

ETHNOBOTANY OF SELECTED MEDICINAL PLANTS OF SRIKAKULAM DISTRICT, ANDHRA PRADESH

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ABSTRACT: *India has a rich heritage of herbal medicine of which the most important system namely Ayurveda needs even today a critical scientific scrutiny both in the correct identity of the proper drug plants and in the standard of the preparation of Ayurveda drugs. Authentic data on the medicinal plants growing in the Srikakulam district of Northern Andhra Pradesh is presented in the paper along with their ethnobotanical data and their distribution in the district.*

Srikakulam district. The northern most part of the 23 districts of Andhra Pradesh State, lies along the coast of coromandel. The district lies between 18°5' -19°12'N and 83°12' -84°47'E with an altitude range of 90-1200 m. and rainfall 90-125 cm and temperature 11°C-47°C. The geology and soil of considerable variation from Deltaic alluvial to Red sandy soils presents an interesting floristic data.

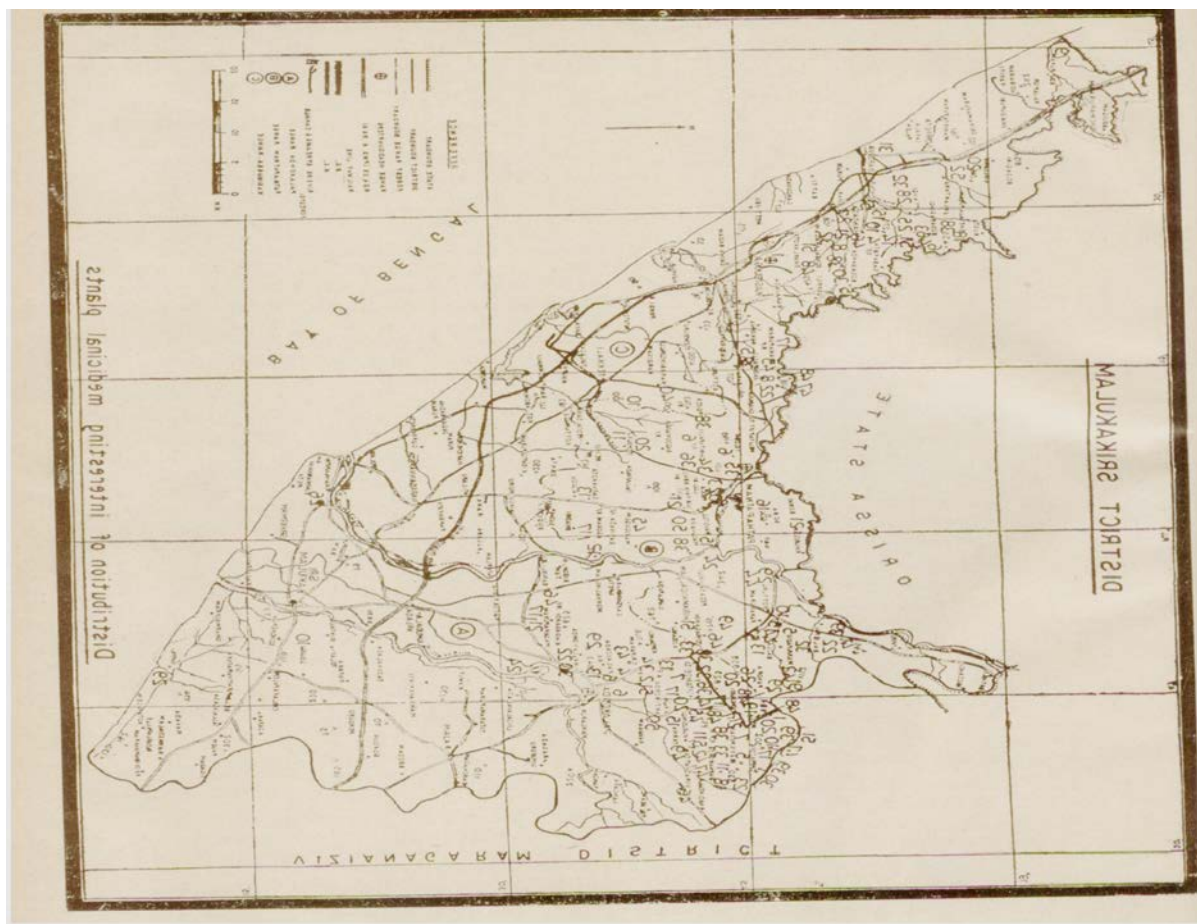
The vegetation is mainly of dry-deciduous forest type with a few pockets of moist deciduous patches at higher altitudes. The main girijan tribes are Savaras, Jatapus and Gadabas are closely associated with the forests. The tribals use the wild plants in a variety of ways especially for food and medicine.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

The district with its rich forest pockets harbours a variety of medicinal plants. There is every possibility for introduction and systematic cultivation of several useful indigenous medicinal plants (which are required by Pharmaceutical Companies of Andhra Pradesh and other parts of India) in selected areas both by the Government (State/ Central) and Private firms and "Drug Farms" for preparing good quality crude drug extracts of drug plants on small scale industry basis. Such planning on indigenous medicinal plants would not only improve the economic condition of the people living in hilly and plain areas of the district but also improve the quality of Ayurvedic medicines and thereby the confidence of the people on the indigenous systems of medicine particularly the Ayurveda which is one of the most useful systems of medicine best suited in a country like India with the huge rural/ tribal population.

It is well known how the Government of India and the Council of Scientific and

Industrial Research (CSIR) through Regional Research Laboratories (RRL), Central Drug Research Laboratories (CDRL), Central Indian Medicinal Plants Organisation (CIMPO) and other allied organizations like Central Councils for Ayurveda, Unani and Homeopathy etc., have been persistently encouraging the scientific research on Indian medicinal plants and their chemical analysis and their utility on various diseases and more particularly on diabetes, bronchial allergy, cancer etc. to achieve positive results, regular survey of specific medicinal plants in different parts of India, their systematic chemical screening based on various populations, cultivation of selected and well established medicinal plants in their natural

habitats, both hilly and plain areas, under drug farms, projects both by the Government agencies noted above and also leading Pharmaceutical Companies like Hoechst, Ciba, Glaxo and others, are in active progress in the country. It is therefore needless to emphasize the importance of medicinal plants data and their populations in various districts of India and their chemical screening to find out their utility according to the Indian Pharmacopoeial standards and thus leading to the Development of Drug Farms in suitable habitats in different districts of the State and the allied projects.



During the present study, species which are already known for their medicinal value, have been carefully scrutinize for their identity and the distribution in the district. Such data together with the medicinal uses of such species by the tribal “Vaidas” as brief Ethnobotanical notes, are presented under each species with a view to provide a useful basic information for further followup studies on the medicinal plants of the district.

Thus, the Ethnobotanical data gathered on 52 medicinal plants together with their local name, distribution indicated to their corresponding numbers in the Map.

1. *Abrus precatorius* Linn. (Fabaceae)
'Gurivinda teega'

The root paste mixed with cows milk is given in dysentery. The leaves are given for curing cough and other throat troubles.

Locality: Polla (A); Muragadavalasa (A); Gudivada (A); Nallakonda (A); Tharlakota (C).

2. *Achyranthus aspera* Linn. (Amaranthaceae) 'Vuttareni', 'Dichodi'.

Leaves and seeds are used in medicine. Leaves along with *Piper nigrum* used for scorpion sting and decoction of leaves used in liver enlargements. Leaf paste is applied for dermal diseases. Seeds boiled with milk and used in Gastric trouble.

Locality: Voni (A); Gudivada (A); Lodasingi (A); Nallakonda (A); Mallikonda(A).

3. *Acorus calamus* Linn. (Arecaceae)
'Vasa'

Rhizome is used for throat cleaning, digestive troubles paralytic fevers and dysentery.

Locality: Pilli-Budarasingi (C).

4. *Adhatoda zeylanica* Medic (Acanthaceae) 'Addasaramu'

Leaves and stem bark is medicinal, decoction of the stem bark is used in blood motions, fevers, Leaf paste is employed in tongue diseases, leaves are boiled in water and used for bathing for minor dermal diseases. Dry leaves are made into cigars and smoked for the relief of asthma.

Locality: Kurmarajapuram (A); Mandasa (C); Ichchapuram (C).

5. *Alternanthera sessilis* (Linn.) DC. (Amaranthaceae) 'Ponnagantikura'

Leaf is blood purifier and cools the body and leaves are made into curry as a green vegetable.

Locality : Palakonda (A); Kurmarajapuram (A) ; Chintapalli (B); Kowsalyametta (C).

6. *Alstonia venenata* R.Br. (Apocynaceae) 'Edakulapala'

Ripe fruits are used in syphilis, insanity, epilepsy and as a tonic.

Locality: Jamparakota (A) ; Burnakonda (A); Kothakota (A); Gajapathinagaram (B); Neelapuram (B).

7. *Andrographis paniculata* (Burm.f.) Nees (Acanthaceae) 'Nelavemu'

Whole plant is used as a febrifuge, tonic, alterative, anthelmintic, useful in debility, dysentery and dyspepsia. An infusion of the plant is used in malaria.

Locality: Sitampeta (A); Donubayi (A) ; Darapadu (A); Kusimi (A); Tivvakonda (A); Lodasingi (A); Nallakonda (A).

8. *Argemone Mexicana* Linn.
(Pepavaraceae) 'Balurakkasi'

Yellow juice of the plant is employed for eye infection an leaf paste for skin diseases. Adulteration of this seed wit Brassica seed produce toxicity in "Sarsoon".

Locality: Jadupalli (B), Hamsarali (C).

9. *Aristolochia bractiolata* Lamk.
(Aristolochiaceae) 'Gadida gadapa'

Leaf is mixed with castor oil and applied to Eczema, leaf juice along with banana fruit is given for menstrual troubles.

Locality : Himagiri (B), Burjapadu coast (C).

10. *Aristolochia indica* Linn.
(Aristolochiaceae) 'Nalla Eswari'
Root is said to be very effective in snake bite.

Locality: Echcherla (A), Chinagora (A), Kondamulagam (A), Kothuru (B), Mandasa (C), Chinakedari (C).

11. *Asparagus racemosus* Willd.
(Liliaceae) 'Pillitegalu'

Under ground bulbus roots are used as medicine, powder or decoction of the roots is used in blood motions and this is said to

increase the milk content in ladies and gives strength.

Locality: Kurusingi (A), Burnakonda west (A), Themburu (B) Donubayi (A).

12. *Balanites aegyptiaca* (Linn.) Delile
(Balanitaceae) 'Garachettu'

Seed oil and bark is used in dermal diseases.

Locality : Asokam (C).

13. *Butea monosperma* (Lamk.) Taub.

(Fabaceae) 'Moduga' Butea gum or "Bengal kino" an exudates from the tree is an astringent and used in dysentery and diarrhoea, seeds as vermicide.

Locality : Valagajji (A); Haripuram Palakonda R.F. (A); Sarvakota (A); Bagga R.F. (B).

14. *Caesalpinia bonduc* (Linn.) Roxb.
(Caesalpenaceae) 'Gachakaya'.

Seeds are said to be highly poisonous and used for abortion. Leaves used in fevers.

Locality : Hunnali (c).

15. *Cadaba fruticosa* (Linn.) Druce
(Capparidace) 'Sivakantaku'.

Leaves and roots are purgative anthelmintic, antispasmodic, prescribed as decoction in uterine obstructions.

Locality: Gudivada R.F. (A); Kothuru (B); Nowtala (B); Mandasa (C).

16. *Cassia fistula* Linn. (Caesalpinaceae)
'Rella chettu', Root bark and leaves

are used as laxative and fruit for asthma.

Locality: Routhlakshmipuram (B);
Donubayi (A).

17. *Celastrus paniculata* Willd.
(Celastraceae) 'Palleru tivva'.

Oil from the seeds is used for rheumatic pains and mental disorders. This oil keeps mosquitoes away.

Locality: Darapadu R.F.(A) ; Somidavalasa (A) ; Antikonda (A); Chinagora (A); Burnakonda (A); Asokam (B); Banapuram (B).

18. *Centella asiatica* (Linn) Urban.
(Apiaceae) 'Saraswatiaku'.

The plant is useful in skin diseases nerves and blood. Leaves are said to be good for increasing memory power.

Locality : Mekava – Donubayi (A); Polla (A);Thumbakonda vagu (A); Kowsalyametta (C).

19. *Ceropegia candelabrum* Linn.
(Asclepiadaceae) 'Bakkalimanda',
'Pullamanda'.

The tubers are tonic for bowel complaints of children and remedy for dysentery and diarrhoea.

Locality: Polla (A).

20. *Cissampelos pareira* Linn.
(Menispermaceae) 'Pativeru',
'Vishaboddi'.

Leaf paste is applied on scabies, itches and other skin diseases. Roots are useful in

dyspepsia, diarrhoea and urinary troubles. Useful in bowel complaints.

Locality : Donubayi Sal forest (A); Polla (A); Darapadu (A); Antikonda (A); Themburu (B); Gundam (C).

21. *Cocclus hirsutus* Linn. Diels
(Menispermaceae) 'Dusari Teega',
'Sarpi'.

Juice of the leaves when mixed with water forms a jelly which is said to be useful in venereal diseases and external application for skin diseases. Root has cooling effect.

Locality : Karakavalasa (A); Bonni (B); Sudirayakonda (B); Mandasa (C).

22. *Costus speciosus* (Koen. Ex. Retz.)
SM. (Zingiberaceae)
'Bogachikadumpalu'.

Rhizome is used as antivermin and used for abortion. Diosgenin, a steroidal sapogemin is extracted from these rhizomes.

Locality: Donubayi (A); Palakonda (A); Nallakonda (A) ; Jadupalli (B) ; Bondiguda – Baleru (B).

23. *Curcuma pseudomontana* Grahm.
(Zingiberaceae) ' adavi pasupu'

Rhizome is used in cough and other stomach troubles.

Locality: Burnakonda West (A); Pedalogidi (B).

24. *Cymbopogon martini* (Roxb.) Wats.
(Poaceae) 'Nimmagaddi'

Aromatic oil from the leaves used as a remedy for cold. Oil mixed with hair oils for its cooling effect.

Locality: Narayanapuram (A); Korada-Hiramandalam (B).

25. *Datura metel* Linn. (Solanaceae)
'Tella ummatta'.

Seeds, leaves and roots are used in insanity, in fevers, cerebral complaints and skin diseases. Leaves are used as cigars in asthma.

Locality: Korangibadra (c); frequent along the roadsides.

26. *Dichrostachys cinerea* Wt.& Arn. (Mimosaceae) 'Velturu Chettu'.
Stem bark is used in chickenpox and for urinary troubles.

Locality: Antharaba (B); Gundam (C); Baleru (B).

27. *Dillenta pentagyna* Roxb. (Dilleniaceae) 'Ravodichettu'

Fruits and fleshy calyx are eaten by the tribals for general stamina. The fruits are made into pickle.

28. *Dioscorea oppositifolia* Linn.

(Dioscoreaceae) 'Tellagaddalu' Under ground tubers are collected and cooked on fire and eaten by the tribals for general stamina.

Locality: Gopalapuram (A); Burnakonda (A); Chekkapuram (A); Chintalaguda (B); Hamsarali (C).

29. *Ecbolium viiride* (Forsk.) Alston (Acanthaceae) Roots are medicinal; decoction is given in Jaundice.

Locality: Donubayi (A); Kuppili (A); Palakonda (A); Parapuram (B).

30. *Eclipta prostrata* (Linn.) Linn. Mant. (Asteraceae) 'Guntakalagarata'.

Plant juice is a tonic and deobstruent in liver troubles, fevers, Jaundice. Leaf juice is used in the preparation of Hair oils, which gives cooling effect to the brain.

Locality: Ananthagiripeta – Palakonda (A); Chinagora (A); Pedalogidi (B); Baliagam (C).

31. *Euphorbia tirucalli* Linn. (Euphorbiaceae) 'Kada Jemudu'.

Latex and juice of the stem is febrifuge, Latex is externally applied for swellings and rheumatic pains.

Locality: Vadapalem – Baruva (c); Common as a hedge plant.

32. *Evolvulus alsinoides* (Linn.) Linn. (Convolvulaceae) 'Vishnukrantha'.

Decoction of the plant increases the general stamina and increases the longevity of the teeth.

Locality: Sitampeta (A); Sirikonda (A); Echcharla (A); Sativada (B); Bajji (B); Marripadu (B); Hamsarali (C).

33. *Gloriosa superb* Linn. (Liliaceae) 'Nabhi', 'Pottidumpa'.

Corm is poisonous, Vermicide and used in chronic fevers and for abortion.

Locality: Donubayi (A), Sitampeta (A), Thumbakonda (A), Gudivada (A), Beleru (B).

34. *Hemidesmus indicus* (Linn.) Schult. (Periplocaceae) 'Palasugandhi'.

Decoction of the root is used as blood purifier and it cools the body and also for white discharges, used as a flavouring agent for the cool drinks.

Locality: Kuddapali (A), Kothakota (A), Pedalogidi (B).

35. *Holarrhena antidysenterica* (Roth.) Wall. (Apocyanaceae) 'Kodisapala'.

Seeds and root bark is used for dysentery and diarrhoea.

Locality: Sitampeta (A); Kondamulagam (A); Antharabha (B).

36. *Hygrophyla auriculata* (Sch.) Heine (Acanthaceae) 'Mulla gobbi', 'Neeli gobbi'.

Seeds are given for gonorrhoea and with milk and sugar in spermatorrhoea.

Locality: Mogadara-Sitampeta (A)

37. *Lepidogathis cristata* Willd. (Acanthaceae) 'Suryakhanta'.

A bitter herb used in fevers. The ash of the dry plant is employed as an application to sores. It cures itches.

Locality: Lodasingi – Gumada (A).

38. *Maltus philippinensis* (Lamk)

Mull. Arg. (Euphorbiaceae) 'Sinduram', 'Pandigachettu'.

The red powder from the fruits is used as purgative.

Locality: Tanginibhadra (A); Sitampeta (A); Chintapalli (B); Jadupalli (B); Kowsalyametta (C).

39. *Piper longum* Linn. (Piperaceae) 'Pippallu'.

Fruiting spike is used for cough, cold, fevers and for rheumatic pains. Roots is used for digestive troubles.

Locality: Chinagora (A); Baluru (B).

40. *Plumbago zeylanica* Linn. (Plumbaginaceae) 'Chitramulamu'.

Root bark is used as appetizer, root paste is applied externally for skin diseases and leprosy.

Locality: Lodasingi – Gumada (A), Narisingipalli (C).

41. *Rauvolfia serpentina* (Linn.) Benth. (Apocynaceae) 'Sarpagandhi', 'Patalgiridi'

Roots are used in the treatment of high blood pressure, as a sedative and for insanity.

Locality: Thumbakonda (A), Solikiri (B).

42. *Rubia cordifolia* Linn. (Rubiaceae) 'Mangista teega', 'Erravellu'

Roots are used as blood purifier and also for spleen and stomach disorders.

Locality: Kurusing (A), Himagiri Hill Top (A).

43. *Salacia chinensis* Linn.
(Celastraceae) 'Nerani'.

Root powder is used in the treatment of diabetes.

Locality: Palakonda R.F. (A), Kothakota (A).

44. *Solanum surattense* Burm. F.
(Solanaceae)

The fruit mixed with sesamum oil is said to be very effective in paralysis. The whole plant is used in chest ailments.

Locality: Parapuram (B), Karlemma-Bagga (B).

45. *Soymda febrifuga* (Roxb.) A. Juss.
(Meliaceae) 'Somida Chettu'.

The bitter bark is used as febrifuge used in diarrhoea, dysentery.

Locality: Palakonda Hills (A), Reivada (B).

46. *Strychnos nux-vomica* Linn.
(Loganiaceae) 'Mushini',
'Vishamusti'.

Seeds are useful in wide range of fevers, ulcers, dysentery, dyspepsia and excited mental conditions.

Locality: Veeraghattam (A), Karakavalasa (A), Somaghandhi (B), Budarasingi (C).

47. *Strychnos potatorum* Linn. f.
(Loganiaceae) 'Induba'.

The seeds are used to clean the turbid water and used in ophthalmic diseases and woopy cough.

Locality: Kothakota (A), Mulakhumbidi (A), Chekkapuram (A), Jadupalli (B).

48. *Terminalia bellirica* (Gaertn.) Roxb.
(Combretaceae) 'Tanikaya'.

The fruit is one of the important constituent of the "Triphalas" of Ayurveda it is useful against various ailments like diseases of eyes, asthma, bronchitis etc.

Locality: Gudivada (A), Somagandhi (B).

49. *Terminalia chebula* Retz.
(Combretaceae) 'Karakachettu'.

The fruits are dried and powdered and used as purgative with honey for fevers and cough. This is also one among the Triphalas.

Locality: Antikonda (A), Donudayi (A), Burnakonda (A).

50. *Tinospora cordifolia* (Willd.) Miers.
Ex. Hook. f. & Thoms.
(Menispermaceae) 'Tippateega'.

Crushed root is given with milk to the children for cough, the extract of the plant parts is given in fever as tonic and also for high blood pressure.

Locality: Gudavada (A).

51. *Tylophora indica* (Burm.F.) Merr.
(Asclepiadaceae) 'Kakapalla'.

Leaves are used for bronchial asthma.

Locality: Donubayi (A), Voni (A), Pedamanapuram (A), Somagandhi (B), Korangibhadra (C), Hamsarali (C).

52. *Vitex negundo* Linn. (Verbenaceae)
'Vavili'.

Juice of the leaves used to disperse swellings of joints from acute rheumatism and for various other dermal diseases.

Locality: Kotthuru (B), Sompeta (C).

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