

NOTE ON WILDERNESS AREA IN TELANGANA STATE FOREST ACADEMY, DULAPALLY, HYDERABAD

Wilderness area, is an area for recreation with floral species diversity. It includes timber, NTFP, RET and Medicinal plant species. The area was a quarry site surrounded by the natural vegetation and habitat for beautiful fauna. It was proposed to develop this area in to a model plantation by various species to serve as an ex-situ conservation plot and also educative to trainees of Academy as well as CAFÉ (Children and Forest Education) programmes.

The General Manager, CMS (Centre for Media Studies) New Delhi approached with a proposal to take up a plantation in the area in collaboration with HSBC. The HSBC agreed to provide funds for establishment and maintenance of this plantation for three years as part of its CSR (Corporate Social Responsibility) agenda.

Plantation was taken up on 22nd and 23rd September 2011 by the enthusiastic green volunteers of HSBC. Each volunteer planted 3 saplings. Total 350 saplings of 30 species were planted in two days. The intervention of the CMS and HSBC was appreciated by the Academy and the green volunteers of HSBC were awarded a certificate which contained photograph and details of the sapling they planted and its geographical position (Longitude and Latitude) as a token of gratitude and memento. A small Herbal garden has also been added with 50 species. It creates awareness to children and general public about our rich heritage of traditional Medicine.

List of species planted by HSBC Staff in Quarry area:

1. Mimusops elengi: (Pogada)

It is a medium sized, beautiful evergreen tree, it grows on a variety of soils. It is a shade bearer and best plant for avenue plantations because of its scented flowers. Young twigs are used for cleaning teeth. Flowers and seeds yield fragrant oil.

2. Bauhinia variegata: (Devakanchanamu)

It grows upto 13 mtrs height and naturally occurs in dry rocky hills and looks very beautiful in the forests. The leaves and flower buds are sometimes eaten as vegetables. Bark yields a fibre and it is used for tanning and dyeing, it is also having medicinal value.

3. *Dalbergialatifolia* : (Rose wood, Jittegi.)

Large deciduous tree, nearly ever green up to 20 mtrs tall. It is a drought resistant species, leaves are used as fodder. Bark contains tanins. Oil from the seed is used as an antidote for poison. Wood extremely hard and valuable.

4. *Cassia fistula* : (Rela)

Large deciduous tree up to 10 mtr tall, common in all the dry deciduous forests, frequently cultivated in gardens and avenues. The pulp of the ripe fruit is a strong purgative. The wood is strong, hard and useful for agricultural work. It gives good fire wood and charcoal.

5. *Callistemon viminalis*: (Bottle brush.)

The weeping bottlebrush is typically a small tree with pendulous foliage. It reaches a height of about 10 metres. This is a well behaved tree with a beautiful form that puts on a spectacular floral display each spring followed by brief encore flushes of color throughout the year. Drought tolerance and relative freedom from pests and disease only add to this bottlebrush's attractiveness.

6. *Terminalia arjuna*: (Tellamaddi)

It is evergreen, handsome tree grows up to 30 mtr tall. Mostly present along the streams, river banks, ravines and dry waste courses. Wood is hard - used for agricultural implements and boat building. Bark is used against hyper tension, diuretic and for dyeing, tanning. The leaves are fed to tasar silk worms.

7. *Micheliachampaca*: (Sampenga)

Densely foliaceous, ever green tree up to 20 mtr tall. Planted in cool valleys, temples and gardens for the sake of sweet scented flowers. Flowers and fruits used in the treatment of fever, healing cracks in feet. Flowers yields champa oil. Wood is used for decorative fittings.

8. *Aegle marmelos*(Maredu)

It is medium sized deciduous tree with straight thorns. Leaves are used as sacred offerings to the deity SIVA. Fruit is having medicinal value and highly nutritious, aromatic, cooling and laxative with strong aromatic scent. Wood is used for agricultural implements, leaves analgesic and root bark is febrifuge.

9. *Pterocarpussantalinus*: (Red sanders/ Rakthachandanamu)

Large deciduous tree up to 20 mtr tall, wood is dark red to almost black. It is rare and endangered species mainly grows typically on dry, hilly often rocky grounds of Seshachalam hill ranges. Wood is extremely hard, used for making traditional musical instruments in Japan and furniture in China.

10. *Alstoniascholaris*: (Edakulapala.)

Large, evergreen tree with whorled leaves, presently used in avenue plantations and gardens. Wood is soft for boxes, stem bark is used for Malaria, Anthelmintic and it is having Galactagogue properties (promotes lactation).

11. *Putranjivaroxburghii*: (Putrjivika)

Moderate sized ever green tree. The name putranjiva is derived from the fact that the seeds are said to be the life savers of kids. The seed yields fatty oil, used for burning. Leaves with fruit decoction used for cold and fever. Wood is hard, strong, heavy and durable.

12. *Stereospermumsuaveolens*: (Kokkesa)

Large deciduous tree, occasional in semi ever green and dry deciduous forests. The tree is useful for reclothing bare hill sides. The root is used in important Ayurvedic preparation called "DASAMOLARISHTA".

13. *Mitragnaparvifolia*: (Battaganapu.)

A medium sized deciduous tree common in forests, beautiful with white fragrant flowers in globose heads. The wood is strong, hard and moderately heavy, used for furniture, agricultural implements. The bark and roots are used in fever and colic.

14. *Meliadubia*: (Malabarvepa)

A very fast growing large tree from Neem family. It is one of the best species for agro forestry. The wood is soft, useful for tea boxes, packing cases, Ceiling planks and mainly for preparation of particle boards and musical instruments. It serves as a good fuel wood, fruits are bitter and Anthelmintic (kills parasitic worms).

15. *Plumeriaalba*: (Deva Ganneru.)

It is a medium sized tree with beautiful foliage and fragrant large white flowers. It is cultivated as ornamental plant in gardens, temples.

16. *Filiciumdeciens*: (Pattakunkudu.)

It is a medium sized ever green tree which grows up to 15 mtr tall. It is commonly called as fern tree. The fruit is having medicinal value.

17. *Hardwickiabinata* : (Nara yepi)

Large deciduous tree grows up to 30 mtrs. tall. Wood is extremely hard, very heavy and durable, used for bridge and house posts. Bark yields a red brown strong fibre extensively used for well ropes and other agricultural purposes. Gum used in varnishes.

18. *Simaroubaglauca*: (Simarouba.)

It is a medium sized evergreen tree. The seed yields vegetable oil, wood is soft mainly used for small furniture. The leaves and bark are used against dysentery, bark for fevers, malaria, and a haemostatic agent to stop bleeding, astringent, a digestion and menstrual stimulant and an antiparasitic remedy

19. *Gmelinaarborea* (Gummaditeku.)

It is deciduous tree grows up to 15 mtr tall. Whole plant is used as antidote for snake bite and scorpion sting. Root is bitter useful in fever and indigestion. Wood is very light and it is one of the best and most reliable timbers. Root is used in important Ayurvedic preparations called "DASAMOLARISHTA"

20. *Santalum album* : (Sandal wood)

Evergreen tree up to 12 mtr tall. Heart wood is strongly, characteristically scented and is in great demand for carvings. Wood contains essential oil. Wood is moderately hard to heavy, used for burning as incense in temples. Both oil and wood credited with cooling, diaphoretic, diuretic and expectorant properties.

21. *Anacardiumoccidentale*: (Jeedimamidi)

Ever green tree grows up to 10 mtr tall, The tree can be grown in any type of soil except heavy clay, alkaline soils. The seeds are roasted or eaten raw. The pericarp of the fruit on roasting yields a black acrid oil, hypocarp is fleshy and edible. Wood used for packing cases and as charcoal.

22. *Terminalia catappa*: (Badam / Indian Almond.)

It is a deciduous tree up to 20 mtr tall. Commonly planted in almost all the places like households, gardens and avenues. Seeds are edible, the oil extracted from dried kernel is used as a substitute for almond oil. The leaf juice is applied externally for scabies, leprosy skin diseases and head ache.

23. *Saracaasoca*: (SeethaAsoka.)

It is an evergreen tree up to 5 mtr tall, flowers scented during the night. It is one of the sacred trees of the Hindus, Buddhists, the flowers being much used for religious ceremonies and temple decorations. Leaves and flowers possess blood purifying properties The juice mixed with cumin seeds is used for Stomachache. Flowers used for skin disorders and Gynaec diseases.

24. *Hymenodictyon excelsum*: (Dudippa, Chedippa.)

It is a deciduous tree upto 25 mtr tall, common in dry and mixed forests. Leaves are used as a cattle fodder and for dye. Bark and root are used as febrifuge (reduces fever), bark is used for tanning. Bark is used in bone fractures.

25. *Albizia odoratissima*: (Chinduga)

Large deciduous tree, 15 – 25 mtr tall. The twigs are lopped for fodder. The leaves boiled in ghee are used as cough remedy. The timber is widely used for many purposes, particularly for construction of houses, agriculture implements. The plant yields gum and dye.

26. *Terminalia bellerica*: (Tani.)

It is a tall deciduous tree grows up to 30 mtr height. The fruit is one of the important constituents of the Ayurvedic drug "TRIPHALA CHURNA" which is used against asthma, bronchitis. Bellericmyrobalanis used in tanning. Kernel yields an oil which is reported to have antibiotic activity against a wide variety of microorganisms.

27. *Ficus carica* : (Anjuramu.)

It is a small deciduous tree, branching from the base. Fresh figs are delicious, mildly laxative and high nutrient value. It is a diuretic, and used in the prevention of nutritional anemia. Latex is used as an Anthelmintic. Leaves are used as fodder. The wood is used in cabinet work

28. *Erythrina variegata*: (Badidha.)

Medium sized fast growing tree grows up to 20 mtr height. Bark and leaves pacifies vitiated *kapha*, *vata*, inflammation, insomnia, anorexia, colic, helminthiasis, cough, bronchitis, dysmenorrhea (painful periods / menstrual cramps), skin diseases and fever.

29. *Prosopis cineraria*: (Jammi.)

Evergreen tree grows up to 10 mtr tall. It is one of the sacred trees of the Hindus. The pods form a valuable food for cattle and goats. Wood is hard, suitable for interior construction work. The bark and galls formed on the leaves are used for tanning. Leaves are useful for fodder and green manuring. The tree exudes gum from the cut ends of branches. It is the State Tree of Telangana State

30. *Emblica officinalis*: (Usiri / Aonla)

A medium sized deciduous tree, mostly found in dry deciduous to moist deciduous forests and on open grass lands. Bark is light grey, exfoliating in irregular patches, red in side. Fruit is having rich source of Vitamin C, used in preparation of Chyavanaprash and it is a one of the ingredients in *TRIPHALA*.

Details of Medicinal Plants at Herbal Garden

1	<i>Acoruscalamus</i>	Vasa, sweetflag	Rhizomes are used in Rheumatism, inflammation of throat, hoarseness of voice digestion, cures diarrhea, dysentery and abdominal obstruction.
2	<i>Andrographispaniculata</i>	Nelavemu, Kalmegh	Whole plant forms an ingredient of a medicine used as a bitter tonic, used in specific remedy for all types of fevers especially malarial and intermittent fevers
3	<i>Aloe vera</i>	Kalabanda, Aloe	Leaves are used in chronic constipation, haemophilia, skin and uterine disorders, painful inflammation of the body, chronic ulcers and burns.
4	<i>Commiphoramukul</i>	Guggul	Resinous gum is used for arthritis, gout, sciatica, hemiplegia, facial paralysis, leucoderma.
5	<i>Ocimum sanctum</i>	Tulasi, Holy Basil	Whole plant is used as a domestic remedy for infantile cough, cold, bronchitis.
6	<i>Coleus ambonicus</i>	VaamuAaku	Chronic Cough, Asthma, Epilepsy, Abdominal Colic, Anaemia, Improves Vitality.
7	<i>Artemisia vulgaris</i>	Machapatri	Anthelmintic, Stomachic, Asthma, Antiseptic, Nervous and Spasmodic affections antiviral properties
8	<i>Adhatodavasica</i>	AddaSaramu	The plant is bitter, astringent, refrigerant, expectorant, diuretic, antispasmodic, febrifuge, depurative, styptic and tonic. The roots along with the leaf juice are used in asthma.
9	<i>Sauropusandrogynus</i>	Multi Vitamin Plant	Leaf is a Source of various, Vitamins except Vitamin – D, good for Diabetic, Decoction of the roots is given in stricture of the bladder and in fevers.
10	<i>Withaniasomnifera</i>	Aswagandha	Important rejuvenating drug which improves physical vigour.
11	<i>Rauwolfiaserpentina</i>	Sarpagandha	The alkaloids in the roots effective remedy against hypertension. painful affections of bowels. Worms and snake bites.
12	<i>Menthapiperita</i>	Pepper Mint.	Aromatic stimulant, Nausea, Spasmodic pains of the stomach and bowels, Expel flatus
13	<i>Pelargonium graveolens</i>	Geranium	Antidepressant, Antiseptic, Astringent, Cicatrisant (heals skin), Diuretic, Deodorant, Haemostatic, Vermifuge (expels worms)
14	<i>Cymbopogonflexuosus</i>	NimmaGaddi	Whole plant is useful for gastric irritation, fever, cholera, skin diseases, bronchitis, neuralgia and sprain. It also repels mosquitoes
15	<i>Centellaasiatica</i>	SaraswatiAku	Whole plant is used for epilepsy, leprosy, polyuria, distaste, psychosis, fever, bronchial asthma and stammer. It is a brain tonic, rejuvenator, nervine and cardiac tonic.

16	<i>Bacopamonnieri</i>	Brahmi	A brain tonic, Improves memory power, intelligence and mental health.
17	<i>Rosemarinusofficinalis</i>	Rosemary	Digestive, Nervine tonic, Kidney disorders.
18	<i>Justiciagendarussa</i>	Nelavavili	Fever, Glandular swellings, Cough, Chronic Rheumatism,
19	<i>Alpiniagalanga</i>	Dumparastramu	Rhizomes are aromatic, thermogenic, carminative, stomachic, aphrodisiac and are useful in rheumatism and bronchial catarrh, nervous diseases.
20	<i>Majoranahortensis</i>	Maruvam	Cold, Cramps, Digestive disorders, Swellings, Rheumatism, Colic, Head ache
21	<i>Rutagraveolens</i>	Sadapaku	Whole plant is used in hemiplegia, oedema, earache, convulsions, Epilepsy, indigestion, stomachache, worm infestations.
22	<i>Curcuma aromatica</i>	KasturiPasupu	It is used in bronchitis, cough, leucoderma, skin eruptions, improving complexion of the skin.
23	<i>Anisomelesmalabarica</i>	Magabeera.	Intellect promoting, Epilepsy, Hysteria, Intestinalworms, Intermittent fever, Diarrhea, Rheumatic pains
24	<i>Abelmoschusmoschatus</i>	Kasturibenda	Carminative, Stimulant
25	<i>Ocimumgratissimum</i>	LavangTulasi	Ear ache, Tooth ache, Digestive tonic, Stimulant, Anthelmintic, Neuralgia, Urinary
26	<i>Coleus forskohlii</i>	Coleus	Chronic cough, Asthma, Gonorrhoea, Epilepsy, Abdominal colic,
27	<i>Notonia grandiflora</i>	KundeluChevi - aku	Mild Laxative, Anti Bacterial activity, Ear infections, Pimples.
28	<i>Salacia reticulata</i>	Saptarangi.	Liver tonic, Stomachic, Diabetes, Leprosy, Skin diseases, Colic,
29	<i>Saracaasoca</i>	Asocamu	Anthelmintic, Ulcers, Leucorrhoea, pimples, Cervical adinitis, Haemorrhagic dysentery, Diabetes.
30	<i>Ficus carica</i>	Anjooram	Laxative, Diuretic, Anthelmintic, Source of fig Syrup
31	<i>Aegle marmelos</i>	Maredu	Diarrhea, Constipation, Worms, Skin diseases, High Blood pressure, Jaundice, Leucoderma
32	<i>Pterocarpussantalinus</i>	Red sanders	General debility, Fever, Skin diseases, Ulcers, Kidney disorders, Diarrhea.
33	<i>Pimento officinalis</i>	All spices	Aromatic stimulant, Digestive troubles, Carminative, & Anodyne against Neuralgia & Rheumatism.
34	<i>Hymenodictyon excelsum</i>	RakhtaKandela	Anti pyretic, Relives thirst, Bone fractures, Febrifuge.
35	<i>Mappia foetida</i>	Mappia	It is having active anti cancer ingredient like "CAMPTOTHECIN & MAPPICIN. Used against variety of cancers.

36	<i>Tinosporacordifolia</i>	Tippateega	Urinary affections, Fever, Jaundice, Liver disorders, syphilis, Rheumatism, General debility, Leprosy.
37	<i>Gymnemasylvestre</i>	Podapatri	Snake bite, Enlargement of liver and spleen, Diabetes, Cardiac stimulant, Malarial fever, eye disease, Diuretic.
38	<i>Leptadeniareticulata</i>	Jeenathi	Skin infections and diminished lactation, cold, Ear ache.
39	<i>Abrusprecatorius</i>	Guruvinda	Diuretic, Inflammations, Wounds, asthma, Leucoderma, Skin diseases, Stomatitis, Hyperdipsia.
40	<i>Cryptolepisbucharani</i>	Adavi Pala teega	Rickets in Children.
41	<i>Basellarubra</i>	ErraBachali	Cooling agent, Aphrodisiac, Laxative, Appetiser, Sedative, Diuretic, Insomnia.
42	<i>Piper betle</i>	Tamalapaku	Antiseptic, Aphrodisiac, Expectorant, Impotency
43	<i>Piper longum</i>	Pippallu	Bronchial asthma, Infections of throat, flatulence.
44	<i>Asparagus racemosus</i>	Satavari	Urinary diseases, Hyper acidity, Gastritis Gastritis, Cardiac debility, Hyper tension
45	<i>Tylophoraasthmatica</i>	MekameyaniAaku	Dysentery, Asthma, Bronchitis, Whooping cough, Dermatitis, Rheumatism and Gouty pains.
46	<i>Cissusquadrangularis</i>	Nalleru	Bone fractures, Dyspepsia, General weakness
47	<i>Passifloraedulis</i>	Passion fruit	Relieves pain, Anxiety, Depression, Inflammation, Convulsions, Sedative, Scanty urination, Blood pressure, Expel worms
48	<i>Argyreia nervosa</i>	Samudrapala	Chronic ulcers, Itching, Eczema, Diuretic, Aphrodisiac, Rheumatism.
49	<i>Decalepishamiltonii</i>	MareduGaddalu	Wound, Bronchial asthma, Intrinsic haemorrhage, Appetizer, Depurative, Indigestion, Blood Purifier, Fever
50	<i>Paederiafoetida</i>	Stink vine	Emetic, Carminative, Colic, Spasms, Rheumatism, Anti inflammatory