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Ethnomedicinal recipes for Ophthalmic and ENT problems & allied diseases from Tribals of Sriharikota Island, Andhra Pradesh

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ABSTRACT

Sriharikota Island in Andhra Pradesh is an elliptical land mass sandwiched between Bay of Bengal in the East and Pulicat lake in the West. Sullurpet is the nearest railway station, which is 18 Km from Sriharikota Island and it is on Chennai –Kolkata trunk line and 90 Km away from North of Chennai. An aboriginal tribe called *Yanadi* dwells in Sriharikota. It is similar to Chenchu community elsewhere in Andhra Pradesh. In spite of the community being drifted from their natural way of life due to agro-rural development activities, a few aged tribals are still able to furnish traditional ethnomedicinal data. So far no ethno medico-botanical studies are conducted in this area except for list of 50 plants reported for general ailments/ diseases by Suryanarayana et.al. Therefore a detailed study on ethno medico-botanical uses of the tribals of Sriharikota Island was undertaken for the duration three years (1996-1999). During this work about 280 species are collected having a variety of ethno medico-botanical/pharmaceutical values. However the article presents the 23 plant species only having remedial effect for Ophthalmic and ENT problems & allied diseases (i.e. Cataract, Tooth ache, mumps, swellings and infected gums etc.). The study analyzes the habit and plant part(s) used for ethnomedicinal practices by the tribals of Sriharikota Island.

Keywords: Ethnomedicinal recipes, Ophthalmic and ENT problems & allied diseases, tribals, Sriharikota

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INTRODUCTION

An aboriginal tribe called 'Yanadi' dwells in Sriharikota. It is similar to Chenchu community elsewhere in Andhra Pradesh. In spite of the community being drifted from the natural way of life due to agro-rural development activities a few aged tribal men are still able to furnish traditional ethno medico-botanical data. In Sriharikota Island about tribal families are living in 3 colonies viz. Penubakam, Kothachenu and Chengalpalem [1,2].

Topography

Sriharikota Island is geographically located at $80^{\circ} 21''$ E and $13^{\circ} 22''$ N to 14° N. It is a spindle shaped landmass sandwiched between Bay of Bengal on the East and Pulicat Lake on the West. It is 18 km East of Sullurpet. The nearest railway station located on Chennai-Kolkata trunk line. Chennai is 98 km away from Sriharikota [1].

MATERIALS AND METHODS

An intensive medico-ethnobotanical survey of Sriharikota Island was undertaken for the duration three years (1996-1999). Regular periodical fieldwork is conducted covering all the seasons so as not to miss seasonal elements having pharmaceutical value and collected a large number of specimens in their respective phenological stages. Ample field notes recorded pertaining to frequency, abundance, edaphic and morphological characters, which cannot be deduced from exsiccata [3]. Local tribal men are contacted to record data related to ethno medico-botanical uses, drug preparation and mode of administration etc. After identification, samples are properly processed, mounted on herbarium sheets and deposited in Visodaya Govt. College Herbarium (VGCH) and a duplicate set at SHAR Herbarium, Sriharikota [4,12].

RESULTS AND DISCUSSION

During these studies a good number of ethnomedicinal plants are collected. However in this paper 23 species of having remedial effect on various common Ophthalmic and ENT problems & allied diseases (i.e. Cataract, Tooth ache, mumps, swellings and infected gums etc.) are enumerated [2]. Latest Scientific name followed by relevant synonyms if any, local name, habit flowering & fruiting season, ethnomedicinal data and their phytochemical composition are also furnished for each species. Plants marked with asterisk (*) are reported here first time for their remedial effect on various common Ophthalmic and ENT problems & allied diseases as above mentioned [2]. Their other medicinal uses adopted in the Island and elsewhere also given in **Annexure** [5,6].

Enumeration:

1. *Albizia lebbbeck* (L.) Willd. (FABACEAE)

Ln: Dirisena or Birachapu. Sn: Sirisha.

Large trees.

Common in forests. Fl. & Fr.: February - June. Ld: Penugariapalem: RBK 8926.

Leaves-**Ophthalmia**: 100g of fresh leaves ground into fine paste. It is applied on eyes like kajal for 10-15 days to get cure from night blindness.
CC: Tannins, Saponins [2].

2. ***Annona squamosa*** L. (ANNONACEAE)

Ln: Sithaphalam. Sn: Gandhagatra.

Shrubs or small trees.

Common in hedges, also planted. Fl. & Fr.: June-October. Ld: Keepakam: RBK 9820.

A well cleaned, fresh leaf is taken and cut into 2 cm² pieces. Ghee is smeared on upper surface of two leaf bits. They are attached on the temples either side, in case of severe **headache**, for fast relief.

CC. : Vitamin C, Hydrocyanic acid [5,6].

3. ***Argemone mexicana*** L. (PAPAVARACEAE)

Ln: Kusuma chettu, Brahmadandi, Sn: Kanchanakeliri.

An erect prickly, annual herb, with yellow latex.

A common weed of way sides. F1. & Fr.: Most part of the year. Ld: Ellanthugunta: RBK 9763.

Yellow Latex for **ophthalmia**: Latex from vegetative parts dropped into eyes against eye infections.

CC.: Sanguinarine, dihydrosanguinarine, berberine [8] .

4. ***Azadirachta indica*** A. Juss. (MELIACEAE)

Ln: Vepa. Sn: Nimbha.

Trees, bark black fissured, young branches pink.

Common in the island and also planted near colonies. F1. & Fr.: March-June. Ld: Penugaripalem: RBK 8921.

Twigs **odontalgic**: Twigs used as tooth brush to get relief from tooth ache.

CC: Azadirachtin, Margosine, Nimbidine [5,7].

5. ***Barleria prionoitis***: L. (ACANTHACEAE)

Ln: Mullagorinta, Mulla kanakambaram. Sn: Karunta, Vajradanti, Bindi.

Armed erect bushy undershrubs.

Common in the under growth of scrub jungles and forests. Fl. & Fr.: November-February. Ld: Chengalpalem: RBK 9138.

TM: Leaves for infected gums: 100g of fresh leaves ground to paste, slightly warmed and applied on gum swellings for 3-4 days to get relief.

CC: Potassium [6,7] .

6. ***Calotropis gigantea*** (L.) R. Br. (ASCLEPIADACEAE)

Ln: Jilledu. Sn: Arkamandara.

Erect, tall shrubs.

Common in waste places and abundantly seen along the coast in pure stands. F1. & Fr.: March-December. Ld: Ellanthugunta: RBK 9922.

Latex-**odontalgic**: 20 ml of fresh latex taken from the leaves and stems is slightly warmed and applied on the teeth to get relief from teeth ailments. This treatment is to be repeated for 4-5 days to get good relief.

CC: Akundarin, Calotropin, Giganteol [5,7].

7. ***Capparis brevispina*** DC. (CAPPARACEAE)

Ln: Palasuri.

A slender thorny shrubs.

Occasional in dry forests. F1.: February, Fr.: April. Ld: Keepakam: RBK 8912.

Toothache -due to infections. Tender stems collected and washed with water and cut into small pieces. 20g of stem pieces are ground into fine paste. It is applied on infected teeth for 2-3 days to get relief from tooth ache and infected teeth fall out painlessly.

CC: . Alkaloids, flavonoids, tannins [2,10].

8. ***Cassia auriculata*** L. (CAESALPINIACEAE)

Ln: Tangedu. Sn: Charmaranga, Mayahari.

Shrubs.

Common in open scrubs. F1. & Fr.: May- September. Ld: Kothachenu: RBK 9070.

Leaf paste - **ophthalmia**: 100g of fresh leaves are ground to paste. It is slightly warmed applied on head twice in a day to get relief from conjunctivitis or any allergic itching / irritation.

CC: Tannins [2].

9. ***Cleome gynandra*** L. (CLEOMACEAE)

=*Gynandropsis pentaphylla* (L.) DC.

Ln: Tellavaminta. Sn: Ajagandha, Avigandha,
Annual herbs.

Common in waste places. F1. & Fr.: November-February. Ld: Chengalpalem: RBK 8988.

Leaf juice in **ophthalmia**: Fresh leaves washed with water and crushed to prepare juice mixed with 2 ml of breast milk. 1-2 drops of milky sap applied into eyes twice a day to get remedy from early stages of cataract. The treatment is continued for 10-15 days to get cure.

5g of fresh leaves warmed slightly and crushed to obtain sap. The sap prepared as above is also applied in case of ear ache. 2-3 drops poured into affected ear to get relief from **ear ache**. It is continued for 2-3 days to get cure.

CC: Cleomin [5,7].

10. ***Crataeva magna*** (Lour.) DC. (CAPPARACEAE)

=*Crataeva religiosa* sensu Dunn.

Ln: Mavalangi, Mogilenka. Sn: Shvetadru, Varuna.

A medium sized deciduous tree.

Common in dry forests. F1. & Fr.: May-August. Ld: Penubakam: RBK 9131.

Root bark **odontalgic**: 100g of fresh root bark cut into small pieces, ground into fine paste and applied on infected gums twice a day to get relief from tooth-gum infection and inflammation.

CC: Tannins, Saponins [2,11].

11. ***Cymbidium aloifolium*** (L.) Swartz. (ORCHIDACEAE)

Ln : Thatisaga.

An epiphytic herb with tufted roots.

Rare. Ld: Palliveedi : RBK 9871, Fl & Fr: July – October. Rare, epiphyte on *Borassus flabellifer* in the locality cited. Ld: Palliveedi : RBK 9871.

Leaf juice for **ear ache**: 1- 2 drops of leaf juice dropped into ear for 1 –2 days to get relief from ear ache.

CC: Flavanoids, Saponin, Tannin, Steroids[2,11].

12. ***Dendrophthoe falcata*** (L.f.) Etting. (LORANTHACEAE)

=*L. longiflorus* Desr. in Lam.

Ln: Bhajanachettu. Sn: Vanda, Vriksha bhasha.

Dichotomously branched, parasitic shrubs.

A common parasite on various trees especially on *Causarina littorea*. Fl & Fr: March – October. Ld: Mavalam: RBK 9307.

Leaf juice for **ear ache**: 50g of fresh leaves are squeezed and obtained juice. 1-2 ml of juice slightly warmed dropped into ear to get relief from ear ache.

CC: Tannin [2].

13. ***Derris scandens*** (Roxb.) Benth. (FABACEAE)

Ln: Minaputeega, Pachori, Konnatiteega.

A large climbing shrub.

Common gregarious on hedges. Fl. & Fr.: September- February. Ld: R.V. Chatram: RBK 9727.

Root - **odontalgic**: 100g of fresh roots cut into small pieces and ground to paste with 1-2 garlic pieces. It is applied on teeth to get relief from tooth ache.

CC: Scandenin, Nallanin, Chandnin [6,7].

14. ***Eclipta prostrata*** (L.) L. (ASTERACEAE)

=*Eclipta alba* (L.) Hassk. Jav. Rar.

Ln: Guntagalagara, Guntagaligeru, Sn: Bhringaraja, Hesharaja.

Prostrate or ascending herbs.

Common near water bodies and in moist sandy soil either in pure stands or mixed.

Fl. & Fr.: July-November. Ld: Chengalpalem: RBK 8939.

Twigs used as tooth brush and also subside tooth ache.

CC: Nicotine, Wedelolactone [5,6].

15. ***Eugenia bracteata*** (Willd.) Roxb. ex DC. Prodr. (MYRTACEAE)

Ln: Kunda neredu.

Evergreen shrubs.

Common in the forests. Fl. & Fr.: August-February. Ld: Chengalpalem: RBK 8901.

Root paste - treatment for **mumps**: 100g of fresh roots ground and made into paste, 200 ml of goats milk mixed well into paste. The paste is slightly warmed applied on swellings of mumps, for 20 days to get relief from mumps.

CC: Alkaloids, Flavonoids, Phenols, Tannins and Amino acids [2] .

16. ***Ichnocarpus frutescens*** (L.) R.Br. (APOCYNACEAE)

Ln: Palateega Sn: Syamalata, Chandana sariva, krishna sariva.

An extensively branched climbing shrub.

Common on bushes and hedges. Fl. & Fr.: November-May. Ld: Penubakam: RBK 9119.

Crushed and chewed to give good relief to tooth ailments.

Leaves and wiry stems – **odontalgic**: 100g of leaves and stems separately weighed cut into small pieces mixed them and ground to paste. 1-2 spoonfuls of paste slightly warmed and chewed in between teeth. 3-4 times a day for 4-5 days to get good relief from teeth ailments.

CC: Yellowish latex [5].

17. ***Jatropha gossypifolia*** L. (EUPHORBIACEAE)

Ln: Adavi konnadi, Simanepalam

Shrubs,

Common in waste places, along way-sides and more profusely on the sandy coast.

Fl & Fr: throughout the year. Ld: Penubakam: RBK 9852.

Twigs used like tooth brush to prevent dental ailments.

Watery latex as **stomatitis**: Fresh stem parts cut and obtained latex. It is applied in mouth gently with a quill. For relief from inflammation in mouth.

CC: Jatropine, Tannin, Cyanidin [6,7].

18. ***Salvadora persica*** L. var ***wightiana*** (Planch.ex. Thw.) (SALVADORACEAE)

=*Salvadora persica* L.

Ln: Adavigogu, Varagogu. Sn: Pilu.

Tall trees, branchlets pendulous. .

Common in scrub jungles near coast and also along margins of Buckingham canal.

Fl. & Fr.: March-July. Ld: Penubakam: RBK 9438.

Twigs used as tooth brush to get relief from **tooth ache**.

CC: Salvadorine, Trimethyl chlorine, Saponin and Tannin[2,5,6]

19. ***Sansvieria roxburghiana*** Schultes & Schultes f. (AGAVACEAE)

Ln: Nelasaga. Sn: Murva, maurvi (fibre).

Perennial, stout, fleshy herbs.

Common in shades along hedges. Fl & Fr: January – May. Ld: Penubakam: RBK 9441.

Leaf juice for **ear ache**: Fresh leaves squeezed and obtained juice. 1 – 2 drops leaf juice dropped into ear for 1 – 2 days gives relief from ear ache.

CC: Sansevierine. (Alk.)[6,7].

20. ***Sapindus emarginatus*** Vahl. (SAPINDACEAE)

Ln: Kunkudu. Sn: Arishta.

Deciduous trees.

Common all over the island. Fl. & Fr.: January-April to May. Ld: Chandrasikupam: RBK 9020.

Leaves: 100g of fresh leaves are ground to fine paste. It is slightly warmed and gently applied on temples and forehead for relief from heavy cold. Recipe is continued once a day for 4-5 days to get complete relief from **heavy cold**.

Leaves - **ophthalmia**: Fresh leaves taken and cleaned. 30g of leaves taken crushed and obtained sap; it is filtered with a fresh cloth into a container. 1-2 drops of sap dropped into eyes once in a day for the improvement of eye sight. It is continued for 20-30 days. It is also used as a medicine to prevent **eye diseases**.
CC : Saponin, Fatty acids [2,13].

21. ***Sarcostemma acidum*** (Roxb.) Voigt. (ASCLEPIADACEAE)

=*Sarcostemma brevistigma* Wight & Arn. in Wight.

Ln: Pullakadalu, Jemudukadalu. Sn: Soma.

A straggling leafless shrub,

Common, extensively spreading on bushes. Fl. & Fr.: July-December. Ld:

Penubakam: RBK 9053.

Latex – **ophthalmia**: Fresh tender stems taken and cut into small pieces obtained latex. 1-2 drops of latex dropped into eyes in case of early stages of Cataract. (Suklamu). It may be repeated for 2-3 times in a week to cure *Cataract*.

CC: Mallic acid, Succinic acid, Phyto sterol, Tannin[2,6,7].

22. ***Vanda testacea*** (Lindl.) Reichb. f. (ORCHIDACEAE)

=*Vanda parviflora* Lindl.

Ln: Vajanika.

Epiphytic herbs.

Rare, a few plants were noticed on the trunks of *Sapindus emarginatus*. Fl: September. Ld: Ellanthungunta : RBK 9012.

1 –2 drops of leaf juice dropped into ear for 2 days to get relief **ear ache**.

CC.: Alkaloids[2,5].

23. ***Vitex negundo*** L. (VERBENACEAE)

Ln: Vavili chettu. Sn: Indrani, Nila pushpa, Nirgundi.

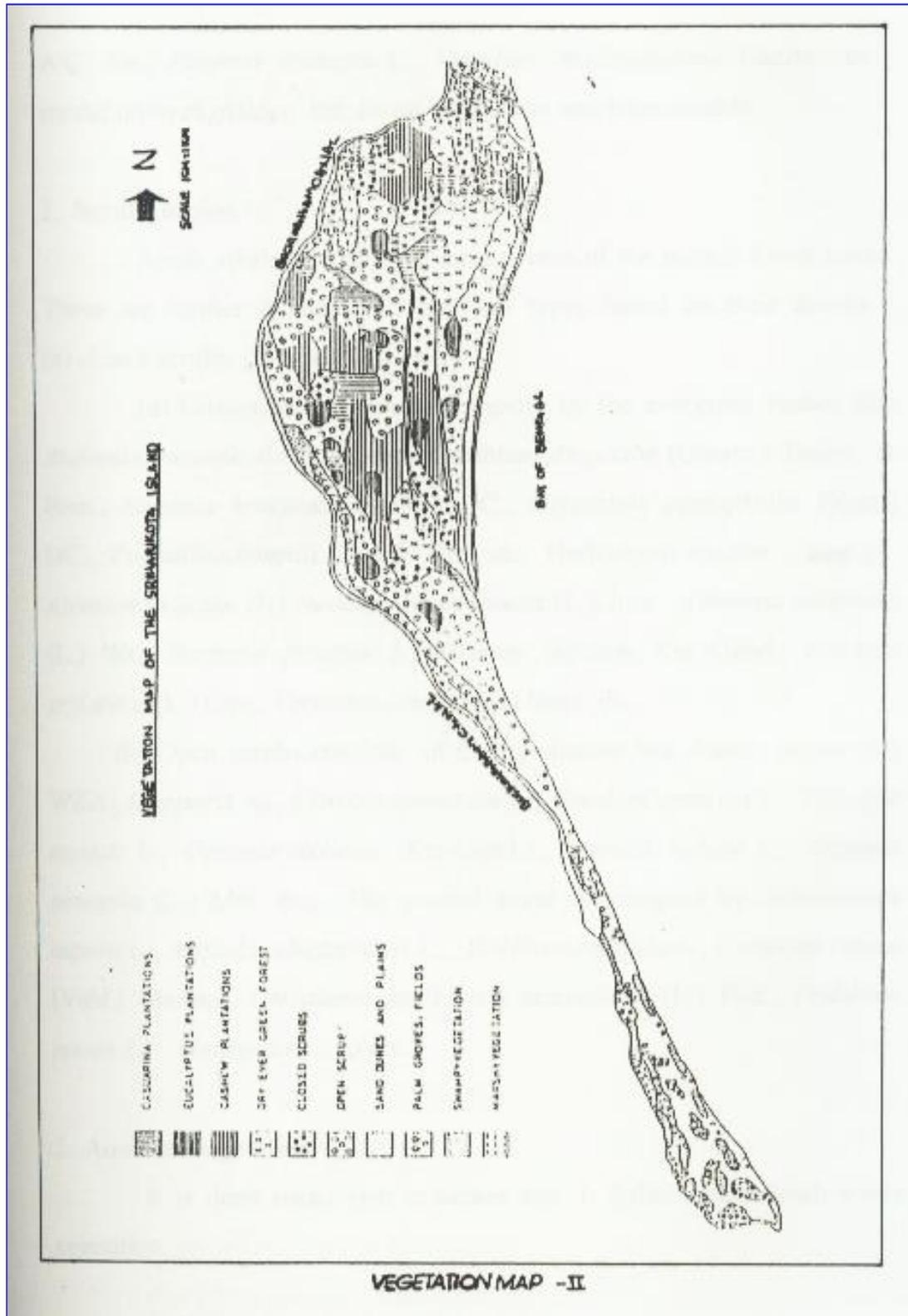
Shrubs or small tress.

Common in waste places and abundant along the banks of streams and canals Fl & Fr: throughout the year. Ld: Keepakam : RBK 9125.

Twigs used as tooth brush for **toothache**.

Leaf paste used for ulcers in mouth (**stomatitis**) : Leaf paste applied in mouth for a few days to get relief from ulcerous mouth.

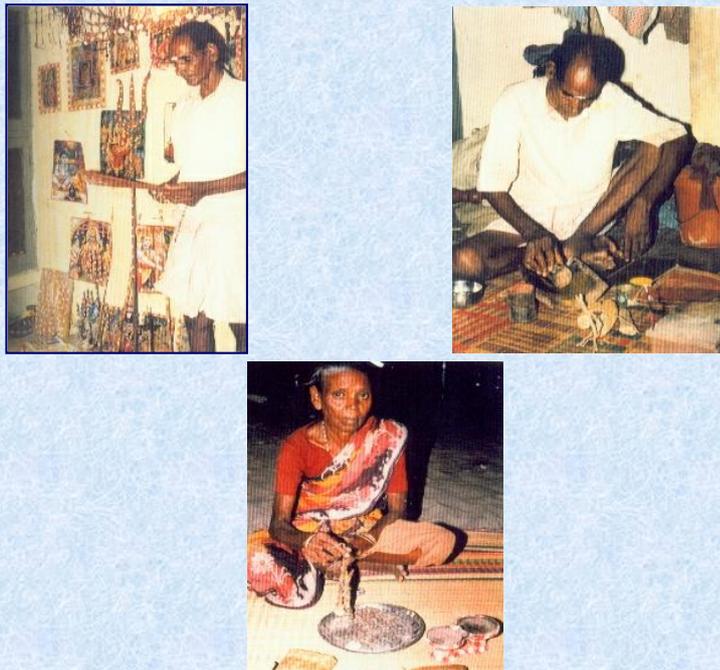
CC: Vitricine [5,7].



TRIBALS OF SRIHARIKOTA ISLAND



TRIBAL DOCTORS/NATUVAIDYAS- SRIHARIKOTA



Medicinal Plant Species –Used by Tribals for Ophthalmic and ENT problems & allied diseases



***Albizia lebeck* (L.) Willd.**



***Annona squamosa* L.**



***Argemone mexicana* L.**



***Azadirachta indica* A. Juss.**



***Barleria prionotis* L.**



***Calotropis gigantea* (L.) R. Br.**



***Capparis brevispina* DC.**



***Cassia auriculata* L.**



***Cleome gynandra* L.**



***Crataeva magna* (Lour.) DC.**



***Cymbidium aloifolium* (L.) Sw.**



***Dendrophthoe falcata* (L.f.) Ettings.**

	
<p><i>Derris scandens</i> (Roxb.) Benth.</p>	<p><i>Eclipta prostrata</i> (L.) L.</p>
	
<p><i>Eugenia bracteata</i> (Willd.) DC.</p>	<p><i>Ichnocarpus frutescens</i> R.Br.</p>
	
<p><i>Jatropha gossypifolia</i> L.</p>	<p><i>Salvadora persica</i> L. var <i>wightiana</i> (Planch.ex. Thw.)</p>



***Sansvieria roxburghiana* Schultes & Schultes.**



***Sapindus emarginatus* Vahl.**



***Sarcostemma acidum* (Roxb.) Voigt.**



***Vanda testacea* (Lindl.) Reichb. f.**



***Vitex negundo* L.**

Other Medicinal uses for Plants of Ophthalmic and ENT problems & allied diseases from Tribals of Sriharikota Island, Andhra Pradesh reported first time from Sriharikota

S.No.	Scientific Name and Family	Local Name(s)	Other uses	
			In Island	Elsewhere
1.	<i>Albizia lebbek</i> (L.) Willd. (FABACEAE)	Dirisena, Birachapu	Stem bark, seeds - antidysentric and diarrhoea: Fresh stem bark and seeds in equal quantity ground into powder. It is taken 200 ml of water boiled well and prepared decoction. 10-15 ml of decoction taken orally 3 - 4 times a day to get relief from dysentery and diarrhoea.	Antiseptic, antibacterial, antiallergic, antidermatosis, antidysenteric [6,14]. Bark—used in bronchitis; bark and seeds in piles; root in hemisrania; flowers in cough, bronchitis, tropical pulmonary eosinophilia and asthma[9,15].
2.	<i>Annona squamosa</i> L. (ANNONACEAE)	Sithaphalam.	--	Leaves, unripe fruits, and extracts of bark and root, all rather astringent, have been used in traditional medicine to treat fevers, rheumatism, diarrhea, dysentery, and other ailments [7,16].
3.	<i>Argemone mexicana</i> L. (PAPAVERACEAE)	Kusuma chettu, Brahmadandi	--	Seeds as a sedative and analgesic tea, including for use to help alleviate migraine headaches. The seeds are taken as a laxative [5,14].
4.	<i>Azadirachta indica</i> Juss. (MELIACEAE)	Vepa.	Seed oil - antiseptic: Seed oil is warmed and applied on wounds and boils twice a day for 5-10 days until wounds and boils are healed.	Neem leaves have been also been used to treat skin diseases like eczema, psoriasis etc. Neem oil is also used for healthy hair, to improve liver function, detoxify the blood, and balance blood sugar levels[8,10]
5.	<i>Barleria prionotis</i> L. (ACANTHACEAE)	Mullagorinta, Mulla kanakambaram	--	Plant is used for treating fever, respiratory diseases, toothache, joint pains and a variety of other ailments; and it has several cosmetic uses [11,14].
S.No.	Scientific Name and Family	Local Name(s)	Other uses	
			In Island	Elsewhere
6.	<i>Calotropis gigantea</i> (L.) R. Br. (ASCLEPIADACEAE)	Jilledu.	Leaves – as analgesic: The required quantity of leaves taken in 200 ml of castor oil and boiled. The oil extract is applied on painful body parts to get relief from body pains.	Leaf juice administered with honey to kill the Intestinal Worms & treatment for –Stomach ulcers [6,14].

7.	<i>Capparis brevispina</i> DC. (CAPPARACEAE)	Palasuri	--	Used as hepatic stimulant and protectors, improving liver function treat arteriosclerosis, kidney disinfectants, vermifuges and tonics [5,8].
8.	<i>Cassia auriculata</i> L. (CAESALPINIACEAE)	Tangedu	Root - refrigerant: Fresh roots are cut into small pieces and ground to paste. 1-2 spoonfuls of paste given orally with 100 ml of butter milk twice a day, to result cooling effect to body and reduces excess heat.	Leaf & root used for diabetes, eye infections (conjunctivitis), joint and muscle pain (rheumatism), constipation, jaundice, liver disease, and urinary tract disorders [7,14].
9.	<i>Cleome gynandra</i> L. = <i>Gynandropsis pentaphylla</i> (L.) DC. (CLEOMACEAE)	Tella vaminta.	--	Leaf decoction is administered to cure scurvy disease [6].
10.	<i>Crataeva magna</i> (Lour.) DC. = <i>Crataeva religiosa</i> sensu Dunn. (CAPPARACEAE)	Mavalangi, Mogilenka.	Stem bark- diuretic: Decoction of stem bark 5-10 ml is given twice a day to the patient to get relief from urinary infections.	The decoction of bark is internally administered to cure diseases like renal calculi, dysuria, helminthiasis, inflammations and abscesses [5,7].
11.	<i>Cymbidium aloifolium</i> (L.) Sw. (ORCHIDACEAE)	Thatisaga.	--	Plant was used in the treatment of Anti-inflammatory, Paralysis, joining fractured bones, fever, weakness of eyes, chronic illness, burns, sores etc.[6,14]
12.	<i>Dendrophthoe falcata</i> (L.f.) Ettings. = <i>L. longiflorus</i> Desr. in Lam. (LORANTHACEAE)	Bhajanachettu.	--	Plant is used in indigenous system of medicine as cooling, bitter, astringent, aphrodisiac, narcotic and diuretic [5,12].
S.No.	Scientific Name and Family	Local Name(s)	Other uses	
			In Island	Elsewhere
13.	<i>Derris scandens</i> (Roxb.) Benth. (FABACEAE)	Minaputeega, Pachori,	Tender stems - antiarthritic: Tender stems cut into 10-15 cm long pieces crushed and applied on joint swellings and with a fresh piece of cloth. Treatment recommended for 20-30 days for relief from joint swellings.	Plant used for-Osteoarthritis, arthritis, musculoskeletal disease, rheumatism, muscle tension, antidycentric & diuretic [6,14].
14.	<i>Eclipta prostrata</i> (L.) L. = <i>Eclipta alba</i> (L.) Hassk. Jav. Rar. (ASTERACEAE)	GuntagalagarGuntaligeru	Leaf juice – Jaundice: 100g of Fresh leaves taken ground to extract juice. 10-15 ml leaf juice given orally twice a day for 10-15 days for relief from jaundice.	Used for tonifying liver and kidney, cooling blood, and stopping bleeding. Improves the immune system function [5,11].
15.	<i>Eugenia bracteata</i> (Willd.) DC. (MYRTACEAE)	Kunda neredu.	Leaves as mosquito repellent:100g -above required amount of fresh leaves taken and burnt. Smoke acts as mosquito	Root paste mixed with goat milk is used to treat tonsils and gum swellings [11,14].

			repellent.	
16.	<i>Ichnocarpus frutescens</i> R.Br. (APOCYNACEAE)	Palateega	--	Treatment for rheumatism, asthma, cholera, and fever [5,15].
17.	<i>Jatropha gossypifolia</i> L. (EUPHORBIACEAE)	Adavi konnadi, Simanepalam	Leaf juice for dermatotherapy: 200g of fresh leaves squeezed and obtained juice. The juice is warmed and applied for scabies and other skin diseases.	The leaves are applied to boils, carbuncles, eczema and itches. The decoction of the bark is an emmenagogue. Seeds are an emetic and a purgative [14,18].
18.	<i>Salvadora persica</i> L.var <i>wightiana</i> (Planch.ex. Thw.) = <i>Salvadora persica</i> L. (SALVADORACEAE)	Adavigogu, Varagogu.	--	Antiuro lithiatic properties. antiseptics, astringent, detergents, enzyme inhibitors [6,7].
19.	<i>Sansvieria roxburghiana</i> Schultes & Schultes. (AGAVACEAE)	Nelasaga	--	Sap has antiseptic qualities, used for first aid treatment and bandages [5,14].
S.No.	Scientific Name and Family	Local Name(s)	Other uses	
			In Island	Elsewhere
20.	<i>Sapindus emarginatus</i> Vahl. (SAPINDACEAE)	Kunkudu	Leaves: 100g of fresh leaves are ground to fine paste. It is slightly warmed and gently applied on temples and forehead for relief from heavy cold. Recipe is continued once a day for 4-5 days to get complete relief from cold.	Treatment for eczema, psoriasis, and for removing freckles and contraceptive [6,10].
21.	<i>Sarcostemma acidum</i> (Roxb.) Voigt. = <i>Sarcostemma brevistigma</i> wight & Arn. in Wight. (ASCLEPIADACEAE)	Pullakadalu, Jemudukadalu	Tender stems – cold: 200g of fresh stem bits ground and obtained juice. 10-15 ml of juice slightly warmed administered orally to children for 4-5 days to get relief from cold.	The Roots and Leaves of the Moon plant is used viral infection, mental diseases, allergic rhinitis & sinusitis [11].
22.	<i>Vanda testacea</i> (Lindl.) Reichb. f. = <i>Vanda parviflora</i> Lindl. (ORCHIDACEAE)	Vajanika.	--	Plant extract used to treat asthma, malaria, rheumatism & nervous disorders [10,11]
23.	<i>Vitex negundo</i> L. (VERBENACEAE)	Vavili chettu.	Root and leaves antiarthritic: Equal quantities of roots and leaves (100g each) are cut into small pieces and mixed them with seasemum oil is prepared. It is gently applied on joint swellings to get relief from rheumatic pains.	Roots and leaves used in eczema, ringworm and other skin diseases, liver disorders, spleen enlargement, rheumatic pain, gout, backache. Seeds used as vermicide [2,10].



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