Explorer Research Article
CODEN (USA): IJPLCP

[Murthy, 3(10): Oct., 2012]
ISSN: 0976-7126

INTERNATIONAL JOURNAL OF PHARMACY & LIFE SCIENCES

Ethno medicinal plants used by gonds of Adilabad district, Andhra Pradesh, India

E.N. Murthy
Department of Plant Sciences, School of Life Sciences, University of Hyderabad, Hyderabad, (A.P.) - India

Abstract

Adilabad district of Andhra Pradesh is known for gond tribe. The Gonds are divided into six sub-tribes, *Raj Gond*, *Pardhan*, *Toti*, *Dadve*, *Gowari, Kolam,* all are being endogamous. Gonds are very dominant in the district. Frequent field trips were conducted in Gond rich areas to collect the Traditional Botanical Knowledge and Ethno-medicinal plants used by the Gonds. Because of modernization, all the ethno-botanical knowledge is declining day by day, so there is an urgent need to document the knowledge of ethnic people. Here 96 plants of ethno- medicinal value were recorded from Adilabad district of Andhra Pradesh, India.

Key-Words: Indigenous Traditional Knowledge, Ethnobotany, Gonds, Adilabad, Andhra Pradesh

Introduction

Tribal people have traditional knowledge of plant species used for different purposes such as food, beverages, colours, resins, gums and medicine. This knowledge was even passed through generation to generation and played an important role in the conservation and sustainable use of biodiversity. They also have knowledge about in situ conservation of numerous plant resources in the form of sacred groves. Plant-based traditional medical systems continue to provide the primary health care to more than three-quarters of the world's populace. The World Health Organization has estimated that over 80% of the global populations rely chiefly on traditional medicine (Akerele, 1992). Indigenous herbal treatment is a part of the culture and dominant mode of therapy in most of the developing countries. These traditional phyto-remedies with a considerable extent of effectiveness are socially and economically accepted. Still, one-third of the modern pharmaceutical preparations have botanical origin. International trade on medicinal plants is therefore increasing rapidly mainly as a result of intensified adoption of crude extracts for self-medication by the general public in the developed countries.

It was officially recognized that 2500 plant species have medicinal value while over 6000 plants are estimated to be explored in traditional, folk and herbal medicine (Huxley, 1984).

*** Corresponding Author**
E.mail: murthyen@yahoo.co.in

The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources receives more and more recognition (Posey, 1992). Moreover, an increased emphasis is being placed on possible economic benefits especially of the medicinal use of tropical forest products (non woody forest produce) instead of pure timber harvesting (Pimbert *et al*. 1995). In many developing countries a large part of the population especially in rural and forest areas depends mainly on traditional medicines for their primary health care. Traditional knowledge on medicine since the time of Great sage '*Charaka*' has led to the discovery of many important drugs of modern age (Uniyal *et al*. 1995). Today about 65% of the Indian population depends on the traditional system of medicine (Timmermans 2003). Before the extinction of ethno-medicine from the tribal community, it is necessary to document and understand the culture-specific medical heritage. Keeping in view of this the present study is focused on ethnomedicinal plants used by Gond tribes of Adilabad district, Andhra Pradesh, India.

Study Area

India has the largest concentration of tribal population in the world. Andhra Pradesh is a tribal populated state with 33 tribes. Adilabad district is one among the tribal rich districts of Andhra Pradesh. It is located between longitudes 77^0 46' to 80^0 00' E and latitudes 18^0 40' to19^0 56' N. The district is bounded on the north by Yeotmal and Chandrapur districts and on the west by Nanded district of Maharastra on the south by

Karimnagar and Nizamabad districts of Andhra Pradesh (Fig 1). The district has 52 *mandals* which are grouped into five revenue divisions, *viz.* Adilabad, Utnur, Nirmal, Mancherial and Asifabad. The most important river that drains in the district is Godavari with its tributaries Penganga, Wardha, Pranahita, Kadem and Pedavagu. The district occupies fifth position with the extent of an area, i.e. 16,203.8 sq km which accounts for 5.9% of total geographic area of Andhra Pradesh (Anoymous, 1975). It is the second largest district in Telangana region. Besides, it is the least-populated district in the State. In forest cover Adilabad ranks second in the State. Forests occupy 6,066 km^2 which is 37.61% of the total geographical area of the district (Anonymous, 2011). It is more than 33% of the desirable minimum in the National Forest Policy of 1952. Teak is the principal timber extract besides other available non woody forest produce from these southern tropical dry deciduous forests (Champion & Seth, 1968).

Gond Tribe

Gonds are one of the numerically predominant tribal groups in Andhra Pradesh (Fig 2). They call themselves as *Koitur* in their own dialect. The Gonds were ruling class before the invasion of *Moghals* and emergence of Maratha rulers. The ruined forts belonging to Gond chiefs are found at Utnoor and Sirpur of Adilabad district (Prasad, 2008). Gonds constitute the great mass of aboriginals who occupy comparatively large tracts as a compact population. But the large scale immigration of people like *Banjaras* from outside the state into the district brought changes in the social and economic status among the aboriginals. Gonds live in hamlets. They settle usually at the foot of the highest ridges, cultivate the valleys, gentle slopes and plateau. The Gonds are divided into six sub-tribes, *viz.* 1. *Raj Gond*, 2. *Pardhan*, 3. *Toti*, 4. *Dadve*, 5. *Gowari,* and 6. *Kolam*, all are being endogamous. An Austrian Anthropologist Füer-Haimendorf (1979) explained the customs and traditions of Gonds (Haimendorfe, 1979). They were shifting cultivators in the past but they have become almost settled cultivators. *Kolams* are organized in exogamous clans corresponding to the Gond system. They speak Kolami language. Kolam settlements are situated amidst flat fields on sites where two or three groups gathered from the surrounding hills. Resembling the *Kolams* in many respects are the *Naikpods*. Most of the Telugu-speaking *Naikpods* are found in villages of the plains. In their social customs, the ceremonies at birth, marriage and death, the *Naikpods* conform largely to the usage and ritual of the Hindu castes. The *Pardhans* in Adilabad are the hereditary bards of the Gonds. They play a vital role in Gond culture. The language spoken by Pardhans in their homes is Marathi, but they are equally familiar with *Gondi*. The important possession of a Pardhan is *Kingri* (Three-stringed fiddle). The Pardhans follow practically the Gond pattern in every detail. *Toti* the bards are not very numerous. They play on *Kingri* and blow trumpets on ceremonial occasions. They observe the social customs of *Gonds.* Many Toti women are experts in tattooing. Hemadri *etal* worked on tribal-knowledge by covering some parts of the district (Hemadri & Rao, 1989; Hemadri et al. 1987; Hemadri, 1990; Hemadri, 1992). Ravishankar (1990) did his Ph.D on Ethnobotanical Studies in Adilabad and Karimnagar Districts. Murthy *et al* reported the piscicidal plants used by Gonds of Adilabad district (Murthy *et al*. 2010). Available studies on ethnomedicine of the gonds are very few (Ravishankar & Henry, 1992; Ramarao & Henry 1996; Reddy et al 2003; Murthy et al 2011). The forests of Adilabad district have great potentiality both from the tribal and botanical points of view. There is an urgent need to inventorise and record the available ethno botanical information known to the diverse ethnic communities before the traditional cultures are completely lost. Hence, an attempt was made to document the ethno botanical knowledge of the Gond tribe inhabiting in the remote areas of the Adilabad district of Andhra Pradesh, India.

Methodology

Ethnobotanical survey was conducted by repeated interviews and conversations with aged ethnic people, local herbal healers, shepherds, tribal headmen, owners of cattle herds, etc. in different seasons for two consecutive years. Several field trips were conducted between the years 2008 to 2010 in the district to record the ethno botanical knowledge of the Gonds. The data were collected through questionnaires, discussions among the tribal people. The information on useful plant species, parts used, local names and mode of utilization was collected. The data collected were further verified and cross-checked in different tribal *Gudems* (Hamlets). Plants used in their daily needs were also collected. Plants used in their traditional medicinal uses were identified with the help of regional floras (Gamble & Fischer, 1935; Pullaiah *et al*. 1992). The plant voucher specimens were pressed and deposited in the Herbarium of Botany Department (KUH), Kakatiya University, Warangal, Andhra Pradesh, India. The sorted information on ethno botanical knowledge of tribal inhabitants is tabulated alphabetically by botanical names of plants, name of the family, vernacular names in Telugu, habit, parts

used and uses that includes medicinal or any other purpose (Table 1).

Results and Discussion

A total number of 96 plants belonging to 53 families were recorded (Table 1). Fabaceae has the highest number of species (9 species) followed by Mimosaceae (8 species), Euphorbiaceae (6 species), Acanthaceae, Asclepiadeaceae, Caesalpiniaceae, Combretaceae, Menispermaceae, Verbenaceae and Vitaceae (3species each) Aristolochiaceae, Asteraceae, Loganiaceae, Malvaceae, Moraceae, Rhamnaceae, Rutaceae, Sterculiaceae and Zingiberaceae (2 species each) and rest of the families contain one species each. Among the total plant species, trees are highest in number (41) followed by herbs (30), climbers (19) and shrubs (6). Use of the plant parts ranged from stem bark (21), leaves (17), whole plant (12), roots (9), seeds (8), and tubers (7), Fruits (7), Rhizome (4) and Gum (2). With regard to the frequency of plant parts used in preparations, stem bark was most often used followed by roots, leaves, whole plant, roots, seeds and tubers etc. The majority of the medicinal plants are used singly in the manufacture of preparations rather than in particular combinations.

Leaf paste of *Bauhinia vahlii* applied and tied with bandage for arthritis. Decoction of shoots of *Butea superba* used in piles. Seeds sedative and antihelmintic. Besides, medicinal their leaves are used for making meals plates. Entire plant of *Hygrophylla auriculata* is used to cure leucorrhoea. Bark of *Litsea glutinosa i*s useful in bone fractures. Entire plant *Cissus quadringularisis* crushed and bind to broken limbs. Gonds use root paste of *Plumago zeylanica* to remove the piles. It is interesting that the bark of *Acacia arabica* is crushed and juice is applied on Russels' viper bite. Gonds also apply root paste of climber *Aristolochia indica* on snake bite. It acts as antivenom. Root paste of *Pergularia daemia* is also applied on snake bite. Leaf decoction of *Adhatoda vasica* is administered to heal respiratory problems like asthma, bronchitis and even tuberculosis. Bark of *Aegle marmelos* is powdered, taken with water to control dysentery. Whole plant of *Andrographis paniculata* is powdered, administered in the form of tablets in all general fevers. Whole plant powder of *Cocculus hirsutus* is used in fevers and stems used to make mouth baskets for cattle. Bark powder of *Strychnos nux-vomica* is administered in the form of tablets to control hypertension. Gonds use seeds of *Strychnos potatorum* to cure various ailments like kidney problems. Whole plant of *Vernonia cinerea* is powdered and administered in tablet-form to cure menstrual problems of women. Root powder of *Convolvulus sepiaria* is administered with water to cure infertility problems in women. Rhizome paste of *Zingiber roseum* is applied on skin diseases. Root of *Achyranthus aspera* is tagged to the waist of a pregnant woman for normal delivery. A whole plant of *Aristolochia bracteolata* is grinded and powder is administered with honey menstrual pains. Root tubers of *Curculigo orchioides* and roots of *Asparagus racemosus*, entire plant powder of *Hybanthus enneaspermus* and bulbs of *Crinum asiaticum* are used as aphrodisiacs. Seed paste of *Abrus precatorius* is applied to reduce hair fall and improve hair growth; seed powder is used as natural contraceptive and for temporary breakdown of menstrual cycle. Stem bark of *Anogeissus latifolia* is chewed to control stomachache. Stem bark of *Bombax ceiba* is crushed and juice administered in dysentery. *Toddy* (sap) of *Caryota urens* is used to cure urinary problems.

Root juice of *Asparagus racemosus* is mixed with honey used for dyspepsia. Root powder is taken with milk as aphrodisiac, galactogogue and nervic tonic. Fruit pulp of *Cassia fistula* with pepper, garlic, tamarind and common salt are crushed and made it as a juice and taken orally as a general tonic and the crushed bark of *Cassia fistula* is applied on scorpion bite. Stem bark of *Dalbergia paniculata* paste with neem oil used as an external application on the head to improve hair growth. Root and bark powder-paste of *Dichrostachys cineraria* is applied on joint pains. Roots of *Hemidesmus indicus* are boiled in water or milt and administered as a general tonic. Steam bark-powder of *Lagerstromia parviflora* is administered in the form of tablets to cure Leucorrhoea. Gum tablets from *Buchanania lanzan* for the treatment of chest pain. Seed powder *Nelumbo nucifera* is taken with honey for forty days in infertility. Entire plant powder of *Phyllanthus amarus* along with pepper powder is administered for Jaundice. Leaf paste of *Ziziphus xylopyrus* with turmeric used as an external application for skin eruptions. It is noted that the Gonds use most of the medicinal plants to cure their day to day health problems like diarrhea, dyspepsia, general fevers, skin diseases, impotency, menstrual problems, joint pains, wounds, snake and scorpion bites etc.

Conclusion

Due to constant association with the forest environment, they have evolved knowledge by trial and error and have developed their own way of diagnosis and treatment for different ailments. The ethnic drug formulations need clinical tests to prove their efficacy and also to develop new herbal drugs for the effective treatment. This data provides basic source for further studies aimed at conservation, cultivation,

improvement of ethnic traditional medicine and economic welfare of rural and tribal population of the region. The traditional botanical knowledge will provide secure livelihood to the native tribes that minimize the resource depletion, environmental degradation, cultural disruption and social instability. The medico-botanical survey of the area revealed that the people of the area possessing good knowledge of herbal drugs but as the people are in progressive exposure to modernization, their knowledge of traditional uses of plants may be lost in due course. So it is important to study and record the uses of plants by different tribes and sub-tribes for futures study. Such studies may also provide some information to biochemists and pharmacologists in screening of individual species and in rapid assessing of phyto-constituents for the treatment of various diseases.

Acknowledgement

We thank the Gond tribal people who shared their traditional botanical knowledge with the authors. EN Murthy is thankful to Prof. MNV. Prasad for his valuable guidance and UGC, New Delhi for financial support in the form of Dr DS Kothari Post Doctoral Fellowship.

References

1. Akerele O, WHO guideline for assessment of herbal medicines. *Fitoterapia* 63(1992) 99-118.
2. Huxley A, *Green Inheritance*: *The World Wildlife Fund Book of India*, (Collins/Harvel, London) (1984).
3. Posey, D, *Traditional knowledge, conservation and "The Rain Forest Harvest". In: Sustainable Harvest and Marketing of Rain Forest Products*, (Plotkin, M. & L. Famolare, (Eds.), Island Press, Washington DC) (1992) 46-50.
4. Pimbert M & Parks PJ, *People and Professionals: Putting "Participation" into Protected Area Management.* UNRISD Discussion Paper 57, Geneva, (1995).
5. Uniyal SK, Avasthi A & Rawad GS, Tradtional and ethnobotanical uses of plants in Bhagirathi valley, western Himalayas, *Indian J. Traditional Knowledge*, 1(1) (2002) 7-19.
6. Timmermans K, *Intellelctual property rights and traditional medicine: policy dilemma at the interface,* World Health Organization, Jakarta, 2003
7. Anonymous, Gazetteer of Adilabad District, Government of Andhra Pradesh, (Government Press, Hyderabad) (1975).
8. Anonymous, *India State of Forest Report,* (Forest Survey of India) (2011) 93-94.
9. Champion HG & Seth SK, *A revised survey of the forest types of India*, (Government. of India Press, Delhi) (1968).
10. Prasad OSVD, *Glimpses into the tribal lives of Andhra Pradesh*, (Emesco, Vijayawada) (2008) 31-37.
11. Haimendorfe CVF, *The Gonds of Andhra Pradesh* (Vikas, New Delhi) 1979.
12. Hemadri K & Rao SS, Folk medicine of Bastar. *Ethnobotany*, 1(1-2) (1989) 61-66.
13. Hemadri K, Sarma CR & Sasibusan RS, Medicinal plant wealth of Andhra Pradesh,Part I *Anci. Sci. Life* 6 (1987) 167-186.
14. Hemadri K, Contribution to the medicinal flora of Karimnagar and Warangal districts, Andhra Pradesh. *Indian Med,* 2 (1990)16-28.
15. Hemadri K, Tribals of Andhra Pradesh-their knowledge in nutritional & medicinal herbs. *Indian Med,* 4 (3) (1992) 1-6.
16. Ravishankar T, *Ethnobotanical studies in Adilabad and Karimnagar districts of Andhra Pradesh, India*, (Ph.D. thesis, Bharathiar University, Coimbatore), 1990.
17. Murthy EN, Pattanaik C, Reddy CS & Raju VS, Piscicidal plants used by Gond tribes of Kawal Wildlife Sanctuary, Andhra Pradesh, India. *Indian J. Nat. Products and Resources,* 1(1) (2010) 97-101.
18. Ravishankar T & AN Henry, Ethnobotany of Adilabad district, Andhra Pradesh, India, *Ethnobotany,* 4 (1992) 45-52.
19. Ramarao N & AN Henry, *The Ethnobotany of Eastern Ghats in Andhra Pradesh, India*, (Botanical Survey of India, Kolkata), 1996.
20. Reddy CS, Nagesh K, Reddy KN, & Raju VS, Plants used in Ethnoveterinary practice by Gonds of Karimnagar district, Andhra Pradesh. *J. Econ. Taxon. Bot.* (27) (2003) 631-634.
21. Murthy EN, Pattanaik C, Reddy CS, & Raju VS, Traditional Knowledge of Ethnic tribes in Pranahita wildlife sanctuary, Andhra Pradesh. *Biodiversity and Sustainable Livelihood.* (Vedams Publications), (2010) 35-44.
22. Gamble JS & Fischer CEC, *Flora of the Presidency of Madras*, (London. rep. ed. 1957: BSI, Calcutta). (1935).
23. Pullaiah T, Prasanna, PV & Obulesu G, *Flora of Adilabad district,* (C.B.S Publishers, New Delhi) 1992.

[Murthy, 3(10): Oct., 2012]
ISSN: 0976-7126

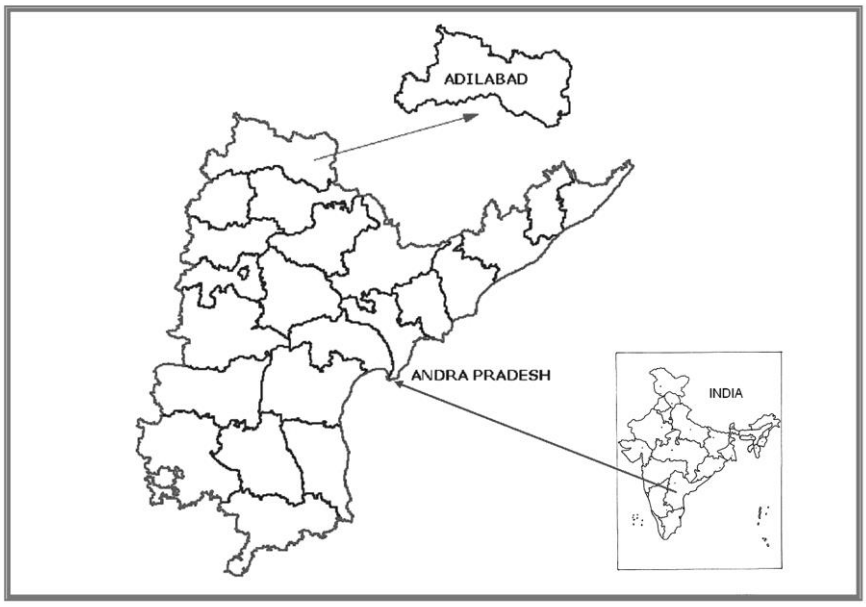

Fig. 1: Location map of the study area

Fig. 2: Typical Gond family

Table 1: Ethno medicinal plants used by *Gonds* of Adilabad district, Andhra Pradesh, India

Botanical Name	Family	Vernacular name	Habit	Parts used	Mode of Administration
Abrus precatorius L.	Fabaceae	Gurivinda	Climber	Seeds	Seed paste is applied to reduce hair fall and improve hair growth; seed powder is used as natural contraceptive.
Acacia arabica (Lam.)Willd.	Mimosaceae	Nalla thumma	Tree	Stem bark	Bark is crushed and juice is applied on Russels' viper bite. It acts as anecdote
Acacia caesia (L.) Willd.	Mimosaceae		Climber	Leaves	Leaf paste used as an external application to heal wounds
Acacia concinna Willd. DC.	Mimosaceae	Shikka	Climber	Pods	decoction of pods purgative, relieves biliousness
Acacia farnesiana (L.) Willd.	Mimosaceae	Muriki thumma	Tree	Stem bark	Stem bark crushed and applied on dog bite
Acacia pennata (L.) Willd.	Mimosaceae		Climber	Leaves	Decoction of leaves used as a febrifuge
Acalypha indica L.	Euphorbiaceae	Muri pinidi	Herb	Whole plant	Whole plant is shade dried, powered and taken in the form of tablets with honey as a general tonic
Achyranthus aspera L.	Amaranthaceae	Uttareni	Herb	Roots	Root is tagged to the waist of a pregnant woman for normal delivery
Adhatoda vasica Nees.	Acanthaceae	Addasaramu	Shrub	Leaves	Leaves are boiled; decoction is taken in treatment for tuberculosis
Aegle marmelos (L.) Corr.	Rutaceae	Maredu	Tree	Stem bark	Bark powder is used in dysentery and diarrhea
Alangium salvifolium (L.f.) Wang.	Alangiaceae	Ooduga	Tree	Seeds	Seeds powder is used in removing poison from the body
Albizia odoratissima (L.f.) Benth.	Mimosaceae	Chindi elugu chettu	Tree	Stem bark	Bark powder is applied on insect bites, used in leprosy, skin disease, cough and diabetes
Aloe vera Burm.f.	Agavaceae	Kitta nara	Herb	Leaves	Succulent leaf paste is applied in skin diseases
Ampelocissus latifolia (Roxb.)Planch.	Vitaceae	Adavi draksha	Climber	Leaves	Leaf juice used in dental troubles. Root decoction is administered to control dysentery.
Andrographis paniculata (L.)Nees	Acanthaceae	Nelavemu	Herb	Whole plant	Whole plant is shade dried, powdered and taken with honey in all fevers like Malaria, Typhoid and other viral fevers
Anogeissus latifolia (DC.)Bedd.	Combretaceae	Thirumani	Tree	Leaves	Stem bark is chewed to control stomachache
Aristolochia indica L.	Aristolochiaceae	Thella usiri	Climber	Roots	Root paste is applied on snake bite. It works as anecdote.
Aristolochia bracteolata Lam.	Aristolochiaceae	Gadida gadapa	Climber	Whole plant	Whole plants is grinded and powder is administered with honey in Menstrual pains.
Asparagus racemosus Willd.	Asparagaceae	Pillipeechari gaddalu	Shrub	Tubers	Root juice is mixed with honey used for dyspepsia. Root powder is taken with milk as aphrodisiac, galactogogue and nervic tonic
Atalantia monophylla Corr.	Rutaceae		Tree	Fruits	Berries yield oil used externally in rheumatism.
Bauhinia racemosa Lam.	Caesalpiniaceae	Are	Tree	Stem bark	Stem bark used in dysentery, decoction of leaves used in malaria, leaves crushed

					with onion for diarrhea.
Bauhinia vahlii Wt. & Arn.	Caesalpiniaceae	Addaku	Climber	Leaves	Leaf paste applied and tied with bandage for arthritis
Bombax ceiba L.	Bombacaceae	Burugu	Tree	Fruits and stem bark	Fruits used to cure urinary problems. Stem bark is crushed and juice is administered in diarrhea
Buchanania lanzan Spreng.	Anacardiaceae	Chinna morli	Tree	Gum	Gum used as an external application
Butea superba Roxb.	Fabaceae	Modugu teega	Tree	Seeds	Decoction of shoots used in piles, seeds sedative and anthelmintic
Capparis zeylanica L.	Capparidaceae	Adonda	Shrub	Fruits	Fruits are edible and improve immunity
Careya arborea Roxb.	Lecythidaceae	Budda dharmi	Tree	Leaves	Leaf paste is applied for skin diseases
Caryota urens L.	Arecaceae	Adavi Jeelugu	Tree	Toddy	2-3 glasses of toddy taken daily once to heal urinary problems
Casearia elliptica Willd.	Celastraceae	Kanne bisiri	Tree	Stem bark	Stem bark crushed and spread on wounds to heal
Cassia fistula L.	Caesalpiniaceae	Rela	Tree	Fruits	Fruit pulp with pepper, garlic, tamarind are crushed and taken orally as a tonic
Catharanthus roseus G.Don	Apocynaceae	Billa ganneru	Herb	Whole plant	Whole plant is soaked in a mud bowl and taken in the morning in blood pressure
Cayratia pedata (L.)Dom.	Vitaceae	Adavi draksha	Climber	Leaves	leaves astringent, decoction used for uterine reflexes
Cissus quadringularis L.	Vitaceae	Anduatukula teega	Herb	Entire plant	whole plant is crushed and bind to broken limbs
Cocculus hirsutus (L.) Deis	Menispermaceae	Dusari teega	Climber	Entire plant	Whole plant powder mixed with water taken orally to control fevers
Colocasia esculenta (L.)Schott	Araceae	Adavi gadda	Herb	Rhizome	Boiled rhizome is eaten in internal hemorrhages
Convolvulus sepiaria J.Koeng ex Roxb.	Convolvulaeae	Laxmana panja	Herb	Roots	Root is grinded with cow milk and administered in infertility.
Costus speciosus (Koen.)Smith	Costaceae	Chengalva	Herb	Rhizome	roots and rhizomes used as tonic and anthelmintic
Crinum asiaticum L.	Lilliaceae		Herb	Bulbs	Boiled bulbs are eaten for their anthelmintic and aphrodisiac properties
Curculigo orchioides Gaertn.	Hernandiaceae	Nelathati gaddalu	Herb	Tubers	Tuber powder is administered along with milk as a aphrodisiac
Curcuma pseudomontana Grah.	Zingiberaceae	Adavi pasupu	Herb	Rhizome	Rhizome paste is used as an external application.
Cyanotis tuberosa Sch. & Sch.f.	Commelinaceae		Herb	Tubers	Tubers are eaten to relieve cough
Cyclea peltata (Lam.) Hook. f. & Thoms.	Menispermaceae		Climber	Tubers	tubers are chewed to control stomachache and general tonic
Dalbergia paniculata Roxb.	Fabaceae	Chindugu	Tree	Stem bark	Stem bark paste with neem oil used as an external application in the case of baldness
Desmodium triflorum (L.) DC.	Fabaceae		Herb	Leaves	leaves used for dysentery, diarrhea and convulsions
Dichrostachys cinerea Wight et Arn.	Mimosaceae	Veluthuru	Tree	Root bark and Stem bark	Root bark and Bark powder is administered in joint pains
Dillenia pentagyna Roxb.	Dilleniaceae	Kallinga	Tree	Stem	10-12 ml of stem bark decoction taken

				bark	twice or thrice in a day to cure stomach-ache
Dioscorea bulbifera L.	Dioscoreaceae	Govinda gadda	Climber	Tubers	tuber paste is applied on wounds and piles
Diospyros chloroxylon Roxb.	Ebenaceae	Illinta	Climber	Stem bark	Bark powder is applied on wounds
Ficus religiosa L.	Moraceae	Ravi chett	Tree	Stem bark	Bark powder is administered in the form of tablets or syrup for immunity
Flemingia semialata Roxb. ex Aiton	Fabaceae		Herb	Roots	Root paste used as an external application.
Garuga pinnata Roxb.	Burseraceae	Garugu	Tree	Roots, fruits and stem bark	decoction of root used in pulmonary infections, leaves used in asthma, fruits are cooling, digestive, carminative, vermifuge and anthelmintic
Gmelina arborea Roxb.	Verbenaceae	Gummadi teku	Tree	Bark	2-3 teaspoons of stem bark extract taken with pepper and garlic powder daily once to 3-4 days for fevers
Hemidesmus indicus (L.)R.Br.	Asclepiadeaceae	Sughandhi pala	Herb	Roots	Roots are boiled in water or milt and administered as a general tonic
Hybanthus enneaspermus (L.) F.V.Muell	Violaceae	Ratna purusha	Herb	Entire plant	Entire plant is shade dried, powdered and administered with honey for Immunity.
Hygrophila auriculata (Schum.) Heine	Acanthaceae	Neeti Gobbi	Herb	Entire plant	Whole plant powder is administered in the form of tablets along with milk for leucorrhoea
Jatropha curcas L.	Euphorbiaceae	Adavi amudamu	Shrub	Latex	Latex mixed with the jaggory and paste used as an external application.
Lagerstromia parviflora Roxb.	Lythraceae	Chennangi	Tree	Stem bark	Steam bark-powder is administered in the form of tablets to cure Leucorrhoea
Litsea glutinosa (Lour) Bark.	Leaceae	Nara mamidi	Tree	Stem bark	Bark is grinded into powder and powder is taken in Calcium deficiency; bark powder is mixed with goat milk administered in chest pain. Stem bark paste applied and tied with bandage to heal wounds
Macaranga peltata Roxb. Mueller	Euphorbiaceae		Tree	Stem bark	Stem bark paste used as an external application.
Miliusa tomentosa (Roxb.) Sinclair	Annonaceae	Barre duddugu	Tree	Leaves	Leaf paste rubbed over the head twice or thrice in a week.
Mimosa pudica L.	Fabaceae	Attipatti	Herb	Entire plant	Entire plant powder is administered to cure general fevers
Moringa concanensis Nimmo ex Dalz. & Gibson	Moringaceae	Munaga	Tree	Leaves	Leaves are boiled along with pulses and taken as food in Anemia and Jaundice.
Mucuna pruriens (L.)DC.	Fabaceae	Dula gondi	Climber	seeds	Seeds are boiled and eaten during drought days
Nelumbo nucifera Gaertn.	Nymphiaceae	Thamara	Herb	seeds	Seed powder is taken with honey for forty days in infertility.
Ociumum sanctum L.	Lamiaceae	Nalla thulasi	Herb	Leaves	Leaf juice is dropped in the eyes to avoid night blind ness.
Pentanema indicum L.	Asteraceae	Adavi chamanthi	Herb	Root	3-4 inches of root kept in vagina to 5-6 hours for termination of ovum.
Pergularia daemia	Asclepiadeaceae	Dushtapu	Climber	Root	Root paste is applied on snake bite

(Forrsk.)Chiov.		teega			
Phyllanthus amarus Schum.& Thon.	Euphorbiaceae	Nela usiri	Herb	Entire plant	Entire plant powder along with pepper powder is administered for Jaundice
Phyllanthus emblica L.	Euphorbiaceae	Usiri	Tree	Roots, fruits and leaves	Roots used for rheumatism, diarrhea and dysentery. Leaves decoction used stomachache and used externally for enlarged spleen
Plumbago rosea L.	Plumbaginaceae	Erra chitramulamu	Herb	Root bark	Root paste is applied on piles to remove.
Pterocarpus marsupium Roxb.	Fabaceae	Peddegi	Tree	Wood oil	Oil used in diarrhea and dysentery and extraction of wood used to cure diabetes
Pueraia tuberosa (Willd.)DC.	Fabaceae	Nela gummadi	Climber	Tubers	Tubers are powdered and taken with milk as nervic tonic and Aphrodisiac
Putranjiva roxburghii Wall.	Euphorbiaceae	Puthranjivi chettu	Tree	Seeds	Seed powder is administered in the form of tablets to cure impotency
Schleichera oleosa (Lour.)Oken	Sapindaceae	Pusugu chettu	Tree	Seeds	seed oil leg swelling, in perfumery and soap making
Sida acuta Burm.f.	Malvaceae	Bala	Herb	Leaves	boiled leaves in mustard oil they are applied to testicular swellings Decoction of leaves used for hemorrhoids and impotence
Smilax zeylanica L.	Smilacaceae		Climber	Tubers	Half cup of tuberous- root decoction taken orally as a general tonic
Solanum nigrum L.	Solanaceae	Kamanchi	Herb	Whole plant	Whole plant powder is administered in the form of tablets to cure iron deficiency
Sterculia urens Roxb.	Sterculiaceae	Tapasi	Tree	Stem bark	Stem bark is soaked in water for ten days, remaining water is administered with empty stomach to treat Oligospermia (to increase sperm count)
Sterculia villosa Roxb.	Sterculiaceae	Jangli badam	Tree	Gum	Gum is administered in the form tablets to cure body pains
Streblus asper Lour.	Moraceae	Barrenka	Tree	Tender shoots	Tender shoots and leaf powder is used to brush the teeth
Strychnos nux-vomica L.	Loganiaceae	Vishamushti	Tree	Stem bark	Bark powder is taken in the form of tablets daily in hypertension
Strychnos potatorum L.f.	Loganiaceae	Chilla ginjalu	Tree	seeds	Seeds chewed for kidney problems
Syzigium cuimini (L.) Sk.	Neredu chettu	Neredu	Tree	Bark	Bark powder orally administered in urinary problems
Tectona grandis L.f.	Verbenaceae	Teku	Tree	Bark	Decoction of tender shoot tips juice used as a lotion. Bark is crushed and administered orally with water to reduce body heat.
Terminalia bellirica (Gaertn.) Roxb.	Combretaceae	Tani	Tree	Fruits	The fruit pulp with those of *Terminalia chebula, Phyllanthus emblica* are crushed and powder (1 teaspoon) taken daily twice to 4-5 days as a nervic tonic
Terminalia chebula L.	Combretaceae	Karakkaya	Tree	Fruits	Fruit pulp chewed and sap swallowed.
Tinospora cordifolia (Willd.)Hook.f.&Thoms.	Menispermaceae	Tippa teega	Climber	Stem bark	5-6 inches of stem crushed with a pinch of common salt and pepper powder and extract given daily once to 2-3 days.Stems are boiled in water and taken

					for immunity
Triumfetta rhomboidea Jacq.	Tiliaceae		Herb	Roots	Root paste applied on wounds
Tylophora indica (Burm.f.)Merr.	Asclepiadeaceae	Dushtapu teega	Climber	Leaves	Leaves are heated and bind to wounds
Urena lobata L.	Malvaceae		Herb	Leaves	Leaf paste applied and tied with bandage to heal wounds
Vernonia ceneria (L.)Less.	Asteraceae	Sahadevi	Herb	Whole plant	Powder of the whole plant is administered in the form of tablets for regular menstrual cycle in women
Wrightea tinctoria (Roxb.) R.Br.	Verbenaceae	Kodisha pala	Tree	Stem bark	A glass full of bark decoction is administered to cure typhoid, bronchitis and gas trouble
Xylia xylocarpa Roxb.	Mimosaceae	Bojja	Tree	Stem bark	Stem bark paste applied and tied with bandage for skin eruptions
Zingiber roseum (Roxb.)Rosc.	Zingiberaceae	Adavi allamu	Herb	Rhizome	Rhizome paste is used as an external application for tumours
Ziziphus oenoplia (L.)Mill.	Rhamnaceae	Pariki	Shrub	Fruits	Ripened fruits crushed with common salt and swallowed for dyspepsia
Ziziphus xylopyrus (Retz.)Willd.	Rhamnaceae	Gotti	Shrub	Leaves	Leaf paste with turmeric used as an external application for skin eruptions