

**Traditional Knowledge of Srikakulam District,  
Andhra Pradesh, India****S. B. Padal**Senior Lecturer in Botany, Mrs. A.V.N. College, Visakhapatnam,  
Andhra Pradesh, India**Y. Vijayakumar**Research Scholar, Dr. V. S. Krishna Govt. Degree College, Visakhapatnam,  
Andhra Pradesh, India***Abstract:***

*Ethno botanical studies were carried out to collect information on the use of Ethnomedicinal Plants by the tribal people of Srikakulam district, Andhra Pradesh, India. Ethnomedicinal uses of 50 plant species along with local name, botanical name, family, ailments for which the drug is administrated, mode of administration are presented. They belong to 46 genera and 28 families. These plants use to cure different type of ailments. Most remedies were taken orally, accounting for 60% of medicinal use. The most widely sought after plant parts in the preparation of remedies in the areas are the root and leaves. Tribal people have high number of medicinal plant species for the treatment of different type of diseases.*

***Key words:*** Ethnomedicinal plants, Traditional knowledge, Tribal people, Srikakulam district, Andhra Pradesh.

## 1.Introduction

The Indian sub-continent is unique in the richness of plant wealth. In India, 15,000 higher plant species occur, of which 9,000 wild plants used by the tribals, for their requirements. Out of the 7,500 wild plants used for medicinal purposes by the tribals, about 950 species found to be new claims and worthy for the scientific investigation. Many wild plants are used as edibles by the tribals. Almost all the plants are used -as cordage, pesticides, fodder, fibre and gum.

Recent investigators showed interest on investigating about medicinal plants and collection of folklore claims. Many traditional medical systems are mainly using the herbs. Many scientists of different disciplines have paid good attention in screening the medicinal plants used in different traditional systems. So the scientists have succeeded in exploring good number of healing agents.

There are Ethnobotanical works either based on an ethnic tribe or on phytotherapy of a disease. Anonymous (1966) provided the information on Koyas of Andhra Pradesh. Hemadri (1981) reported the tribal medicine for rheumatism and Hemadri & Rao (1983, 1984) enlisted the plant species for leucorrhoea, menorrhagia and jaundice. Ramarao et al. (1984) presented the note on Ethnobotanical studies in Andhra Pradesh while Ramarao (1988) did his Ph.D. work on the Ethnobotany of Eastern Ghats in Andhra Pradesh.

## 2.Study Area

Srikakulam district. The northern most part of the 23 districts of Andhra Pradesh State lies along the cost of coromandel. The district lies between  $18^{\circ}51'-19^{\circ}12'N$  and  $83^{\circ}12'-84^{\circ}47'E$  with an altitude range of 90-1200 m. and rainfall 90-125 cm and temperature  $11^{\circ}C-47^{\circ}C$ . The geology and soil of considerable variation from Deltaic alluvial to Red sandy soils presents an interesting floristic data.

The vegetation is mainly of dry-deciduous forest type with a few pockets of moist deciduous patches at higher altitudes. The main girijan tribes are Savaras, Jatapus and Gadabas are closely associated with the forests. The tribals use the wild plants in a variety of ways especially for food and medicine. While working out the flora of the district, data on the medicinal value of the plants is gathered form Girijans, local people and local Ayurvedic doctors. Out of all a few interesting medicinal plants are discussed here.

### 3. Material and Methods

Ethnomedicobotanical data were collected through conversation with traditional healers, tribal doctors and old women in the field trips. During the interview local names, useful plant parts, method of preparation, and dosage were recorded. The plant species were identified with the help of regional and local floras Hooker, 1897; Gamble, 1967; Narayana Rao *et al.*, 1981, Rangacharyulu, 1991; Thammanna *et al.*, 1994 and Matthew, 1983d). The method of collection of voucher specimens, their preservation herbaria and technique for the collection of ethnomedicobotanical information follows Jain and Rao (1997).

S.No	Botanical Name	Family	Telugu name	Mode of administration
1.	Abelmoschus esculentus Moench. Habit: Shrub	Malvaceae	Bendakaya.	Extract of leaves mixed with egg albumin and applied on hair which makes black and silky hair.
2.	Abrus precatorius Linn. Habit: Twinner	Fabaceae.	Ghurie-ghenza.	Leaves are eaten with sugar cube to cure mouth ulcer.
3.	Abutilon indicum (Linn.) Sw. Habit: Shrub	Malvaceae	Adavibenda.	Leaves ground with butter milk and extract given orally for thrice a day to cure dysentery.
4.	Acacia farnesiana (Linn.) Willd. Habit: Small tree	Mimosaceae.	Kamputuma,	Branches are used to prepare fencing surrounding the cropland.
5.	Acacia leucophloea (Roxb.) Willd. Habit: Tree	Mimosaceae.	Tella-tuma.	20g root paste is given on empty stomach as an abortifacient.
6.	Albizia lebbek (Linn.) Benth. Habit: Tree	Mimosaceae.	Dirasan	Pounded fruits with the latex of Euphorbia neriifolia are applied over dog or fox bites as sedative.
7.	Alstonia scholaris R. Br. Habit: Small tree	Apocynaceae	Phalagaruda	1 cup decoction of stem bark is given orally to three days in malaria.

8.	Balanities aegyptiaca (Linn.) Del. Habit: Shrub	Balanitaceae	Garachettu	5-10 g powder of fruit Pericarp mixed with sugar cube is given orally twice a day for 3-4 days to cure cough.
9.	Bauhinia racemosa Lam. Habit: Tree	Caesalpiniaceae.	Devakanchan	A pinch of dried powdered flowers with honey recommended for diarrhea and vomiting.
10.	Boerhavia diffusa Linn. Habit: Herb	Nyctaginaceae.	Punarnava.	Leaves are boiled in water and applied on boils.
11.	Bombax ceiba Linn. Habit: Tree	Bombacaceae.	Mundlaburga-chettu	Crushed seeds mixed with wheat flour given to livestock for stomach disorders.
12.	Breynia retusa (Dennst.) Alst. Habit: Shrub	Euphorbiaceae.	Errapurugudu.	It is grown on outskirts of fields as a live fence and wind breaker.
13.	Cadaba fruticosa (Linn.) Druce Habit: Shrub	Capparidaceae.	Adamorinika.	It is grown on outskirts of fields as a live fence and wind breaker.
14.	Caesalpinia bonduc (Linn.) Roxb. Habit: Climber	Caesalpiniaceae.	Gachakaya.	5 to 10g crushed seeds are given internally to children to remove worms in digestive canal.
15.	Calotropis procera (Ait.) Ait. f. Habit: Shrub	Asclepiadaceae	Mandaram.	Rosted corona is given orally twice a day for a week to cure cough.
16.	Capsicum annuum Linn. Habit: Herb	Solanaceae.	Mirapakaya.	Dried ripe fruit powder is pressed on dog bite.
17.	Cassia auriculata Linn. Habit: Shrub	Caesalpiniaceae.	Tangedu,	Crushed leaves of it and put the urine than boil and prepare a paste, it is applied on muscular pain.
18.	Cassia fistula Linn. Habit: Tree	Caesalpiniaceae.	Rela-kayalu	Pulp of fruit is given orally to cure stomach ache

19.	Cassia tora Linn. Habit: Herb	Caesalpiniaceae.	Tagarishachettu.	Extract or paste of leaves is applied in Eczema on effected part of the skin.
20.	Catharanthus roseus (Linn.) G. Don, Habit: Herb	Apocynaceae.	Billaganneru	2 teaspoonfuls leaves juice is given orally twice a day for a week for diabetes.
21.	Celastrus paniculata Willd. Habit: Shrub	Celastraceae.	Bavungie	The root paste mixed with curd is applied on boils as a very effective medicine.
22.	Celosia argentea Linn. Habit: Herb	Amaranthaceae.	Gulugkura,	Powder of seeds is given with sugar cube twice a day for 10 days to treat haematuria.
23.	Cleome gynandra Linn. Habit: Herb	Capparidaceae.	Kukkavamintha	Vapour of boiling seeds is inhaled thrice a day to cure cough.
24.	Desmostachya bipinnata (Linn.) Stapf. Habit: Herb	Poaceae.	Darbhi.	10 small pieces of fresh root ground and is applied twice a day for 7 days to treat toothache.
25.	Diospyros melanoxylon Roxb. Habit: Tree	Verbenaceae.	Tumi.	Powder of fruit and ghee mixed with honey is given orally to stop hiccough.
26.	Eucalyptus citriodora Hk. Habit: Tree	Myrtaceae.	Neelagirichettu	Extract of leaves is applied on child's chest to cure cough and cold.
27.	Euphorbia tirucalli Linn. Habit: Shrub	Euphorbiaceae.	Chemudu.	Yellow colored twig is slightly roasted and 2 to 3 drop of juice is poured in ear to get relief in earache.
28.	Firmiana colorata (Roxb.) R. Brown Habit: Tree	Sterculiaceae.		½ cup decoction of root bark is taken orally twice a day for two days in fever.
29.	Gardenia turgida Roxb. Habit: Tree	Rubiaceae.	Yerribikki.	Gum from the stem dissolved in water and given to kill intestinal worms.
30.	Gloriosa superba Linn. Habit: Herb	Liliaceae	Adavinabhi	Leaves crushed in water and made in to a past and applied in rheumatism.

31.	<i>Helicteres isora</i> Linn. Habit: Shrub	Sterculiac eae	Kavanchi	Fruit is tied on cradle to stop stomach pain in children
32.	<i>Hemidesmus indicus</i> (Linn.) Br. Habit: Twiner	Periplocac eae.	Gadisugand hi	10 fresh leaves with sugar cube taken orally twice a day for a week in jaundice.
33.	<i>Hibiscus rosa-sinensis</i> Linn. Habit: Shrub	Malvaceae	Mandara	Extract of flowers is applied on hairs to arrest falling hairs.
34.	<i>Holarrhena antidysenterica</i> (Buch.-Ham.) Wall Habit: Shrub	Apocynac eae.	Amkudu	Made decoction of 100-400 ml water with leaves and root of <i>Andrographis paniculata</i> , drink this decoction twice a day for a week to cure fever.
35.	<i>Jatropha curcas</i> Linn. Habit: Tree	Euphorbia ceae.	Nepalan.	Fresh latex of the leaves is applied over piles.
36.	<i>Kalanchoe pinnata</i> (Lam.) Merr. Habit: Herb	Crassulace ae.	Simajamudu	Prepare a cup of Leaves juice, taken orally for 7 days; the kidney stone will be disintegrated.
37.	<i>Lagenaria siceraria</i> (Molina) Standl. Habit: Climber	Cucurbita ceae.	Soraikkaya.	Seeds are collected from dried fruits. These are grind into fine powder and given with honey for appendix
38.	<i>Lannea coromandelica</i> (Houtt.) Merr. Habit: Tree	Anacardia ceae.	Uddimanu.	If snakebite produces swelling, then bark of stem is made into paste with cow urine and applied over swelling.
39.	<i>Lawsonia inermis</i> Linn. Habit: Shrub	Lythracea e	Gorinta.	Poultice of leaves mixed with lime juice is tied over soles of feet of persons suffering from burning sensation
40.	<i>Luffa acutangula</i> Var. <i>amara</i> Clarke Habit: Climber	Cucurbita ceae.	Birakya,	500 g fresh whole plant material is boiled in 250 ml water, concentrated and taken while warm to get relief from insect bite.

41.	Martynia annua Linn. Habit: Herb	Martyniac eae.	Garudamuk ku.	Seeds are used as an antidote for scorpion sting.
42.	Maytenus emarginata (Willd.) Ding. Herb: Tree	Celastrace ae.	Danti,	10 to 15 Leaves with sugar cube taken orally two times for 7days to cure jaundice.
43.	Mitragyna parvifolia (Roxb.) Korth. Habit: Tree	Rubiaceae	Nerkadamba	Paste of bark is smeared on infected area as effective remedy in rheumatism.
44.	Momordica charantia Linn. Habit: Climber	Cucurbita ceae	Kakarakaya	Extract of fruits taken orally to control diabetes.
45.	Morinda tomentosa Heyne ex Roth. Habit: Tree	Rubiaceae	Maddicettu;	2 to 3 drops of leaves juice is used as ear drops to treat earache.
46.	Ocimum basilicum Linn. Habit: Herb	Lamiaceae	Thulasi	3-4 drops of leaves extract are pored in ear to cure earache.
47.	Sterculia urens Roxb. Habit: Tree	Sterculiac eae.	Kalvi.	Twig of the tree is used as tooth brush to toothache.
48.	Tamarindus indica Linn. Habit: Tree	Caesalpini aceae.	Chinta	Seed is rubbed on stone and then placed on affected area of scorpion sting. The seed stick at that place and falls off after sucking the poison.
49.	Vernonia cinerea (Linn.) Less. Habit: Herb	Asteraceae	Garitikamma	Decoction of whole plant is given in the morning in empty stomach to cure fever.
50.	Woodfordia fruticosa Kurz. Habit: Shrub	Lythraceae	Gaji-godari	1 teaspoonful in fusion of flower is given 2 times a day in dysentery.

*Table 1: Ethnomedicinal plants used by tribal people of Srikakulam district*

#### 4. Result and Discussions

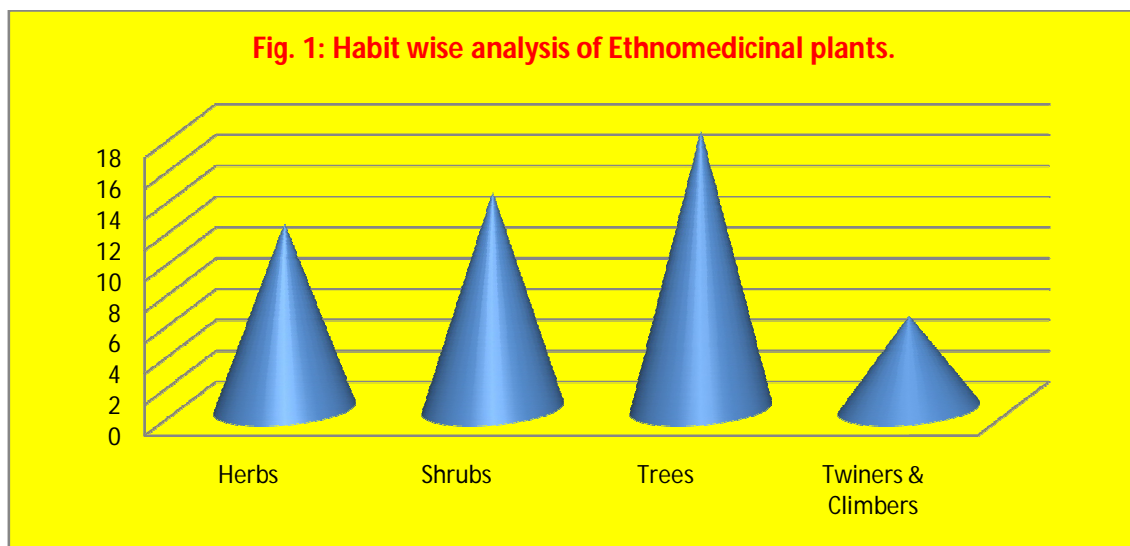
Conservation of biological resources and of the indigenous traditional knowledge is essential for sustainable development and managing of natural resources the world over.

The history of indigenous knowledge as an old as the human race. This knowledge has always been very important for the people who generate it. It is a matter of survival for them. Many scientists, researchers and environmentalists all over the world are now striving to explore, know, Document and use the resource base knowledge for the welfare of the wider human race. Documentation of ethnic groups' knowledge related to plant resources is known as 'Ethnobotany'. The study deals with the relationships of man to the plant he used or uses. Analysis of information presented in appendix-I indicates that Srikakulam District tribes inhabitant of varies localities possess rich knowledge about plant resource around them. This is evident form the following fact. A total of 50 angiosperm plant species belonging to 46 genera of 28 families have been identified and recorded for ethnobotanical uses. Out of the 21 families Caesalpiniaceae is the dominated family with 6 species, followed by Malvaceae, Mimosaceae, Apocynaceae, Euphorbiaceae, Sterculiaceae, Rubiaceae and Cucurbitaceae with 3 species, Capparidaceae, Celastraceae and Lythraceae with 2 species, remaining of the families each have single species.

Out of the total 50 flowering species, 18 are trees, 14 shrubs, 12 herbs, 6 are climber and twiners. (Table. 1, Fig. 1). This study shows that Trees are dominating the forest. It is noted that the tribal people use most of the medicinal plants to cure their day to day health problems like diarrhea, dyspepsia, general fevers, skin diseases, menstrual problems, joint pains, wounds, snake bite etc.

The survey indicated that, the study area was rich in medicinal plants useful to treat a wide spectrum of human ailments. The tribal people are treasures of traditional knowledge of plants from utilitarian point of view. They have successful art of curing diseases in several localities of the district. Frequent field surveys and regular personal interviews in different pockets revealed 30 diseases treated with 50 medicinal plants.





*Figure 1*

## 5. Conclusions

However, we feel that the indigenous knowledge and practices of the Srikakulam tribes on utilization of plant resources as medicine should be reported and preserved before they get lost due to increasing integration. In the information obtained, there were many details about the appropriate indication of each plant. There are plants that are traditionally employed for specific symptoms or conditions that often accompany itching, allergy and other skin disorders. This vast array of rare medicinal plants can be used for further research only if we ensure proper conservation of these endangered species. Thus researchers should observe ethno medical information before deciding which kind of screening should be used in the search of drugs for various diseases which may also be a potential source of modern drug industries.

## 6. Acknowledgement

The authors are thankful to the notified and denotified adivasis groups, their vairs, ojhais, bhopas etc. and forest officials who provided valuable information on this subject. We are also thankful to the authorities of various herbaria and, museums for their help and co-operation extended in several ways.

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