

Diversity and indigenous uses of Some Ethno Medicinal Plants in Papikondalu wild life Sanctuary, Eastern Ghats of Andhra Pradesh, India

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ABSTRACT

Objective: The main objective of the Present study deals with Ethno medicinal information collected on 173 plants species utilized by the tribal communities of papikondalu wild life sanctuary area.

Methods: The Papikondalu wild life sanctuary is thoroughly studied by repeated visits in different seasons of the year 2014 to 2015 covering the pre monsoon, monsoon and post monsoon seasons to cover the overall sperectrum of vegetation. It helps in observing the developmental stages of medicinal plants species like vegetative, flowering and fruiting stages. The plants specimens were collected identified with the help of Flora of Presidency of Madras, Flora of Andhra Pradesh, Forest flora of Andhra Pradesh. The names of tribal doctors, other ethno medicinal knowledge peoples (Tribal men and Women) who have given the ethno medicinal information were recorded.

Results: The Present study deals with Ethno medicinal information on 173 plants species , belonging to 148 genera's under 65 families utilized by the tribal communities of papikondalu wild life sanctuary area. Out of which 87 medicinal properties were recorded for human ailments. Out of 65 families 63 families belongs to Dicocts and 2 families are monocots

Conclusion: This forest region is good resource and wealth for various flora and fauna, but due to anthropogenic activities, density as well as canopy of the forest was reduced knowingly or unknowingly. It is a high time to have a look on its conservation and management strategies to protect our heritage and forest wealth.

Keywords- Diversity, ethno medicinal plants, Papikondalu wild life sanctuary, Therapeutic agents.

INTRODUCTION

India is well known as an “Emporium of medicinal plants”. About 70% of the rural folk depend on medicinal plants for their health care. India is the largest producer of medicinal plant products and is rightly called the “Botanical garden of the World”. Since ancient times, Ethnobotanical use of plants has been known and use of traditional medicine and medicinal plants in most developing countries as therapeutic agents for the maintenance of good health has been widely observed and accepted. The indigenous people of various regions have developed their own way of using plants for their health care and following their own culture, customs, folk songs and food habits. This knowledge is transferred through orally from one generation to another. Over exploitation of trade species, destructive way of collection, vulnerability due to anthropogenic pressures are some of the major threats to medicinal plants. Documentation of indigenous knowledge through ethno botanical studies is important for the conservation and utilization of biological resources¹⁻⁴. The indigenous groups depend either directly or indirectly on the products of the forest for their livelihood and have down the ages, preserved the knowledge about the traditional and cultural uses of plants.⁵ The Ethno medicinal studies in Andhra Pradesh have been conducted by Several Authors like⁶⁻⁹. The utilization of medicinal plants as a source of medicine amongst the tribal region of Papikondalu wild life sanctuary area has considerably neglected in state of Andhra Pradesh¹⁰⁻¹². In India, 45,000 plant species have been identified, out of which about 15-20, 000 plants are of good medicinal value^{13,14}. About 2, 500 plant species belonging to more than 1,000 genera are used by traditional healers. The World Health Organization estimates that 80% of

the people in developing countries of the world rely on traditional medicine for their primary health care needs, and about 85% of traditional medicine involves the use of plant extract. Traditional medicine is widely used in India, particularly in rural areas, where 70% of the population lives. In India Ayurveda, Unani and Siddha are well popularized traditional medicinal systems for the treatment of various ailments. Therefore the present study focused to assessment the medicinal plants diversity in papikondalu wild life sanctuary of Eastern Ghats of Andhra Pradesh to identify the species richness and Ethno medicinal uses and suggest conservation measures.

STUDY AREA

Papikondalu wild life sanctuary is spreads over 591Sq kms and across the two districts of East Godavari and West Godavari. This wild life sanctuary is a home to many species of flora and fauna and cuts through the papikonda range of hills in Eastern Ghats. The mountain range is covered with tropical and deciduous rain forests that provide views of the surroundings. Papikondalu wild life sanctuary has museum and an environmental education. The natural vegetation here makes it suitable for animals like tigers, panthers, four-horned Antelopes, Hyenas, Sloth bear and many migrated birds flock here and make it their shelter for some times generally from May to October. The main vegetation of the region is generally tropical and dry deciduous type. The climate of the Region is typically temperate and consists of 3mainly distinct seasons i.e. summer season, Rainy season and winter season.

MATERIALS AND METHODS

The entire area of the Papikondalu wild life sanctuary is thoroughly studied by repeated visits in different seasons of the year 2014 to 2015 covering the pre

monsoon, monsoon and post monsoon seasons to cover the overall spectrum of vegetation. It helps in observing the developmental stages of medicinal plants species like vegetative, flowering and fruiting stages. The plants specimens were collected identified with the help of Flora of Presidency of Madras,¹⁵ Flora of Andhra Pradesh^{16,17,18,19}, Forest flora of Andhra Pradesh^{20, 21, 22}. The names of tribal doctors, other ethno medicinal knowledge peoples (Tribal men and Women) who have given the ethno medicinal information were recorded. Plants specimens were collected either with flower or fruit, they were dried and poisoned with saturated solution of mercuric chloride in rectified spirit and herbarium specimens were prepared with their botanical name, vernacular name locality, collector names, voucher specimen number and deposited in the Herbarium of Botany department, Andhra University, Visakhapatnam. The informants were asked question in Telugu language understandable in most of the cases, otherwise in their local languages (Koya language) seeking help of paid local assistance regarding traditional uses of ethno medicinal plants and their local names and distribution. Finally the ethno medicinal information are given in according to Bentham and Hooker classification with other details such as Botanical name, local name, family, life form, used part and medicinal uses in **Table-1**.

RESULTS AND DISCUSSION

The Present study deals with Ethno medicinal information on 173 plants species, belonging to 148 genera's under 65 families utilized by the tribal communities of papikondalu wild life sanctuary area. Out of which 87 medicinal properties were recorded for human ailments. Out of 65 families 63 families belongs to Dicocts and 2 families are monocots i.e. Areaceae

representing 3 species and Poaceae representing 4 species. Ethno medicinally the most dominant family are Fabaceae with 11 species followed by Euphorbiaceae (8), Caesalpiniaceae, Combretaceae, Apocynaceae and Asclepiadaceae is each (7) Mimosaceae, Rubiaceae and Verbinaceae (6), Malvaceae and Poaceae (5), Rutaceae, Anardiaceae Asteraceae and Sterculiaceae (4) Capparidaceae Minispermaceae and Meliaceae 3 Species each (**Table-1**) According to the habitation of plants Trees are the most utilized plants (69) followed by Herbs (45), Climbers(32) Shrubs (25) Epiphytes and Parasites are each one. (**Fig-2**) Different parts of the medicinal plants are using by the traditional practitioners among them Stem bark(30%) are used for the preparation of medicines predominantly followed by Leaf and Root each(24.7%), whole plant (6.93%), Seeds (6.35%), Fruits(4.04%) and Tubers(3.40%) **Fig-3**. Ethno medicinal plants are used in treatment of different diseases in human body such as Malaria, Paralysis, Fever, eye problems, Throat infection, Kidneys problems and teeth problems etc. Most of the species are used for Diarrhoea (10) species followed by rheumatic arthritis and Asthma each (6), Dysentery and Fever (6) Paralysis, Jaundice and Leucorrhoea (5) Epilepsy(4) Stomachache and Peptic ulcers (3), the following details is given by (**Table-2&Fig-1**). The area of study is rich in floral diversity with strong traditions of Ethno medicinal practices 1 practices existing among the ethnic communities. Therefore, there is a strong need to take necessary steps for the conservation and sustainable use of these medicinal plants, which are the source of food, herbal medicine and a variety of materials for daily use of the ethnic communities.

CONCLUSIONS

This forest region is good resource and wealth for various flora and fauna because of several bioactive compounds are being extracted from traditional medicinal plants. There is a need to create and maintain a database on traditional botanical knowledge of the local inhabitants which helps to conserve the native phytodiversity. Due to anthropogenic activities, density as well as canopy of the forest was reduced knowingly or unknowingly. The present study alarming that, it is a high time to have a look on its conservation and management strategies to protect our heritage and forest wealth. So Government and Non Government organizations should involve in the conservation measures to maintain its glory forever which helps in developing novel drugs to treat ailments.

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CONFLICT OF INTEREST

I have read and understood AJETHNO policy on declaration of interests and declare that I have no competing interests.

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REFERENCES

1. Ratnaraju, Y. Yugandhar, P and Savithramma, N (2014) Documentation of Ethnomedicinal Knowledge of hilly tract areas of East Godavari District of Andhra Pradesh, India, *International Journal of Pharmacy and Pharmaceutical sciences* Vol (6) Issue-4.
2. Arunee Kumar & Niteswar K, 1990 Medicinal plants of Kakinada (East Godavari district, Andhra Pradesh). *Indian Medicine* Vol (2) pp 229 -232.
3. Sankara Rao, B., Sarada Mani, N., Sujatha, B., Sharmila Polumahanthi,. 2015. Ethnobotanical investigation of underground Plant Parts of Kotia Hills of Vizianagaram District, Andhra Pradesh, India, *Journal of Medicinal Plants Studies*. Vol (3) pp 140-142.
4. Siva Kumari, B., Prabhu Y.T., Tambur Pavani., (2014). Traditional knowledge of medicinal plants used to cure respiratory diseases in Krishna District of Andhra Pradesh, India. *Journal of Medicinal Plants Studies*: Vol (2) pp 34-37.
5. Ramakrishna, N. Varma, Y.N.R, and Saidulu, Ch.(2014) Ethnobotanical studies of Adilabad district Andhra Pradesh, India *Journal of Pharmacognasy and Phytochemistry*, Vol (3) pp18-36
6. Aniel kumar.O, Mallikarjuna,K. Raju.P.R. Krishna Rao.M and Mutyalanaidu M 2015 Ethnobotanical studies for Skin diseases by tribes of Papikondalu forest, Andhra Pradesh, India *International Journal of Advanced Research in Science and Technology*. Vol (4) pp 416-420.
7. Shanmukha Rao,V., Srinivasa Rao,D, Venkaiah .M and Venkateswara Rao.Y (2014) Ethnobotanical studies of some selected medicinal plants of Pathapatnam Mandalam, Srikakulam district, Andhra Pradesh, India, *Journal of Plant sciences*. Vol(4) pp 22-33.
8. Srinivasa Rao.D, Bhaskara Rao, M Prayaga Murthy.P and Venkaiah M ethnobotanical uses of certain plant species from Makkuva Mandalam, Vizianagaram District Andhra Pradesh, India *International Journal of Current Research*. Vol (6) pp 5387-5390.
9. Srinivasa Rao.D, Shanmukha Rao, V.Prayaga Murthy.P, G.M.Narasimha Rao and Venkateswara Rao,Y (2015) Some Ethnomedicinal Plants of Parnasala sacred grove area Eastern Ghats of Khammam District, Telangana ,India. Vol.(7) pp 210-218.

10. Murthy, E.N., 2012. Ethno medicinal plants used by gonds of Adilabad district, Andhra Pradesh, India. *Int. J. of Pharm. & Life Sci. (IJPLS)*, Vol (3) pp 2034-2043.
11. Omkar Kanneboyena., Sateesh Suthari and Vatsavaya S. Raju., 2015. Ethnomedicinal Knowledge of Inhabitants from Gundlabrahmeswaram Wildlife Sanctuary (Eastern Ghats), Andhra Pradesh, India. *American Journal of Ethnomedicine*, Vol (2) pp 333-346.
12. Prayaga Murthy,P. Srinivasa Rao.D and Venkaiah M(2012) Study of Some Ethnomedicinal Plants for treatment of dysentery if North coastal Andhra Pradesh, India *International Journal of Bioscience*. Vol (12) pp 18-24.
13. Padal S.B, Prayaga Murthy, P.Srinivasa Rao.D and Venkaiah,M (2010) Ethno botanical Plants from Paderu division of Visakhapatnam district, Andhra Pradesh, *India Journal of Phytology*. Vol (2) pp 70-91
14. Ramana Naidu, B.V., Haribabu Rao, D., Subramanyam, P., Prabhakar Raju, C., Jayasimha Rayalu., D. 2012. Ethnobotanical study of medicinal plants used by tribals in nallamalla forest area of Kurnool District, Andhra Pradesh. *International Journal Of Plant, Animal And Environmental Sciences*. Vol (2) pp 72-81.
15. Gamble J.S. and C.E.C. Fischer, 1915-1935. *Flora of the Presidency of Madras*,(3vols.). (Rep.Ed.1957), Adlard and Son Ltd., London.
16. Rajagopal Reddy, S., Madhusudhana Reddy, A., and M. V .Suresh Babu., 2015. Traditional Medicinal Plants of Lankamalleswara Wildlife Sanctuary, Kadapa District, Andhra Pradesh, India. *American Journal of Ethnomedicine*, Vol (2) pp 379-391.
17. Pullaiah, T, and E. Chennaiah, 1997. Flora of Andhra Pradesh. Vol.1. Scientific Publishers Jodhpur.
18. Pullaiah, T, and D. Ali Moulali, 1997. *Flora of Andhra Pradesh*, Vol.2.Scientific Publishers Jodhpur.
19. Pullaiah, T, 1997. *Flora of Andhra Pradesh*, Vol.3. Scientific Publishers, New Delhi.
20. Reddy, R.D., M.K.Prasad and K.Venkaiah, 1991. *Forest Flora of Andhra Pradesh*, Hyderabad.
21. Devarinti srihari reddy, 2012, Ethnomedicinal plants used by the tribals of achampet forest division in Nallamalais, Telangana, India. *International Journal Of Plant, Animal and Environmental Sciences*. 2, 72-81.
22. Rakesh Samar, P,. Shrivastava., N and Manju Jain. 2015. Ethnobotanical Study of Traditional Medicinal Plants Used By Tribe of Guna District, Madhya Pradesh, India. *Int.J.Curr.Microbiol.App.Sci* 4: 466-471.

Table 1: Utilization of Medicinal plants in Different types of ailments

S.No	Ailments / Medicinal Properties	No of Species	S.No	Ailments / Medicinal Properties	No of Species
1	Abdominal Swelling	1	45	Fluent talk	1
2	Abortion	3	46	Fracture	3
3	Allergy	1	47	Galactagogue	1
4	Amoebic Dysentery	1	48	Gastric trouble	1
5	Anaemia	2	49	Gonorrhoea	1
6	Analgesic	1	50	Haematuria	1
7	Anthelmentic	3	51	Haemorrhage	1
8	Antidote to Animal Bite	1	52	Head ache	2
9	Antifertilit	1	53	Heart Pain	1
10	Asthma	9	54	Heart problems	1
11	Backache, Menorrhagia & Weakness	1	55	Herpes	1
12	Black Quarter Disease in Cattle	1	56	HIV	1
13	Blisters	2	57	Impotency	2
14	Blood Pressure	2	58	Inflammation	1
15	Blood Purifier	1	59	Intestinal Worms	1
16	Body pains	2	60	Jaundice	5
17	Body Swelling	1	61	Leucoderma	1
18	Boils	2	62	Leucorrhoea	5
19	Boils and Blisters	1	63	Malaria	2
20	Bone Fractures	3	64	Muscle Pain	1
21	Bronchitis	1	65	Night Blindness	1
22	Burns	3	66	Obesity	1
23	Chest pain	3	67	Paralysis	5
24	Chickenpox	1	68	Peptic Ulcer	3
25	Cobrabite	1	69	Peripheral Neuritis	1
26	Conception	1	70	Post natal Care	1
27	Constipation	1	71	Purgative	1
28	Cooling affect	1	72	Rheumatoid Arthritis	9
29	Cough and Cold	1	73	Rheumatism	1
30	Cuts	1	74	Scalp infection	1
31	Dandruff	2	75	Scorpion sting	3
32	Diabetes	2	76	Sexual Potency	1
33	Diarrhoea	10	77	Snake Bite	2
34	Dysentery	7	78	Sterility	1
35	Dysmenorrhoea	3	79	Stomachache	3
36	Dysuria	1	80	Stomach pain	1

37	Ear diseases	1	81	Stomach Ulcers	1
38	Eczema	1	82	Suicide	1
39	Epilepsy	4	83	Swellings	1
40	Eruptions on the Skin	1	84	Toothache	2
41	Fertility	2	85	White Discharge	1
42	Fever	7	86	Whooping Coug	2
43	Fish Poison	1	87	Wounds	1
44	Fits	1			

Table 2: Diversity and indigenous uses of Ethnomedicinal Plants

S.No	Family	Plant Name	Lafe form	Local name	Used part	Medicinal uses
1	Ranunculaceae	<i>Naravalia zeylanica</i>	Climber	Pullabatchala	Stem	Toothache: Stem is used to cure toothache.
2	Dilleniaceae	<i>Dillenia pentagyna</i>	Tree	Revadi chettu	Stem	Rheumatoid Arthritis: 3 inches of stem bark is crushed with sufficient quantity of salt and the extract is administered orally daily once for 3days.
3	Annonaceae	<i>Annona squamosa</i>	Tree	Seethaphalam	Leaves and Bark	Asthma: 10 leaves and 30 g of bark are boiled in 1 glass of water till it reduces to half glass and given orally once a day till cure.
4	Menispermaceae	<i>Cissampelos pareira</i>	Climber	Adavibankateega	Leaves	Intestinal Worms: Leaves crushed with that of <i>Androgaphis paniculata</i> and <i>Pongamia pinnata</i> and the extract given orally 3 sponfuls thrice a day for
		<i>Cocculus hirsutus</i>	Climber	Dusara teega	Roots	Rheumatoid Arthritis: 12 g o f roots crushed with 2 long pepper seeds are mixed in a cup of goat milk and the extract is taken daily once for a fortnight.
		<i>Tinospora cordifolia</i>	Climber	Tippateega	Tubers	Stomach Ulcers: 3 spoonfuls of tuber extract is given orally twice a day till cure.
5	Pepavaraceae	<i>Argemone mexicana</i>	Herb	Balarakasi	Roots,Seeds and Leaves	Malaria: Roots are ground with seeds and leaves and the extract two spoonfuls is given once a day for 4 days.
6	Capparaceae	<i>Capparis zeylanica</i>	Climber	Adonda	Roots	Paralysis: Root bark ground with aerial root of <i>Ficus benghalensis</i> and tail of garden lizard and the paste is made into pills. 2 pills are given per day for 40 days.
		<i>Cleome gynandra</i>	Herb	Vaminta	whole plant	Peptic Ulcer: 50 ml of the plant juice is given orally once a day for every 3days for about 6 times.
		<i>Cleome viscosa</i>	Herb	Kukkavaminta	whole plant	Peptic Ulcer: 50 ml of the plant juice is given orally once a day for every 3days for about 6 times.
7	Violaceae	<i>Hybanthus enneaspermus</i>	Herb	Ratnapurusha	whole plant	Impotency: 3 spoonfuls of whole plant extract is mixed with goats milk and administered once a day for 30 days.
8	Cochlospermaceae	<i>Cochlospermum religiosum</i>	Tree	Kondagogu	Stem Bark	Bone Fractures: Stem bark is ground into paste and it is plastered over the effected area.
9	Malvaceae	<i>Abutilon indicum</i>	Shrub	Tuttru Benda	Leaf	Scorpion sting: Leaf paste is applied over the spot of scorpion sting
		<i>Pavonia zeylanica</i>	Shrub	Karubenda	Leaf	Purgative: 2-3 leaves are chewed after meals
		<i>Sida acuta</i>	Herb	Nelabenda	Leaf	Scorpion Sting: Leaf paste applied over the bitten part.
		<i>Sida cordata</i>	Herb	Gayapuaku	Leaf	Paralysis: 2 spoonfuls of leaf juice is mixed with goat milk and administered

						twice a day till cure.
		<i>Sida cordifolia</i>	Herb	Chirubenda	Seeds	Sexual Potency: Seeds made into peanut seed size pills. 2 pills are administered once a day for 15 days.
10	Bombacaceae	<i>Bombax ceiba</i>	Tree	Buruga	Roots	Fertility: Root powder taken orally with glass of cow milk increases the fertility
		<i>Ceiba pentandra</i>	Tree	Tella Buruga	Stem bark	White Discharge: 50 ml Juice is extracted from stem bark and a pinch of zeera powder and Sugar is mixed to taste and given orally before breakfast in alternate days
11	Sterculiaceae	<i>Helicteres isora</i>	Tree	Melikaya	Roots	Scorpion Sting: Root decoction is given orally immediately after the snake bite.
		<i>Pterospermum xylocarpum</i>	Tree	Lolugu	Stembark	Whooping Cough 2ml of stem bark decoction is given orally once a day for 3days for infants
		<i>Sterculia urens</i>	Tree	Kovelachettu,Tapsi	Stem bark	Rheumatoid Arthritis: Stem bark ground with turmeric and the filtrate is mildly heated and administered in 2 spoonfuls twice a day for 5 days.
		<i>Waltheria indica</i>	Herb	NallaBenda	Leaf	Cough and Cold: Dry leaf powder is boiled in water and used against cough
12	Tiliaceae	<i>Grewia tiliaefolia</i>	Tree	Tada	Leaf paste	Fracture: Root bark paste is applied as plaster on dislocated joints of cattle.
13	Zygophyllaceae	<i>Tribulus terrestris</i>	Herb	Palleru	Whole plant	Jaundice: Equal quantities of whole plant <i>Amaranthus tricolor</i> with <i>Tribulus terrestris</i> are made into paste. Two spoonfuls of this paste mixed with cow milk is given on empty stomach for about 7 days.
14	Rutaceae	<i>Aegle marmelos</i>	Tree	Maredu	Leaf paste,Fruit pulp	Diabetes: About 10ml of leaf juice is given with 5 Piper nigrum seeds twice a day for two months
		<i>Chloroxylon swetenia</i>	Tree	Billudu chettu	Stem Bark	Impotency: Root bark extract mixed with goat's milk and administered two spoonfuls twice a day for 15 days.
		<i>Murraya paniculata</i>	Shrub	Kondakarivepaku	Root	Anaemia: The roots mixed with the roots of <i>Toddalia asiatica</i> and grounded to paste and a spoonful of paste is given along with ghee daily for a week.
		<i>Naringi crenulata</i>	Tree	Torrivelaga	Stem Bark	Dysentery: Stem bark crushed with the bark of <i>Strychnos potatorum</i> and the extract is mixed with a pinch of salt and is administered in the doses of 2 spoonfuls twice a day for 5 days.
15	Simaroubaceae	<i>Ailanthes excelsa</i>	Tree	Peddamanu	Stem Bark	Asthma: 30-50ml of bark infusion is administered orally twice daily till cure.
16	Burseraceae	<i>Garuga pinnata</i>	Tree	Garuga	Stem Bark	Stomachache: Stem bark along with the roots of <i>Tridax procumbens</i> and the bark of <i>Butea monosperma</i> and <i>Pterocarpus marsupium</i> taken equal proportions and extract is prepared 10 ml of this extract is given twice a day for 1 day.

17	Meliaceae	<i>Azadirachta indica</i>	Tree	Vepa	Stem Bark	Amoebic Dysentery: Stem bark gum mixed with seeds of <i>Ocimum basilicum</i> is dried and powdered. It is made in decoction. A spoonful decoction is administered daily twice for 3days..
		<i>Cipadessa baccifera</i>	Shrub	Paladonda	Leaf	Chickenpox: Leaf juice along with turmeric powder applied externally for the treatment of chickenpox.
		<i>Soymida febrifuga</i>	Tree	Soymida	Root	Dysmenorrhoea: Roots along with <i>Piper nigrum</i> and cow milk are pound to paste and is administered in doses of 2 spoonfuls per a day for 3days.
18	Celastraceae	<i>Celastrus paniculatus</i>	Climber	Jyothismathi	Root Bark	Leucorrhoea: Root bark ground with black pepper grains, 3 ml of extract taken orally once a day for about 2 weeks.
19	Rhamnaceae	<i>Ziziphus mauritiana</i>	Shrub	Reni	Leaves	Body pains: A decoction is made with leaves and bark and is used to take both to treat severe body pains
		<i>Ziziphus oenoplia</i>	Climber	Parimakampa	Stem Bark	Diarrhoea: Pound the stem bark and make pills with the size of 1gm each. 1 pill is given orally thrice in a day for three days.
20	Vitaceae	<i>Ampelocissus latifolia</i>	Climber	Adavi Draksha	Stem Bark	Fever: 5 gms stem bark powder is mixed with water and given orally thrice in a day for 2-3 days
		<i>Cissus quadrangularis</i>	Climber	Nalleru	Stem,Leaves	Fever: Tenders stems and leaves crushed and the extract mixed with breast milk is administered in doses of half spoonful once a day for 3days to infants.
21	Sapindaceae	<i>Cardiospermum helicacabum</i>	Climber	Buddakakara	Leaves	Burns: Leaf paste along with oil of <i>Ricinus communis</i> is applied over the affected parts.
		<i>Sapindus emarginatus</i>	Tree	Kunkudu	Leaves	Cooling affect: Leaves are made into paste and the paste is applied over the head.
		<i>Schleichera oleosa</i>	Tree	Pusika chettu	Stem Bark	Rheumatoid Arthritis: Stem bark along with those of <i>Mangifera indica</i> and <i>Tamarindus indica</i> and seeds of black horse gram (20 g each) are crushed, boiled in 500 ml of water till it is reduced to 100 ml. 1 cup of this decoction is taken daily once for 4 days. Bark is powdered, mixed with water and boiled in earthen pot. The decoction thus obtained is massaged lukewarm on the affected part thrice daily for 4 days. Seed oil is massaged over the affected area till cure.
22	Anacardiaceae	<i>Buchanania lanzan</i>	Tree	Sarapappu,Muralig injalu	Stem bark	Diarrhoea: Stem bark powdered with stem bark of <i>Syzygium cumini</i> one spoonful of this powder is administered twice a day for 3days.
		<i>Lansea coromandelica</i>	Tree	Gumpini	Stem Bark	Gastric trouble: 1 spoonful of stem bark decoction administered twice a day till cure.
		<i>Mangifera indica</i>	Tree	Mamidi	Stem Bark	Fluent talk: Stem bark pound with the root bark of <i>Cleistanthus collinus</i> and tuber of <i>Momordica dioica</i> The paste is used for fluent talk in children.

		<i>Semecarpus anacardium</i>	Tree	Nallajeedi	Seeds	Abdominal Swelling: Seeds ground with onion and the paste is applied over the affected area.
23	Fabaceae	<i>Abrus precatorius</i>	Climber	Guruvinda	Seeds	Abortion: 2 or 3 seeds are ground and the paste is mixed in a glass of water. This is administered once a day before breakfast for 3days.
		<i>Butea monosperma</i>	Tree	Chettumoduga	Bark	Post natal Care: Gum is extracted from the bark is fried with ghee and is administered twice a day for 15 days.
		<i>Butea superba</i>	Climber	Teegamoduga	Stem bark	Haematuria: Stem bark is made into paste. 2 spoonfuls paste is administered on empty stomach once a day for 3days.
		<i>Dalbergia latifolia</i>	Tree	Pachari	Stem Bark	Fever: 2 spoonfuls of stem bark extract is administered twice a day for three days.
		<i>Desmodium gangeticum</i>	Herb	Kolapanna	Leaves	Boils and Blisters: leaves ground with a pinch of salt and the paste is applied on the affected areas till cure.
		<i>Desmodium pulchellum</i>	Shrub	Karra Anthina	Root	Epilepsy: roots are ground with garlic cloves and the paste is made into pills of Bengal gram seed size and the pills are administered in doses of three pills twice a day for about 30 days.
		<i>Mucuna pruriens</i>	Climber	Dulagondi	Root	Dysmenorrhoea: Roots are ground to paste along with roots of <i>Azadirachta indica</i> , stem barks of <i>Chloroxylum swietenia</i> and <i>Holoptelia integrifolia</i> . The paste along with cow milk is administered in the doses of 1 spoonful per day for 5 days.
		<i>Pongamia pinnata</i>	Tree	Kanuga	Stem bark	Peripheral Neuritis: Stem bark ground with the stem barks of <i>Barringtonia acutangula</i> , <i>Calotropis gigantea</i> , <i>Casearia elliptica</i> and roots of <i>Aristida funiculata</i> are made into pills. 2 pills per day are given for 1 week.
		<i>Pterocarpus marsupium</i>	Tree	Yegisha	Stem Bark	Conception: 10g of stem bark ground with that of <i>Mitragyna parvifolia</i> and the paste made into pea nut seed size pills. 21 pills are administered orally once a day for 7 days.
		<i>Pueraria tuberosa</i>	Climber	Nelagummadi	Tubers	Peptic Ulcers: Tuber extract mixed with little sugar and administered in doses of 2 spoonfuls twice a day till cure.
		<i>Tephrosia purpurea</i>	Herb	Vempalli	Root bark	Paralysis: 1 Spoonful of dried root powder mixed with that of <i>Cassia occidentalis</i> ground with jaggery is administered once a day for 45 days.
24	Caesalpinaceae	<i>Bauhinia racemosa</i>	Tree	Arechettu	Root bark	Diarrhoea: Five spoonfuls of the root bark extract is administered twice a day for 5 days.
		<i>Bauhinia vahlii</i>	Climber	Addakulu	Root bark	Dysentery: 5 spoonfuls of root extract along with half cup of curd is administered twice a day for 3days.
		<i>Caesalpinia bonduca</i>	Shrub	Gachakayalu	Leaves	Black Quarter Disease in Cattle: The leaves boiled alongwith the leaves of <i>Vitex negundo</i> , <i>Cassia occidentalis</i> , <i>Tinospora cordifolia</i> and <i>Pupalia lappacea</i> and the extract given orally to cattle.

		<i>Cassia auriculata</i>	Shrub	Tangedu	Leaves	Burns: leaves burnt with the feathers of Peacock, and the ash mixed with coconut oil applied on burns.
		<i>Cassia fistula</i>	Tree	Rellachettu	Stem bark	Chest pain: The stem bark extract mixed with the seed oil of <i>Schleichera oleosa</i> 2 spoonfuls of this extract administered once a day for 3days.
		<i>Cassia occidentalis</i>	Herb	Kasitha	Root	Anthelmentic: 2 Spoonfuls of root extract mixed with a pinch of salt and administered thrice a day for 4 days.
		<i>Tamarindus indica</i>	Tree	Chintachettu	Fruits	Backache, Menorrhagia & Weakness: 10 ml of fruit extract mixed with old jaggery in 1:2 ratio is administered twice a day for 7 days.
25	Mimosaceae	<i>Acacia chundra</i>	Tree	Sandra	Stem	Whooping Cough: 10g of stem sap with 2 spoonfuls of mother's milk is administered to children twice a day till cure.
		<i>Acacia leucophloea</i>	Tree	Tella tumma	Stem Bark	Burns: Take 20 gms stem bark powder and apply on burns along with oil.
		<i>Dichrostachys cinerea</i>	Tree	Veluturuchettu	Stem Bark	Paralysis: 10 gms stem bark extract of <i>Dichrostachys cinerea</i> and <i>Abutilon indicum</i> in water is given orally once in a day for week.
		<i>Entada pursaetha</i>	Climber	Peddagacha	Seeds	Rheumatism: Seed coat made into paste and applied externally on the affected parts till cure.
		<i>Mimosa pudica</i>	Herb	Attipatti	Root	Epilepsy: The roots ground with the roots of <i>Mundulea sericea</i> and <i>Mucuna puriens</i> and the powder is mixed with water and is given orally in the doses of 2 spoonfuls for every 15 minutes about 2 times.
		<i>Xylia xylocarpa</i>	Tree	Kondaptangedu	Root bark	Gonorrhoea: 2 spoonfuls of root bark extract is administered orally twice a day for 15 days.
26	Combretaceae	<i>Anogeissus acuminata</i>	Tree	Pachichettu	Stem bark	Dysentery: Stem bark ground with <i>Pithecellobium dulce</i> and paste is made into pills. 3 pills twice are given twice a day for 3 days.
		<i>Anogeissus latifolia</i>	Tree	Sirimanu	Seeds	Snake Bite: Seed paste along with water is administered orally and also applied externally
		<i>Calycopteris floribunda</i>	Climber	Bontha teega	Leaves	Fever: Leaves are ground to make a fine paste and administered with butter to cure malarial fever.
		<i>Terminalia alata</i>	Tree	Nallamaddi	Roots	Fever: Roots are collected in the early morning and tied to the cure intermittent fever
		<i>Terminalia arjuna</i>	Tree	Tellamaddi, Yerumaddi	Stem bark	Heart problems: A tonic is prepared from the bark of the tree for heart problem.
		<i>Terminalia bellerica</i>	Tree	Tani	Fruits	Asthma: Fruits are ground to power with the fruits of <i>Terminalia chebula</i> , <i>Balanites aegyptiaca</i> ; roots of <i>Aristolochia indica</i> , <i>Rauwolfia serpentina</i> and <i>Syzygium aromaticum</i> . 1 spoonful of powder along with honey is given thrice a day for 30 days.
		<i>Terminalia chebula</i>	Tree	Karakaya	Stem bark	Fish Poison: Crushed stem bark and fruits is administered orally in doses of

						2 spoonfuls
27	Barringtoniaceae	<i>Barringtonia acutangula</i>	Tree	Kanapa	Leaves	Head ache: Leaves made into paste and applied on forehead.
28	Melastomaceae	<i>Memecylon umbellatum</i>	Tree	Alli chettu.	Root bark	Leucorrhoea: 2 spoonfuls of extract of root bark decoction is administered twice a day till cure.
29	Lythraceae	<i>Lagerstroemia parviflora</i>	Tree	Chennagi	Leaves	Dysentery: Tender leaves are ground into paste with pepper grains. This paste in doses of two spoonfuls is administered once a day for 5 days.
		<i>Woodfordia fruticosa</i>	Shrub	Arepuvvu, Pittachettu	Flowers	Diarrhoea: Dried flower powder is mixed with warm water and is given in doses of two spoonfuls per a day for 3 days.
30	Cucurbitaceae	<i>Coccinia grandis</i>	Climber	Kakidonda	Leaf	wounds: Leaf juice is applied on the wounds
		<i>Diplocyclos palmatus</i>	Climber	Lingadonda	Leaves	Fertility: 10ml of leaf decoction administered once a day to induce menses in girls for fertility.
31	Apiaceae	<i>Centella asiatica</i>	Herb	Saraswathiaku	Leaves	Anaemia: Shade dried leaves powder with powder of pepper seeds is given in the dosages of 3 spoonfuls of powder with glass of milk early in the morning for 30 days.
32	Alangiaceae	<i>Alangium salvifolium</i>	Tree	Udugachettu	Stem bark	Paralysis: Stem bark ground to past with <i>Piper nigrum</i> and the past is administered two spoonfuls per day for 7 days.
33	Rubiaceae	<i>Canthium parviflorum</i>	Shrub	Balusu	Leaves	Constipation: Boiled leaves are made into paste and given orally thrice a day for 2 days ays.
		<i>Gardenia gummifera</i>	Tree	Nallaika	Roots	Head ache: Roots are rubbed on stone with coconut oil and extract applied on the head
		<i>Haldinia cordifolia</i>	Tree	Kambamanu	Stem bark	Leucorrhoea: stem bark mixed with that of <i>Sterculia urens</i> , ground, boiled with <i>Piper nigrum</i> , decoction given orally for 9 days. Salt and oil food prohibited during treatment.
		<i>Ixora pavetta</i>	Shrub	Korivichettu	Stem bark	Jaundice: 2 spoonfuls of stem bark extract is administered twice a day for 9 days.
		<i>Pavetta indica</i>	Shrub	Papidi	Leaves	Blisters: warm leaf paste applied over the affected parts.
		<i>Tarenna asiatica</i>	Shrub	Pedda papidi	Stem bark	Dysentery: Stem bark crushed with that of <i>Jatropha curcas</i> , 2 spoonfuls of the extract is administered thrice a day for 3 days.
34	Asteraceae	<i>Emilia sonchifolia</i>	Herb	Pisapatri	Stem bark	Night Blindness: 10 ml stem bark juice is given internally to cure blind ness.
		<i>Tridax procumbens</i>	Herb	Gaddichamanthi	Plant	Jaundice: Plant paste with jaggery is administered in doses of two spoonfuls per day for 7 days.
		<i>Vernonia cinerea</i>	Herb	Garitikamma	Seeds	Leucoderma: A spoonful of seed powder mixed with 2 black pepper fruits is administered once a day for 30 days.
		<i>Xanthium</i>	Herb	Marulamathangi	Roots	Boils: 3ml of root extract is administered once a day for 2 days ays.

		<i>strumarium</i>				
35	Sapotaceae	<i>Madhuca longifolia</i>	Tree	Vippachettu	Roots	Stomach pain: Roots crushed to paste along with the roots of <i>Aristolochia indica</i> , <i>Holarrhena pubescens</i> and <i>Rauvolfia serpentina</i> is made into pills. 2 pills per day is administered till cure.
		<i>Manilkara hexandra</i>	Tree	Palachettu	Stem bark	Body pains: Stem bark with black pepper grain is crushed 2 spoonfuls of the extract is mixed with jaggery and milk and administered twice a day till cure.
36	Ebanaceae	<i>Diospyros chloroxylon</i>	Tree	Ullinda	Leaves	Diarrhoea: Two spoonfuls of leaf juice is given twice a day for 3days.
		<i>Diospyros melanoxyton</i>	Tree	Tunika	Leaves	Diarrhoea: Two spoonfuls of tender leaf juice is administered thrice a day for 5 days.
37	Oleaceae	<i>Nyctanthes arbortristis</i>	Tree	Parijatham	Leaves	Malaria: Decoction of the leaves with black pepper fruits, ginger and pinch of salt is made into a paste and is administered thrice a day for 3days.
38	Apocynaceae	<i>Alstonia venenata</i>	Tree	Eduakulapala	Stem bark	Anthelmintic: Stem bark along with <i>Piper longum</i> is made into an extract and is administered in doses of 5 spoonfuls twice a day for 3days.
		<i>Holarrhena pubescens</i>	Shrub	Peddapala	Stem bark	Asthma: One teaspoonful of bark powder is given orally till cure.
		<i>Ichnocarpus frutescens</i>	Climber	Nallateega	Root	Haemorrhage: Root crushed with <i>Cuminum cyminum</i> and <i>Trachyspermum roxburghianum</i> seeds and the paste with lemon juice is administered once a day for 9 days.
		<i>Rauvolfia serpentina</i>	Herb	Sarpagandhi	Root	Heart Pain: Roots crushed to paste with the roots of <i>Alstonia scholaris</i> , 2 spoonfuls of the paste is administered once a day for 5 days.
		<i>Rauvolfia tetraphylla</i>	Shrub	Patalagaruda	Root bark	Blood Pressure: 6ml decoction of root bark is administered once a day for 7 days.
		<i>Wrightia arborea</i>	Tree	Kodisapala	Bark	Snakebite: Latex, and the bark fiber tide above the bitten spot.
		<i>Wrightia tinctoria</i>	Tree	Kodisapala	Bark	Obesity: Bark along with <i>Cuminum cyminum</i> and garlic is used to reduce weight.
39	Asclepiadaceae	<i>Calotropis gigantea</i>	Shrub	Jilledu	Root	Leucorrhoea: Root decoction with paste of long peppers (3:1) is taken orally.
		<i>Gymnema sylvestre</i>	Climber	Podapatri	Root	Cobrabite: Root pounded with roots of <i>Aristolochia India</i> and <i>Rhinacanthus nasuta</i> . The paste along with infant's urine administered immediately for cobra bite.
		<i>Pergularia daemia</i>	Climber	Dustaputeega	Leaves	Bone Fracture: Leaves ground with that of <i>Plumbago zeylanica</i> and the aerial roots of <i>Vanda tessellate</i> , and the paste plastered over fractured bones.

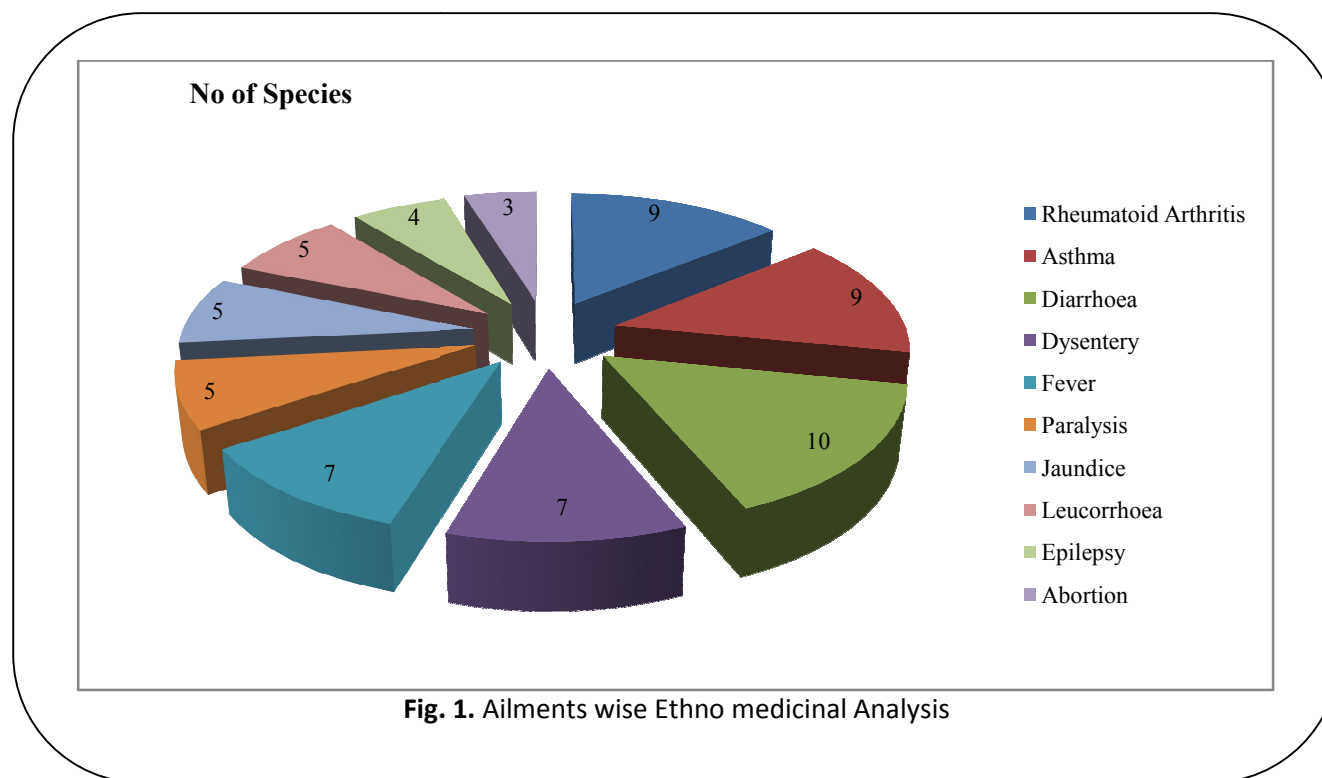
		<i>Tylophora indica</i>	Climber	Kukkavaminta	Leaves	Asthma: One tender leaf with 3 black pepper fruits is chewed on empty stomach once a day for 30 days.
		<i>Wattakaka volubilis</i>	Climber	Bundiguruja	Leaves	Inflammation: Gently warmed leaves measured with sesame oil are tied to the part of inflammation.
		<i>Cryptolepis buchanani</i>	Climber	Adavipalateega	Leaves	Galactagogue: 200g of leaf paste is administered once a day for 7-10 days to increase lactation
		<i>Hemidesmus indicus</i>	Climber	Sugandapala	Root	Herpes: Root ground to paste with the roots of <i>Aristolochia indica</i> and tubers of <i>Cyperus rotundus</i> and paste is applied on infected parts.
40	Loganiaceae	<i>Strychnos nux-vomica</i>	Tree	Musti	Stem bark	Asthma: Stem bark is crushed with black pepper and this decoction is administered in doses of 2-3 spoonfuls twice a day for 45 days.
		<i>Strychnos potatorum</i>	Tree	Chillaginjal	Seeds	Blood Pressure: Seed paste mixed with root paste of <i>Abelmoschus ficulneus</i> and <i>Cuminum cyminum</i> seeds is administered orally for 5 days.
41	Boraginaceae	<i>Coldenia procumbens</i>	Herb	Hamsapadu	Whole plant	Eczeema: Plant paste along with that of <i>Eclipta prostrata</i> is applied on the effected parts till cure.
		<i>Cordia dichotama</i>	Tree	Iriki	Stembark	Diarrhoea: 10 ml stem bark decoction is given twice in a day 4-6 days
42	Convolvulaceae	<i>Argyreia nervosa</i>	Climber	Samudrapala	Roots	Rheumatoid Arthritis: A paste of roots made with rice water is applied over the swollen part till cure.
		<i>Evolvulus alsinoides</i>	Herb	Vishnukranthi	Leaves	Jaundice: 2 spoonfuls of leaf paste is mixed with onion bulb paste is administered twice a day for 7 days.
		<i>Evolvulus nummularius</i>	Herb		Whole plant	Fever: Plant crushed with few seeds of <i>Trachyspermum ammi</i> . 1 spoonful of extract is administered twice a day for 3days.
43	Cuscutaceae	<i>Cuscuta reflexa</i>	Herb	Pasiteega	Whole plant	Epilepsy: One spoonful of decoction of the young plant with honey is administered once a day for 7 days.
44	Solanaceae	<i>Datura metel</i>	Herb	Ummetta	Root	Rheumatoid Arthritis: Root crushed with that of <i>Dioscorea bulbifera</i> 2 inches each and the extract is administered twice a day for 5 days.
		<i>Physalis minima</i>	Herb	Budda dusara	Leaf	Ear diseases: 2-3 drops of leaf juice is dropped in the ear.
		<i>Solanum nigrum</i>	Herb	Kamanchi	Whole plant	Swellings: About 250 g of the whole plant (except root) is eaten as a vegetable once a day for 5 days.
		<i>Solanum surettens</i>	Herb	Mullavanga	Seed	Toothache: Seeds are powdered and mixed with turmeric powder and is applied over gums and in between the teeth.
45	Scrophulariaceae	<i>Scoparia dulcis</i>	Herb	Goatweed	Leaf,Root	Dysentery: Leaf/root extract mildly heated and administered in doses of 3 spoonfuls twice a day for 3days.
46	Bignoniaceae	<i>Oroxylon indicum</i>	Tree	Pampinichettu	Root bark,Seeds	Antifertility: Root bark or seeds ground with roots of <i>Spermacece articularis</i> and the intestine of mangoose and the paste made into pills. 1

						pill is administered after menstruation.
47	Pedaliaceae	<i>Pedaliium murex</i>	Herb	Enugupalleru	Leaves	Dysmenorrhoea: Leaves mixed with garlic cloves and black pepper fruits are made into paste. The paste is administered in doses of 2 spoonfuls once a day during menstrual period for 4 days.
48	Martyniaceae	<i>Martynia annua</i>	Shrub	Gaddagoru	Root	Bronchitis: 3 spoonfuls of root decoction administered orally twice a day for 4 days.
49	Acanthaceae	<i>Adhathoda zeylanica</i>	Shrub	Addasaram	Leaves	Asthma: Leaves are ground to make paste and it is mixed with water and orally once a day for 4-5 days.
		<i>Andrographis paniculata</i>	Herb	Nelavemu	Stem	Asthma: Stem is mixed with that of <i>Gymnema sylvestre</i> and <i>Justicia adhatoda</i> leaves, ground and the infusion is given orally till cure.
50	Verbenaceae	<i>Clerodendrum serratum</i>	Shrub	Chiruteku	Root	Analgesic: 100 g root in one liter of water is boiled down to half one. This decoction in one glassful administered twice a day for 7 days.
		<i>Gmelina arborea</i>	Tree	Gummaditeku	Stem bark	Chest pain: stem bark ground with that of <i>Streblus asper</i> , <i>Careya arborea</i> and <i>Piper nigrum</i> and the paste made into pills, one pill a day is administered for 30 days.
		<i>Gmelina asiatica</i>	Shrub	Sallagummadu	Fruit	Dandruff: The ripe fruit paste applied to scalp 1 hour before bath for 4 weeks.
		<i>Lantana camara</i>	Shrub	Akshintalu pulu	Tender shoots	Rheumatoid Arthritis: 3 teaspoons of tender shoot decoction is administered daily once for a 30 days
		<i>Phyla nodiflora</i>	Herb	Bokkinagu	Whole plant	Stomachache: 50 ml whole plant juice is administered orally
		<i>Vitex negundo</i>	Shrub	Vavila	Leaves	Body Swelling: Leaf paste made into peanut sized pills, 2 pills are administered orally twice a day till cure.
51	Lamiaceae	<i>Hyptis suaveolens</i>	Shrub	Sirnatulasi	Root	Fever: 5ml of root decoction is administered twice a day for 3 days.
		<i>Ocimum americanum</i>	Herb	Kukkatulasi	Leaves	Fits: The leaves of this plant along with black pepper fruits and garlic cloves are crushed into a paste and the paste is given in doses of 2 spoonfuls twice a day for 15 days.
52	Nyctaginaceae	<i>Boerhaavia diffusa</i>	Herb	Atikamamidi	Whole plant	HIV: Whole plant of this along with <i>Centella asiatica</i> and <i>Piper longum</i> are mixed in 5:3:2 proportion and ground into paste. The extract thus obtained is administered in doses of 2 spoonfuls twice a day. This increases the haemoglobin content, disease resistance and weight also.
53	Amaranthaceae	<i>Achyranthes aspera</i>	Herb	Uttareni	Seeds	Antidote to Animal Bite: 3 spoonfuls of seed paste mixed in a glass of hot water is administered twice a day as an antidote for bite of any poisonous animal.
		<i>Aerva lanata</i>	Herb	Kondapindikura	Whole plant	Leucorrhoea: 4 spoonfuls of whole plant juice mixed with a pinch of camphor is administered daily twice for 5 days.

54	Aristolochiaceae	<i>Aristolochia indica</i>	Climber	Nallaeswari	Roots	Diarrhoea: Roots ground with the roots of <i>Holarrhena pubescens</i> , <i>Madhuca longifolia</i> , <i>Orthosiphon rubicundus</i> and caraway seeds. The paste with water is administered for 5 days.
55	Loranthaceae	<i>Dendrophthoe falcata</i>	Parasites	Badanika	Stem Bark	Asthma: 10-12 g of stem bark powder is administered daily twice for 3days.
56	Euphorbiaceae	<i>Acalypha indica</i>	Herb	Muripindi	Leaves	Jaundice: leaves with leaves of <i>Justicia adhatoda</i> , <i>Eclipta prostrata</i> , <i>Centella asiatica</i> , <i>Phyllanthus amarus</i> , <i>Coccinea indica</i> , and <i>Momordica charantia</i> are taken in equal quantities and ground and made into pills of soapnut seed size. One pill is administered with rice cunjee or butter milk twice a day for 3days.
		<i>Baliospermum montanum</i>	Herb	Kondaamudam	Roots	Stomach ache: The roots are crushed with jaggery and the filtrate is taken orally twice a day for 2 days ays.
		<i>Bridelia retusa</i>	Tree	Anemchettu	Stem bark	Chest pain: Stem bark crushed with that of <i>Butea superba</i> and <i>Lannea coromandelica</i> and the filtrate administered in doses of 1 spoonful twice a day for 3days.
		<i>Cleistanthus collinus</i>	Tree	Kodisa	Stem bark	Suicide: Stem bark or fruits crushed in goat's milk and the extract taken orally for committing suicide.
		<i>Euphorbia hirta</i>	Herb	Pachabotlu	Leaves	Dysentery: 3 spoonfuls of leaf extract mixed with sugar is administered twice a day for 7 days.
		<i>Mallotus philippensis</i>	Tree	Sinduram	Fruit	Anthelmintic: Fruit is made into powder and powder is used for powerful Anthelmintic.
		<i>Phyllanthus amarus</i>	Herb	Nelausiri	Leaves	Scalp infection: The leaves pound with the roots of <i>Andrographis paniculata</i> and the paste is applied over the scalp.
		<i>Phyllanthus emblica</i>	Tree	Usiri	Stem	Bone Fracture: Stem galls ground with leaves of <i>Vanda tessellate</i> and the paste plastered over fractured bones.
57	Ulmaceae	<i>Holoptelea integrifolia</i>	Tree	Nemali chettu	Leaves	Blisters: Leaf made into paste and is applied on the affected parts.
		<i>Trema orientalis</i>	Tree	Bogguchettu	Root bark	Epilepsy: 3 spoonfuls of root bark extract is administered twice a day for 20 days.
58	Moraceae	<i>Ficus benghalensis</i>	Tree	Marrichettu	Fruit	Boils: Latex is applied on the affected parts.
		<i>Ficus religiosa</i>	Tree	Ravichettu	Stem bark	Diarrhoea: 2 spoonfuls of stem bark extract is taken orally once a day for 3days.
		<i>Sterblus aspera</i>	Tree	Barnika	Roots	Rheumatiod Arthritis: Dried roots pounded with the dried roots of <i>Holarrhena pubescens</i> and <i>Piper longum</i> . This powder is mixed with water and boiled along with a bit of earthen pot. This extract is taken orally till cure.

59	Orchidaceae	<i>Vanda tessellata</i>	Epiphytes	Vadanika	Roots	Fractures: Aerial roots are pounded to paste with the stem of <i>Viscum articulatum</i> , stem bark of <i>Litsea glutinosa</i> , tubers of <i>Dioscorea oppositifolia</i> and <i>Dioscorea pentaphylla</i> . The paste along with gingelly oil and blood of black hen is made in to pills, one pill is administered orally once a day for 9 days.
60	Costaceae	<i>Costus speciosus</i>	Herb	Bokachikadumpa	Rhizome	Abortion: 10g of Rhizome paste is administered twice a day for 5 to 7 days.
61	Hypoxidaceae	<i>Curculigo orchiolides</i>	Herb	Nelatadi	Root	Cuts: Roots are made into paste, and the paste is applied on the affected area till cure.
62	Dioscoreaceae	<i>Dioscorea bulbifera</i>	Climber	Adavidumpa	Tubers	Sterility: Tuber paste is used orally from the 4 th day of menstruation for a period of 21 days to attain sterility.
		<i>Dioscorea oppositifolia</i>	Climber	Tellagadda	Tubers	Fractures: Tubers ground to paste along with tubers of <i>Dioscorea pentaphylla</i> , stem bark of <i>Litsea glutinosa</i> , aerial root tubers of <i>Vanda tessellata</i> and ste of <i>Viscum articulatum</i> . The paste along with gingerly oil and blood of black hen is made into pills. Two pills are given twice a day for 30 days.
		<i>Dioscorea pentaphylla</i>	Climber	Adaviginusateega	Tubers	Rheumatoid Arthritis: Tuber paste is applied externally over the affected area till cure.
63	Liliaceae	<i>Asparagus racemosus</i>	Climber	Sathavari	Roots	Diabetes: These tuberous roots with tuberous roots of <i>Mirabilis Jalapa</i> , <i>Boerhavia chinensis</i> and roots of <i>Plumbago auriculata</i> are taken in equal quantities and soaked in lime water for 2 days, dreid and powdered. 2 spoonfuls of powder mixed in a glass of cow milk is administered daily twice for 3days.
64	Arecaceae	<i>Borassus flabellifer</i>	Tree	Tadichettu	Stem	Muscle Pain: Stem peelings crushed with root bark of <i>Alangium salvifolium</i> and the filtrate mixed with sugar, two spoonfuls of the mixture is a administered twice a day for 3days
		<i>Caryota urens</i>	Tree	Jilugu	Nuts	Dandruff: Nut powder made into paste applied to the head and bath is taken after one hour for twice a week.
		<i>Cyperus rotundus</i>	Herb	Tungagaddi	Tubers	Diarrhoea: Three or Four of tuberous underground stolons are crushed and the extract along with few drops of honey is taken orally for about 3days.
65	Poaceae	<i>Bambusa arundinacea</i>	Shrub	Veduru	Stem,leaves	Blood Purifier: 5 ml of stem and leaf extract is administered twice a day for 7 days.
		<i>Cynodon dactylon</i>	Herb	Garikagaddi	Leaves	Dysuria: 10 Leaves are pestled with 7 leaves of <i>Zizyphus mauritiana</i> and 7 grains of raw rice and a mixture is prepared by adding 150 ml of water to it. This is taken once in a day for about 10 days.

		<i>Dendrocalamus strictus</i>	Shrub	Sadanapuvoduru	Leaves	Abortion: Tender leaves crushed along with seeds of <i>Hibiscus cannabinus</i> 5 spoonfuls of this extract is given orally twice a day for 5 days (Pregnancy upto 3 months).
		<i>Saccharum spontaneum</i>	Herb	Rellagaddi	Root	Eruptions on the Skin: 20 ml root decoction is given orally once a day for 5 days.
		<i>Vetiveria zizanoides</i>	Herb	Vattiveru	Root	Allergy: Roots ground with that of <i>Achyranthes aspera</i> in doses of 10g in one glass of water once a day for 3days.



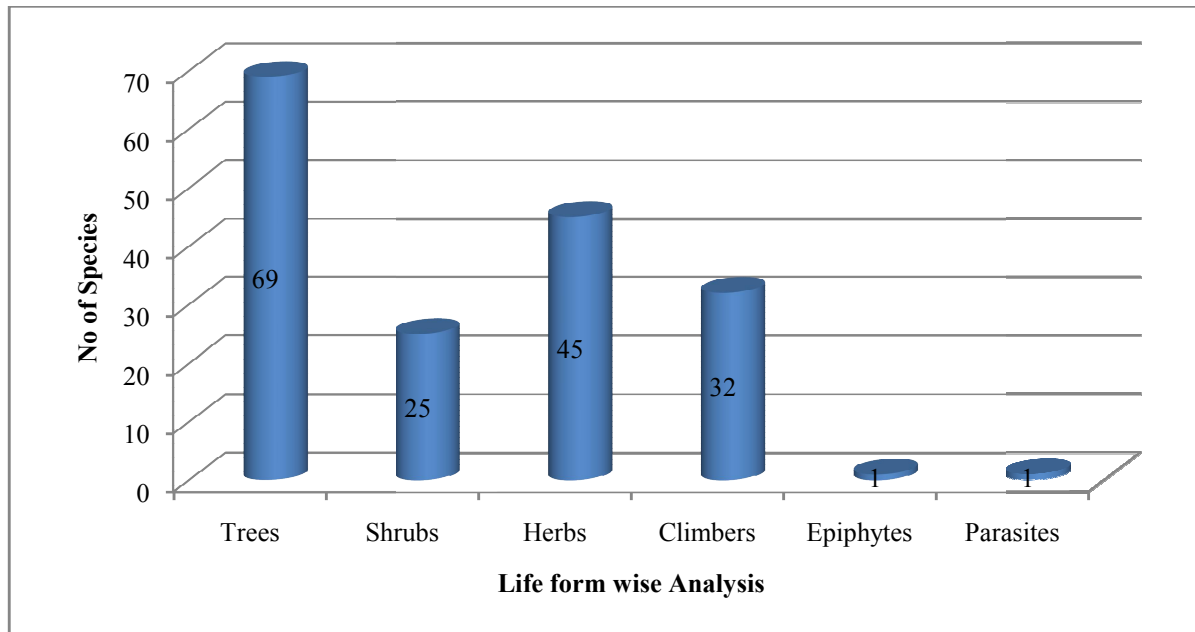


Fig. 2. Life form wise Ethno medicinal Analysis

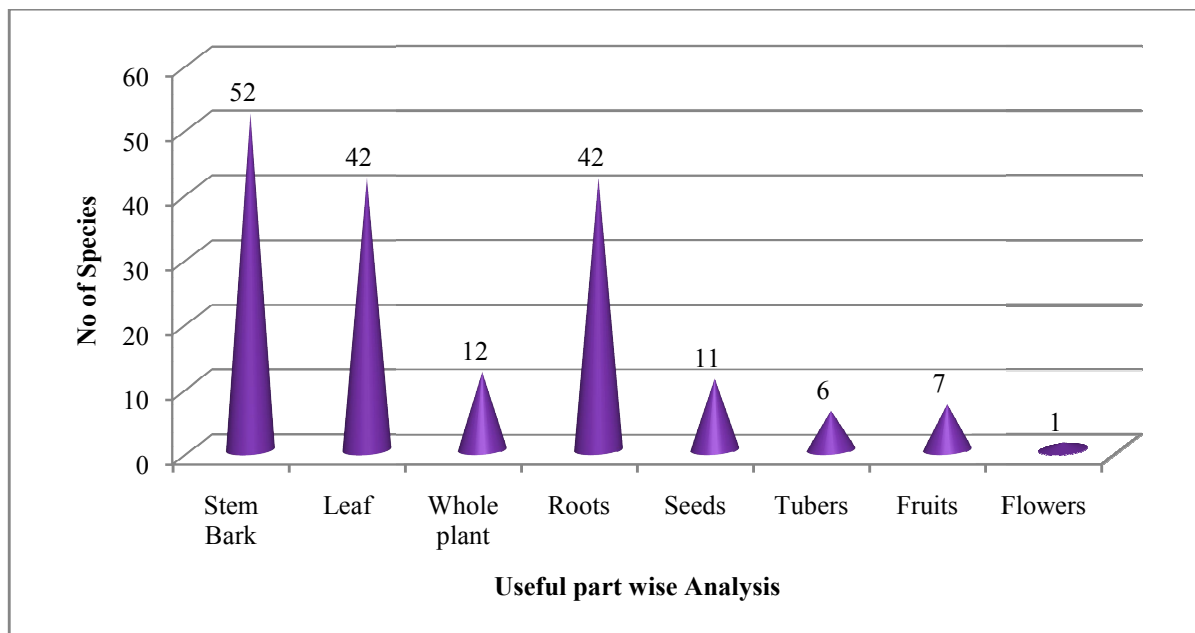


Fig. 3. Useful part wise analysis