Swamp species description:

Species name	Habit	Family	Local Name	Status
Acacia sinuata	L	Mimosoideae	Siege	
Actinodaphne	Т	Lauraceae	Tudgenasu	
hookeri				
Aglaia elaegnoidea	Т	Meliaceae		NT
Aglaia lawii	Т	Meliaceae	Madrasada	
Agrostistachys indica	S	Euphorbiaceae	Uddele gida	NT
Agrostistachys Iongifolia	S	Euphorbiaceae	Uddele gida	NT
Alangium salvifolium	S	Alangiaceae	Ankole	NT
Alpinia malacensis	S	Zinziberaceae	Kudu yelakki	NT
Alstonia scholaris	Т	Apocynaceae	Maddale	
Ancistrocladus heyneanus	L	Diperocarpaceae	Girgitle balli	NT
Anodendron paniculatum.	L	Apocyanaceae		NT
Antidesma menasu	S	Euphorbiaceae	Huli hannina gida	NT
Anthocephalus cadamba	Т	Rubiaceae		
Aphalanthe cuspidata	Т	Ulmaceae Naru bhootala		Vu
Apama siliquosa	S	Aristolochiaceae	Chakrani	NT
Archidendron monadelphum	Т	Mimosoideae	Nuggikar	
Ardisia solanacea	S	Myrsinaceae	Havalada gida	NT
Arenga wightii	Р	Arecaceae Kan Tengu		NT
Artobotrys zeylanicum	L	Annonaceae		Vu
Artocarpus hirsutus	Т	Moraceae	Hebbalsu	NT
Artocarpus integrifolia	Т	Moraceae Halasu		Vu
Atalantia monophyllla	S	Rutaceae Kudu limbu		NT
Bauhenia racemosus	Т	Caesalpinioideae Basavan pada		NT
Blachia denudate	S	Euphorbiaceae		NT
Bleishmedia wightii	Т	Louraceae		NT
Calamus twatessi	С	Arecaceae	Betta	NT
Callicarpa tomentosa	S	Verbenaceae	Taudatti	
Callophyllum apetalum	Т	Clusiaceae	Bobbi	NT

Calophyllum	Т	Clusiaceae Surhonne		
polyanthum Canarium strictum	Т	Burseraceae	e Karidhupa	
Canthium dicoccum	T	Rubiaceae	-	
Capparis heyneana	S	Capparaceae		
Carex spp	G	Un known		Vu
		-	Datas	vu
Caryota urens	P	Arecaceae	Baine	
Casearia rubens	T	Flacourtiaceae		NT
Casearia tomentosa	Т	Flacourtiaceae	Konje	NT
Celtis cinnamomum	Т	Louraceae		
Chewnanthus	L	Oleaceae	Akkerakalu	
malabarica				
Chilocarpus	L	Apocynaceae	Halballi	NT
atroviridis	6			
Chromolaena	S	Asteraceae	Kangress	Vu
odorata Chrusenbullum	Т	Constance		
Chrysophyllum		Sapotaceae	Hale	
roxburghii Cinnamomum	Т	Lauraceae	Kadudalchinni	En
wightii	1	Lauraceae	Kauuuaiciiiiiii	
Cinnamomum	Т	Lauraceae Lolle Dalchinni		
malabathrum		Lauraceae		
Clausena dentate	т	Rutaceae	Kadu bevu	
Cleidion spiciflorum	Т	Euphorbiaceae		NT
Combretum	L	Combretaceae		Vu
ovalifolium				
Cryptocarya	Т	Louraceae	Gulmar	NT
bourdilonii				
Cyathea gigantean	F	Cyatheaceae	Mara Zari gida	
Derris scandens	L	Leguminosae		
Dicapetalum	S	Oleaceae	Bodingina Gida	NT
gelanioides				
Dimocarpus longan	Т	Sapindaceae	Kan kindal	
Dimorphocalyx	Т	Euphorbiaceae		NT
lawiana				
Diospyros buxifolia	Т	Ebenaceae	Karikuncha	
Diospyros	Т	Ebenaceae	Karemara	LR nT
candolleana				
Diospyros	Т	Ebenaceae	Tumari	Vu
crumenata				
Diospyros paniculata	Т	Ebenaceae	Karimara	NT
Diospyrus	Т	Ebenaceae	Kantumri	En
crumenata				
Diospyrus oocarpa	Т	Ebenaceae		NT
Diospyrus paniculata	Т	Ebenaceae	Karikumar	NT

Diospyrus sylvatica	Т	Ebenaceae Bilisarali		NT
Dipterocarpus indicus	Т	Dipterocapaceae Garjan		
Drypetes wightii	Т	Euphorbiaceae		Vu
Dysoxylum	Т	Meliaceae		
binecteriferum			Kaadugandha	
Elaeocarpus serratus	Т	Elaeocarpaceae		En
Elaeocarpus tuberculatus	Т	Elaeocarpaceae	kadugandha	
Embelia ribes	L	Myrsinaceae	Vayu vilanga	NT
Encistrocladus	L	Ancistrocladaceae		NT
Entada rheedii	L	Fabaceae	Ganape kaayi	NT
Epiprinus mallotiformis	Т	Euphorbiaceae		Vu
Euonymus indicus	Т	Celastraceae		NT
Ficus amplissima	Т	Moraceae	Bilibasari	NT
Ficus arnotaiana	Т	Moraceae	Kallu Ashwatha	Cr
Ficus beddomi	Т	Moraceae		NT
Ficus callosa	Т	Moraceae		
Ficus hispida	Т	Moraceae Kadu atti		
Ficus nervosa	Т	Moraceae	Neeratti	
Ficus racemosa	Т	Moraceae	Atti	En
Ficus tsjhela	Т	Moraceae	Kari basari	
Flacourtia montana	Т	Flacourtiaceae	Hannu sampige	NT
Garcinia gummi- gutta	Т	Clusiaceae	Uppage	NT
Garcinia morella	Т	Clusiaceae Ardala		NT
Glochidion ellipticum	Т	Euphorbiaceae	Neerchalle	NT
Glochidion zeylanicum	Т	Euphorbiaceae	orbiaceae Neerchalle	
Gnetum scandens	L	Gnetaceae	Kugale balli	
Gompandra tetrandra	S	Icacinaceae		NT
Gymnacranthera canarica	Т	Myristicaceae	Myristicaceae Ondanki mara	
Hibiscus furcatus	С	Malvaceae		
Holigarna arnotitiana	Т	Anacardiaceae		
Holigarna ferruginea	Т	Anacardiaceae	Holageru	NT
Holigarna grahamii	Т	Anacardiaceae	Doddele holageru	Vu
Hopea parviflora	Т	Dipterocarpaceae	Kiralbogi	Rare

Hopea ponga	Т	Dipterocarpaceae Haiga		
Hydnocarpus pentandra	Т	Flacourtiaceae Toratti		Cr
Ixora brachiata	Т	Rubiaceae		NT
lxora nigricans	S	Rubiaceae		
Ixora parviflora	S	Rubiaceae	Gorivi	NT
Kneema attenuata	Т	Myrsticaceae	Hedamangala	
Leea indica	S	Leeaceae	Dippanige	NT
Litsea floribunda	Т	Lauraceae	Dhade mara	
Litsea mysorensis	Т	Lauraceae		NT
Litsea wightiana	Т	Lauraceae		Cr
Lophopetalum wightianaum	Т	Celastraceae	Banate	
	Т	Euphorbiaceae	Chandakalu	
Madhuca longifolia	Т	Sapotaceae	Hole Hippe	
Mangifera india	Т	Anacardiaceae	Mavu	NT
Mastixia arborea	Т	Cornaceae	Neerotte	NT
Melastoma malabathricum	S	Melastomataceae	Nekkarike	
Mellotus philippensis	Т	Euphorbiaceae	Kunkumada mara	
Memicylon malabaricum	Т	Melastomataceae	Hanagere	
Mesua ferrea	Т	Clusiaceae	Nagasampige	
Grewia umbellifera	S	Elaeocarpaceae		
Myristica dactyloides	Т	Myristicaceae	Daspatre	
Myristica fatua	Т	Myristicaceae	Hedapatre	
Myristica malabarica	Т	Myristicaceae	Rampatre	
Neolitsea zeylania	Т	Louraceae		
Neonauclea purpurea	Т	Rubiaceae	Shine mara	
Nothopegia racemosa	Т	Anacardiaceae	Gandu Halageru	
Ochlandra rheedii	G	Роасеае	Vate gala	
Olea dioca	Т	Oleaceae	Bili mase	
Pajanelia longifolia	Т	Bignoniaceae		
Palaquium elliipticum	Т	Sapotaceae		
Pandanus tectorius	S	Pandanaceae	Mundige	
Pandanus unipapillatus	S	Pandanaceae	Mundige	
Persea macrantha	Т	Lauraceae	Gul mavu	

Pinnanga dicksonii	Р	Arecaceae	Pandavara adike
Polyalthia fragrans	Т	Annonaceae	Gowrimara
Psychotria dalzelii	S	Rubiaceae	Shivane Yelakki
Pterospermum	Т	Strercularaceae	
diversifolium			
Randia rugosa	S	Rubiaceae	
Rubia cordifolia	С	Rubiaceae	Manjista
Salacia oblonga	L	Hippocrateaceae	Balige balli
Saraca asoka	Т	Caesalpinioideae	Ashoka
Scleropyrum pentandrum	Т	Euphorbiaceae	Bodliga
, Semecarpus kathalekanensis	Т	Anacadiaceae	Kathalekan geru
Smilax indica	С	Smilacaceae	Heggarane balli
Sterculia guttata	Т	Sterculiaeae	Basavana otte
Steriospermum personatum	Т	Bignoniaceae	
Strombosia ceylanica	Т	Olacaceae	
Symplocos cochinchinensis	Т	Symplocaceae	Lodha
Symplocos racemosa	Т	Symplocaceae	
Syzygium caryophyllatum	S	Myrtaceae	Kuntanerale
Syzygium gardnerii	Т	Myrtaceae	
Syzygium hemisphericum	Т	Myrtaceae	Kan nerale
Syzygium heyneanum	Т	Myrtaceae	
Syzygium Ianceolatum	Т	Myrtaceae	Male neralu
Syzygium travancoricum	Т	Myrtaceae	Kempu neralu
Syzygium zeylanicum	Т	Myrtaceae	
Tabernaemontana heyneana	Т	Apocyanaceae Bilikodasa/Nayikod asa	
Thunbergia mysorensis	С	Acanthaceae	
Todelia asiatica	L	Tiliaceae	
Ventilago medaraspatana	L	Rhamnaceae	Gapsandi balli
Vepris bilocularis	Т	Rutaceae	Mara jumma

Walsura trifolia	Т	Meliaceae	Male sagade	
Xanthophyllum	Т	Xanthophyllaceae	Jummana mara	
flavescens				
Mimusops elengi	Т	Sapotaceae	Bakula	

Brief description of species occurring in the fresh water Myristica swamps in the Uttara Kannada district of Karnataka

1. Acacia concinna DC. Family: Mimosoideae Local name: Seegekai, Sheege

Key characters: Woody climber, Bark grey, shining dotted with white lenticels and covered with prickles when young, Leaves bipinnately compound, aches armed with grey prickles, Stipules ovate, caduceus, a lage gland at the middle of the petiole, flowers yellow in fascicle, globose head, forming large racemose panicles at the ends of the branches, Pods shortly stalked 3"-5" by 75"-1 ",thick, dehiscing at intervals along sutures, wrinkled on drying,6-10 seeds.

Flowering & Fruiting: March-July.

2. Actinodaphne hookeri Meissn. Family: Lauraceae Local name: Tudegenasu

Key characters: A small to moderate sized evergreen tree ,bark smooth easily recognized by reddish hairy whorled and crowded verticillate leaves at the tip of bare twigs. Ovate-lanceolate finely acuminate apex,coriaceous,glabrous shining above and white or gloucaus beneath, young leaves more or less red silky pubescent, male flowers golden yellow, female flowers in few flowered clusters or very short racemes below the leaf, fruit red globose, red when matured, seated on enlarged perianth cup.

Flowering: Oct-Nov

Fruiting: Feb-March

Habitat: Evergreen tree, in rain forest along the Ghats.

Distribution: Particularly in Northern parts of Western Ghats like Uttarakannada, east coast and Orissa.

Uses: The timber appears to be strong, and of excellent quality, but not in use.

Propagation Methods:

Rarity:

Note:

3. Aglaia elaeagnoidea (Juss.) Benth

Family: Meliaceae

Local name: Nyavalu

Key characters: Large evergreen tree with smooth grey bark. Blaze reddish brown. Young branches, petioles and inflorescence covered with minute brown scales. Leaves are compound, alternate, leaflets opposite, shining, oblique at the base. Flowers are yellow, minute & in axillary panicle inflorescence. Flowers are with 5 fid ciliate margin calyx and 5 petals. Stigma 1-3 toothed. Fruits are berry, pyriform or subglobose, buff coloured, hairy with 2 seeds in a whitish pulp.

Flowering: November-December

Fruiting: May-July

Habitat: Generally in dry <u>evergreen</u> forests and sometimes found as <u>understory trees</u> in wet <u>evergreen</u> forests

Distribution: India, Malaysia to Pacific Islands; in the <u>Western Ghats-</u> South and Central Sahyadris.

Uses: Fruit is used as antidiarrhoeal, astringent, tonic and used in burning sensation. Seeds are used in painful micturition.

Rarity: Not assigned any threat status.

Propagation Methods: Can be propagated by seeds

4. Aglai lavii(Wight)Saldanha Family: Meleaceae Local name: Madrasada

Key characters: A middle sized tree, young branches covered with yellowish brown scales, leaflets rather thin, alternate, hairy, sometime gland like galls can be observed, in the

axile of lateral veins, Leaves 15-22.9 cm long, leaflets 3-5 more or less elliptic, obtusely acuminate, flowers small white, Fruits yellowish indehiscent obovoid, rich in white resinous juice.

Flowering: --

Fruiting:--

Distribution: South west India, Scarcely found in Western Ghat in low elevations, gregarious in Uttarakannda , Belgaum, Shimoga, Hassan of Karnataka.

Propagation Methods:

Rarity: Not assigned

Note:

5.Agrostistachus indica Dalz. Family: Euphorbiaceous Local name:

Key characters: Shrubs with stout branches, with rough surface, young parts glabrous, leaves strongly serrate, often spiny, Leaves elliptic to oblong or lanceolate acute at both ends,male flowers in raceme,small,catkin like in axillary clusters, stamens clustered within disc, female flowers solitary, fruit capsule red, deeply three lobed, seeds pale brown.

Flowering: Feb

Fruiting: Nov-March

Habitat: As undergrowth in evergreen forest throughout streams at 200-1829 m

Distribution: In all district of Western Ghat, common in Kodagu,Hassan,Shimoga,Uttarakannada.

Uses:

6. Agrostistachys longifolia Benth.

Family: Euphorbiaceae

Local name: Uddale gida

Key characters: A large shrub or small tree. Branches stout, terrete, glabrous, marked with scars of fallen leaves and stipules. Young parts with yellow resinous. Leaves are long, crowded at the end of the branches, leathery, alternate, serrate. Flowers are dioecious, in axillary racemose inflorescence. Male flowers are 1-4 clustered in the axils of the bracts and female flowers distant along the rachis. Sepals 2-3 and petals usually 5. Disk gland is very large. Ovary hairy. Fruits are capsule, globose. Seeds are dark-brown & smooth.

Flowering: July-October

Fruiting: January-March

Habitat: Common <u>understorey</u> <u>trees</u> in medium elevation wet <u>evergreen</u> forests between 600 and 1500 m and present in swampy areas.

Distribution: South India, Sri Lanka, Peninsular Thailand, Peninsular Malaysia, Sumatra, Borneo, Philippines, and New Guinea.; in the <u>Western Ghats-</u> common in South Sahyadri and rare in Central Sahyadri.

Uses: Stiff hard leaves are used to thatching the roofs of huts in Ceylon.

Rarity: Not assigned any threat status.

Propagation Methods: Can be propagated by seeds

7. Alangium salvifolim (L.f.) Wangerin

Family: Alangiaceae

Local name: Ankole Balli

Key characters: A small deciduous tree, bark is smooth, light coloured with sharp spines. Leaves are alternate, 3 nerved, shining above, small hairy glands in the axils of the veins. Flowers are white, sweet scented, silky hairy, hermaphrodite. Calyx turbinate with 6 sepals. Petals 5-10. Stigma large. Fruit globose, ribbed, purplish-red edible, filled with red pulp, red pulp, 1-seeded crowned with, endocarp bony.

Flowering: February-April

Fruiting: May-August

Habitat: Found in lowland rainforest and riverine forest up to 750 m altitude.

Distribution: Tropical India from North Western Himalayas to Ceylon, China, Malaysia and Philippines.

Uses: Wood valuable fuel. Fruit is astringent, acid and edible. Oil is extracted from the seeds. Used for pestles to crush oilseeds, inlaying and carving work. Decoction of the bark used as antidote for snake bite poisoning.

Propagation Methods: Can be propagated by seed and is reported to have a fairly good natural regeneration

Rarity: Not assigned any threat status.

8. Alstonia scholaris R.Br. in Mem.

Family: Apocynaceae

Local name: Maddale, Hale

Key characters: A large tree with buttresses, bitter milky juice, bark grey with conspicuous lenticels and branches whorled. Leaves usually whorled, 4-7, narrowed in to short petiole, bright green above and pale and whitish beneath. Flowers are greenish white in coloured and in branched cymose inflorescence. Corolla tube hairy inside. Style filiform and stigma

capitate. Fruits are follicles, long, cylindrical, becoming completely everted after dehiscence. Seeds are long, linear, flattened with fringe of hairs at the both ends.

Flowering: December-March

Fruiting: June

Habitat: Present in open <u>evergreen</u> forests to moist <u>deciduous</u> forests.

Distribution: India (Throughout the Western Ghats), Malaysia, Sri Lanka and Australia.

Uses: Wood is used for making boxes, furniture, sword scabbards, cricket bats, coffins. Bitter inner bark known as *Dita* used as medicine in treating malaria and other fevers, tonic and antiperiodic. The latex provides a good quality chewing gum. It has been recommended as a fuel wood species for the patana lands of Sri Lanka. Rarity: Not assigned any threat status.

Propagation Methods: Natural regeneration is often scarce; seedlings are found scattered in groups, particularly in open places at forest edges and in secondary forest. Regeneration can be enhanced by enrichment planting using the strip system, but sufficient opening of the canopy is essential for optimal growth of the seedlings. Seeds are difficult to collect, as the fruits open while still on the tree. The germination rate of fresh seeds is high, nearly 100%. A. scholaris has been grafted. Cleft grafting and inverted T-grafting have been found to be most appropriate.

Note: This tree is commonly known as Devil Tree, The tree is sometimes planted as an ornamental. It was amongst the native plants used in magico-religious beliefs.

10. Ancistrocistrocladus heynianus Family: Ancisrocladaceae Local name:

Key characters: A large evergreen woody climber Leaves obovate or oblanceolate, narrowed at the base, sessile, acute or obtuse quite glabrous and shining, lateral veins inconspicuous but possessing a fine ,strongly developed reticulation, very deciduous, in terminal bifurcate panicles, shorter than the leaves. Calyx lobes unequal, as long as petals ,petals obovate, thick, yellow, imbricate, twisted. Stamens 10,5 longer with red filaments, anthers basifixed, introse. fruit with 5, unequals preading, spathulate wings.,

Flowering: March

Fruiting: April

Distribution: South Asia through Malaysia to Austrelia. Common in moist forest of Western pannisula from Konkan to Travencore.Common inevergreen rain forests.

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9. Antidesma menasu Miq.

Family: Euphorbiaceae Local name:

Key characters: A small branching tree, with characteristic stem galls, branchlets grey – pubescent, leaves chartaceous, elliptic-oblong, nerves prominent on ventral surface, glabrous, acuminate, rarely acute, shining above, stipules ovate-lanceolate, subpersistent. Flowers greenish, male flowers distinctly pedicillate, fruits drupe, slightly oblique, turning red on ripening, fleshy, edible, falling off easily.

Flowering: April-June

Fruiting: December

Habitat: Common in under storey of moist deciduous and evergreen forests of Western Ghat often along the nalla-banks.to 1829 m hill shoals >1200 m

Distribution: Western Ghats in all districts,

Uses:Wood white soft,used for tea chests,coffins,black board,bark known as Ditta bark used in medicine for tonic and antiperiodic.Bark and leaves are antidotes for fever,chronic cases of diarrhoea and dysentery.

Propagation Methods:

Rarity:

Note:

10. Archidendron monodelphum (Roxb.)Nielson Family: Mimosoidea Local name: Kan karinje

Key characters: A middle sized evergreen tree ,young parts glabrous,bark smooth,greyish brown,thin,leaflets terminal largest.Unequal,lower pair smallest,leaflets 2-8,lanceolate,acute,glabrous,flowers white in globose spikes, Fruit spirally twisted and curved into a ring on ripening to expose the inside handsome brilliant orange red coloured layer,with the shinning black seeds hanging from long slender funicles ,rather larger than a pea.

Flowering: Jan-Feb.

Fruiting: June-July

Habitat: In evergreen forests to 1000 m

Distribution: South west India, Eastern Himalayas.In Western Ghats from Uttarakannada to Kodagu, Annamalai and Kerala: Common in Devimane (Uttarakannada) and Waynad (Kerala).

11. Ardisia solanaceae Roxb. Family: Myrsinaceae Local name: Havlad Key characters: A large shrub or a small tree, branches cylindrical marked with the scars of fallen leaves, leaves coriaceous, alternate, ovate, oblong, bark brown, smooth, leaves oval or obovate flowers very pretty bright pink, fading white, sepals brown,

Flowering: April-June

Fruiting: December

Habitat: Common in understory of moist deciduous and evergreen forests of Western Ghats often along the nalla-banks.to 1829 m hill shoals >1200 m

Distribution: western Ghats in all districts

Uses:

12. Arenga wightii Griff. In Calc.

Family: Palmae

Local name: Dadasal, Kan tengu

Key characters: A short thick stemmed palm densely clothed with fibrous bases of the leaf sheaths, forming clumps by suckers. Leaves are long, furfuraceous petiole, leaflets alternate, white beneath, toothed, and auricled at the base. Inflorescence is spadix, decurved, interpetiolar in the axils of the green leaves, much branched, male and female flowers are solitary. Male flowers symmetric, sepals 3, stamens numerous, filaments short, strongly scented. Female flowers seated in a bilobed cup, subglobose, sepals cordate, Petals triangular, valvate, Ovary subglobose, 3 celled, stigmas 3 and recurved. Fruit obtusely triangular, depressed, spirally arranged and crowded on the lower side crowned with remains of the stigmas. Seeds 3, convex on face, unequally angular, marked with branched veins converging at the apex of the seed, smooth, brown.

Flowering: November-December

Fruiting: May-July

Habitat: Common on steep slopes in low and medium elevation wet <u>evergreen</u> forests, up to 1500 m.

Distribution: Endemic to the Western Ghats- South and Central Sahyadris.

Uses: Sugar toddy is obtained by tapping the flower stalks and used by hill men. The horse hair like fiber found at the base of rachis is valuable for cordage. Pith is sweetish and edible. Laves are also eaten when tender.

Propagation Methods: It can be propagated by seeds. Seeds do not remain viable for a long time and they need suitable environment for germination. Seeds do not have a distinct dormancy period. They cannot withstand desiccation. Only 50% germination is noted.

Rarity: Vulnerable according to IUCN.

13.Artabotrys zeylanicus Family: Anonaceae Local name:

Key characters: A large woody climber branches dark coloured, leaves elliptic-oblong, acute, coriaceous, glabrous, petiole 25 "long, leaf opposed. Peduncles with characteristically hooked,flattened,woody.Flowers solitary or fascicled ,brown tomentose, pedicels 5 ' long, pubescent, Sepals 25' broad, ovate. Petals densely tomentose on both sides, inner three smaller, anthers sessile, Ovary glabrous, Carpels 7-10 sessile,obovoid,mucronate at the top. Fruits remain two years on the stem.

Flowering: November

Fruiting:

Habitat: In evergreen rain forest of the western Peninsula.

Distribution: Western Panninsula, also in Central and Southern Ceylon. Abundant in Gersoppa rain forest.

Uses:

Note: An ornamental species worth introducing into garden cultivation.

13.Atlantia monophylla(L)DC.

Family: Rutaceae Local name: Kadunimbe

Key characters: Spinous shrubs or small trees, simple coriaceous ovate leaf usually 2-lobed at the apex, entire, petioles 25 ' long. flowers in racemes or fascicle, axillary, Calyx irregularly split to the base, petals 3-5 obtuse, Ovary sessile on a small disk 4 celled, Fruit globose berrylike a lime 4 celled,

Flowering: October to Feb

Fruiting:April-June

Habitat:

Distribution: At the foots of khasia mountains, Southern India and Ceylon(Talbot)

Uses: Recommended as substitute for boxwood

Propagation Methods:

Rarity:

Note: Known as Kudu kanchi and it is used in homeremedy to cure cuts, burns etc

14. *Calamus thwaitessi* Family:Poaceae

Local name: Handibetta

Key characters: Stem clustered, climbing to 50 m long,6 cm diameter, Leaf sheaths yellow green with brown hairs, with ridges of black, strongly flattened, to 4 cm long spines, interspersed by among many short spines, knees absent, Inflorescence to 7 m long, fruits ovoid, to 2.5 cm long and 1.5 cm diameter, dull arrange or yellowish brown.

Flowering:

Fruiting:

Habitat: South western India, Low land or mountain rain forest or deciduous forest, up to 1500 m, persisting in disturbed places.

Uses: Provides a medium quality, large diameter cane used in furniture making and basketry.

Distribution: Throughout Uttarakannada in rain forest.

Propagation Methods:

Note:It is very usefull plant for the people of Uttarakannada especially Sirsi,Siddapur,Yellapur and Kumta Taluk

15.Callicarpa tomentosa Family:Verbinaceae Local name: Batti gida

Key characters: A small slender stemmed bushy tree or large shrub to 762 cm high, laves opposite, under side of leaves and inflorescence is densely soft glabrous above, stellate tomentose, bark o.85 cm thick, brown, rough, blaze white with yellow streaks, Leaves ovate, white tomentose beneath, flowers purple sessile, in axillary branched cyme, small, fruits drupe, black, seeds angular,

Flowering: Feb-May

Fruiting: Feb- December

Habitat: Rain forest of Konkan and North Kanara

Distribution: Western peninsula, ascending to 4500 'at Mahableshwar Ceylon in the moist region, up to 4000 'very common throughout Uttarakannada.

Propagation Methods:

Rarity:

Note: wood used for chewing, Roots and mucilaginous bark are used in Kerala for skin and other disease. The tomentose buds serve as a substitute for wick in oil lamps.

16.*Calophyllum apetalum* Willd.

Family: Clusiaceae

Local name: Bobbi, Holehonne.

Key characteristics: A moderate or large evergreen tree; branches acutely tetragonal. Leaves obovate or oblong, acuminate, coriaceous, shining above, paler beneath. Flowers white in axillary racemes. Stamens numerous. Fruits small, ovoid, smooth, yellowish.

Flowering: October-November

Fruiting: December-January

Habitat: Along the fringes of the forest and also along the streams and swamps

Distribution: Endemic to Western Ghats.

Uses: Wood is an excellent timber for building purposes and for making furniture. Bark contains *Shickimic* acid which is used in treating *Bird flu* disease.

Rarity: According to FRLHT, this tree is having vulnerable status.

Notes: Very large handsome tree with characteristic yellowish longitudinal fissured bark

33.Calophyllum polyanthum Family: Clusiaceae Local name: Surhonne

Key characters: Lofty handsome royal tree,35 m hight,1.2 meter diameter, with a straight cylindrical ornamental stem, large girth, unbranched to a great height, bark characteristically deeply fissured, yellowish brown, blaze red or yellowish brown, Leaves elliptic-Lanceolate, very glossy, dark green smooth, flowers white, fragrant, sepals 4, petals 4 fruit ovoid, dark purple.

Flowering: April- May

Fruiting: May-June

Habitat: Wet evergreen forests of Western Ghat at 304-1524 m from Uttarakannada.

Distribution:South west India,Indomalasia,China.Wet evergreen forest of Western ghat.frequent in Uttarakannada.

Propagation Methods:

Rarity:

Note: Wood is well known as 'Poon Spar' used for ship-mats, seed yields oil.

22. Dipterocarpus indicus Bedd

Family: Dipterocarpaceae

Local name: Garjan, Dhoma

Key characters: Lofty, gigantic evergreen tree with straight, cylindrical trunk. This tree is characterized by the deeply, fissured trunk with resins juice, large conspicuous brown

coloured stipules, leathery leaves crowded at apex. Flowers are in 3-8 flowers racemes, calyx tube obtusely angular at the base, mouth contracted at the base, the two enlarged lobes. Petals white, linear –oblong, tinged with red, linear obtuse puberulus – without twisted in bud. Stamens numerous, anthers terminated by longslender bristle, yellow filaments. Fruit globose with two linear, lanceolate, 3-nerved wings, reticulately veined, and 3 short deltoid- ovate brown coloured wings and it is looks like a "shuttle cock".

Flowering: December-January

Fruiting: May

Habitat: <u>Canopy</u> and <u>emergent trees</u> in <u>evergreen</u> forests up to 800 m.

Distribution: Endemic to the Western Ghats- South and Central Sahyadris

Uses: Wood of this tree is used for house-building and canoes in Burma. Trunk yields Balsamic oil called Garjan Oil used medicinally for urinary tract infection, ulcers, ring worm, cutaneous infection, rheumatic complaints and for painting houses and ships.

Propagation Methods: It has to be propagate through in vitro propagation

Rarity: Endangered Tree

Note: This tree is called as Wood Oil tree

23.Canarium strictum Roxb. Family: Burseraceae

Local name: Rala Dhupa, Guggala Dhupa

Key characters: Large tree, young parts, inflorescence, leaves are densely tufoustomentose. Leaves large, imparipinnate, coriaceous, leaflets 3-9, ovate, opposite or alternate finely serrate, very prominent beneath. Flowers in branched axillary panicles, shorter than leaves, Calyx usually 3 lobed, copular, rusty tomentose. Petals imbricate, twice the calyx, stamens 6, filaments united, slightly attenuated in to style as long as the ovary, glabrous, rudimentary in the males. Disk inconspicuous, ovary glabrous, ovoid, Drupes ellipsoid or ovoid, tapering at the both ends, stone hard and obtusely triangular.

Flowering: February-April

Fruiting: November-December

Habitat: Occasionally <u>canopy trees</u> in the <u>evergreen</u> forests up to 1600 m

Distribution: India and Myanmar; in the Western Ghats- South and Central Sahyadris.

Uses: Exudates a resin called as 'Sambrani' or 'Dammar' which has medicinal as well as commercial uses. Its usage among tribal and folk people for medicinal purposes in different parts of India has been explored through ethno botanical studies. It is also used in Siddha system of medicine. It finds its usage in incense and varnish industries [8] and also used as a substitute for burgundy pitch in making medicinal plasters. Resin: The species is rich

sources for Sambrani which is used to cure various bronchial ailments. The resin powder is given orally to cure rheumatism, fever, cough, asthma, epilepsy, chronic skin disorders. The wood of this tree is greyish-white with a pinkish cast to the heartwood and used for making boards for ceiling, flooring and partitions from well seasoned timber. It is also used for packing cases and for cheap utility furniture. The wood has good glue holding capacity and used for plywood tea-boxes. Seed: The seed kernel is edible and its oil is used in confectionery.

Propagation Methods: Seeds of a Canarium strictum fall close to the tree and germinate easily. Artificially it could be propagated by directly sowing the 24 hour water soaked and drained seeds in properly shaded mother beds at a depth of 1.5 to 2.0 cm vertically to keep micropyle upward. Germination is epigeal; it starts after three weeks of sowing and continues up to 120 days especially when sowing is done during winter months. 95% germination was observed on sand substratum. Transplanting is done in the polythene bags when seedlings attain 3-leaves stage. Initial growth of the seedlings is very fast and they become ready for plantation after about two months of transplanting. It can be successfully raised by direct sowing in fields at the onset of monsoon rains. Canarium strictum shows high rate of germination under controlled conditions, thus establishing nursery at the study site can aid in achieving high seed to seedling ratio.

49.Canthium dicoccum(Gaertn)Teijsm & Binn. Family: Rubiaceae Local name: Hanagere

Key characters: A small evergreen tree branches often more or less quadrangular, leaves elliptic, very thick, coriaceous, glabrous shinning above,paler beneath,Flowers white,5-merous,sweet scented,in axillary,peducled umbels or umbelliform cymes,corolla white,Fruit obovoid,didynamous,about 5 "long,black purple,shinning when ripe.

Flowering: April- August

Fruiting: July-September

Habitat: Evergreen tree, common in rain forest

Distribution:Sikkim Himalaya,Bengal,Central and Southern India.Common in rain forest of Konkan region.

Propagation Methods:

Rarity:

Note:

50. Capparis heyniana Wall. Ex Wight & Arn. Family: Capparaceae Local name: -- Key characters: Erect shrubs to small trees, branches brown, stellate tomentose ,glabrescent, young shoots cataphyllous at base, minute spines, leaves elliptic –ovate to lanceolate, acute or mocronate, glabrous above, flowers solitary, often in short bracteates raceme, petals obovate, beaked, large.

Flowering: April-June

Fruiting:

Habitat: Evergreen –Semi evergreen forests

Distribution: Uttarakannada, Shimoga and Dharwar

Propagation Methods:

Rarity:

Note:

24.Caryota urens Linn Family: Palmae Local name: Baine

Key characters: A tall unarmed palm with annulate, naked sheathed trunk covered with long shallow cracks with corky edges. Leaves terminal, bipinnate , drooping, bright green colour, shining, leaflets obliquely wedge-shaped and erose-toothed at the top, base swollen at the point of attachment. Spadix inflorescence 10-12 ft long, branches simple, forming a dense tussel drooping from the stout peduncle,. In male flowers Sepals cordate, ciliate. Petals leathery. Fruit reddish, pericarp acrid, causing burning sensation when tasted, stinging with 1-2 seeds.

Flowering: Throughout the Year

Fruiting: Throughout the Year

Habitat: Common in open evergreen and semi-evergreen forests, up to 1400 m

Distribution: Indomalaysia; in the <u>Western Ghats-</u> South Central and south Maharashtra Sahyadris.

Uses: Tree is tapped for Toddey which when boiled yields coarse sugar. Leaves give the Kittul fiber, which is very strong and is made in to ropes, brushes, baskets and other artics. Fiber from the petiole sheath is made in to fibre lines. Pith furnishes good sago which is edible starch, while outer part of the stem supplies a hard durable wood used for agricultural purposes.

Propagation Methods: Caryota urens can be propagated by seed with direct sowing being a viable method. Exposure of seeds to direct sunlight for 6 hours prior to sowing inhibits germination. Therefore satisfactory germination could be obtained by placing seeds in a moist, dark environment. Seeds germinate in 18-30 days.

Note: It is also called as Mhar palm, Hilla Palm, Sago Palm and Fish Tail Palm etc.

51. Caseria rubescens Dalz. & Gibs. Family: Flacourtiaceae Local name:

Key characters: A small apparently evergreen tree 3-4 m tall, allglabrous, branchlets pale, with large lenticels, stem with horizontally wrinkled marks, when scratched upper layer yellow, next layer brownleaves with red petiole and red midrib muscillaginous on crushing, Leaves elliptic-oblong, shinning on both sides, rounded at the base, Flowers in axillary fascicles, stemens 6-8, seeds few,

Flowering: March-May

Fruiting: March-May

Habitat: Hill of South Kerala upto 1166 m

Distribution:South West India,W.Ghats,Kodagu,Uttarakannada,hills of south Kerala

Propagation Methods:

Rarity:

Note:

52. Caseria tomentosa Roxb. Family: Flacourtiaceae Local name: Bili oobina

Key characters: A small tree branchlets pubescent or tomentose with bitter bark growing upto 4-7 m height, bark thick grey to dark brown, peeling off in square flakes, leaves elliptic – lanceolate,, Flowers greenish white, tomentose, Fruits ellipsoid, 6 ribbed.

Flowering: Jan-May

Fruiting: July-August

Habitat: Throughout t the presidency in deciduous forest.

Distribution:India ,Shreelanka,Malaysia to Austrelia.At low elevations in Circas,Deccan and Carnatic,rare in Western Ghat,commn in grazed open deciduous land.

Propagation Methods:

Rarity:

53. Celtis cinnamomea Lindl.ex Planch. Family: Ulmaceae Local name: Key characters: A small tree to 20-25 m tall ,branchlets rufous-tomentose,bark pale green,covered with small lenticels,leaves 3-ribbed at base,membranous when young,leaves obliquely ovate,dark green, glabrous,Flowers in paniculate cyme,Fruit drupe,strongly beaked.

Flowering: Feb -March

Fruiting: Feb -March

Habitat:Common in dryforests and occasional across Ghats in evergreen forests at low elevations to 166-1500 m

Distribution:India ,Myanmar,Malaysia.Common in Central Tamil Nadu.

Propagation Methods:

Rarity:

54. Chionanthus malabarica Bedd. Family: Oleaceae Local name:Maniki mara

Key characters: A small or moderate size tree to 18 m height, leaves opposite, entire, ellipticoblong, thick, main nerves about 10 distant pairs, flowers in short axillary racems or clusters, white in colour, smells like ripe appeles, anthers sessile, Fruit drupe, slightly curved black, succulent wen ripe,

Flowering:Nov-Jan

Fruiting:Feb-June

Habitat:Rain forest

Distribution:South West India,W.Ghats

Propagation Methods:

Rarity:

Note: Flowers have strong odour like ripe apples in the early morning.

Chrysophyllum roxburghii G.Don. Family: Sapotaceae Local name: Hale

Key characters: A lofty evergreen , dark grey bark, covered with dark grey lenticels, branchlets drooping, blaze with yellow colour giving out white latex, leaves coriaceous, ovate, shinning with close parallel veinscovered with rusty hairs below, fruits fleshy depressed globse, greenish yellow with sticky latex, very fragrantwhen ripe, edible, seeds pale brown, hard, shinning testa,

Flowering:April-May

Fruiting:Nov-December

Habitat: In rain forest

Distribution:Bengal,Burmah,Assam,Sylhet and Khasia hills,W.ghats,Annamalai and hills of S. Kerala,upto 1333 m ,common in climax evergreen forest of Sirsi,Siddapur.Gersoppa,Devimane and Chorla ghat in Belaum.

Propagation Methods:

Rarity:

Note: Tree can be used for building purpose. Fruits are eaten by local people.

57. Cinnamomum wightii Meissn. Family:Louraceae Local name: Kaadu dalchinni

Key characters: A stout tree with very coriaceous broadly ovate leaves, rounded or acute at base, peduncles long, pedicels short, fruit berry, obovate-oblong to 1 cm long, supported by truncate cup.

Flowering:

Fruiting:

Habitat: Most common in high altitudes like Ooty,

Distribution:Western Ghat,Shreelanka,Nilgiris Annamalais and Palanis in shlola forest above 1829 m.

Propagation Methods:

Rarity:

Note:

58.Cinnamomum malabatrum(Burm. f.) Bl.

Family:Louraceae Local name: Lavanga patra

Key characters: Small evergreen trees to 10-12 m tall, bark reddish brown, blaze red, aromatic, leaves long, large, coriaceous, shinning, usually 3 mid ribs from base of the leaf reaches apex of the leaf, berry large, globose-oblong supported by a large thickened cup and pedicel.

Flowering: Jan-June

Fruiting: April-June

Habitat: Common in moist deciduous to evergreen forest in Western Ghat, Anamalais, Nilgiris, Uttarakannada, Trichonopoly and Kollimalai hills.

Distribution: Western Ghat, India, Anamalais, Nilgiris, Uttarakannada, Trichonopoly and Kollimalai hills.

Propagation Methods:

Rarity:

Note : Leaves and bark used as flavouring agent for food.

59.Clausena dentata Willd.Roemer.

Family:Rutaceae Local name: Kaadu bevu

Key characters: A small ,strongly aromatic, evergreen , glabrous tree, bark black, branches glabrescent, leaves compound long, leaf rachis up to 40 cm long, leaflets 11-15 ovate to ovate-elliptic. Leaflets crenate, large, acuminate at the apex, rounded base, flowers 4 merous, fruit ovoid berry, greenish in colour, seeds 1-2, in mucilaginous pulp, very delicious.

Flowering: Apri-May

Fruiting: May-June

Habitat: Evergreen, semi evergreen to dry deciduous

Distribution:	Indomalasia,	Chinglepet,	S.Arcot,	Western	Ghat f	from	Mysore	through	Nilgiris
to	South		Kei	rala			at		low
levels.Uttaral	kannada,Belga	aum,Kodagu	,Bangalo	re,Hassar	,Kolar	,Shim	loga of K	arnataka	

Propagation Methods:

Rarity:

Note :

60.Cleidion spiciflorum

Family:Euphorbiaceae Local name:

Key characters: A moderate sized evergreen tree to 20 mt.height,branches lenticillate,bark greenish white,smooth,leaves elliptic,acuminate at the apex,glabrous,dark green above, acuminate,petiole 4 cm long,slender,swollen at both ends,fruit is characteristic with 2-lobeswith persistent long styles,the axis prolonged beyond the lobes into hair like mucro. male in axillary racemes female 1-2 on long peduncles,fruit globose capsule 3-4 cm diameter,seeds globular.

Flowering: Oct-December

Fruiting: Jan-Feb

Habitat: Semi evergreen to evergreen forest along streams in W.Ghat.to 914 m. Distribution: Indo Malaysia, less common in Kerala.frequent in U.Kannada, Ansi, Anmod-goa, in Kodagu.

Propagation Methods:

Rarity:

60. Combretum ovalifolium

Family:Combretaceae Local name:

Key characters: large climbing nearly glabrous shrub, branches А numerous, stiff, divaricate, thickened at the nodes, leaves opposite, coriaceous, elliptic, rounded or shortly acuminate, glabrous, shinning above, paler and brownish hairy at base of midrib beneath, petiole 5-.75" longFlowers white, sessile, 25 "long dense axillary spike, buds globose, calyx tube glabrous outside, lobes 4.petls oblong, as long as the calyx lobes.fruit pale golden yellow,wings 5 "wide, stiff, papery, seeds 4 sided.

Flowering: Feb

Fruiting: May

Habitat: In deciduous forests

Distribution: The Deccan peninsula and Ceylon. Throught the presidency in Decidous forests.

Propagation Methods:

Rarity:

Note: The twigs are flexible and yields a gum.

61. Cryptocarya bourdilonii

Family:Louraceae Local name:

Key characters: A large tall, evergreen tree with whorled branches, bark brown, smooth, thin, covered with open green coloured lenticels, bark smells and tastes like Cinnmon and leaves smells like mango leves, which are diagnostic character, branchlets rusty tomentose, blaze brownish red mottled, leaves oblong, glaucous white beneath, petiole red, flwers yellow, small, purplish black fruits crowned with persistant perianth tube.

Flowering: November-Jan

Fruiting: May-June

Habitat: Semi evergreen to evergreen wet forests.

Distribution:Western Ghats from Konkan southwords to Shrilanka,S.Kerala.Common in evergreen kans in Yellapur and Nilkund,Gersoppa,Malemane,Kodkani,Chikkamagaluru.

Propagation Methods:

Rarity:

Note: Wood used in Building purpose

62.Cyathea gigantea

Family: Local name:

Key characters:

Flowering:

Fruiting:

Habitat:

Propagation Methods:

Rarity:

63.Derris scandens

Family:Leguminaceae Local name:

Key characters: A verya large scandent ahrubbranches closely covede with reddish coloured round lenticels young parts pubescent, leaflets opposite, coriaceous, glabrous shinning, elliptic , emarginate, reddish appressed, hairy beneath. Flowers small, in peduncled, axillary racemes, slender pedicels, corolla 3" long, white or pink, Ovary pubescent, Fruit 1-3" long acute at both the ends, somewhat thickened between the seeds, seeds 1-4.

Flowering: September-October(per. Notes)

Fruiting: Sept.

Habitat: In swamp forests, in moist monsoon and rain forest.

Distribution:Eastern Himalaya,Bengal,Assam,Andaman,Westerbn peninsula from Konkan to Ceylon,Through out the Konkan and North Kanara.

Propagation Methods:

Rarity:

Note: The bark yields a coarse rope fibre.

64.Dicapetalum gelanioides

Family:Dicha petalaceae Local name:

Key characters: A tall shrub to small trees, with 15 cm long leaves, branches pubescent, leaves elliptic-lanceolate, glabrous, flowers clustered, densly white pubescent, petals deeply notched at the tip, Fruit transeversly oblong, with soft grey epicarp, scarlet fleshy mesocarp and crustaceous endocarp, enclosing two hard stones with fleshy cotyledons,

Flowering: December-June

Fruiting: August-Sept

Habitat: As undergrowth in evergreen forests upto 1333 m in W.Ghats.

Distribution:India –Malaysia,common in W. Ghats.from Uttarakannada to Annamalai,Chikkamagalur,Hasan,Shimoga and Kodagu.

Propagation Methods:

Rarity:

26. Dimocarpus longan Lour.Family: SapindaceaeLocal name: Kan Kindal

Key characters: Large evergreen tree, young parts clothed with hairs, bark smooth, flaking off in small pieces. Leaves are alternate, compound, reddish when young, mucronate, leathery, more or less oblique. Flowers numerous, small, yellowish white, in clusters on the branches. Calyx 5-6 lobes, yellow tomentose. Petals 5, spathulate, hairy inside, inserted between the calyx lobes and hairy disk, style long, stigmas 2, recurved. Fruit supported on the persistent calyx, globose and reddish in colour shining. Seeds solitary, enveloped in a fleshy pale aril, black and shining.

Flowering: February-April

Fruiting: June-August

Habitat: Canopy trees in evergreen forests up to 1400 m

Distribution: Indomalaysia; in the Western Ghats- throughout

Uses: Fruit used as stomachic, anthelmintic, aril used as tonic and febrifuge. Longan fruit is consumed fresh, dried, frozen and canned.

Carbohydrate	16-25 g
Fat	0.1-0.5 g
Protein	1 g
Calcium	2-10 mg
Phosphorous	6-42 mg
Iron	0.3-1.2 mg
Vitamin A	28 IU
Vitamin B1	0.04 mg
Vitamin B2	0.07 mg
Niacin	0.6 mg
Vitamin C	6-8 mg

Nutritional composition per 100 g longan fruit

Fresh fruit is consumed to reduce fevers, and the dried fruit as a cure for insomnia. Leaves contain quercetin, with antioxidant and antiviral properties, and are used in the treatment of allergies, cancer, diabetes and cardiovascular diseases. Crushed seeds produce foam, which is used as shampoo. The wood is used in the construction of furniture and other articles. The tree is also planted as an ornamental.

Propagation Methods: Longan trees were been grown from seeds. The seeds lose viability quickly. After drying in the shade for 4 day, they should be planted without delay, but no more than 3/4 in (2 cm) deep, otherwise they may send up more than one sprout. Germination takes place within a week or 10 days. The seedlings are transplanted to shaded nursery rows the following spring and set in the field 2-3 years later during winter dormancy. Grafting is uncommon and when it is done, it is a sandwich graft on longan rootstock, 3 or 4 grafts being made successively, one onto the beheaded top of the preceding one, in the belief that it makes the graft wind-resistant and that it induces better size and quality in the fruit. Conventional modes of grafting have not been successful in Florida, but whip-grafting has given 80% success in Taiwan. Air-layering is frequently done in Fukien Province and was found a feasible means of distributing the 'Kohala' from Hawaii. Air-layers bear in 2 to 3 years after planting. A tree can be converted to a preferred cultivar by cutting it drastically back and veneer-grafting the new shoots.

Rarity:

Note: Cultivated throughout the tropics and subtropics, but primarily in Thailand, China, Taiwan, Vietnam, Australia, and in the USA, Florida and Hawaii

1. Semecarpus kathalekanensis Dasappa & Swaminathan

Family: Anacardiaceae

Local name: Kaanu geru/Kathalekaan geru

Key characters: Medium to large evergreen tree. Bark smooth with white or grey blotches on the surface. Black thick sticky acrid juice exuding of the stem when cut. Leaves alternate simple, crowded at the ends of the branches, oblong to oblanceolate, base acute. Bark green turning yellow or pale yellow when old. Lateral nerves about 25 – 30 pairs prominent at both side. Leaf stalk thick, and enlarged below. Flowers are small and arranged in axillary and terminal panicles, male and female flowers are grown on separate plants. Drupes (fruits) unequally oblong, green when young and turning yellow orange when ripening and become black when old, exude black acrid juice, seated on a cup-shaped, fleshy stalk called 'hypocarp'.

Flowering: March- April

Fruiting: May-June

Distribution: Rarely distributed in the swampy habitat of Karnataka. Recorded only from Kathalekan, Thorme, Mundigeteggu and Hemgar swamps of Uttara Kannada district.

Uses: Gum and bark is used for scrofulous, veneral and leprous infections.

Rarity: It is recently discovered from Kathalekan swamp near world famous Jog falls and only 150 -200 individuals recorded from the type locality. Since its recent discovery, not assigned any threatened status. But in general it could be considered as Critically Endangered species.

Notes: Leaves of the saplings sometimes attains a size up to 1.5 to 2 metres.

2. Gymnacranthera canarica Warb.

Family: Myristicaceae

Local name: Ondanki mara, Hedagalu, Pindi mara

Key characters: Large evergreen tree. Bark smooth, grey or pale brown with lenticels on the surface. Knee roots come out of the moist ground and spread around the tree. Leaves alternate, oblong, dark green above and pale white below. Flowers small, dioecious, male flower in fascicles in axillary panicles, female flowers 6-10 in short axillary racemes. Fruit is globose with thick pericarp, green. Seeds are round covered with orange aril.

Flowering: March-April

Fruiting: July-August

Distribution: Typical swamp species of the Western Ghats

Uses: Seeds used in making candles.

Rarity: Plant is having endangered status.

Notes: *Knee roots are the unique character of this plant which is having the shape of Kannada numerical number 1, hence the name Ondanki mara.*

3. Myristica fatua var. magnifica

Family: Myristicaceae

Local name: Dodda Rampatre, Jaddi Rampatre, Ramadike.

Key characteristics: Moderate sized evergreen tree with buttress at the base; trunk furnished with thick, large aerial roots grown from the middle of the base of the trunk. Branchlets covered with deciduous mealy, rusty tomentum. Leaves large, thick, oblong or obovate-oblong, coriaceous, shining above with rusty, deciduous tomentum when young, ultimately silver-glaucous beneath. Lateral nerves prominent and reddish coloured beneath. Male and female flowers in 2-4 clusters in the axils of leaves. Fruit larger and thick than M. dactyloides, somewhat broader at the base than at top, with a shallow, longitudinal, sutural groove, brown-pubescent; seed ellipsoid covered by an arillus.

Flowering: May - June

Fruiting: October - January

Distribution: Endemic to Western Ghats. Very rare swamps species.

Uses: Arils used as spice, stem juice as well as arils of the seed has medicinal importance.

Rarity: According to IUCN FRLHT, this tree is having vulnerable status; the habitat (freshwater swamp) of this species itself is under vulnerable stage. Hence conservation of habitat as well as species is urgently required.

Notes: Strong thick aerial roots (stilt roots) are the characteristic of this plant.

4. Syzigium travencoricum

Family: Myrtaceae

Local name: Kempu nerale

Key Characters: medium or large tree, It attains a bole girths about 250 to 300 cms. The older trees have buttresses at the base. The young branchlets are 4-angled; in the saplings the angles are winged. Stream side trees have floating water roots, an adaptation to swampy habitat. Leaves are simple, opposite, ovate and bluntly acute towards the tip. The leaf base is shortly decurrent (continued) on the 2 cm long petiole. Leaf measures 9-18 cm in length and 6-9 cm in breadth. It has 12-15 pairs of lateral nerves. Flowers occur in the axils of leaves in corymbose cymes of 5-8 cm long (Fig. 4d). They are very small, only 3 mm across. The white petals form a calyptra (cap) in the bud enclosing the stamens. Fruits 0.7-1 cm across, purplish to maroon-red.

Flowering: February- April

Fruiting: May-June

Distribution: Rarely distributed in the swampy habitat of the Western peninsula

Uses: No special uses

Rarity: Critically Endangered

Notes: Once this species considered as extinct from the type locality. Later this species found in the one of the sacred groves Kerala and recently this species is reported in Myristica swamp in Kathalekan (Relic forest) of Uttara Kannada district by Dr. Subhash Chandran. Leaves of the seedlings/saplings having the aroma of mango smell. Small reddish fruits are characteristic of this species.

5. Mastixia arborea (Wt.) Bedd.

Family: Cornaceae

Local names: Neerotte, Neeratti

Key characteristics: A medium or large evergreen tree with smooth bark. Leaves ellipticoblong, obtuse or shortly acuminate apex, narrowed into petiole at base, dark green above & pale beneath, sometimes unequal sided, Flowers green in dense terminal pubescent panicles, often in the axils of small narrow leafy bracts. Fruits ellipsoid narrowed at the top & crowned with calyx tube.

Flowering: January - March

Fruiting: May

Habitat: Along the streams and swampy areas but nowhere abundant.

Distribution: Endemic to Western Ghats.

Uses: Not any specific use

Rarity: Not assigned any threat status.

Notes: Yellowish bark and thick green leaf with whitish yellow midrib is characteristic feature of this plant

6. Pinnanga dicksonii Blume Rumph.

Family: Aracaceae

Local Name: Pandavara Adike

Key characteristics: A slender, erect, green, smooth, annulate-stemmed, soboliferous palm. Leaves sheath thick, coriaceous, truncate at the top. Leaflets numerous, sessile, elongate, broadly linear. Flowers in spadix with 4-8 stout branched, densly clothed with the imbricating flowers. Fruits ellipsoid, thick, broad and slightly contracted at the base, seated on the perianth in 2 opposite rows at right angle to the spadix-branch on the flattened sides. Seed narrow, ellipsoid, hard.

Flowers and fruits: Throughout the year at different times.

Habitat: Rare in Swampy areas.

Distribution: Endemic to Western Ghats.

Uses: Seeds some time used for chewing paan. Stems used for fencing.

Rarity: Very sensitive palm. Not assigned any threatened status.

Notes: Inside the swamp this palm appears like Arecanut orchards.

7. Elaeocarpus tuberculatus Roxb.

Family : Elaeocarpaceae

Local names: Bhutale

Key characteristics: A medium or large evergreen tree with rough bark often buttressed at the base. Leaves crowded at the ends of the branches obovate, acuminate, crenate, base rounded. Flowers are pure white, many in pubescent raceme aggregated just below the leaves and near the ends of the branches. Drupes ovoid, smooth, stones 2-valved, more or less laterally compressed, 1-2 seeded, sides deeply tubercled, margins thickened, globose, tubercled. Seeds one, hard.

Flowering: December-January

Fruiting: July-August

Habitat: Along the streams and Myristica swamps of the Western Ghats.

Distribution: Endemic to Western Ghats.

Uses: The tubercled nuts are made into rosaries and necklaces. The flanks of the buttresses are used in making folk articles.

Rarity: Not assigned any RET status.

Notes: Very handsome tree when flowering.

8. Lophopetalum wightianum Arn.

Family : Celastraceae

Local names:Banate

Key characteristics: A very Large handsome evergreen tree. Leaves opposite, ovate, acuminate, pale beneath. Flowers are yellow with purple disk and petals in large, axillary or terminal, branched paniculate cymes. Fruit a 3-celled apex, greenish brown Seeds thin and winged.

Flowering: March-May

Fruiting: June-August

Habit: Usually found along the streams and riverside and Swamps.

Distribution: Perhaps endemic to Western Ghats.

Uses: Useful timber for panelling & ornamental work & house building purposes

Rarity: Not assigned any RET status.

Notes: Tree has large buttresses at the base. Wood is best for making pencils, hence name 'Pencil wood tree'

9

10. Hydnocarpus pentandra (Buch-Ham.) Oken

Family: Flacourtiaceae

Local name: Toratti, Surti, Kudre surti, chalmugra enne mara

Key characteristics: A moderate evergreen tree; young parts brown pubescent. Leaves ovate or oblong-lanceolate, acuminate, entire or serrate, coriaceous or membranous, nearly glabrous. Flowers solitary or racemed. Fruits woody large, globose, uneven, warted, brown, orange size Seeds black, obtusely angular, embedded in pulp.

Flowering: February-April

Fruiting: October-December

Habitat: Along the streams and swamps.

Distribution: Endemic to Western Ghats

Uses: Wood is used for building purposes. Seeds yield a Yellow (Chalmogra) oil, used for burning and in local medicine for skin ailments.

Rarity: According to FRLHT, this tree is having vulnerable status

Notes: Tree with fluted stem and cricket ball sized warted brown colored fruit is characteristic.

11. Pandanus furcatus Roxb.

Family: Pandanaceae

Local name: Mundige

Key characteristics: A small gregarious tree with an erect, branched stem with aerial roots (stilt roots) from near or base of the stem. Leaves dark green with short, stout erect spines on the margins and short, retrose spines on the midrib. Male flowers in compound, cylindrical spikes. Spathes golden-yellow fruits orange yellow when ripe.

Flowering and Fruiting: Cold and Hot season

Habitat: Common along streams, rivers and swamps

Distribution: Along the Western Ghats.

Uses: Leaves used in making mats.

Rarity: Not assigned any threatened status.

Notes: A low gregarious tree forming dense, impenetrable thickets. Thickets of Panadanus good habitat for rare swamp birds

12. Neonauclea purpurea (Roxb.)Merr.

Family: Rubiaceae

Local Name: Shine mara

Key characteristics: Medium sized, glabrous evergreen tree. Leaves elliptic, obovate, and membranous. Flowers are in heads, yellowish purple, Fruits covered with persistent calyx lobes.

Flowering: February-March

Fruiting: January-August

Habitat: Distributed along the streams and water courses as well as swamps

Distribution: Endemic to Western Ghats.

Uses: Wood is an excellent timber for making house doors and furniture.

Rarity: Not assigned any threatened status.

Notes: Parrot green leaves and yellowish flowers heads are the characteristic of this plant.

12. Madhuca nerifolia (Moon.) Lam.

Family: Sapotaceae

Local names: Udlu, Hole Hippe

Key characteristics: A moderate sized or large tree with dark coloured, scaly bark. Leaves ovate-lanceolate, crowded at the ends. Flower crowded towards the end of the branches in dense fascicle. Fruit (berry) oblong-lanceolate, glabrous when young.

Flowering: February-May

Fruiting: September-November

Habitat: Common along the banks of rivers of rain forests.

Distribution: Throughout Western Ghats.

Rarity: Endangered according to FRLHT

Uses: Fruits edible, oil is extracted from the seed is used in burning lamps. It is one of the important biodiesel plant.

13. Holigarna arnottiana Hook. f.

Family: Anacardiaceae

Local name: Holageru

Key characteristics: A large straight evergreen tree, bark smooth ash-coloured. Leaves coriaceous, cuneate-obovate, acute, blade decurrent on the stout petiole, shining above, pale glaucous beneath, 2-linear tubercles at the top of the petiole. Flowers in axillary or terminal, compound racemes. Crowded at the ends of the leafy branches. Fruit oblique-oblong, black, glabrous.

Flowering: January-February

Fruiting: June-July

Distribution: Endemic to Western peninsula from Konkan southwards, Coorg, Travancore, Nilghiris.

Uses: Wood is used for native boats, packing cases, cigar boxes.

Rarity: Not assigned any RET status.

Note: The resin from the fruit or wood is very much allergic & may cause serious wounds.

14. Anthocephalus cadamba Miq.

Family: Rubiaceae

Local names: Aapathi, Kadamba vraksha

Key characteristics: Large deciduous handsome tree with horizontal branches. Leaves coriaceous, broadly ovate, decussate, rounded or subcordate at the base, shining above, pubescent beneath, lateral nerves looping within the margin. Flower head large, yellow, solitary, terminal, peduncles stout. Fruit globose, orange mass of closely packed, compressed, angular capsules with persistent calyx tube ,with acrid smell.

Flowering: April-May and August-November

Fruiting: June–July and November-December

Distribution: Northern and Eastern Bengal, Pegu and the Western peninsula, sometime cultivated. Rarely Seen in Sirsi, Siddapur, Yellapur of Uttarakannada

Uses: Wood Used for building purpose and excellent for tea-boxes.

Rarity: Not assigned any threat status.

Note: Ideal tree for avenues and gardens for their useful size in a very short time.

15. Actinodaphne aungustifolia Nees

Family: Lauraceae

Local name: Tudagenasu

Key characters: Moderate sized evergreen tree with smooth bark. Inner bark light-brown in colour. Young part of the tree is with silky hairs. Leaves are whorled at the end of the branches, ovate-lanceolate, acuminate at the apex, acute at the base, shining above and little whitish below. Young leaves are more or less red silky hairs. Flowers are dioecious & golden yellow in colour. Bracts cupular & densely silky. In female flowers anthers are strap shaped. 2 reniform shaped glands are present at the base of the each filament. Fruit is berry globose to ellipsoid in shape, red when ripe, seated on the cup-shaped, enlarged perianth tube. 1 seeded.

Flowering: October-November

Fruiting: February-March

Habitat: <u>Understory trees</u> in semi-evergreen to <u>evergreen</u> forests.

Distribution: Endemic to the Western Ghats- Central and South Maharashtra Sahyadris.

Uses: Wood of this tree is strong and excellent timber quality.

Rarity: Not assigned any threat status.

Propagation Methods: Can be propagated by seeds.

19.

20. Knema attenuata Wall. Cat.

Family: Myristicaceae

Local name: Rakta mara, Hedemagala

Key characters: Evergreen tree with drooping, horizontal branching covered with golden hairs. Inner bark is with red juice. Leaves are alternate, acute or acuminate at the apex, shining above and whitish beneath. Flowers are dioecious. Male flowers obovate-globose, perianth deeply divided, segments 3, fleshy, densely woolly hairy outside, Female flowers are tubular perianth cylindrical, 3 toothed, hairy,glaborous. Stigma cup shaped or hollow at the apex. Fruit ellipsoid, pointed at the both ends, densely red hairy, arils fleshy, bright red coloured completely covering the seed. Seeds narrowly ovoid.

Flowering: October-February

Fruiting: May-July

Habitat: Common <u>sub-canopy trees</u> in <u>evergreen</u> forests up to 1400 m.

Distribution: <u>Endemic</u> to the <u>Western Ghats-</u> South, Central and south Maharashtra Sahyadris.

Uses: A preliminary phytochemical assay revealed the presence of phenolics, tannins, steroids, terpenes, resins, and glycolipids in all the extracts.

Propagation Methods: Can be propagated by seeds.

Rarity: Not assigned any threat status.

Note: It is commonly known a Wild Nutmeg

21. Syzigiunm hemisphericum (Wight.)Alston

Family: Myrtaceae

Local name: Hole nerale, Bennerale

Key characters: A moderate sized evergreen tree with yellowish –grey bark and subtetragonous branches. Leaves are opposite, gland dotted, acuminate or rounded at he apex, shining above, narrowed in to petiole, lateral nerves about 12 pairs looping within the margin, petiole channelled. Flowers are fragrant, white and in axillary cymose inflorescence. Calyx–tube hemisphermic, reflexed and with membranous margins. Disk thick yellow and glandular. Petals gland dotted, concave and reflexed. Stamens yellowish white. Fruit berry, globose, crowned with the calyx segments.

Flowering: March-April

Fruiting: June-July

Habitat: <u>Understorey</u> to <u>sub-canopy trees</u> in <u>evergreen</u> forests up to 1400 m.

Distribution: South India and Sri Lanka; in the <u>Western Ghats-</u> South, Central and Maharashtra Sahyadris

Uses: Bark of this tree is antibilious and antisyphilitic

Propagation Methods:

Rarity: Not assigned any threat status.

Note: It is also called Hemispheric Rose Apple

25. Euonymus indicus Heyne ex Roxb Family: Celastraceae Local name: Key characters: A large ever green shrub or small tree. Leaves are opposite, leathery, dark green above, lighter beneath, lateral nerves 4-5 pairs uniting within the margin. Flowers in axillary cymose inflorescence with 1-3 flowers. Flowers light pink, petals inserted on the disk. Disk large , confluent with 5-6 celled ovary. Stamens 5, bent towards the style in bud. Anthers dehiscing longitudinally. Fruits obovoid, angular or winged.

Flowering: December-February

Fruiting: May-June

Habitat: Generally <u>understorey trees</u> in low elevation wet <u>evergreen</u> forests, between 200 and 500 m.

Distribution: <u>Endemic</u> to the <u>Western Ghats-</u> common in Central Sahyadri and rare in South Sahyadri.

Propagation Methods: Can be prorogated by stem cuttings. The soil should be kept barely moist.

Rarity:

27.Garcinia gummigutta(L.) Robson Family: Clusiaceae Local name: Uppage

Key characters: A moderate sized tree with round head, horizontal or drooping branches and dark brown bark. Leaves are opposite, dark green above, paler beneath and smooth. Male flowers are in the axils of the fallen leaves. Sepals thick, fleshy. Stamens numerous on a short, thick androphore, anthers monadelphous, forming a global head. Female flowers are larger than male flowers. Staminodes 10-12, unequal, in a ring round the ovary free or connate at the base. Ovary globular, grooved. Fruit yellow or reddish, more or less globular, with 7-13 deep vertical furrow, pericarp thick, fleshy. Seeds as many as grooves of the fruit, ovoid, compressed, surrounded by a white or red aril.

Flowering: January-May

Fruiting: June-August

Habitat: Frequent understorey tree in evergreen forests up to 1800 m

Distribution: <u>Western Ghats</u> and Sri Lanka; in the <u>Western Ghats</u>- throughout in South and Central Sahyadris.

Uses: Bark contains yellow gum, insoluble in water, soluble in spirits of turpentine with which it forms a beautiful yellow varnish. Fruits are edible and used as anti obesity, antiseptic, bowel complaints. Resin used as purgative. Decoction of rind used as mouth

wash in cattle. Food: The rinds of the ripe fruits are processed and used as a condiment in fish and prawn preparations to impart flavour and taste and to improve the keeping quality. In India, the dried seeds often yield a protein and fat-rich butter, popularly known as uppage tuppa. Fruit juice or syrup is used as a coolant and helps reduce body fat. Fruit rind is marketed in large quantities, for example in India, export of over 50 tonnes (valued at 17 million rupees) have been recorded. Timber: Its wood is used in construction and furniture making Lipids: Fat obtained from seed is used as vegetable butter. Medicine: A decoction made from it is given for rheumatism and bowel complaints. In cattle, it is used as a wash for mouth diseases. An extract obtained from the mature fruit rind, Hydroxy Citric Acid, is used against obesity. Other products: It contains 30% acid essentially (-)-hydroxy-citric acid, Camboginol and cambogin.

Propagation Methods: Land preparation involves preparing 1 m2 pits 10 m apart. Refill the pits with a mixture of topsoil and compost / fertilizer. Proper care should be given to avoid water stagnation in pits. In India, planting is generally done during July-October months: The crop can be raised as a pure or as a perennial intercrop of coconut, areca nut gardens. Clean the field free of bushes and thick shades. Weed once in three months and mulch the basin with black polythene or dry leaves to avoid drying. The percentage of male trees in population varies from 50-60 per cent and this also creates much difficulty in the cultivation of the crop. Problems such as lack of high yielder, planting grafts prepared from elite mother trees can solve variability in population and occurrence of male trees. Fertilizer application involves using 10 kg of cattle manure or compost per seedling/graft during the first year. This is increased gradually to 50 kg annually at15 years. Seeds are collected manually from freshly harvested and fully ripened fruits before they fall. Immediately after harvesting, they are washed in running water to separate the fruit rind. The seed storage behaviour is recalcitrant. Viability can be maintained for 1-2 months in moist storage at 20°C.

Rarity:

Note: One of the major NTFP species of the Western Ghats

28. *Garcinia Morella* Desr. in Lamk. Family: Clusiaceae Local name: Arasina Gurige, Hardala

Key characters: Moderate sized tree with spreading branches, branchlets quadrangular and smooth. Leaves are opposite, coriaceous, midrib strong beneath, veins oblique. Male flowers axillary, sepals 4, decussate, concave, outer smaller. Petals extending the sepals. Petals 4. Stamens 25-40, monadelphous, the filaments combined in to a central column, free at the apex, anthers orbicular, flattened, dehiscing transversely. Female flowers larger than the male. Staminodes 18-30, sin a ring round the ovary, connate at the base. Ovary globular, smooth, 4-celled, stigma peltate, irregularly lobed and tubercled. Fruit subglobose, surrounded at the base by the persistent sepals. Seeds 4, ovoid-reniform, compressed and dark brown in colour.

Flowering: November

Fruiting: March-May

Habitat: Common <u>understorey trees</u> in <u>evergreen</u> forests up to 1200 m.

Distribution: Indomalaysia; in the <u>Western Ghats-</u> throughout South and Central Sahyadris.

Uses: Gamboge obtained by pricking the bark is used in Europe as a pigment and in Burma for dyeing the silk fabrics. Gum-resin is used as anthelmintic, dropsy, amenorrhoea, obstinate constipation and cerebral congestion. In Ayurveda gum-resin is used for pain, abdominal disorders, wounds and as purgative. Effective against brain and nervous disorders, paralysis, convulsions, epilepsy, severe constipation. Also cures abnormal leucorrheal discharge, Gonorrhea and gleet. It is widely used as a weight loss aid.

Propagation Methods: It can be propagated by seeds , through cuttings and grafts. Seeds are sown in seed pans. Initial germination time is 40 days and about 80% of the seeds germinate. Temperature of 30 to 35° is ideal for germination. Semi hard wood cuttings which are 2x150mm with 2 nodes are used. Planting should be done in polyhouses in May or October.

Rarity:

29. Holigarna Arnottiana Hook.f. Family: Anacardiaceae Local name: Holageru

Key characters: Evergreen tree, branches are densely leafy at the apex. Leaves are alternate, leathery, shining and dark green above. Flowers are crowed at the end of the leafy branches, calyx rusty tomentose, corolla 5, triangular lobes hairy outside. Stamens 5, longer than the corolla, inserted on the edge of a dark red and angled disk and alternating with the corolla-lobes, anthers red, versatile, dehiscing by longitudinal side silts. Pollen yellow. Ovary hairy at the apex, sunk in the disk, stigma broad, flat, recurved with irregular margins. Fruit obliquely oblong, black, glabrous.

Flowering: January-February

Fruiting: June-July

Habitat: <u>Canopy trees</u> inwet <u>evergreen</u> to <u>semi-evergreen</u> andmoist <u>deciduous</u> forests, up to 1200 m.

Distribution: Endemic to Western Ghats from Central and South Sahyadris.

Uses: Wood used in the native boats. The black caustic juice which raises blisters can be used as varnish.

Propagation Methods: Can be propagated by cutting and seeds.

Rarity:

Note: This tree is called as Black Varnish Tree

Habitat: <u>Tropical evergreen forests through out IIndia, common in Konkan, North Canara</u> <u>moist mansoon forests.</u>

Distribution: Tropical evergreen forests throughout India, common in Konkan, North Kanara moist monsoon forests., up to

Uses: Fruit is used as substitute for soaps; by crushing it with water it gets foam.

Propagation Methods: Can be propagated by seeds.

Rarity:

Note: This tree is also referred as Soap berry tree.

33 36 40.

41. Arenga wightii Griffith Family: Aeacaceae Local name: Dadasalu

Key characters: Monoecious erect, thick stemmed palm 3-10' high ,12-24' in diameter, stem densely covered with fibrous base of leaf sheath, Leaves terminal long, pinnatisect, white beneath, glabrous and dark green above 10- 30' long . Spadix with 90-122 cm strongly scented straw coloured male flowers which are sessile, female solitary seated in a bilobed cup, spirally arranged sepals small, cordate, petals much larger than the sepals, staminodes several, Ovary subglobose 3 celled .Fruits smooth pale green, seeds 2-3,9.5 cm ,brown.

Flowering: April -August

Fruiting: June-August, December

Habitat: South west India at 152 -914 m, fairly common in lower Ghats. Very common in climax evergreen forests

Distribution: Western panninsula, N.Kanara, common on Mushki Ghat.at about 1500 ' in moist monsoon-forest, gregarious but very local, very common in rain forest up to 3000 '

Uses: A sugar toddy is obtained by tapping the flower stalks and used by hill men, the horse hair like fibre found at base of rachis is valuable for cordage. The juice of fruits causes severe itching and blisters.

Propagation Methods:

Rarity:

Note: An ornamental species worth introducing into garden cultivation.

42. 43 44 . 45. 46. 48. 56. 65. Dimorphocalyx lawiana

Family:Euphorbiaceae Local name:

Key characters: A small much branched tree branches lenticellate, branches nearly white, bark smooth, dark coloured, leaves margin dentate, gabrous, dark green above, pale beneath, triangular small stipule, male flowers solitary on lod wood, fleshy, white, female with long petiole solitary, Fruit is a capsule, 3 lobedy ellowish mottled with brown.

Flowering: Feb-September

Fruiting: November-Jan

Habitat: In evergreen forests

Distribution:Western peninsula from Konkan to Travencore,Khandala,Bhimshankar,common in Southern ghats of North kanara in rain forests.

Propagation Methods:

Rarity:

66. Diospyros buxifolia

Family:Ebenaceae Local name: Kari- Kuncha

Key characters: A large tree branchlets verticillate, covered with long yellowish hairs, blaze reddish brown, Leaves elliptic-Ovate, obtusely acuminate at the apex, coriaceous, glabrous, shinning above, petioles 1-15" long, male flowers small, axillary often deflexed cymes, calyx minute 4 lobed, lobes hirsute outside, corolla white, Rudimentary ovary hirsute, female flowers solitary axilary, calyx more deeply lobed than in the males, ovary glabrous, 4 celled, fruit cylindrical, pointed at the apex, seed 1.

Flowering:

Fruiting:

Habitat:

Propagation Methods:

Rarity:

67. Diospyros candolleana

Family:Ebenaceae Local name: Kare mara

Key characters: A medium sized dioecious tree with greenish –black bole, covered with lenticels, branches whorled, horizontally spreading, young parts pubescent , bark smooth, greenish black, blaze dull red, sapwood white, branchlets glabrescent, leaves bifarious, rather large, oblong, shortly and bluntly acuminate, petiole 1.2 cm long, flowers silky tomentose. Inflorescence of axillary clusters, flowers usually 5 merous, stamens 10, in pairs, ovary 4 celled, styles 2-5, fruit globose

Flowering: April-July

Fruiting: November-December.

Habitat: evergreen and semi-evergreen forests

Distribution:Western peninsular India,Shrilanka.W.Ghats from Konkan to Kerala and Shrilanka, occasional in Chikamagalore,D.kannada,Hassan,Shimoga.Common in Uttarakannada in sirsi,siddapur,Gersoppa,Katlikan,Kodkani,Malemane,Devimane,near sea coast of Karwar,N.Circars,Mahendragiri Hillsat 1500m

Propagation Methods:

Rarity:

68. Diospyros crumenata

Family:Ebenaceae Local name:

Key characters: A very large evergreen tree young parts glabrous bark thin,.Leaves ovateelliptic, mid rib depressed on the upperside,prominent on the lower,inflorescence 3-5 male flowersin short cyme,femaleflowers solitary,flowers 4-5 merous,fruit berry brown tomentose,glabrous,seeds 6-8 black,immersed in a stingynglutinous pulp.

Flowering: Jan-May

Fruiting: Jan-May

Habitat: Evergreen forests and semi-evergreen forests.

Distribution: Western Karnataka, Shrilanka, semievergreen forests across Ghats from U.Kannada to D.Kannada, in climax forest of Gersoppa and Dodmane ghats, Rare in Kodagu. Common in lower Bisle Ghat in Hassan.

Propagation Methods:

Rarity:

Note: Wounds in trunk caused by broken branches or cutting instrument rapidly turn very black.

69. *Diospyros paniculata*

Family:Ebenaceae Local name:

Key characters: A large –moderate sized branch lets angular, young parts covered with black sooty hairs, leaves oblong-lanceolate thinly coriaceous, glabrous, petiole 5 "long, stout grooved on upperside, Male flowers about 5 "long corolla tubular, sooty black hairs on buds.stamens 20, female flowers solitary, ovary 4 cell, fruit ovoid, covered with short rusty hairs, strongly wrinkeled, seeds ovoid,

Flowering: Nov-Dec

Fruiting: April-June.

Habitat:

Distribution.:in the rain forest of konkan and North Kanara, frequent in forest of Gersoppa and Nilkunda,

Propagation Methods:

Rarity:

70. Diospyrus oocarpa

Family:Ebenaceae Local name:

Key characters: A moderate sized tree ,leaves ovate,acute at the base,thinly coriaceous,glabrous,dark green shinning above,[aler beneath,male flowers subsessile,,axillary cymes,red silky,hairy imbricate bud,stamen 9-12,ulternately unequal,female flowers 1- together,larger than male,calyx cup shaped,truncate,fruit ellipsoidal,seeds oblong.

Flowering: Jan-March.

Fruiting: May-June

Habitat: In rain forests

Distribution:Konkan to Mysore and low country of Ceylon.In the rain forest of Uttarakannada.common on ghats of Karwar

Propagation Methods:

Rarity:

Note:

71. Diospyrus sylvatica

Family:Ebenaceae Local name:

Key characters: A small or moderate sized tree ,sometime buttressed,buds silky,bark dark coloured,smooth,innerbark yellow,leaves elliptic-lanceolate,becomes black on drying,flowers green,male flowers indistinctly peduncled cyme,stamens 13-22.in pairs,female flowers solitary,styles 3-4.fruit dark green,globose,seated on ccresent calyx,seeds 2-8,rugose,brown,shinning.

Flowering: Jan-Feb

Fruiting: September-Otober.

Habitat:

Distribution:Western Ghats,Shrilanka,W.ghats from Mumbai to Shrilankaascending to 1666m in the rain forest of Konkanand U.kannada.common in evergreen forest of Yellapur,Sirsi ,Siddapur,Occasional in semievergreen forest of Chikamagaluru,Hassan,Kodagu,N.circars down to the Godavari in the forest.

Propagation Methods:

Rarity:

72. Drypetes wightii

Family: Euphorbiaceae Local name:

Key characters: A small or moderate sized tree stem fluted, bark white, thin, smooth, leaves lanceolate, obtusely acuminate, base slightly unequal, leaves 9 cm long, fruit obovoid or ellipsoid.

Flowering:

Fruiting:

Habitat: In evergreen forest

Distribution:Western Peninsular India.W.Ghats,Anamalai and Aymalai hills and hills of S.Kerala at 1000 to 1666 m.

Propagation Methods:

Rarity:

73. Dysoxylum binecteriferum(Roxb)Hook.f.ex .Bedd.

Family:Meliaceae Local name: Devdaru

Key characters: A large tree ,with leaves up to 46 cm, petiole 3-4 "long,leaflets 5-9,alternate,elliptic,acuminate,glabrous,flwers white,4 merous,calyx thick,cup shaped,petals acute,minutely tomentose on the outside,stamina tube 4 angled,ovary ribbed,hairy,ovules 2 in each,stigma capitates,globose,fruit capsule,sub-globose,red,seeds 4,dark purple,

Flowering: June-July

Fruiting: July-December

Habitat: Evergreen tree

Distribution:South West India,Shrilanka,semi evergreen forest from U. Kannada to Anamalai,Tirunelveli,apparently absent from S.Kerala,Occasional in Shimoga,Hassan,Uttarakannada,Belgoum and in Kodagu.

Propagation Methods:

Rarity:

73. Elaeocarpus serratus L.

Family:Elaeocarpaceae Local name:

Kev characters: А small tree 18 height,ypung parts pubescent, leaves m broader, darkerthinner with fewer veins, acute at both ends, petiole pubescent,glandular,leaves elliptic,serrate margine,inflorescence axillary raceme,generally shortet than leaves, sepals 4-5, petals glabrous, anthers with tuft of hairs at tip, fruit is a drupe, oblong- obovate, seeds 1-2.

Flowering: Jan -March

Fruiting: July-September

Habitat: Evergreen forest of Western Ghat to 1829 m.

Distribution:India,Shrilanka,Nilgiri shoals,common in evergreen to semi evergreen forest to 100-900 m in Kodagu and Uttarakannada.

Propagation Methods:

Rarity:

Note:Fruits edible, sometimes pickled.

74. Embelia ribes

Family:Myrsinaceae Local name: Vaayu vilanga

Key characters: A large climbing shrub, climbes by means of long slender, flexible, deciduous branches, the base of which remain as deflexed spines, bark smooth, shinning, covered with large lentiels nd conical emergences, leaves lanceolate, obtusely acuminate at the apex, acute or rounded at the base, thinly coriaceous, glabrous and shinning on both the sides, pale beneath and covered with small, sunken, reddish glands, midrib prominent often with large closed or open glands, flowers minute, 5 merous, inflorescence terminal calyx lobes acute, broad, ciliate, petals greenish yellow, fruit berry, smooth, crimson.

Flowering:

Fruiting: May

Habitat: Fairly common in rain forest

Distribution:Throught out India from the Central Himalaya to Ceylon alt 0-5000 ',Konkan and North Kanara,common in rain forest of Gersoppa.

Propagation Methods:

Rarity:

Note:Seeds used in native medicines as an antheminthic, also to adulterant to black pepper.

76. Entada scandens

Family:Leguminosae Local name: Dodda ganape

Key characters: A woody climber with twisted angled stem, leaves bipinnate, main rachis glabrous, bifid tendri, pinnae opposte, leaflets 3-4 pairs, ovate-oblong, obtuse, dark green, flwers polygamous, pale yellow, crowded in long peduncled, or simple spikes, from axil of upper leaves or from nodes on the old leafless branches.calyx minute, corolla twice as long as calyx, petals 5, pods very large, woody, consisting of 6-15 one seeded discoid or square flat – joints, which seperates by sutures, seeds ovoid, brown, shinning with a very hard testa.

Flowering: March to May

Fruiting: December-Jan

Habitat:

Distribution: Central and Eastern Himalaya ascending to 4000 'in Sikkim, W.peninsula, Burma and Ceylon. Throughout the monsoon forest of the North Kanara and Konkan Ghats often along river banks,

Propagation Methods:

Rarity:

Note: The great seeds contain oil used as emetic. They are often hollowed out and made into small boxes. The cotyledons after being steeped in water for some time are eaten.

77. Epiprinus mallotiformis (Muell.-Arg.) Croizat

Family:Euphorbiaceae Local name:

Key characters: A large shrub or small monoecious evergreen treewith elliptic, coriaceous shinning entire leaves, young banchlets sparsely stellate, bark whitish , smooth, leaves alternate, elliptic, often mucronate, entire , mid rib sparsely hairy, petiole hairy when young, flowers in 5-6 cm long lateral and terminal pubescent spikes, male flowers many, clustered, female flowers few , stamens 4, fruit capsule, 3 lobed, seeds globose.

Flowering: October-December

Fruiting: April

Habitat:

Distribution: Western Peninsular India,Deccan, hills of Cuddapah along streams at about 1000 m ,Kolli forest >1000 m,Western ghats from Uttara kannada and Kodagu to Nilgiris, Annamalai,in evergreen and semievergreen forest at about 1166 m .Frequent in Chikamagaluru,D.&U.Kannada (Malemane,Gersoppa-Talbot),Hassan(Saldana)

Propagation Methods:

Rarity:

Note:

78. Ficus amplissima J. E.Smith

Family:Moraceae Local name: Bili basari

Key characters: Large trees to 24 m height arial roots few or none, leaves ellipticovate, abruptly acuminate at apex, rounded at base, with 3 basal nerves, margin thick, cartilaginous, figs in axillary pairs, sessile, smooth, pubescent when young, covered by 3 flat apical scales, basal bracts 4, small, scarious, , globose, purple when ripe.

Flowering: All seasons

Fruiting: All seasons

Habitat: In deciduous and evergreen forests

Distribution: South India, Shrilanka, Forest of W. Peninsula from Konkan southwords in deciduous and evergreen forests from 333 to 1166 m in S. Kerala, in Peninsula from Kurnool south words, widely planted a roadside tree.

Propagation Methods:

Rarity:

Note:

78. Ficus arnotaiana (Miq) .Miq.

Family: Moraceae Local name: Kalashwatha

Key characters: Small trees or large shrubs without aerial roots, with cordate leaves, stipules 6 cm long, deciduous, petiole 14 cm long, leaves large, broadly ovate, base cordate, margines sub undulate, fruit/figs purple with green dots when ripe usually in the axils of fallen leaves

Flowering: December-September

Fruiting: December-September

Habitat: Moist deciduous to rain forests, open grassy slopes and rock crevices across ghats to 1500 m.

Distribution: India,Bihar southwords,Southn India,Shrilanka,near Yana rock in Kumta of U.Kannada,occasional in plains and upper Ghats on rocky ground in Hassan,no where common,central Tamil naduoften associated with rocks.

Propagation Methods:

Rarity:

Note:

79. Ficus beddomei King

Family: Moraceae Local name:

Key characters: Large trees with dense foliaceous crown,often epiphytic,bark pale brown,smooth,stipules deciduous,petiole stout 6 cm long,leaves ovate,rounded at base,glabrous,lateral nerves 15 pairs,figs in axillary pairs,globose,peduncle stout

Flowering:

Fruiting:

Habitat: Rare in evergreen forest of W. Ghats from 333-1666 m.

Distribution: Endemic to Western ghat, rarely find in shoals of Central Tamilnadu.

Propagation Methods:

Rarity:

Note:

80. Ficus callosa Willd.

Family: Moraceae Local name:

Key characters: Very large fast growing evergreen tree, branchlets warted, bark smooth, grey, containing much pearly white juice, leaves broadly elliptic, abruptly acuminate at the apex, basal nerves 3, slightly pubescent beneath, margines slightly recurved, figs axillary, globose, solitary, greenish yellow when ripe.

Flowering:

Fruiting:

Habitat:

Distribution:Endemic to Western Ghat

Propagation Methods:

Rarity:

Note: Buttressed root and without aerial roots

80. Ficus hispida

Family: Moraceae Local name: Kad atti

Key characters: A small tree internodes hollow,all parts hispid,aerial roots absent,perhaps the only hollw ficus,bark grey,tough,peeing off in irregular flakes,opposite leaves are characteristic,leaves hispid-pubescent,serrate or dentate,base rounded or cuneate,fruits seems to be clustered on tubercles,becomes yellowish on ripe.

Flowering: Jan-December especially in Jan-Feb.

Fruiting:

Habitat:

Distribution: Elsewhere in damp localities and near steams from sea level to about 1219 m.

Propagation Methods:

Rarity:

Note: A week tree with hollow internode, aerial roots absent, all parts hispid.

81. Ficus nervosa Heyne ex Roth

Family: Moraceae Local name:

Key characters: A very large evergreen tree with a straight ,cylindrical,huge,buttressed trunk,without aerial roots ,shoots tomentose,bark smooth,dark coloured,blae yellowish whitish-brown, with sticky watery juice pouring out,leaves oblong-lanceolate,figs yellow to red,depressed globose,glabrous,

Flowering:

Fruiting: Jan-March

Habitat: Usually found near the streams

Distribution: Deciduous to evergreen forest of W.Ghats

Propagation Methods:

Rarity:

Note:

82. Ficus racemosa L.

Family: Moraceae Local name: Atti mara

Key characters: A large deciduous tree with few aerial roots, leaves elliptic-lanceolate, acute at both ends, with copious leaf galls, fleaves glabrous, reddish when ripe, edible, obovoid, born on older branches and on stem.

Flowering: All the seasons

Fruiting: All the seasons

Habitat: From evergreen forest to scrub forests, near streams.

Distribution:

Propagation Methods:

Rarity:

Note: Figs are tomentose when young,A sacred tree,grows faster,indicator of underground water,leaves used in local medicine,figs are edible,Birds and smaller animals relish the fruits.Watery fluid stored in the plant is been extracted by making a small cut on the bark and the water is used to make many dishes in Uttarakannada district, it is believed to cool the body.

82. Ficus tsjahela Rheede ex Burm .f.

Family: Moraceae Local name:Kari basari

Key characters: A large and tall trees without aerial roots, bark smooth, greenish white or dark brown, long petiole, leaves elliptic-oblong, shinning, glabrous, with cystolith beneath, acuminate, figs purple black when ripe, sessile, globose.

Flowering: All seasons

Fruiting: All seasons

Habitat: Frequent in moist deciduous to evergreen forests of W.coast.

Distribution: South India , Shrilanka

Propagation Methods:

Rarity:

Note:

83. Flacourtia montana Graham

Family: Flacourtiaceae Local name: Sampe hannu

Key characters: A medium to smll sized spinous tree,bark grey,thin,smooth,blaze upper layer with green colour,inner yellow,turning slightly reddish,leaves ovate,elliptic,coriaceous,mid rib tomentose,margine serrate,young leaves purplish red flowers in small axillary fascicles rusty tomentose,fruits 6 seeded,red,size of a cherry.

Flowering: Cold season

Fruiting: April

Habitat: Moist deciduous to climax evergreen forest

Distribution: Moist deciduous to climax evergreen forest

Propagation Methods:

Rarity:

Note: Common in U.Kannada.handsome fruit is edible, sour-sweet in taste.

84 .Glochidion ellipticum Wight

Family: Euphorbiaceae Local name: Key characters: Monoecious shrubs branches angled,glabrous,leaves oblonglanceolate,acute at both the ends,coriaceous,flowers greenish yellow,female sessile flowers,male pediceled,ovary tomentose,fruits sessile,exposing red seeds on dehiscens,

Flowering: Jan-April

Fruiting: Jan-April

Habitat: Common in evergreen forest in upper Ghats along edges of forest

Distribution: Southern W.Ghats.

Propagation Methods:

Rarity:

Note:

85. Glochidion zeylanicum (Gaertn) A.Jussieu

Family:Euphorbiaceae

Local name:

Key characters: Small dioecious tree branchlets glabrous,grooved,leaves ovatelanceolate,unequal sided,bright green shinning above,pale beneath,old leaves whitish above,very brittle,flowers yellow,sub umbellate,stamens 5-7,fruit is a capsule,orange colured.

Flowering: December-June

Fruiting: December-June

Habitat: In ghats along streams, in swampy places both in evergreen and moist deciduous forests (Talbot)

Distribution:

Propagation Methods:

Rarity:

Note: A shola tree

87. Gompandra tetrandra(Wall)

Family:

Local name:

Key characters: An erect evergreen shrub with green branches.leaves entire,glabrous,membranous,lanceolate or ovate,flowers very small in axillary congested

cymes, calyx tomentose on outside, stamens united in a column, rudimentary ovary in male, fruit ovoid, white, fleshy, crowned by remains of stigma, stone crustaceous,

Flowering: April-May

Fruiting: Nov

Habitat: Common in evergreen rain forest of Konkan and North Kanara ghats.

88. Hibiscus furcatus

Family: Malvaceae

Local name:

Key characters: Stem tendril,very prickly,leaves palmately 3-5 lobed,cordate,pubescent,margines crenate-serrate,prickly on the nerves beneath,flowers large,yellow with purple center,calyx enlarged in fruit,very hispid,sepals lanceolate,covered wit shinning bristeles,peduncles prickly as long as petioles,fruit is a capsule,ovoid,pointed.

Flowering: Jan-Feb

Fruiting:

Habitat:

Distribution: Throught the tropics

Note: Yeids an excellent fibre, Roots infused in water make a cooling drink in hot weather.

89. Holigarna ferruginea

Family: Anacardiaceae

Local name:

Key characters: A large tree of evergreen forest branches glabrous, petiole with a pair of spurs, leaves glabrous, leaves olive –brown when dry, inflorescence with dark purple –brown tomentum, corolla white, drupe completely enclosed in hypocarp, ellipsoid.

Flowering: March-May

Fruiting:

Habitat: Frequent in semievergreen to evergreen forest of W.Ghats

Distribution:

Propagation Methods:

Rarity:

Note:

90. Holigarna grahamii Hook. F.

Family: Anacardiaceae

Local name:

Key characters: A large evergreen tree leaves very coriaceous,oblanceolate,finely pubescent beneath,petiolar spur 2-4,male panicles large,ferruginous,much branched,crowded at the ends of the branch,calyx copular,truncate,or broadly triangular.Petals oblong,stamens slightly exerted ,female flowers in shorter panicles than the males.Styles 3-4,unequal in lengh,stigma capitate,fruit is a drupe, oblong,hypocarp yellow or reddish,covering 5/6 th of the fruit.cotyledons large,plano convex.

Flowering: Jan-Feb

Fruiting: May-June

Habitat: In the moist evegreen forests/rain forests.

Distribution: common in North Kanara rain forests.

Propagation Methods:

Rarity:

Note: The plant wood is very similar to that of *Holigarna arnotiana*.Bark covered by scattered raised lenticular,corky cells,inner bark reddish,hard,often fibrous.The exudation from any part of the plant couses skin burn,allergy.

91. Hopea parviflora Bedd.

Family: Dipterocarpaceae

Local name: Kiralbogi

Key characters: A large handsome tree to 35 m height, bole straight, crown like conical , when young like a flame, branches reddish brown, bark smooth, mottled with brown and white when young, later it cracks and no white markings are seen, colour changing to rusty brown, leaves ovate-lanceolate, glabrous, lateral veins 8-12, their axils glandular beneath, flowers many, flowers creamy yellow, short pedicels, sweet scented, Fruit is a nut black coloured.

Flowering: Jan-Feb

Fruiting: May-June

Habitat: In the evegreen forests.

Distribution: Endemic to Western Ghat.

Propagation Methods:

Rarity:

Note: Wood is ant proof, preferred for house construction in coastal region; it is uncommon species in Uttarakannada.

92. Hopea ponga (Dennst.)Mabberly

Family: Dipteocarpaceae

Local name: Haiga

Key characters: A common medium sized tree leaves dark green, shinning, oblong, coriaceous, smooth, base and tip rounded, riund echinate galls are found in the axil of leaf, inflorescence racemose, flowers yellowish pink, fruits ovoid, with samara wings, green turning to dark red when mature.

Flowering: March-April

Fruiting: May-June.

Habitat: Common in semievergreen to evergreen forests of ghats to 800 m.

Distribution: Evergrren forest of W.Coast.

Propagation Methods:

Rarity:

Note: An important timber, excellent fuel and very usefull for green manure, apart from this the tree acts as a host for many species of butterfly.

93. Ixora nigricans Br. in Wall

Family: Rubiaceae

Local name:

Key characters: : A large or small evergreen shrub ,leaves turn black when dry,leaves elliptic to lanceolate, acute or shortly acuminate at the apex,glabrous, stipules shortly triangular, flowers white in short peduncled cymes, lower pair of bracts small, foliaceous, buds narrower, slender, fusiform, calyx glabrous, styles glabrous. Fruit black or red, fleshy, globose, size of a large pea, seeds plano convex, or globose with a large central cavity.

Flowering:

Fruiting: April - May

Habitat: In rain forests

Distribution:In manson and rain forest common in Konkan and N.Kanara Ghats.

Propagation Methods:

Rarity:White flowers are very small withsweet scent .The black succulent pulp of the fruit has sweet taste.

Note: White flowers are very small withsweet scent .The black succulent pulp of the fruit has sweet taste.

95. Ixora parviflora Vahl.Symb.

Family: Rubiceae

Local name:

Key characters: A small evergreen tree ,branhlets slightly compressed,glabrous,leaves ovateoblong,shinning,pale whendry,shortly acuminate at the apex,rounded at the base,stipules broad,shortly cuspidate,petioles very short and stout.Flowers white,sweet scented,arranged in sessile,pubescent or glabrous cymes,calyx minute,cup shaped,corolla lenear,oblong,glabrous.Anthers sessile,nearly as long as corolla lobes.Styles densly pubescent,stigma 2 branched,fruit small 25 "in diameter.

Flowering: March- April

Fruiting: May-June

Habitat: In decidous forests.

Distribution: Throught the presidency in deciduous forests.

Propagation Methods:

Rarity:

Note: The tree is known as "The Torch Tree". The tree is used for furniture and building purpose, The green branches make excellent torches.

96. Leea indica (Burm f.) Merr.

Family: Leeaceae

Local name: Dippanige

Key characters: A large shrub or a small tree with long straight branches, bark smooth , leaves bipinnate, 2-3' long, leaflets 2-10. deeply irregularly serrate, acute at the base, becomes black on drying. Flowers greenish white, buds ribbed when dry, in large compound, corymbose cymes, bract minute caducous. Petals spreading, hooded at apex, stamina tube white, fruit depressed globose, shinning, purple black seeds,

Flowering: Throughout the year

Fruiting: Throughout the year

Habitat: Common in moist rain forest of Uttarakannada and Konkan.

Distribution: From Himalaya to Ceylon.

Propagation Methods:

Rarity:

Note: In the heavy rain fall area of the Uttarakannada rain forests it develops short aerial roots abundantly from the branches. The plant is a part of ceremony in Hindus festival Deepavali in Uttarakannada. It is oftenly used to show the torch to the god in the festival occasion.

97. Litsea floribunda (Bl.) Gamble

Family: Louraceae

Local name:

Key characters: Evergreen treeto 8-15 m tall,branchlets fulvous tomentose,blaze sweet to taste,smells slightly of mango leaves,leaves fulvous tomentose beneath,tender leaves bright red,leaf ape is acute,flowers unisexual,greenish yellow,inflorescence racemose,with 6-7 flowers in each umbel,bracts yellow,berries ovoid,thick pedicels.

Flowering: August-March

Fruiting: August-March

Habitat: Evergreen and semievergreen species.

Distribution: Through out W.Ghats at 600-1800 m

Propagation Methods:

Rarity:

Note:

98. Litsea mysorensis Gamble

Family: Louraceae

Local name:

Key characters: Evergreen shrub or small tree with very small sessile clusters of umbellules, leaves linear-elliptic, acuminate, branchlets glabrous, perianth of the flower is silky hairy, fruit is a berry, subglobose, seated on cup shaped perianth.

Flowering:September-Feb

Fruiting: September-Feb

Habitat: Frequent in semi evergreen forests.

Distribution: Western ghat

99. Litsea wightiana Wall

Family: Louraceae

Local name:

Key characters: A large tree with rusty tomentose branchlets, leaves alternate, variable in size, acute at the base and shortly acuminate at the apex, dark green , shinning above, brown pubescent beneath, petiole 25" long, tomentose, umbel inflorescence, 4-6 flowered, bracts 4 coriaceous. Perianth tube silky tomentose, stamens 12, stigma discoid, fruits ovoid or subglobose.

Flowering: April - October

Fruiting: September-Jan

Habitat:

Distribution: Western Peninsula to Nilgiris upto 6000 m.

Propagation Methods:

Rarity:

Note: Wood is very hard yellowish brown in colour.

100. Macaranga peltata (Roxb.)Muell.-Arg.

Family: Euphorbiaceae

Local name: Chandarakalu

Key characters: A small resinous fast growing tree young shoots stellate tomentose, branchlets gloucous, bark pale, lenticillate, leaves peltate, dark green above, stipules large, veins red, prominent beneath, petiole long, flowers greenish—yellow in panicles, male in dense cluster, cup like bracts, female in smaller panicles, fruit is a capsule, hairy, glandular.

Flowering: Jan-March

Fruiting: Jan-March

Habitat: Common on the slopes. In disturbed and cleared forests.

Distribution: Peninsular India,Western Ghats(D & U Kannada,Chikamagalur,Hassan,Kodagu,Mysore,Shimoga,Belgoum,

Propagation Methods:

Rarity:

Note: It is found to appear in cleared forests, red gum from the tree is used for taking impressions of leaves, coins, tree often planted for in coffee plantation for shade.

101. Madhuca longifolia (Koenig) Macbride

Family: Sapotaceae

Local name: Hippe

Key characters: A large evergreen tree with a straight cylindrical stem, ypung shoots silky, bark dark yellowish –grey to brown, slightly furrowed, blaze red with milky juice, leaves oblanceolate, tapering to both ends, pedicel slender, flowers pale yellow, solitary, pedicels slender, small bracts, corolla yellowish –white, fruit obliquely ovoid,

Flowering: Feb-April

Fruiting:September-October

Habitat: Often found along the river banks and nalla banks.

Distribution:West coast both dry and high manson forest of both D.&U. Kannada.

Propagation Methods:

Rarity:

Note: Wood used in boat building, for keels, oil extracted fro seeds, flowers edible and biofuel is extracted.

102. Mangifera india Linn.

Family: Anacardiaceae

Local name: Maavu

Key characters: A large tree leaves oblong, lanceolate, acute or acuminate, entire, shinning above, pulvinous leaf base, flowers monoecious in large terminal pubescent panicles, off white small flowers, sepals ovate, pubescent outside, petals oblong, purple anther, ovary glabrous, drupes large, fleshy.

Flowering: Dec-April

Fruiting: Jan-April

Habitat: Wild can be seen in Deccan Peninsular India

Distribution:

Propagation Methods:

Rarity:

Note: Different variety in the species is been cultivated for its fleshy tasty fruits. The flowers young fruits are used in preparation of different cuisines. Bark and resin is used in

traditional medicines.Leaf and bark is used in some of the Hindu rituals and worships.Some of the endemic,vulnerable variety of Mango are seem to distributed only in Uttarakannada ghat forests.

103. Mastixia arborea (Wight) Bedd.

Family: Cornaceae

Local name: Neeratti

Key characters: A medium sized evergreen tree leaves elliptic-oblong, alternate, narrowed into the petiole at the base, dark green shinning above, pale beneath, dark green shinning when young, bluish on drying, flowers yellowish green, petals pubescent outside, fleshy, 3-4 flowers together in terminal corymbose panicle, fruit is large, drupe, greenish purple, 3.2 cm long, smooth.

Flowering: Feb-March

Fruiting: April-June

Habitat: Evergreen climax forests

Distribution: South Western India

Propagation Methods:

Rarity:

Note: Resinous gum hascamphoraceous smell.

104. Melastoma malabathricum L.

Family: Mellastomaceae

Local name: Nekkarike

Key characters: Anevergreen handsome much branched, large shrub or small treelet, young parts densly covered with yellowish brown scales, leaves ovate – lanceolate, acute at both ends, 3-5 prominant basal midrib, flowers large, purplein terminal paniculate cymes, calyx tobe companulate, covered wih silvery lanceolate hairs, petals rounded, narrowed to the base, stamens with yellow filaments, anthers alternately yellow and red, ovary bristly–hairy, fruit globose, red, white, curvd seeds.

Flowering: Throught the year

Fruiting: Throught the year

Habitat: Moist forests

Distribution: Through out the Uttarakannada moist forest, common along the streams in evergreen forests,

Propagation Methods:

Rarity:

Note:

105. Mallotus philippinesis (Arg.) Family: Euphorbiaceae

Local name: Kunkumada mara

Key characters: Evergreen small tree, young branches pubescent, bark grey or pale brown, blaze red, leaves ovate-lanceolate, lowerside with minute red glands, petiole long, spikes brick red.

Flowering: November-Jan

Fruiting: Feb-May

Habitat: Moist deciduous forests and in open scrubland forests of Deccan.

Distribution:

Propagation Methods:

Rarity:

Note:

105. Memicylon malabaricum Family: Melastomaceae

Local name:

Key characterers: A small tree, leaves are acute, coriaceous, shinny above.Flowers on slender pedicel, in many flowered pascicled umbel,petals rounded,blue,fruit black,like a small pea.

Flowering: Jan-May

Fruiting: April-August

Habitat: Common in semi evergreen foest of Western ghat.

Distribution: Common in Yellapur Ghats.

Propagation Methods:

Rarity:

Note:

106. Mesua ferrea Linn. Family: Clusiaceae

Local name:Nagakesara

Key characterers: A medium sized tree, leaves coriaceous, shinning above, veins prominent and numerous, tender leaves looks pinkish and gloucous on both the surface, flowers white and yellowstrongly scented. It is having short, thick pedicels, out of 4 sepals 2 outer sepals greenish in colour, petals are 4 in number, stamens with white filaments and yellow anthers, fruit ovoid, seeds 1-4.

Flowering: March

Fruiting: May

Habitat: Evergreen tree

Distribution: In rain forests of Uttarakannada.

Propagation Methods:

Rarity:

Note: Stamens of scented flowers of *Nagakesara* is very important from economic point of view.The flowers are specially used to worship Lord Shiva in Western Ghat region.

107. Grewia umbellifera Bedd. Family: Tiliaceae

Local name:

Key characteristics: A large climber with thin ovate leaves, stellate hair beneath,3 nerves at the base.Flowers large densly tomentose, inflorescence in axillary or terminally 5-30 flowered umbels.fruit is fleshy, reddish yellow in colour.

Flowering: March-May

Fruiting: May-June

Habitat: In evergreen rain forests

Distribution:Common in moist deciduous to semi evergreen forest of Western Ghat.

Note: It has blunt prickelesoften arranged spirally, According to Talbot it is rare in Uttarakannada except in Gerusoppa region.

108. Myristica dactyloides Gaertn.

Family: Myristicaceae

Local name:Giddapatre

Key characterers: A medium sized evergreen tree blackish green, blaze with red juice, leaves oblong covered with tuft of hairs, prominent nerves, fruit brown, orange red aril, flowers white, tomentose.

Flowering: Decmber-Jan

Fruiting: June-July

Habitat: In climax evergreen forest, often it is found along the streams and in moist area.

Distribution: In all districts of Wesern Ghat from 250-1300 m from Uttarakannada to Kerala, common in Katlekan, Gersoppa, Malemane, Devimane of Uttarakannda.

Propagation Methods:

Rarity:

Note: The fruits are extracted for its valuable mace,

109. Myristica malabarica Lam.

Family: Myristicaceae

Local name:Rampatre

Key characterers:A large tree, the small branches are strongly glabrous. Leaves dark green, shinning above, , male flowers are slender and rusty pubescent, bark yields a red watery juice on injury, Flowers are in axillary cymes, perianth ovoid and tomentose, female flowers are larger that the male flowers and in axillary umbels, fruits are rusty tomentose brown in colour, rind is about 2-3 cm thick , one seeded fruit where the eed is completely covered by orange red mace.

Flowering: November-December

Fruiting: Jan-March

Habitat: The species is mainly found in moist ,swampy habitat,particularly in climax evergreen forests.

Distribution: Gregarious in Kumta taluka, frequent in Gersoppa, Malemane, Katlekan, Devimane and Benagam, Menasi of Sirsi Taluk, Uttarakan nada.

Propagation Methods: Through seeds 70 to 80 % germination can be achieved, Care should be taken to saw the seeds immediately after collecting the matured good quality seeds other wise less viability of seeds affect in its germination process.

Rarity:

Note: The mace and nut is collected and sold which is used as adulterant for nutmeg, It is one of the major NTFP in Uttarakannada district. The seed oil is used as ointment. Over harvesting and unscientific harvesting lead the tree into decline its natural regeneration.

110. Neolitsea zeylania (Nees) Merr., Family: Louraceae

Local name:Bili nishane,tudagenasu

Key characterers: A small tree slender branchlets, bark grey coloured, leaves alternate, opposite, white gloucous beneath, Tapering apex, leaf buds are silky, flowers yellow, head inflorescence.

Flowering: April-May

Fruiting: June-July

Habitat: Evergreen, semi evegreen forests.

Distribution: Throughout in Uttaakannaa district.

Propagation Methods:

Rarity:

Note: Externally it recemblance with cinnamon.

111. Neonauclea purpurea(Roxb) Family: Rubiaceae

Local name:

Key characterers: A small tree with elliptic leaves, interpetiolar stipule which are caducous, calyx white, hairy, flower globose.

Flowering: Feb-March

Fruiting: May-June

Habitat: It's an evergreen species.

Distribution:

Propagation Methods:

Rarity:

Note: The tree makes very good quality timber.

112. Nothopegia racemosa(Dalz)Ramam.

Family:Anacardiaceae

Local name:

Key characterers: A small tree, leaves glabrous, shinning above, the leaves smells like mango leaves, elliptic, acuminate.

Flowering: Jan-March

Fruiting: May

Habitat: Semi evergreen forest.

Distribution: Through out Uttarakannada in semievergreen forest.

Propagation Methods:

Rarity:

Note: The tree makes very good quality timber.

113. Ochlandra rheedii

Family: Poaceae

Local name:Vate gala

Key characterers: Medium sized shrub, nodes and internodes are distinct on the stem. Hollow stem with sparcely located nodes; the leaves are more elongated, slightly greyish on underneath surface. Around 20-50 plants make a bush.

Flowering: It is monocropic plant

Fruiting:

Habitat:

Distribution:

Propagation Methods: Through vegetative reproductive structures.

Rarity:

Note: Indian classical instrument flute is made out of Ochlandra. It is also important as it is one of the raw material used to prepare mat by its flexible stem and it is used to dry one of the main agriculture crop, Arecanut in Western Ghat Sirsi, Siddapur Yellapur region. The oclandra bush is important habitat for King Kobra snake during the egg laying season.

114. Olea dioica Roxb.

Family: Oleaceae

Local name: Challe

Key characterers: A moderate sized tree with creamish flowers, leaves elliptic, glabrous, tender leaves are pinkish, reduced reddish petiole.

Flowering: Jan-March

Fruiting: June-July

Habitat: Common in semievergreen to evergreen forest.

Distribution: Common in semievergreen to evergreen forest of Western Ghat, Sirsi, Siddapur, Yellapur of Uttarakannada

Propagation Methods:

Rarity:

Note:

115. Pajanelia longifolia (Willd.)k.Schum.

Family: Bignoniaceae

Local name:

Key characterers: Tall glabrous tree with long bipinnate leaves.young shoots quadrangular,aggregated at the ends of the stem leaving large scars after leaving.leaflets 8-12 pairs,Corolla tube narrow below,very wide at the mouth,crimson with raisedwhite spots ,filaments glabrous at the base contains muscilaginous liquid.

Flowering: Jan-March

Fruiting:

Habitat: North Kanara to Malabar ascending to 2000'

Distribution: Confined to North Kanara rainforest

Rarity:

Note: Timber is not used in North Kanara.

115. Palaquium elliipticum

Family: Sapotaceae

Local name:

Key characterers: A large tree with long straight cylindrical trunk leaves elliptic-oblong, dark green above, paler beneath, flowers peduncled, peduncles longer than the petiole, corolla dark red, caducous, in ud condition, silky outside, fruits one seeded.

Flowering:

Fruiting:

Habitat: Western ghta from Bombay southwords, ascending to 4000'

Distribution: Very rare in Bombay Presidency, in rain forest near Castle – Rock, North Kanara.

Propagation Methods:

Rarity:

Note: Wood is hard and durable

116. Pandanus tectorius auct.non Soland.ex Parkinson

Family: Pandanaceae

Local name:Kedige

Key characterers: A much branched large shrub, to 6 m tall, stem supported by stilt root, leaves coriaceous, margin spinous, gloucous green, fruits yellowish, spathes long, white or yellow, very fragrant.

Flowering: April-June

Fruiting: April-June

Habitat: Near water flow coast, sandy coasts,

Distribution: All districts especially near coast.

Propagation Methods:

Rarity:

Note: Scented sapthes are worn by ladies, offered in worship, an oil is extracted from the spathe.

118. Pandanus unipapillatus Dennst.

Family: Pandanaceae

Local name: Mundige

Key characterers: A large shrub, often branching near top, with few prop roots near the base, leaves small, margines with sharp curved prickles, midrib pricky, spathes fragrant, spike upto 11 cm, anthers 10-16, drupes club shaped, small,

Flowering: In summer

Fruiting:

Habitat: Marshy habitat(river side plant)

Distribution: Common in marshes, along banks of stream, canals forming impenetrable thicket.

Propagation Methods:

Rarity:

Note:

119. Persea macrantha(Nees)Kosterm.

Family: Louraceae

Local name:Gulmaavu

Key characterers: A large evergreen tree bark pale brown, blaze pinkish, greasy to touch, smells lije crushed mango leaf, leaves crowded at branch ends, dark green shinning

above and gloucous beneath, flowers yellowish, fruits greenish black, with white specks, aromatic.

Flowering: December-Jan

Fruiting: April-May

Habitat: Frequent in moist deciduous foresr of Western Ghats.

Distribution: Seen in Sirsi, Siddapur, Yellapur, Gunda, Honnavar of Uttarakannada.

Propagation Methods:

Rarity:

Note: Bark extensively used in Agarbtti, endangered spp.

120. Polyalthia fragrans Benth.

Family: Anonaceae

Local name:Gourimara

Key characterers: A tall evergreen buttressed tree, young shoots rusty tomentose, older corky, Leaves thin, ovate-lanceolate, acute or shortly acuminate, shinning above, flowers greenish yellow, fragrant, sepals small orbicular, fruit glabrous, purple when ripe, seeds ovoid.

Flowering:

Fruiting:

Habitat: Endemic in Western Ghat,

Distribution: In evergreen tropical rain forest of North Kanara

Propagation Methods:

Rarity:

Note: The young flaccid hanging foliage is brilliant red in colour ,no timber value as it decays quickly on expose

121. Psychotria dalzelii Hook.

Family:Rubiaceae

Local name:Shivan yalakki

Key characterers: A large shrub, leave obovate, shortly apiculate at the apex, thick, dark green, coriaceous, shinning above, drying yellow, flowers white,

Flowering And Fruiting: Throught the year

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note:

123. Pterospermum diversifolium Blume

Family: Sterculaceae

Local name:

Key characterers: A middle sized fast growing tree, branches minutely pubescent, leaves palmetly lobed, leaves elliptic, sepals minutely rusty pubescent outside, capsule 5 angled

Flowering: May

Fruiting: September

Habitat: Evergreen forest upto 600-1200 m from Uttarakannada to Tirunelveli.

Distribution: Evergreen forest of Western Ghat.at low elevation.

Propagation Methods:

Rarity:

Note:

124. Randia rugosa

Family:Rubiaceae

Local name:

Key characterers: A large evergreen unarmed glabous shrub, branches drooping, leaves ovate, thinly coriaceous, shortly acuminate at the apex, Cymose inflorescence, Corolla white, Fruit globose, 3 "in diameter,.

Flowering: Jan-Feb

Fruiting: Nov-Dec

Habitat: In rain foest of Western Ghats

Distribution: Common in the forest near Gerusoppa, of Uttarakannada.

Propagation Methods:

Rarity:

125. Rubia cordifolia L.

Family:Rubiaceae

Local name:Manjista

Key characterers: A perennial climber

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note: Its a medicinal plant, its roots are used in dropsy, paralysis and jaundice.

126. Salacia oblonga

Family:Celastraceae

Local name:Eknaik

Key characterers: A climbing scandent shrub, ovate , emarginated leaves, margine entire or slightly distantly serrate, thinly coriaceous, glabrous, yellow when dry, flowers yellow, fruits globular, light brown colour when ripen

Flowering:

Fruiting: During rainy season

Habitat: In rain forests of Western Ghats

Distribution: North Kanara Ghats,

Propagation Methods:

Rarity:

Note

127. Saraca asoka

Family:Faboidea

Local name:Seeta ashoka

Key characterers:

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

128. Scleropyrum pentandra

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

129. Smilax indica

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

130. Sterculia guttata

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

131. Steriospermum personatum

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

132. Strombosia zeylanica

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

133. Symplocos cochinchinensis

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

134. Symplocos racemosa

Family:Styracaceae

Local name:--

Key characterers: A moderate sized large tree leaves crowded at the ends of the branchlets, dark green shinning above, paler beneath, flowers white, very sweetly scented, sessile or shortly pedicillate, Fruits ovoid, turning light yellow when dry.

Flowering: November

Fruiting:

Habitat: Western peninsula, evergreen forest in moist placesnear nalas.

Distribution: Throught Konkan and North Kanara,

Propagation Methods:

Rarity:

Note

135. Syzygium caryophyllatum

Family:Myrtaceae

Local name:Kunt nerale

Key characterers: A large shrub, Leaves obovate, dark green shinning above, pale and gland dotted below, coriaceous, flowers sessile in terminal, fruit depressed globose, purple black juicy with thin shinning skin.

Flowering: April -June

Fruiting: May-July

Habitat: Throught out Konkan and North Kanara in moist forests, very common near the coast above high water mark.

Distribution:

Propagation Methods:

Rarity:

Note: Fruits are edible and leaves makes good green manure.

136. Syzygium gardnerii

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

137. Syzygium heyneanum

Family:

Local name:

Key characterers:.

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note

138. Syzygium zeylanicum

Family:Myrtaceae

Local name:

Key characterers: A small or middle sized tree leaves coriaceous, shinning above, paler beneath, flowers white, numerous, paniculate cymes, fruits nearly globose, size of pea, white,

Flowering: Feb-April

Fruiting:

Habitat:

Distribution: Throught the Konkan and North Kanara ghats along rivers and nalas in North Kanara.

Propagation Methods:

Rarity:

Note

1 Mimusops elengi

Family : Sapotaceae

Local name: Bakula, Pagadi mara.

Key characterers: A small to medium sized evergreen tree with spreading branches and rather small lvs, smaller in dry places and larger in damp localities. Bark dark grey, scaly, rough, deeply furrowed, thick fibrous.

Flowering: March-April

Fruiting: August-September

Habitat: Moist evergreen forest.

Distribution:

Propagation Methods:

Rarity:

Note:

2 Xanthophyllum flavescens

Family : Xanthophyllaceae

Local name: Jummana mara

Key characterers: A large to small timber tree with stout lvs; & panicles of white or yellowish fls;Green fr;bark dark green, smooth & thick.

Flowering: At all time

Fruiting: July- August

Habitat: Evergreen forest

Distribution:

Propagation Methods:

Rarity:

Note:

3 Walsura trifolia

Family: Meliaceae

Local name: Male sagade

Key characterers: A medium sized tree, covered with rusty-brown lenticels dark thin, ashcoloured or greyish-brown, fissured, tessellated in somewhat rectangular squares blaze pink with long white lines, Lvs 3-foliate, alternate; leaflets shining above, glaucose beneath. Fls whitish, corymbosely panicled.

Flowering: Nov

Fruiting: Feb-April

Habitat: Dry evergreen forests

Distribution:

Propagation Methods:

Rarity:

Note: Wood is used for making combs, bark and fruit-pulp used for poisoning fish.

4 Vepris bilocularis

Family : Rutaceae

Local name: Mara jumma

Key characterers: A very handsome, unarmed, evergreen large tree, with trifoliate leaflets up to 23cm long and 7.5cm broad nerves close parallel. The bright yellow immature lvs, dark-green when old.

Flowering: Jan-April

Fruiting: May-June

Habitat: Evergreen & semi evergreen forest.

Distribution:

Propagation Methods:

Rarity:

Note:

5 Ventilago medaraspatana

Family : Rhamnaceae

Local name: Gapsandi balli

Key characterers:

Flowering:

Fruiting:

Habitat:

Distribution:

Propagation Methods:

Rarity:

Note:

7 Thunbergia mysorensis

Family : Acanthaceae

Local name:

Key characterers: A glabrous twinning shrub, branches slender, leaves ovate, flowers large, in long interrupted pendant raceme, corolla two lipped, purple or pinklimb yellow or brown.

Flowering: Dec-Jan

Fruiting: not seen

Habitat:

Distribution: Very rare in Bombay presidency but common in the rain forest of nesr Garusoppa falls in Uttarakannada, apparently indigenous.

Propagation Methods:

Rarity:

Note: Grown in garden as ornamental plant for its beautiful hanging flowers.

	Т	Sapotaceae	
Pandanus tectorius	S	Pandanaceae	Mundige
Pandanus unipapillatus	S	Pandanaceae	Mundige
	Т	Lauraceae	Gul mavu
Pterris confusa	F		
Pterospermum diversifolium	Т	Strercularaceae	
	S	Rubiaceae	

Rubia cordifolia	С	Rubiaceae	Manjista
	L	Hippocrateaceae	Balige balli
Salacia oblonga			
Saraca asoka	Т	Caesalpinioideae	Ashoka
Scleropyrum pentandra	Т	Euphorbiaceae	
Semecarpus kathalekanensis	Т	Anacadiaceae	Kathalekan geru
Smilax indica	С	Smilacaceae	
Sterculia guttata	Т	Sterculiaeae	Basavana otte
Steriospermum personatum	Т	Bignoniaceae	
Strombosia zeylanica	Т		
Symplocos cochinchinensis	Т	Symplocaceae	Lodha
Symplocos racemosa	Т	Symplocaceae	
Syzygium caryophyllatum	S	Myrtaceae	Kuntanerale
Syzygium gardnerii	Т	Myrtaceae	
Syzygium hemisphericum	Т	Myrtaceae	Kan nerale
Syzygium heyneanum	Т	Myrtaceae	
Syzygium lanceolatum	Т	Myrtaceae	Male neralu
Syzygium travancoricum	Т	Myrtaceae	Kempu neralu
Syzygium zeylanicum	Т	Myrtaceae	
Tabernaemontana heyneana	Т	Apocyanaceae	Bilikodasa/Nayikodasa
Thunbergia mysorensis	С	Acanthaceae	
Todelia asiatica	L	Tiliaceae	
Ventilago medaraspatana	L	Rhamnaceae	Gapsandi balli
Vepris bilocularis	Т	Rutaceae	Mara jumma
Walsura trifolia	Т	Meliaceae	Male sagade
Xanthophyllum flavescens	Т	Xanthophyllaceae	Jummana mara
Mimusops elengi	Т	Sapotaceae	Bakula