae	2
46	Sapindaceae	2
47	Scrophulariaceae	1
48	Solanaceae	2
49	Sterculiaceae	3
50	Tiliaceae	1
51	Typhaceae	1
52	Verbenaceae	3
53	Zingiberaceae	1
54	Zygophyllaceae	1

Table 2: Ethnomedically important species in Nallamala Forest region, Kurnool district. A.P.

Species	Family	Vernacular Name	Description	Medical importance
1. <i>Acacia caesia</i> L.	Mimosaceae	Koringa or Yerra chekkei	Woody straggling shrub	Bark is used to clean the skin because it show cleaning property against microorganisms.
2. <i>Achyranthes aspera</i> L.	Amaranthaceae	Vuthareni	An erect, diffuse herb	Leaf paste applied for tooth infections.
3. <i>Acorus Calamus</i> L.	Araceae	Vasa	Rhizomatous, aromatic creeping herb	Rhizome paste mixed with breast milk, administered orally to infants.
4. <i>Aegle Marmelos</i> Correa	Rutaceae	Bilwa Patram	Tree	Leaf juice poured into no strils to cure
5. <i>Aerva lanata</i> (L.) Schult.	Amaranthaceae	Pindikura	Erect or prostrate herb	Leaf paste or root paste used to cure head-ache.
6. <i>Alternanthera sessilis</i> (L.) DC.	Amaranthaceae	Ponnaganti aku	Prostrate branched herb	Roots ground with dry ginger ( <i>Zingiber officinale</i> ) and the paste given orally for indigestion.
7. <i>Andrographis paniculata</i> Nees	Acanthaceae	Nelanemu	An erect herb	1. Leaf or root extract filtered and administered for malarial fever. 2. Leaves ground with turmeric ( <i>curcuma longa</i> ) and applied on cuts, wounds and skin.
8. <i>Anisomeles indica</i> Kuntze	Lamiaceae	Ada beera	Erect, aromatic herb	1. Leaf juice used to cure fever one spoon daily for three days. 2. Roots or leaf powder used in amulet to evil spirits
9. <i>Anogeissus latifolia</i> (Roxb.) Bedd	Combretaceae	Velama or yelama	Deciduous tree	1. Leaves used as antidote for snake bite and scorpion sting. 2. Leaves dipped in castor oil, mildly heated and applied on boil and blisters.
10. <i>Aristolochia bracteolata</i> Lam.	Aristolochiaceae	Tella eswari or Gadida gadapa	Perennial decumbent herb	1. Leaf paste applied for toothache. 2. The leaf paste mixed with castor oil and applied to cure eczema. 3. Leaf paste applied on wound.
11. <i>Bacopa monnieri</i> (L.) Pennell	Scrophulariaceae	Neeti sambrani	Prostrate, sub-succulent herb	1. Leaf boiled in water is used for bathing epilepsy patients. 2. Leaf decoction used in improving memory
12. <i>Boerhavia erecta</i> L.	Nyctaginaceae	Atukumamidi	Annual erect herb	Roots ground with root bark of <i>pavetta indica</i> for fever and stomach pain.
13. <i>Bombax ceiba</i> L.	Bombacaceae	Burugu	A large tree	Seeds ground with fruits of <i>tribulus terrestris</i> , tubers of <i>curculigo orchioides</i> and seeds of <i>phaseolus trilobus</i> taken orally along with cow's milk to promote virility and potency.

14. <i>Boswellia ovalifoliolata</i> N.P. Balakur & A.N. Henry	Burseraceae	Anduga or 'anduva' or 'konda sambrani	A deciduous tree	1. Resin mixed with rice water and applied externally for skin trouble. 2. Decoction prepared from stem bark and turmeric ( <i>curcuma longa</i> ) is taken internally for fevers one spoon thrice a day for 15 days.
15. <i>Breynia Vitis-Idea</i> (Burm.f)	Euphorbiaceae	Punagani chettu	Shrub	Leaves used to cure rheumatism. 200gms of leaves with <i>dalbegia paniculata</i> and <i>dodonaea viscosa</i> leaves ground into joint swellings and for relief from rheumatism.
16. <i>Cadaba fruticosa</i> Druce	Capparaceae	Chagarthi	A large shrub	Leaves crushed and the filtrate administered for indigestion.
17. <i>Canavalia gladiata</i> (Savi.) DC.	Fabaceae	Adavi thamba	A large climbing shrub	Root paste given along with rice gravel for 2 to 3 days to cure enlargement of liver.
18. <i>Cardiospermum halicacabum</i> L.	Sapindaceae	Bud da kakara	A herbaceous climber	Leaf paste along with castor oil ( <i>Ricinus communis</i> ) applied on burns.
19. <i>Carissa spinarum</i> L.	Apocynaceae	Kalimi	Shrub	1. A leaf decoction given in early stages of fever. 2. Root paste applied on wounds of cattle.
20. <i>Cassia fistula</i> L.	Caesalpinaceae	Rela	Medium sized deciduous tree	Tender leaves ground with turmeric ( <i>curcuma longa</i> ) and the paste applied for skin diseases.
21. <i>Cassia senna</i> L.	Leguminosae	Nela tangedu	Under shrub	1. The leaf paste mixed with honey to treat constipation. 2. The leaf paste also applied for cuts, wounds and boils.
23. <i>Chlorophytum tuberosum</i> Baker	Anthericaceae	Sarala padaga	Herb	The fresh leaves and tuberous root are made into a paste, applied on poisonous sting of scorpions.
24. <i>Chloroxylon swietenia</i> DC.	Rutaceae	Billudu	A moderate-sized deciduous tree	Gum extracted from the stem, it dissolved in water and taken orally for urinary disorders.
25. <i>Cissampelos pareira</i> L.	Menispermaceae	Adavibanka teega	shrub	Tuber extract mixed with a pinch of salt for chest and stomach pains.
26. <i>Cleistanthus collinus</i> Benth. & Hook.f.	Euphorbiaceae	wodisi aaku	A small, deciduous tree	1. Stem bark or fruits crushed in goats milk and the extract taken orally for committing suicide. 2. Bark and fruits crushed and used as fish poison.
27. <i>Cleome viscosa</i> L.	Capparaceae	Kukka vamminta	Erect viscous herb	1. Leaf paste mixed with a pinch of fresh lime is applied on the wounds. 2. Pounded leaves bandaged to the head for head ache. 3. Leaf juice applied for tooth-ache.
28. <i>Cleome gynandra</i> L.	Capparaceae	Vaminta	Tall, pubescent, erect herb	1. Leaves used as curry for expel the worms. 2. Leaf juice instilled in the ear for ear-ache.

29. <i>Clerodendrum serratum</i> Moon.	Lamiaceae	Barangi	A shrub	Two to three spoons roots decoction mixed with black pepper and salt is given for asthma and bronchitis.
30. <i>Clitoria ternatea</i> L.	Fabaceae	Sanku pushpamu	Large woody climber	1. Seed powder mixed with pepper(piper nigrum) given for constipation. 2. Root juice for poultice for swollen joints.
31. <i>Cochlospermum religiosum</i> (L.) Alston	Cochlospermaceae	Konda gogu or yerra pliki	Deciduous tree	Stem bark paste plastered over for bone fracture.
32. <i>Crotalaria laburnifolia</i> L.	Fabaceae	Pedda giliciccha	Erect shrub	1. Seed paste or leaf paste used for scorpion sting. 2. Leaves infusion used as gargle.
33. <i>Decalepis hamiltonii</i> Wight & Arn	Asclepiadaceae	Maredu gadda	A glabrous, twining shrub	Roots is pickled and used along with food for constipation.
34. <i>Dendrophthoe falcata</i> Blume.	Loranthaceae	Kukka naluka badanika	A large, semi parasitic shrub	The bark used for wounds and menstrual roubles.
35. <i>Dillenia indica</i> L.	Dilleniaceae	pedda kalinga	Tree	Fruit juice used a hair wash.
36. <i>Diospyros ebenum</i> Koen.	Ebenaceae	Ullinda chettu	Tree	Fruit paste applied on wounds and ulcers.
37. <i>Diospyros melanoxylon</i> Willd.	Ebenaceae	Tumikaku or beedi aku	Tree	Unripened fruit paste plastered over for bone fracture.
38. <i>Dodonaea viscosa</i> Jacq.	Sapindaceae	Bandaru	A gregarious shrub	1. Leaf extract applied on the wound . 2. Stem bark decoction given orally for muscle pain.
39. <i>Eclipta prostrata</i> L.	Asteraceae	Gunta galijeru	An erect or prostrate herb	1. Leaf juice boiled and mixed with coconut oil, filtered and as hair tonic. 2. Leaves founded along with seeds of phyllanthus emblica, sesamum oil boiled and given to pregnant ladies in head ache.
40. <i>Erythrina variegata</i> L.	Fabaceae	Baditha	A moderate sized tree	Leaves by applying castor oil(ricinus communis) bandaged on the affected part for joint pains.
41. <i>Euphorbia hirta</i> L.	Euphorbiaceae	Pachabottu	A prostrate or erect, hirsute shrub	1. Tender leaf extract mixed with sugar administered for dysentery by yanadi tribes 2-3 sponfuls thrice a day. 2. Latex applied on cuts.
42. <i>Ficus benghalensis</i> L.	Moraceae	Mamri chettu	A large tree	Latex applied on boils and blisters.
43. <i>Ficus microcarpa</i> L.f	Moraceae	Yerra juvvi	A moderate sized tree	Root bark paste applied on wounds.
44. <i>Gardenia gummiifera</i> L.f.	Rubiaceae	Bikki	A small tree	Stem bark used in gastri trouble with turmeric power (curcuma longa) 2 spoonfuls twice a day for 3 days.
45. <i>Globba bulbifera</i> Roxb.	Zingiberaceae	Adavi Kasthuri or Adavi pasupu	An erect herb	1. The tuber paste applied on head for cooling effect. 2. Flowers juice poured into eyes for eye sores.
46. <i>Gmelina asiatica</i> L.	Verbenaceae	Adavi gummadi	A shrub	Fruit paste applied on head to remove dandruff and also on wounds.
47. <i>Gomphrena decumbens</i> Jacq.	Amaranthaceae	Pagada banthi	An erect herb	Root decoction used in the treatment of cough.
48. <i>Grewia hirsuta</i> wall.	Tiliaceae	Jubilika	An undershrub	Root bark extract administered for dysentery 2 spoonfuls twice a day.

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49. <i>Helicteres isora L.</i>	Sterculiaceae	gooba thada	A large shrub	Leaf paste used as hair wash.
50. <i>Holarrhena antidysenterica (L.) Wall</i>	Apocynaceae	Kolamukidi	A large shrub	1.The bark used for the treatment of amoebic dysentery and diarrhea. 2.Leaves used for chronic bronchitis .
51. <i>Hugonia mystax L.</i>	Linaceae	Kakibeera	A climbing shrub	1.Root bark an antidote for snake bite. 2. The root paste applied to inflammatory swellings.
52. <i>Imperata cylindrica (L.) P.Beauv.</i>	Poaceae	Dharba gaddi or sarva siddhi	Perennial slender erect herb	Roots used to cure piles.
53. <i>Ixora Pavetta Andrews</i>	Rubiaceae	Korivi Pala	A small tree	1.Root juice relieves abdominal pains. 2.Flowers used for the treatment of leucorrhoea and bronchitis.
54. <i>Jasminum sambac (Soland)</i>	Oleaceae	B ondumalle	Erect or scandent shrub	1.Leaf paste used for wounds and herbs. 2. The leaf juice mixed with honey put in ear to cure pus in the ear.
55. <i>Jatropha curcas L.</i>	Euphorbiaceae	Nepalam	A monoecious shrub	Latex applied on burns.
56. <i>Jatropha Gossypifolia L.</i>	Euphorbiaceae	Chinna nepalam	A shrub	1. The latex applied on boils and bums and also for tooth ache. 2. Two to three drops of latex instilled in the ear for earache.
57. <i>Lantana Camara L.</i>	Verbenaceae	Akshunthalapulu	A armed shrub	Leaf juice squeezed into the eyes to treat eye disease and externally to treat cuts and skin diseases.
58. <i>Leptadenia reticulata (Petz.) Wight&amp;Am.</i>	Asclepiadaceae	Mukkuthummudutiga	Diffuse straggling shrub	1.Latex inhaled for cold. 2.Leaf past applied for skin diseases.
59. <i>Leucas aspera Link</i>	Lamiaceae	Tummi	Annual erect, scarbrid herbs	Leaf juice put into the nose and ears for headache and also skin irritation.
60. <i>Linociera ramiflora (Roxb.) DC.</i>	Oleaceae	Nakinee	Densely foliaceous tree	The dried inflorescence burnt and inhaled for asthma.
61. <i>Linociera zeylanica Gamble</i>	Oleaceae	Punagani chettu	Tree	Root paste used as general medicine for menstrual problems. It is used as emmenagogue.
62. <i>Melastoma malabathricum L</i>	Melastomataceae	Neeti dhanimma	A small bushy shrub	Leaf paste applied for cuts and wounds.
63. <i>Memecylon umbellatum Burm.f.</i>	Melastomataceae	Alli chettu'	A small tree	Root bark extract administered for leuchorrhoea.
64. <i>Merremia tridentata (L.) Hallier f</i>	Convolvulaceae	Muni jada	Prostate or shortly twinning glabrous herb	1. Entire plant paste used externally in bone fracture for bone setting. 2. Plant powder taken in internally to cure piles.
65. <i>Mitragyna parvifolia Korth.</i>	Rubiaceae	Battaganapa	A large deciduous tree	Stem bark extract mixed with jiggery given orally for dysentery.
66. <i>Morinda pubescens Sm.</i>	Rubiaceae	Togaru	A moderate-sized tree	A decoction of roots and leaves useful for the treatment of diarrhea and dysentery.
67. <i>Mundulea sericea (Wild.) A.Chev.</i>	Leguminosae	Tella billudu	A large shrub	Crushed leaves used as fish poison.
68. <i>Ochma Obtusata DC.</i>	Ochnaceae	Erra udhi	Tree	Stem bark juice (about 10ml) taken iteranly as an antidote for snake bite; the bark paste mixed with lime applied on the affected area and slightly warmed to remove the poison.

69. <i>Ocimum Basilicum L.</i>	Lamiaceae	Bhootulasi	Large herb	1. Two to three drops of leaf juice is instilled in the ear for ear ache. 2. Leaf paste applied in eucorchoea.
70. <i>Ottelia alismoides (L.) Pers.</i>	Hydrocharitaceae	Edukula tamara	Aquatic herb	Leaf paste applied as poultice on arms and legs in fever.
71. <i>Pavonia zeylanica (L.) Cav.</i>	Malvaceae	Karubenda	Under shrub	Leaf juice used as vermifuge and purgative.
72. <i>Pedaliium murex L.</i>	Pedaliaceae	pedda pellaru	Annual fleshy much branched spreading herb	Seeds powder given with milk to cure for joint pains
73. <i>Phyla nodiflora (L.) Greene</i>	Verbenaceae	Bookinaaku	Prostrate herb	Leaf juice mixed with goats milk is given to prevent blood in the urine and dissolve the stones in the ureters.
74. <i>Physalis minima L.</i>	Solanaceae	Budabusara	An erect, annual herb	Leaf extract mixed with buffalo curd or sheep milk taken daily two times to cure jaundice.
75. <i>Plectranthus amboinicus (Lour.) Spreng.</i>	Lamiaceae	Kapparillaku	An aromatic, succulent vilous herb	Leaf juice mixed with honey given for asthma and cough.
76. <i>Plumbago zeylanica L.</i>	Plumbaginaceae	Thella chitramulam	An under shrub	Leaf paste mildly heated and massaged in chest pain, muscle pain and also applied on wounds.
77. <i>Pulicaria wightiana C.B. Clarke</i>	Asteraceae	Adavi gobbi	Annual erect, hairy or glabrescent herb	Bruised leaves applied to head to relieve head-ache
78. <i>Rivea hypocrateriformis Choisy</i>	Convolvulaceae	Boddi teega	Large twinning shrub	Root paste given after child birth in labor pain.
79. <i>Semecarpus anacardium L.f.</i>	Anacardiaceae	Nall jeedi or konda jeedi	A moderate sized tree	Seed oil with catror oil (recinus communis.)
80. <i>Senecio tenuifolius DC.</i>	Asteraceae	Katimera chamanthi	Annual erect, glabrous herb	Leaves emollient and vulnerary.
81. <i>Shorea tumbuggaia Roxb.</i>	Dipterocarpaceae	Thamba jalari	Deciduos tree	Resin used as anti-microbial agent. It is used in magico-religious to drive.
82. <i>Solanum anguvi Hook</i>	Solanaceae	Chitti muluga	Prickly armed under shrub	Tender fruits cooked as vegetable and eaten for cough and also to kill intestinal worms.
83. <i>Spermacoea articularis L.f</i>	Rubiaceae	Madana kattu or Nela sada kura	An erect, diffuse herb	Root paste applied on tooth to eradicate infection.
84. <i>Sterculia urens Roxb</i>	Sterculiaceae	Erra pliki	An erect diffuse herb	Gum dissolved in water given orally for cooling the body .and also to cure dysentery.
85. <i>Synedrella nodiflora Gaertn.</i>	Asteraceae	Tella tammi	Herb	1. Juice of the leaves used for ear-ache. 2. The leaves used as poultice for sore legs.
86. <i>Tephrosia purpurea (L.) Pers.</i>	Fabaceae	Venpalaku	An erect under shrub	1. Roots extract mixed with a pinch of salt for stomach pain 2. Leaf paste applied on head for haed ache and cooling.
87. <i>Terminalia arjuna (Roxb. ex DC.) Wight &amp; Arn.</i>	Combretaceae	Thellamaddi	A large deciduous tree	Juice of the fresh leaves used as ear drop.
88. <i>Terminalia bellirica (Gaertn.) roxb.</i>	Combretaceae	Thandra	Large deciduous tree	Gum dissolved in water taken orally for urinary disorder.



89. <i>Terminalia chebula</i> Willd. exFlem	Combretaceae	Nalla karaka	Tree	The fruit paste is mixed with breast and administered to infants cough.
90. <i>Tragia involucrata</i> L.	Euphobiaceae	Teega galizeri	Climbing or trailing herb	Root paste mixed with gingely oil (sesamum indicum) to applied for blisters and skin diseases.
91. <i>Trianthema portulacastrum</i> L.	Aizoaceae	Erra galizeru	Annual prostrate or ascending diffuse glabrous herbs	The leaf juice dropped onto the nostrils to relieve partial headache.
92. <i>Tribulus terrestris</i> L.	Zygophyllaceae	Palleru	A prostrate procumbent herb	1. Plant decoction mixed with a pinch of cumin powder (cuminum cyminum) given for stomach pain.
93. <i>Trichurus monsoniae</i> (L.f) C. C. Towns	Amaranthaceae	Erra pindi	Pro state herb	1. Plant power used in whooping cough. 2. Seed poder used as an antidote for snake bite also in hydrophobia
94. <i>Tridax procumbens</i> L.	Asteraceae	Gayapaku or gaddichamanthi	Procumbent herb	1. Leaf paste topically applied on cuts and wounds as an antiseptic. 2. Leaf juice dropped into the eyes for treatment of inflammation.
95. <i>Typha angustata</i> Bory & Chaub	Typhaceae	Jambu	An aquatic or rhizomatic herb	The rhizome sliced and mixed with butter milk and taken early morning for cooling (for 7 days).
96. <i>Vernonia cinerea</i> L. Less	Asteraceae	Saha devi	Annual erect herb	1. Fresh leaf juice used against eczema and ringworm. 2. Whole plant extract given against urinary infection and abdominal pain.
97. <i>Vitex negundo</i> L.	Laminaceae	Nalla wavili	A large shrub	Tender leaves boiled long with the leaves of alangumsalvifolium (vuduga), dendrocalamus stnicus (veduru), azadirachta indica (vepa), tylophora indica and a pinch of turmeric powder in powder in water, bathed for relief from body pains of delivered ladies and rheumatic pains.
98. <i>Wattakaka volubilis</i> Stapf.	Apocynaceae	Doodi-pala	Woody, hairy pubescent straggling shrub	Leaf paste applied for boils and abscesses.
99. <i>Waltheria indica</i> L.	Sterculiaceae	Uttareni aku or nalla benda	A perennial, under shrub	1. Root powder given to get relief from pain of inflammations (dose is approximate). 2. Plant powder used for drying and healing of wounds.
100. <i>Ziziphus oenoplia</i> (L.) Mill.	Rhamnaceae	Panki	A large scandent, prickly shrub	Dried stem bark powder applied on cuts.

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