

## Phytomedicinal Flora and their Folk claim of Visakha Patnam District Agency, Andhra Pradesh, India.

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**Abstract:** The phytomedicinal plants study was carried out in adjoining tribal areas of Visakha patnam District, Andhra Pradesh during the month of November - December 2011. The information related to medicinal species which are used to cure common ailments and diseases were collected by the local people of study area. A total of 100 plants belonging to 53 families are listed in this paper.

**Key Words:** Agency area, Phytomedicinal flora, Traditional uses, Tribal people, Visakhapatnam.

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### I. Introduction

The use of plants as a relief for human suffering is as old as human especially, in India and China; people are using plants in organized healthcare for over 5000 years. Local communities mainly depend on traditional remedies, largely based on plants, for immediate access to relatively safe, cost effective, efficacious and culturally acceptable solutions to primary health care. In the oral traditions, local communities of all ecosystems right from trans-Himalayas down to costal plains have discovered the medicinal uses of thousands of plants found locally. India has one of the richest plant medicinal cultures in the world. This is a culture of tremendous contemporary relevance because, it can on one hand ensure health security to millions of people on the other hand it can provide new and safe herbal drugs to the entire world. World Health Organization (WHO) notes that out of 119 plants derived Pharmaceutical medicines, about 747 are used in modern medicine in way that correlated directly with their traditional uses as plant medicines by native cultures. C.S. Reddy *et al.* 2000, contains a note on medicinal uses of *Hildegard populifolia* and *Pterocarpus santalinus*: Red listed and endemic taxa in Andhra Pradesh. S.N. Jadhav *et al.* (2001) proceedings of the workshop on conservation Assessment and Management Planning (CAMP) for medicinal plants of Andhra Pradesh. C.S. Reddy *et al.* (2001) enumerated the threatened medicinal plants of Andhra Pradesh. R. Jeevan & Raju. (2001) described certain potential crude drugs used by tribals of Nallamalais, Andhra Pradesh for Skin diseases. K.N. Reddy *et al.* (2002) reported the ethnobotany of some of the orchids of Andhra Pradesh while S.N. Jadhav & K.N. Reddy (2002) presents a paper on In-Situ Conservation of Medicinal Plants in Andhra Pradesh. Banerjee (1977) & Gupta *et al.* (1997) has reported the ethnobotany of Araku valley in Visakhapatnam district. T.A. Reddy (1980) note down some medicinal plants of Polavaram Agency, West Godavari district. Nisteswar & Kumar (1980, 1983) reported the phytomedicine from Rampa and Addateegala Agency, East Godavari district. Rao & Harasreeramulu (1985) described the selected medicinal plants of Srikakulam district. Sudhakar & Rao (1985) enlisted the medicinal plants of East Godavari while Arunee Kumar *et al.* (1990) enumerated the medicinal plants of Kakinada.

### II. Study Area

Visakhapatnam district is one of the North Eastern Coastal district of Andhra Pradesh and it lies between 17° - 15<sup>1</sup> and 18° - 32<sup>1</sup> Northern latitude and 18° - 54<sup>1</sup> and 83° - 30<sup>1</sup> in Eastern longitudes. It is bounded on the North partly by the Orissa State and partly by Vizianagaram District, on the South by East Godavari District, on the West by Orissa State and on the East by Bay of Bengal. The district presents 2 distinct Geographic divisions. The strip of the land along the coast and the interior called the plains division and hilly area of the Eastern Ghats flanking it on the North and West called the Agency Division. The Agency Division consists of the hilly regions covered by the Eastern Ghats with an altitude of about 900 metres dotted by several peaks exceeding 1200 metres. Sankaram Forest block topping with 1615 metres embraces the mandals of paderu, G. Madugula, Hukumpeta Chintapalli, G.K. Veedhi, Koyyuru, Pedabayalu, Munchingiput, Dumbriguda, Arakuvalley and Ananthgiri. Visakha patnam district is rich in its forest resources. The agency areas with thick forests on hills, on hill slopes and in valleys. The total area under forest cover in this area is 104811.91 Ha. As against the total extent of 3, 24,965 Ha. Of the division. The luxuriant forests in the Anantagiri, Araku, Minimuluru, G. Madugula, Chinta palli, and Gudem kothaveedi areas present a good sight to any tourist or naturalist. Based on Champion' and Seth (1968) classification, the forests in the agency area can be divided in to the following types.

1. Southern Tropical Semi-evergreen Forests:

2. Southern Tropical Moist Deciduous Forests:
3. Savannahs or Hill Top Forest:
4. Southern Tropical Dry Deciduous forests:

The climate of the agency area is classified as Sub-tropical with high seasonal variation in rainfall and wide extremes of temperature. The average minimum temperature ranges from 3<sup>0</sup> to 4<sup>0</sup> C in November/December while average maximum temperature ranges from 35<sup>0</sup> to 40<sup>0</sup> C in May/June. Regarding rainfall and seasonal conditions usually the southwest monsoon starts from 3<sup>rd</sup> week of April every year and northeast monsoon starts from October.

### III. Methodology

The study was conducted during the month of November – December 2011 in tribal area of Visakha Patnam district. The information on local use and diseases cured was collected using structured questionnaire from the local people. The plant collections were identified with the help of Flora of Andhra Pradesh and herbarium at Andhra University. A total of 100 species have been recorded and enumerated with its family name, local name, part used, disease/ailment and uses (table 1).

**Table. 1. Medicinal Plants and their uses.**

| S.No | Plant name   | Local name   | Distribution   | Traditional uses   |
|------|--|--------------|--|--|
| 1.   | <i>Acacia chundra</i> (Roxb.ex Rott.)Willd. (Mimosaceae)<br>Habit: A moderate sized tree       | Pikkachandra | Fairy common in thorny scrub jungles                       | Stem bark: Diabetes  |
| 2.   | <i>Acacia leucophloea</i> (Roxb.)Willd. (Mimosaceae)<br>Habit:A Moderate sized tree            | Tellatamma   | Common in dry deciduous forests                            | Stem bark: Dysentery, wound  |
| 3.   | <i>Acacia nilotica</i> (Linn.)Willd.ex Del.(Mimosaceae)<br>Habit: A Moderate sized tree        | Nallathumma  | Common in waste lands and cultivated                       | Stem bark: Bone fracture. Menstrual complaints, piles, snake bite                    |
| 4.   | <i>Acanthospermum hispidum</i> DC.(Asteraceae)<br>Habit: erect hispid herb                     | Palleru      | Common weed in waste places                                | Root: Leprosy, leucorrhoea, menorrhagia  |
| 5.   | <i>Adiantum incisum</i> Forssk.(Adiantaceae)<br>Habit: A leafy fern                            | Jerrickura   | Common along the stream banks and moist shady areas        | Whole plant: Scorpion sting  |
| 6.   | <i>Ailanthus excelsa</i> Roxb.(Simaroubaceae)<br>Habit: large deciduous tree                   | Peddamanu    | A frequent member of deciduous forests                     | Stem bark: Blood pressure, diarrhea, dysentery, fever, leucorrhoea, piles            |
| 7.   | <i>Aloe barbadensis</i> Mill.(Liliaceae)<br>Habit:Perennial herb                               | Kalabanda    | Occasional along the rocky hill slopes and also cultivated | Root: Jaundice<br>Leaf: Pain, ulcer, wound<br>Mucilage: Boil, eye diseases           |
| 8.   | <i>Amorphophallus paeonifolius</i> (Dennst.)<br>(Araceae)Habit: Herb                           | Adavikanda   | Occasional in the hills of Visakha patnam district         | Stem: Leucorrhoea, menorrhagia, piles  |
| 9.   | <i>Aristolochia bracteolata</i> Lamk. (Aristolochiaceae)<br>Habit: A perennial prostrate herb  | Gadidagadapa | Common weed of cultivated fields, waste places             | Root: Dental problems<br>Leaf: Skin diseases<br>Whole plant: Anthelmintic, purgative |
| 10.  | <i>Azima tetracantha</i> Lam.(Salvadoraceae)<br>Habit: Thorny shrub                            | Tellavuppi   | Common in the outskirts of thorny scrub jungles            | Root: Stomache disorders   |
| 11.  | <i>Baliospermum montanum</i> (Willd.)Muell. (Euphorbiaceae)<br>Habit:A stout erect under shrub | Chittamudamu | Occasional in the undergrowth of moist deciduous forests   | Root: Pain, stomache disorders   |
| 12.  | <i>Bambusa arundinacea</i> Willd. (Poaceae)<br>Habit: A tall thorny culm                       | Veduru       | Fairy common along hill slopes of forests                  | Stem: Bone fracture, lymph adenitis, rheumatism                                      |
| 13.  | <i>Barringtonia acutangula</i> (Linn.) Gaertn. (Barringtoniaceae)                              | Tarrepu      | A common species along                                     | Root: Rheumatism<br>Stem bark: Blood   |

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|     | Habit: An evergreen tree   |              | streams and on swampy land   | pressure, bronchial asthma, diarrhea, dysentery, piles   |
| 14. | <i>Bauhinia vahlii</i> W. & A. (Caesalpiniaceae)<br>Habit: A large woody climber   | Addaku       | In deciduous forests   | Root: Leprosy, stomach disorders<br>Leaf: Dropsy<br>Stem bark: Diarrhoea, dysentery, malaria                           |
| 15. | <i>Buchanania lazan</i> Spreng. (Anacardiaceae)<br>Habit: A medium sized tree  | Charapappu   | Common in deciduous forests  | Stem bark: Bone fracture, dysentery, pain  |
| 16. | <i>Caesalpinia bonduc</i> (Linn.) Roxb. (Caesalpiniaceae)<br>Habit: A large scandent prickly shrub                               | Gaccha       | On the foot hills of scrub jungles                                   | Root: Dysentery, stomach disorders<br>Root bark: Epilepsy<br>Stem bark: Diarrhoea<br>Leaf: Hydrocele<br>Seed: Headache |
| 17. | <i>Capparis zeylanica</i> Linn. (Capparaceae)<br>Habit: Thorny climbing shrub  | Adonda       | Common in forests and hedges   | Root: Aphrodisiac<br>Root bark: Pain   |
| 18. | <i>Cassia auriculata</i> Linn. (Caesalpiniaceae)<br>Habit: A much branched shrub   | Nelatangedu  | Common and abundant at forest  | Root: Antiemetic, diarrhea<br>Leaf: Burn, eye diseases<br>Stem bark: Acidity, dysentery, jaundice                      |
| 19. | <i>Cassine glauca</i> (Roth.) O. Kuntze. (Celastraceae)<br>Habit: Small tree   | Pantamanu    | Common in forests  | Stem bark: Sterility, pain, scorpion sting   |
| 20. | <i>Celastrus paniculatus</i> Willd. (Celastraceae)<br>Habit: Climbing shrub  | Teegapalleru | Throughout on hills.   | Root: Venereal diseases<br>Leaf: Headache<br>Seed oil: Hair care, skin diseases  |
| 21. | <i>Chloroxylon swietenia</i> DC. (Rutaceae)<br>Habit: An erect tree  | Billudu      | Frequent in deciduous forest areas                                   | Root bark: Impotence<br>Leaf: Wound<br>Stem bark: Bone fracture, dental problems                                       |
| 22. | <i>Cipadessa baccifera</i> (Roth.) Miq. (Meliaceae)<br>Habit: A Bushy shrub  | Paradonda    | Common near villages and dry forests                                 | Root: Laxative<br>Stem bark: Rheumatism  |
| 23. | <i>Cissampelos pareira</i> Linn. Var. <i>hirsuta</i> (Buch-Ham.ex DC.) Forman. (Menispermaceae)<br>Habit: A climbing under shrub | Gundapaku    | Common on hedges, on bushes along edges of the forests               | Root: Antiemetic, diarrhea, migraine, stomach disorder<br>Leaf: Acidity  |
| 24. | <i>Cissus pallida</i> (W. & A.) Planch. (Vitaceae)<br>Habit: An erect shrub  | Budaritiga   | Common in dry forests  | Root: Boil, warts  |
| 25. | <i>Cleistanthus collinus</i> (Roxb.) Benth. Ex. Hook. f. (Euphorbiaceae)<br>Habit: Small deciduous tree                          | Vodisa       | Common in dry open forests   | Stem bark: Menorrhagia   |
| 26. | <i>Clerodendrum serratum</i> (Linn.) Moon. (Verbenaceae)<br>Habit: Woody perennial shrub   | Bommalamarri | Common in the hilly areas along ghat areas                           | Root: Fever, leprosy, menstrual complaints, skin diseases<br>Leaf: Headache  |
| 27. | <i>Clerodendrum viscosum</i> Moldenke (Verbenaceae)<br>Habit: Gregarious under shrub   | Piduduru     | Common in the undergrowth of deciduous forests                       | Leafy: Ear complaints  |
| 28. | <i>Coldenia procumbens</i> Linn. (Boraginaceae)<br>Habit: Prostrate scabrid herb   | Hamsa padi   | Commonly occurring along bunds of streams in dried ditches and tanks | Root: Paralysis<br>Leaf: Rheumatism<br>Whole plant: Cracks in feet, cuts, skin diseases                                |
| 29. | <i>Colebrookea oppositifolia</i> Sm. (Lamiaceae)   | Joldi        | Occasional along the hill slopes in                                  | Leaf: Bruise, wound  |

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|     | Habit: Shrub   |                | the moist deciduous forests                          |   |
| 30. | <i>Combretum roxburghii</i> Spreng. (Combretaceae)<br>Habit: A large climbing shrub                  | Suritithivva   | Common in deciduous forests on trees and shrubs      | Leaf: Boil, skin diseases<br>Stem bark: Dysentery   |
| 31. | <i>Crataeva magna</i> (Lour.) DC (Capparaceae)<br>Habit: A medium sized deciduous tree               | Velimirichettu | Frequent along river bunds                           | Root: Stomach disorders   |
| 32. | <i>Cryptolepis buchananii</i> Roem & Schult. (Asclepiadaceae)<br>Habit: A large twinning shrub       | Adavipalatiga  | Frequent at foot hills in shady areas                | Root: Acidity<br>Whole plant: Rickets   |
| 33. | <i>Dalbergia lanceolaria</i> Linn.f. (Fabaceae)<br>Habit: A large deciduous tree                     | Irugudu        | Common in dry deciduous forests                      | Stem bark: Fever, paralysis, rheumatism, stomach disorders                                |
| 34. | <i>Dalbergia latifolia</i> Aroxb. (Fabaceae)<br>Habit: A Large deciduous tree                        | Virugudu       | Common in deciduous forests                          | Stem bark: Stomach disorders  |
| 35. | <i>Dalbergia volubilis</i> Roxb. (Fabaceae)<br>Habit: A large woody climber                          | Thiyyatangedu  | Common in deciduous forests                          | Seed: Rheumatism<br>Stem bark: Stomach disorders  |
| 36. | <i>Decalepis hamiltonii</i> Wt.& Arn. (Asclepiadaceae)<br>Habit: Climbing shrub                      | Barrisungandhi | Rare in forests                                      | Root: Aphthous ulcers, tonic  |
| 37. | <i>Dendrophthoe falcata</i> (Linn.) Etting. (Loranthaceae)<br>Habit: Shrubby partial stem parasite   | Radam          | A frequent parasite on all deciduous trees           | Stem bark: Piles<br>Whole plant: Bone fracture, diarrhoea, leucorrhoea                    |
| 38. | <i>Desmodium gangeticum</i> (Linn.) DC. (Fabaceae)<br>Habit: an erect diffusely branched under shrub | Gitanaram      | Common in dry forests                                | Root: Boil, bronchial asthma, cough, whoping cough  |
| 39. | <i>Dillenia indica</i> Linn. (Dilleniaceae)<br>Habit: A medium to large sized tree                   | Revadi         | Frequent along moist hilly areas                     | Calyx: Stomach disorders  |
| 40. | <i>Dillenia pentagyna</i> Roxb. (Dilleniaceae)<br>Habit: A large deciduous tree                      | Pedda Revadi   | Frequent in forest areas                             | Stem bark: Paralysis, snake bite  |
| 41. | <i>Diospyros melanoxylon</i> Roxb. (Ebenaceae)<br>Habit: A moderate sized tree                       | Tumikaku       | Common in dry deciduous forests                      | Leaf: Diarrhoea, tonic<br>Stem bark: Bone fracture, cold, cough                           |
| 42. | <i>Ecboium viride</i> (Forssk.) Alston (Acanthaceae)<br>Habit: Small shrub                           | Ekanga         | Common in hedges and bushes of dry deciduous forests | Root: Dysuria<br>Fruit: jaundice  |
| 43. | <i>Entada pursaetha</i> DC. (Mimosaceae)<br>Habit: A large woody climber                             | Gillatiga      | Common climber in the hilly areas                    | Stem bark: Antiemetic, diarrhoea<br>Seed: hepatic complaints<br>Cotyledons: Anthelminitic |
| 44. | <i>Erythroxylum monogynum</i> Roxb. (Erythroxylaceae)<br>Habit: Small tree                           | Devadaru       | Common in the deciduous forests                      | Leaf: Anthelmentic, antiemetic, jaundice  |
| 45. | <i>Feronia limonia</i> (Linn.) Swingle (Rutaceae)<br>Habit: Tree                                     | Velaga         | In open dry forests                                  | Root: Rheumatism, whooping cough<br>Stem bark: Pain                                       |
| 46. | <i>Ficus benghalensis</i> Linn. (Moraceae)<br>Habit: Evergreen tree                                  | Marri          | Common avenue tree along road sides                  | Prop root: Diarrhoea<br>Stem bark: Boil, menstrual complaints                             |
| 47. | <i>Ficus heterophylla</i> Linn. f. (Moraceae)<br>Habit: Scandent shrub                               | Kuvva juvvi    | Common near streams and rivers                       | Root: Bronchial asthma<br>Root bark: Cough  |
| 48. | <i>Ficus hispida</i> Linn. f. (Moraceae)<br>Habit: A moderate sized tree                             | Buddamedi      | Frequent along the streams in the hills              | Leaf: Spermtorrhoea<br>Stem bark: Diarrhoea, fever<br>Latex: Warts                        |

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| 49. | <i>Ficus religiosa</i> Linn. (Moraceae)<br>Habit: A large tree                                  | Ravi          | Avenue or roadside tree                                | Stem bark: Blood pressure, diarrhea, dysentery, menstrual complaints, pain   |
| 50. | <i>Ficus semicordata</i> Buch. Ham. ex Sm (Moraceae)<br>Habit: Medium sized tree                | Verubodda     | In moist deciduous forests                             | Stem bark: Fertility   |
| 51. | <i>Garuga pinnata</i> Roxb. (Burseraceae)<br>Habit: A large tree                                | Garugudu      | Common on hill slopes                                  | Stem bark: Bone fracture, menstrual complaint, pain  |
| 52. | <i>Glycosmis mauritiana</i> (Lamk.) Tanaka (Rutaceae)<br>Habit: Shrub                           | Golugu        | Frequent species on the outskirts of forests           | Root: Cough  |
| 53. | <i>Gmelina arborea</i> Roxb. (Verbenaceae)<br>Habit: Straggling shrub                           | Gummudu       | Common in the open forest areas                        | Stem bark: Bone fracture, bronchial asthma, cough, diarrhea, epilepsy, stomach disorders                               |
| 54. | <i>Gmelina asiatica</i> Linn. (Verbenaceae)<br>Habit: A large deciduous tree                    | Gummudu       | Fairly common on the hill slopes                       | Fruit: Dandruff  |
| 55. | <i>Gnetum ula</i> Brongn. (Gnetaceae)<br>Habit: A large woody climber                           | Laloditiga    | Rare along stream banks in the moist deciduous forests | Stem bark: Diarrhoea   |
| 56. | <i>Grewia rothii</i> DC. (Tiliaceae)<br>Habit: An erect shrub                                   | Jibilika      | Common in the forest hilly areas                       | Root bark: Dysentery, venereal diseases  |
| 57. | <i>Gymnema sylvestre</i> R. Br. (Asclepiadaceae)<br>Habit: Climbing shrub                       | Podapatri     | Frequent on the outskirts of forests                   | Leaf: Diabetes, snake bite   |
| 58. | <i>Hemidesmus indicus</i> (Linn.) R.Br. (Asclepiadaceae)<br>Habit: Twinning shrub               | Sugandhipala  | Occasional both in plains and forests                  | Root: Antiemetic, ulcers, cut, diarrhea, fever, fit, jaundice, skin diseases<br>Leaf: Insect bite                      |
| 59. | <i>Holarrhena pubescens</i> (Buch. - Ham.) Wall. (Apocynaceae)<br>Habit: A small deciduous tree | Kodisapala    | Common in the deciduous forests                        | Root & Stem bark: Dysentery, diarrhea  |
| 60. | <i>Holoptelea integrifolia</i> (Roxb.) Planch (Ulmaceae)<br>Habit: A large deciduous tree       | Nemalinaara   | Occasional on hill slopes                              | Stem bark: Ant fertility, bone fracture, dental problems, dysentery, fever, pain, piles, rheumatism, stomach disorders |
| 61. | <i>Hugonia mystax</i> Linn. (Linaceae)<br>Habit: A rambling shrub                               | Geddagoru     | In dry deciduous forest areas                          | Root: Dropsy, epilepsy, leucorrhoea, menorrhoea, venereal diseases   |
| 62. | <i>Hybanthus enneaspermus</i> (Linn.f.) Muell. (Violaceae)<br>Habit: Small annual herb          | Ratnapurusha  | Frequently appears on sandy soils and moist places     | Root: Impotence, leucorrhoea, menorrhoea, rheumatism<br>Whole plant: Stomach disorders                                 |
| 63. | <i>Hymenodictyon orixense</i> (Roxb.) Mabb. (Rubiaceae)<br>Habit: A large deciduous trees       | Dudipala      | In the hilly region                                    | Stem bark: Leucorrhoea, menorrhoea   |
| 64. | <i>Ichnocarpus frutescens</i> R.Br. (Apocynaceae)<br>Habit: A Climbing shrub                    | Palatiga      | In the plains and lower hilly areas                    | Root: Jaundice, snake bite   |
| 65. | <i>Jasminum angustifolium</i> (Linn.) Willd (Oleaceae)<br>Habit: Climbing shrub                 | Adavimalli    | Commonly found in dry deciduous forests                | Root: Stomach disorders  |
| 66. | <i>Lannea coromandelica</i> (Houtt.) Merr. (Anacardiaceae)<br>Habit: Deciduous tree             | Gumpena       | Commonly in deciduous forests of hilly areas           | Stem bark: Cut, dysentery, fever, pain, stomach disorders  |
| 67. | <i>Leea indica</i> Merr. (Leeaceae)<br>Habit: A large shrub or small tree                       | Konda mookudu | Rare   | Root: Diarrhoea, dysentery, headache   |
| 68. | <i>Leptadenia reticulata</i> (Retz.) Wt. & Arn. (Asclepiadaceae)                                | Mukkutummudu  | Common in outskirts of                                 | Leaf and root: In skin affection, wounds   |

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| 69. | Habit: A climbing shrub<br><i>Litsea glutinosa</i> (Lour.) Robinson<br>(Lauraceae)<br>Habit: An evergreen shrub or tree | Naramamidi        | forests<br>Common along stream banks in the deciduous forests | Root: wounds<br>Stem bark: Boil fracture, leucorrhoea                              |
| 70. | <i>Litsea monopetala</i> (Roxb.) Pers.<br>(Lauraceae)<br>Habit: Medium sized tree                                       | Chinamamidi       | Occasional in the moist deciduous forests                     | Stem bark: Rheumatism  |
| 71. | <i>Macaranga peltata</i> (Roxb.) Muell.-Arg. (Euphorbiaceae)<br>Habit: Medium sized tree                                | Palakachettu      | Common along the moist valleys and high hills                 | Fruit: Bone fracture   |
| 72. | <i>Madhuca longifolia</i> (Koen.) MacBride (Sapotaceae)<br>Habit: A large tree  | Ippa              | Common along hill slopes and outskirts of forests             | Root: Epilepsy, leprosy<br>Leaf: Burn<br>Stem bark: Cough, diarrhoea               |
| 73. | <i>Malluotus philippinensis</i> (Lamk.) Muell.-Arg. (Euphorbiaceae)<br>Habit: Small tree                                | Pandrakachettu    | Common in high hills and open scrub jungles                   | Root: Epilepsy<br>Stem bark: Diarrhoea   |
| 74. | <i>Melastoma malabathricum</i> Linn. (Melastomataceae)<br>Habit: Shrub  | Nitidanimma       | Occasional along streams                                      | Stem bark: Leucorrhoea   |
| 75. | <i>Mirabilis jalap</i> Linn. (Nyctaginaceae)<br>Habit: A tall herb  | Erramogamalle     | Planted for its showy flowers                                 | Root: Blood pressure, leucorrhoea, menorrhoea, piles, stomach disorders            |
| 76. | <i>Mitragyna parvifolia</i> (Roxb.) Korth. (Rubiaceae)<br>Habit: A large deciduous tree                                 | Bandari           | Occasional in deciduous forests                               | Stem bark: Dysentery, stomach disorders  |
| 77. | <i>Mucuna monosperma</i> DC.ex Wight (Fabaceae)<br>Habit: A large woody climber   | Pulugillatiga     | Rarely occurred in the interior hilly areas                   | Root: Dysmenorrhoea  |
| 78. | <i>Mucuna pruriens</i> (Linn.) DC. (Fabaceae)<br>Habit: A slender climber   | Duradagondi       | Frequently seen climbing on shrubs and hedges                 | Seeds: tonic<br>Roots: epilepsy<br>Leaf: dental problems                           |
| 79. | <i>Murraya koenigii</i> (Linn.) Spreng. (Rutaceae)<br>Habit: Small aromatic tree  | Karivepa          | Cultivated and run wild in the forests                        | Root: Dysentery<br>Leaf: In dysentery, fever                                       |
| 80. | <i>Naravelia zeylanica</i> DC. (Ranunculaceae)<br>Habit: Climbing shrub   | Vorratiga         | Frequent near streams in the outskirts of deciduous forests   | Leaf: Cold   |
| 81. | <i>Naringi crenulata</i> (Roxb.) Nicolson (Rutaceae)<br>Habit: Small tree   | Torrivelaga       | Common dry forests  | Stem bark: Bone fracture, dysentery, fever   |
| 82. | <i>Oroxylum indicum</i> (Linn.) Benth.ex Kurz (Bignoniaceae)<br>Habit: medium sized tree                                | Pampini           | Mostly in the outskirts of forests                            | Root: Stomach disorders<br>Stem bark: Dysentery, ear complaints                    |
| 83. | <i>Pavetta tomentosa</i> Roxb. ex Sm. (Rubiaceae)<br>Habit: Shrub   | Kondapapidi       | Common in the hilly regions                                   | Root: Alexeteric, fever  |
| 84. | <i>Pergularia daemia</i> (Forssk.) Choiv. (Asclepiadaceae)<br>Habit: Perennial climber                                  | Dustapatiga       | Common in waste places  | Root: Cold, cough, dysentery, fever, skin diseases<br>Leaf: Diarrhea, eye diseases |
| 85. | <i>Plumbago indica</i> Linn. (Plumbaginaceae)<br>Habit: Perennial shrub   | Errachitramulamu  | Rare in Visakhapatnam   | Root: Abortifacient, stomach disorders<br>Root bark: Fever, pain                   |
| 86. | <i>Plumbago zeylanica</i> Linn. (Plumbaginaceae)<br>Habit: Scandant undershrub  | Tellachitramulamu | Occasional in waste lands                                     | Root: Abortifacient, bone fracture, pain, rheumatism                               |
| 87. | <i>Pterocarpus marsupium</i> Roxb. (Fabaceae)<br>Habit: A large deciduous tree  | Virugudu          | Common in the hills in moist regions                          | Leaf: Boil, skin disease, sore<br>Stem bark: Cough, dental problems, dysentery     |
| 88. | <i>Rauwolfia serpentina</i> (Linn.)   | Patalagarudi      | Occasional in   | Root: Diabetes, diarrhea,  |

|      |   |                |   |  |
|------|---|----------------|---|--|
|      | Benth. ex Kurtz (Apocynaceae)<br>Habit: Small undershrub  |                | moist deciduous forest                        | fever, scorpion sting, skin disease  |
| 89.  | <i>Schleichera oleosa</i> (Lour.)Oken. (Sapindaceae)<br>Habit: A large tree                         | Bushi          | Common in moist hill slopes                   | Stem bark: Bone fracture, dysentery, malaria   |
| 90.  | <i>Semecarpus anacardium</i> Linn.f. (Anacardiaceae)<br>Habit:A moderate sized tree                 | Nallajidi      | Common in dry deciduous forests               | Stem bark: Cut, diarrhea, fever, leucorrhoea, malaria, rheumatism, piles             |
| 91.  | <i>Terminalia alata</i> Heyne ex. Roth. (Combretaceae)<br>Habit: A large tree                       | Nallamaddi     | Common member of deciduous forests            | Stem bark: Cardiac complaint, piles  |
| 92.  | <i>Urginea indica</i> (Roxb.)Kunth (Liliaceae)<br>Habit: Bulbous herb                               | Kondavulli     | Occasional in open dry hilly slopes           | Bulb: Boil, paralysis  |
| 93.  | <i>Vanda tessellata</i> (Roxb.)HK ex. G.Don. (Orchidaceae)<br>Habit: Epiphytic herb                 | Radam          | Common on the trees in the hilly forest areas | Leaf: ear complaints<br>Stem: bone fracture  |
| 94.  | <i>Vernonia cineria</i> (Linn.)Less. (Asteraceae)<br>Habit: Herb                                    | Sahadevi       | Common weed along road sides                  | Root: Snake bite<br>Root bark: Menstrual complaints                                  |
| 95.  | <i>Wattakaka volubilis</i> (Linn.)Stapf. (Asclepiadaceae)<br>Habit: A large climbing shrub          | Bandigurijaaku | Common in waste places                        | Leaf: Scorpion sting, tonic<br>Root & Leaf: Snake bite                               |
| 96.  | <i>Woodfordia fruticosa</i> (Linn.) Kurz. (Lythraceae)<br>Habit: A bushy shrub                      | Adavijaji      | Common in deciduous forests                   | Flowers: Dysentery, leucorrhoea, skin disease, piles, diarrhea, ulcer                |
| 97.  | <i>Ximenia americana</i> Linn. (Olacaceae)<br>Habit: Large spinous herb                             | Nakkera        | Common in dry forests on stony ground         | Root bark: Diarrhoea<br>Fruit: stomach disorders                                     |
| 98.  | <i>Xantolis tomentosa</i> (Roxb.)Raf. (Sapotaceae)<br>Habit: Moderate sized tree                    | Paala gotti    | In forests of kokkيرا palli                   | Fruit: Skin bite   |
| 99.  | <i>Ziziphus mauritiana</i> Lam. (Rhamnaceae)<br>Habit: Much branched thorny tree                    | Gangaregu      | Found in all scrub and dry deciduous forests  | Root: Cold, fever  |
| 100. | <i>Ziziphus xylopyrus</i> (Retz.) Willd (Rhamnaceae)<br>Habit: Small tree or large straggling shrub | Gottika        | Frequent in open hilly areas                  | Root: Fever, malaria<br>Stem bark: Antiemetic, cholera, dysentery, stomach disorders |

#### IV. Result & Discussion

The present investigation comprises 100 species of phyto-medicinal plant species belonging to 85 genera and 53 families of Visakhapatnam Tribal area. Out of 100 species Angiosperm are 51, Gymnosperms 1, and Pteridophytes 1. Out of 51 angiosperms 47 are Dicots and Monocots are 4 families. For each species botanical name, family, local name, parts used, distribution of the species and ailments treated are provided. Traditional healers are using these plants to cure many diseases like stomachache, diarrhea, headache, fertility, problems skin problems, cold, fever, cough, jaundice, wounds, diabetes, asthma, bone fractures, piles, snake and scorpion bites etc., Trees are 43, shrubs are 37, herbs are 12 and climbers are 8 species found to be the study area. The most dominant families in the study were, Fabaceae and Asclepiadaceae 7, Rutaceae and Moraceae 5, Mimosaceae and Verbenaceae 4, Euphorbiaceae, Apocynaceae, Anacardiaceae, Caesalpiniaceae and Rubiaceae each one 3, remaining families have each one single species. Depending upon the plant parts used root and root bark is used in the 54, followed by stem and stem bark 47, leaf 25, and whole plant/flower/seed/latex are 17. Most of the herbal remedies are taken orally.

#### V. Conclusion

It can be concluded that the local and tribal people of the district have very good knowledge on the use of medicinal plants. But such knowledge of medicinal plants is restricted to a few persons in a rural area. The destructive harvesting of the medicinal plants by the maximum use of underground parts from the wild may lead to extinction of the species in the future. As demand for medicinal plants are ever increasing and these resources depleting from the nature. Therefore, there is a need to generate awareness among the local communities towards the sustainable utilization and conservation of medicinal plants.

### **Acknowledgment**

Authors are thankful to the authorities of Andhra Pradesh forestry for permission and help during explorations.

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