

# TROPICAL ZOO PLANTS

Supplier of tropical plants for ZOO exhibits

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# Welcome to a world of tropical plants



Musaceae; Araceae; Begoniaceae; Sterculiaceae; Marantaceae; Heliconiaceae

[www.tropicalzooplants.dk](http://www.tropicalzooplants.dk)

go to Plantlist and find all our plants

**Tropical Zoo Plants**  
creative consultants of tropical exhibits

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# Tropical Zoo Plants

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## Company profile

Tropical Zoo Plants has supplied rainforest plants for larger tropical exhibits in Europe since 1997. The company own a rainforest in the Limon province, Costa Rica. The forest is 13 HA of secondary rainforest.

Tropical Zoo Plants is a Danish company owned by Botanical Engineer, Mr. Lars Bo Kjeldstrøm-Fisker (1965) and his wife, Mrs. Marianne Kjeldstrøm-Fisker, Forest -and Landscape Engineer.

Since 1992 Lars Bo Kjeldstrøm-Fisker has worked with nature conservation in Costa Rica. Since 1994 he has worked with Zoo exhibits.

Lectures on both conservation, education and the lack of biodiversity in rainforest exhibits, are offered at EAZA horti conferences.



Since 1998 Marianne Kjeldstrøm-Fisker has worked with nature exhibits in Denmark. Since 2005 she has worked with Zoo exhibits and being a conservationist by heart she can explain, to both the visitors in the zoo -and also our collaborators, what we do and why.



[www.tzp.dk](http://www.tzp.dk)

# Company policy

Tropical Zoo Plants combines nature conservation and supplying zoo exhibits with rainforest plants by the well established nursery in Aguas Zarcas, Limon, Costa Rica. We run a non-timber production that sustain the local community. This way many of the people in the village do not have to cut their forest to make a living. They work in the production of tropical plants directly in the rainforest.

We try to support the people in the village with all the work, we are able to give them. Therefore most work is always done by hand, and we dont use big machinery.



## Development

We care about the people working in the nursery. Free dinner break, free coffee and snack break. We support education and environmental issues in the village, and support with our knowledge at town-meetings.



# Company policy

## Conservation

In our rainforest in Costa Rica the biodiversity is very high. It is one of our goals to add more land to our forest. This way we will protect an even larger area, where plants and animals are saved. We will also be able to continue the work with production facilities in the rainforest village and support the local people with a continuous income. This is very essential in modern conservation, that we create a sustainable future - not only in the favour of plants and animals, but also for the local people.

The rainforest nursery is part of a sustainable development and is appreciated by the local government. We concentrate on harvesting the seeds, cuttings, small plants and small trees that are in great numbers in the undergrowth. This will not damage the forest, when done correctly.

## Product ecology

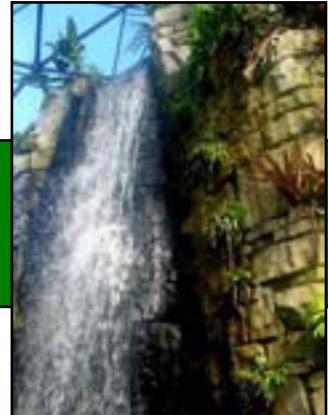
Sacks for the plants are sewed by local women of nylon mesh. The mesh is a waste product from big nurseries - where it is used for shade making. The plant sack goes into a wooden crate. The crates are handmade of waste wood from sawmills.



The crates can be reused at the nursery - as only the sack with the plant leaves the nursery. This way more plants can be stored in a container and a soft sack will not damage any of the other plants in the container during the transport.

The picture above shows a sack in a big crate - by shipment of this size of a plant - the sack does stay in the crate.

# References



Tropical Zoo Plants has supplied rainforest plants for larger tropical exhibits in Europe since 1997.

Creating rainforest exhibits in the zoo's using our knowledge about plants in the real rainforest combined with the knowledge about what plants need when you put them in an artificial environment, like a tropical house.

## Recent projects:

Universeum, Sweden

Randers Regnskov, Denmark

Aalborg ZOO, Denmark

Odense ZOO, Denmark

Kattegatcentret, Denmark

Parken ZOO, Sweden

Zlin ZOO, Czech Republic

London ZOO, United Kingdom



# Order

Besides being a professional supplier of tropical plants – our business is to be consultants from the beginning of your project. We work both at our homeoffice in Denmark and at our nursery in Costa Rica. We produce a wide range of true rainforest species.



Beautiful *Calathea warscewiczii* always on stock



*Bauhinea guianensis*, Liana



Plants from the nursery arrive at London ZOO, 2008.

We receive your order with the requested plantnames and sizes. Following we help you adjust the order to suit the special wishes for your ZOO exhibition. On our web-site, you can find our plantlist in the feature **Plant Search**.

The plants are shipped in 40 feet climate controlled containers. One container consists aprox. plants to cover 500 sqm exhibit with big trees, palms, climbers, understorey and epiphytes. Conditions are to order by contract 8-12 Months before delivery. Customers will be sceduled to visit the nursery in Costa Rica 8-9 weeks before delivery to see the plants in the nursery and enjoy the plants in the nature. For more details go to our webpage:

[www.tzp.dk](http://www.tzp.dk)



## Services

to see all our plants

[www.tzp.dk](http://www.tzp.dk)

go to PLANTLIST

Tropical Zoo Plants offers all kinds of tropical or subtropical environments – ranging from rainforest to desert. Besides the wide range of species we offer in living plants it is possible to supply with dead plant material such as old trunks and cut lianas – and artificial foliage is also an option for problematic environments like nocturnal ZOO exhibits.

Development and maintenance of the growing forest and stories for the visitors about the tropical plants

Consultance about construction of tropical enclosures and buildings

Water and irrigation systems, rain and fog.  
Light and shade, artificial light

Soil and draining, water balance in the plants

Diseases and biological programs to control them

Pressure on plants from animals ex-situ

Education and expedition in the rainforest

Presentation and lectures at EAZA conferences and Zoos.



[www.tzp.dk](http://www.tzp.dk)

## .....Visit the Rainforest .....

With all orders of one or more containers follow a visit to Costa Rica. The visit takes place at our production facilities and in our rainforest. It is important for us to show the customers how we work and how the plants grow in the nature.



[www.tzp.dk](http://www.tzp.dk)

# Construction phase

Besides creating the exact type of environment that you need, we also offer our consultancy in the early phases of designing the building in order to discover any technical faults that might prove very expensive to correct later on – such as ventilation, heating, artificial light or water recirculation.



"we create a piece of tropical nature"



## Animals and plants



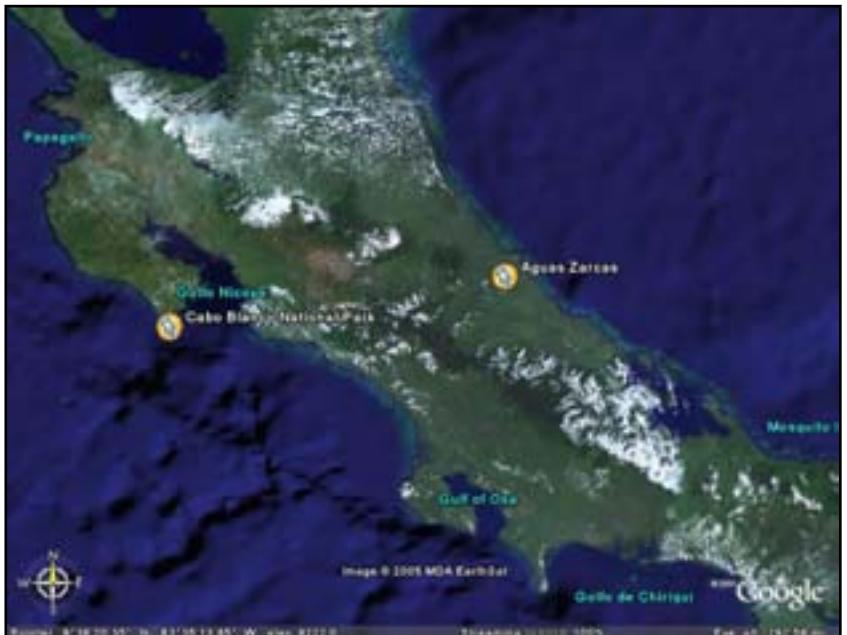
Enclosures for animals are one of our specials – and also butterfly gardens where we can offer consultancy on how to keep and breed - and which species will perform well in your exhibition.

We spend a lot of time in tropical areas to see how nature do the "decorating" – how the plants are growing together and the amount of material we need to create the natural look, which is our primary task when we create a piece of tropical nature.

[www.tzp.dk](http://www.tzp.dk)

# Production in Costa Rica

## Our rainforest and nursery in Costa Rica



The nursery and the forest are located in Aguas Zarcas at the Caribbean Coast close to the City of Limon.



### Our production supports sustainable forestry.

We have the permission to harvest seeds and plant material of wild plant species in the rainforest. The nursery and all plant exports are controlled by the Costa Rican Ministry of Environment and Energy; MINAE and Ministry of Agriculture; MAG.

[www.tzp.dk](http://www.tzp.dk)

# Employees



The employees in Costa Rica are local people from the the village.



Leader of the nursery.



Secretary in San Jose.

# .....Production facilities .....



**Costus villosissimus AM031U**

# ..... Production facilities .....



[www.tzp.dk](http://www.tzp.dk)

# ..... Exportation .....



[www.tzp.dk](http://www.tzp.dk)

# Diversity

Our plant list shows a wide range of diversity in all plant types. From America, Asia and Africa.

You can always draw a new list from our database PLANTSEARCH on the  
[www.tzp.dk](http://www.tzp.dk)

Please be aware that we hold many more species in stock than the list shows. We are working on the registration of all our species.



AM017T *Ceiba pentandra*, America



AF002T *Delonix regia*, Africa



AM107U *Crinum rubescens*, America



AF004P *Elaeis guineensis*, Africa



AM283E *Tillandsia bulbosa*, America



AS018T *Artocarpus altilis*, Asia



AM287E *Aechmea mariae-reginae*, America



AM012T *Plumeria rubra*, America

Click  
PLANTSEARCH  
to see our plantlist on  
[www.tropicalzooplants.dk](http://www.tropicalzooplants.dk)

[www.tzp.dk](http://www.tzp.dk)

## **Plant ID System**

You will find that all plants in our plantlist have a unique number. In the nursery the plants are taged with the ID NO.

Beneath is a simple explanation to the ID system:

**For example a plant with the ID: AM001P**

The two first letters AM indicate in which continent the plant originates:

**AM - means Tropical America**

**AF - means Tropical Africa**

**AS - means Tropical Asia**

The three numbers 001 indicate each plants number

The letter at the end P indicates which type of plant it is.

The system holds 6 types:

**T - means TREE**

**P - means PALM**

**U - means UNDERSTOREY**

**E - means EPIPHYTE**

**C - means CLIMBER**

**O - means Other....**

# Trees

The plant list shows a wide range of diversity in the group of trees. Trees from America, Asia and Africa are present. This group of plants contains small to large trees.

Some species are fast growing pioneer trees, others are slow growing hard wood – and some are bearing fruit for consumption by animals or humans.



AF002T *Delonix regia*, Africa

AS018T *Artocarpus altilis*, Asia



AM017T *Ceiba pentandra*, America



AM012T *Plumeria rubra*, America

ID NO.	Name	Family	Genera	Species
AM410T	Abarema idiopoda	Fabaceae	Abarema	idiopoda
AM408T	Acacia angustissima	Fabaceae	Acacia	angustissima
AM416T	Acacia collinsii	Mimosaceae	Acacia	collinsii
AM417T	Acacia cornigera	Mimosaceae	Acacia	cornigera
AM020T	Acacia farnesiana	Mimosaceae	Acacia	farnesiana
AM170T	Albizia adinocephala	Mimosaceae	Albizia	adinocephala
AM158T	Anacardium exelsum	Anacardiaceae	Anacardium	exelsum
AM420T	Anacardium occidentale	Anacardiaceae	Anacardium	occidentale
AM433T	Annona cherimola	Annonaceae	Annona	cherimola
AM002T	Annona muricata	Annonaceae	Annona	muricata
AM003T	Annona sp.	Arecaceae	Annona	sp.
AM439T	Ardisia comprassa	Myrsinaceae	Ardisia	comprassa
AS018T	Artocarpus altilis	Moraceae	Artocarpus	altilis
AS021T	Artocarpus camansi	Moraceae	Artocarpus	camansi
AS039T	Artocarpus heterophylla	Moraceae	Artocarpus	heterophylla
AS004T	Averrhoa bilimbi	Averrhoaceae	Averrhoa	bilimbi
AS008T	Averrhoa carambola	Averrhoaceae	Averrhoa	carambola
AS041T	Averrhoa carambola acido	Averrhoaceae	Averrhoa	carambola acido
AS010T	Azadirachta indica	Meliaceae	Azadirachta	indica
AS011T	Bauhinia purpurea	Caesalpiniaceae	Bauhinia	purpurea
AM004T	Bixa orellana	Bixaceae	Bixa	orellana
AM406T	Bixa orellana amarillo	Bixaceae	Bixa	orellana
AM405T	Bixa urucurana	Bixaceae	Bixa	urucurana
AF006T	Blighia sapida	Sapindaceae	Blighia	sapida
AM165T	Bravaisia integerrima	Acanthaceae	Bravaisia	integerrima
AM174T	Bursera simaruba	Burseraceae	Bursera	simaruba
AM432T	Byrsonyma crassifolia	Malpighiaceae	Byrsonyma	crassifolia
AM456T	Caesalpinia eryostachys	Caesalpiniaceae	Caesalpinia	eryostachys
AM430T	Caesalpinia pulcherrima	Caesalpiniaceae	Caesalpinia	pulcherrima
AM435T	Caesalpinia pulcherrima Amarillo	Caesalpiniaceae	Caesalpinia	pulcherrima Amarillo
AM024T	Calliandra haematocephala	Mimosaceae	Calliandra	haematocephala
AM021T	Calliandra surinamensis	Mimosaceae	Calliandra	surinamensis
AS006T	Callistemon viminalis	Myrtaceae	Calistemon	viminalis
AS017T	Cananga odorata	Annonaceae	Cananga	odorata
AM155T	Carica cauliflora	Moraceae	Carica	cauliflora
AM154T	Carica papaya	Moraceae	Carica	papaya
AM427T	Casearia sylvestris	Flacourtiaceae	Casearia	sylvestris
AS044T	Cassia fistula	Caesalpiniaceae	Cassia	fistula
AM457T	Cassia grandis	Caesalpiniaceae	Cassia	grandis
AM083T	Castilla elastica	Moraceae	Castilla	elastica
AM074T	Cecropia insignis	Cecropiaceae	Cecropia	insignis
AM073T	Cecropia obtusifolia	Cecropiaceae	Cecropia	obtusifolia
AM072T	Cecropia peltata	Cecropiaceae	Cecropia	peltata
AM026T	Cedrela odorata	Meliaceae	Cedrela	odorata
AM017T	Ceiba pentandra	Bombacaceae	Ceiba	pentandra
AM259T	Chimarrhis sp.	Rubiaceae	Chimarrhis	sp.
AM019T	Chrysophyllum sp.	Sapotaceae	Chrysophyllum	sp.
AM214T	Chrysophyllum sp.	Sapotaceae	Chrysophyllum	sp.
AM431T	Chrysophyllum sp.	Sapotaceae	Chrysophyllum	sp.
AS003T	Cinnamomum verum	Lauraceae	Cinnamomum	verum
AM009T	Citharexylum caudatum	Verbenaceae	Citharexylum	caudatum
AS037T	Citrus aurantifolia	Rutaceae	Citrus	aurantifolia
AS046T	Citrus deliciosa	Rutaceae	Citrus	deliciosa
AM006T	Coccocoba uvifera	Polygonaceae	Coccocoba	uvifera
AS031T	Codiaeum variegatum	Euphorbiaceae	Codiaeum	variegatum
AM421T	Cojoba costaricense	Mimosaceae	Cojoba	costaricense
AM015T	Crescentia alata	Bignoniaceae	Crescentia	alata
AM425T	Cupania glabra	Sapindaceae	Cupania	glabra
AM280T	Cusapoa villosa	Ceppropiaceae	Cusapoa	villosa
AM169T	Cybistax donnell smithii	Bignoniaceae	Cybitax	donnell smithii
AF002T	Delonix regia	Caesalpiniaceae	Delonix	regia
AM262T	Dendropanax arboreus	Araliaceae	Dendropanax	arboreus
AM437T	Diphysa americana	Papilionaceae	Diphysa	americana
AM008T	Dipteryx panamensis	Papilionaceae	Dipteryx	panamensis
AM160T	Enterolobium cyclocarpum	Fabaceae	Enterolobium	cyclocarpum

AM443T	Erythrina costaricensis	Papilionaceae	Erythrina	costaricensis
AM444T	Erythrina fusca	Papilionaceae	Erythrina	fusca
AM023T	Erythrina lanceolata	Fabaceae	Erythrina	lanceolata
AM022T	Erythrina sp.	Fabaceae	Erythrina	sp.
AS013T	Eucalyptus sp.	Myrtaceae	Eucalyptus	sp.
AM350T	Eugenia uniflora	Myrtaceae	Eugenia	uniflora
AS016T	Ficus benjamina	Moraceae	Ficus	benjamina
AM264T	Ficus brevibracteata	Moraceae	Ficus	brevibracteata
AM269T	Ficus cahuitensis	Moraceae	Ficus	cahuitensis
AM276T	Ficus citrifolia	Moraceae	Ficus	citrifolia
AM273T	Ficus colubrinae	Moraceae	Ficus	colubrinae
AS035T	Ficus elastica	Moraceae	Ficus	elastica
AM162T	Ficus goldmanii	Moraceae	Ficus	goldmanii
AM163T	Ficus longifolia	Moraceae	Ficus	longifolia
AM266T	Ficus morazaniana	Moraceae	Ficus	morazaniana
AM161T	Ficus nymphaeifolia	Moraceae	Ficus	nymphaeifolia
AS014T	Ficus panda	Moraceae	Ficus	panda
AM279T	Ficus pertusa	Moraceae	Ficus	pertusa
AM013T	Ficus sp.	Moraceae	Ficus	sp.
AM265T	Ficus sp.	Moraceae	Ficus	sp.
AM267T	Ficus sp.	Moraceae	Ficus	sp.
AM270T	Ficus sp.	Moraceae	Ficus	sp.
AM271T	Ficus sp.	Moraceae	Ficus	sp.
AM272T	Ficus sp.	Moraceae	Ficus	sp.
AM274T	Ficus sp.	Moraceae	Ficus	sp.
AM306T	Ficus sp.	Moraceae	Ficus	sp.
AM268T	Ficus tonduzii	Moraceae	Ficus	tonduzii
AM173T	Genipa americana	Rubiaceae	Genipa	americana
AS043T	Gmelina aborea	Verbenaceae	Gmelina	aborea
AS012T	Grevillea robusta	Proteaceae	Grevillea	robusta
AM167T	Guarea sp.	Meliaceae	Guarea	sp.
AM060T	Hamelia patens	Rubiaceae	Hamelia	patens
AM426T	Heisteria longipes	Olacaceae	Heisteria	longipes
AM313T	Heliocarpus sp.	Tiliaceae	Heliocarpus	sp.
AM084T	Herrania purpurea	Sterculiaceae	Herrania	purpurea
AM331T	Hibiscus pernambucensis	Malvaceae	Hibiscus	pernambucensis
AM127T	Hura crepitans	Euphorbiaceae	Hura	crepitans
AM171T	Hyeronima oblonga	Euphorbiaceae	Hyeronima	oblonga
AM159T	Hymenea courbaril	Caesalpiniaceae	Hymenea	courbaril
AM308T	Inga alba	Fabaceae	Inga	alba
AM305T	Inga ciliata	Fabaceae	Inga	ciliata
AM304T	Inga edulis	Fabaceae	Inga	edulis
AM454T	Inga nobilis	Mimosaceae	Inga	nobilis
AM487T	Inga sapindoides	Fabaceae	Inga	sapindoides
AM303T	Inga skutchii	Fabaceae	Inga	skutchii
AM309T	Inga sp.	Fabaceae	Inga	sp.
AM312T	Inga sp.	Fabaceae	Inga	sp.
AM307T	Inga spectabilis A	Fabaceae	Inga	spectabilis A
AM164T	Inga spectabilis D	Fabaceae	Inga	spectabilis D
AM310T	Inga thibaudiana	Fabaceae	Inga	thibaudiana
AM455T	Inga tonduzii	Mimosaceae	Inga	tonduzii
AM311T	Inga umbellifera	Fabaceae	Inga	umbellifera
AM261T	Isoftia sp.	Rubiaceae	Isoftia	sp.
AM316T	Jacaranda copaia	Bignoniaceae	Jacaranda	copaia
AM007T	Jacaranda mimosifolia	Bignoniaceae	Jacaranda	mimosifolia
AM442T	Jacarata dolichaulea	Cariaceae	Jacarata	dolichaulea
AM514T	Jatropha curcas	Euphorbiaceae	Jatropha	curcas
AM423T	Jatropha multifida	Euphorbiaceae	Jatropha	multifida
AS005T	Lagerstroemia speciosa	Lythraceae	Lagerstroemia	speciosa
AM257T	Lecythis ampla	Lecythidaceae	Lecythis	ampla
AM418T	Licania sp.	Chrysobalanaceae	Licania	sp.
AM419T	Licania sp.	Chrysobalanaceae	Licania	sp.
AS034T	Litchi chinensis	Sapindaceae	Litchi	chinensis
AM260T	Macrocnenum glabrescens	Rubiaceae	Macrocnenum	glabrescens
AM018T	Mammea americana	Clusiaceae	Mammea	americana
AS009T	Melaleuca decora	Myrtaceae	Melaleuca	decora
AM125T	Minquartia guianensis	Olacaceae	Minquartia	guianensis

AS045T	Murraya paniculata	Rutaceae	Murraya	paniculata
AS015T	Myristica fragrans	Myristicaceae	Myristica	fragrans
AM447T	Nectandra membranaceae	Lauraceae	Nectandra	membranaceae
AM449T	Nectandra reticulata	Lauraceae	Nectandra	reticulata
AM028T	Nectandra sp.	Lauraceae	Nectandra	sp.
AS042T	Nephelium lappaceum	Sapindaceae	Nephelium	lappaceum
AS023T	Ochna integerrima	Ochnaceae	Ochna	integerrima
AM413T	Ochroma pyramidale	Bombacaceae	Ochroma	pyramidale
AM441T	Oreopanax sp.	Araliaceae	Oreopanax	sp.
AM005T	Pachira aquatica	Bombacaceae	Pachira	aquatica
AM178T	Pachira quinata	Bombacaceae	Pachira	quinata
AS033T	Peltophorum inerme	Caesalpinaceae	Peltophorum	inerme
AM179T	Pentaclethra macroloba	Mimosaceae	Pentaclethra	macroloba
AM407T	Persea americana	Lauraceae	Persea	amaricana
AM012T	Plumeria rubra	Apocynaceae	Plumeria	rubra
AM263T	Poulsenia armata	Moraceae	Poulsenia	armata
AM411T	Pouruma cecropiifolia	Cecropiaceae	Pouruma	cecropiifolia
AM258T	Pricramnia antidesma	Simaroubaceae	Pricramnia	antidesma
AM016T	Pseudobombax septanum	Bombacaceae	Pseudobombax	septanum
AM176T	Psidium cattleianum	Myrtaceae	Psidium	cattleianum
AM177T	Psidium friedrichstahlianum	Myrtaceae	Psidium	friedrichstahlianum
AM059T	Quassia amara	Simaroubaceae	Quassia	amara
AM448T	Rhodostemonodaphne kunthiana	Lauraceae	Rhodostemonodaphne	kunthiana
AM424T	Rollinia jimenzii	Annonaceae	Rollinia	jimenzii
AM450T	Sapium glandulosum	Lauraceae	Sapium	glandulosum
AS001T	Schefflera amate	Araliaceae	Schefflera	amate
AM011T	Schizolobium parahyba	Fabaceae	Schizolobium	parahyba
AF005T	Spathodea campanulata	Bignoniaceae	Spathodea	campanulata
AS007T	Spondias dulcis	Anacardiaceae	Spondias	dulcis
AM014T	Sterculia recordiana	Sterculiaceae	Sterculia	recordiana
AM422T	Swartzia sumorum	Papilionaceae	Swartzia	sumorum
AM027T	Swietenia macrophylla	Meliaceae	Swietenia	macrophylla
AM492T	Symphonia gabonensis	Clusiaceae	Symphonia	gabonensis
AS040T	Syzygium jambos	Myrtaceae	Syzygium	jambos
AS022T	Syzygium malaccense	Myrtaceae	Syzygium	malaccense
AF008T	Tamarindus indica	Fabaceae	Tamarindus	indica
AM412T	Terminalia amazonia	Combretaceae	Terminalia	amazonia
AM157T	Terminalia catappa	Combretaceae	Terminalia	catappa
AM062T	Theobroma bicolor	Sterculiaceae	Theobroma	bicolor
AM061T	Theobroma cacao	Sterculiaceae	Theobroma	cacao
AM166T	Virola koschnyi	Myristicaceae	Virola	koschnyi
AM415T	Virola sebifera	Myristicaceae	Virola	sebifera
AM414T	Vitex cooperi	Verbenaceae	Vitex	cooperi
AM429T	Xylopia sp.	Annonaceae	Xylopia	sp.
AM409T	Xylosma chlorantha	Flacourtiaceae	Xylosma	chlorantha
AM172T	Zanthoxylum acuminatum	Rutaceae	Zanthoxylum	acuminatum
AM434T	Zygia longifolia	Mimosaceae	Zygia	longifolia

# ..... Palms .....

The plant list shows a wide range of diversity in the group of palms. Palms from America, Asia and Africa are present. This group of plants contains small to large palms, from the deminute *Chamaedorea robertii* of 0,5 m to the majestic royal palm; *Roystonea regia* of 15 m.

Some palms are emergents that thrive in the warm and sunny exhibit. Some palms prefers the shade and coolness in the understorey.



AM142P *Chamaedorea robertii*, America



AS020P *Caryota urens*, Asia

ID NO.	Name	Family	Genera	Species
AS032P	<i>Areca triandra</i>	Arecaceae	Areca	triandra
AM250P	<i>Asterogyne martiana</i>	Arecaceae	Asterogyne	martiana
AM133P	<i>Astrocaryum alatum</i>	Arecaceae	Astrocaryum	alatum
AM134P	<i>Astrocaryum standleyanum</i>	Arecaceae	Astrocaryum	standleyanum
AM136P	<i>Attalea butyracea</i>	Arecaceae	Attalea	butyracea
AM146P	<i>Bactris candata</i>	Arecaceae	Bactris	candata
AM139P	<i>Bactris gasipaes</i>	Arecaceae	Bactris	gasipaes
AM488P	<i>Bactris glandulosa</i>	Arecaceae	Bactris	glandulosa
AM254P	<i>Bactris gracilior</i>	Arecaceae	Bactris	gracilior
AM147P	<i>Bactris hondurensis</i>	Arecaceae	Bactris	hondurensis
AM148P	<i>Bactris longiseta</i>	Arecaceae	Bactris	longiseta
AM252P	<i>Bactris maraja</i>	Arecaceae	Bactris	maraja
AM253P	<i>Bactris</i> sp.	Arecaceae	Bactris	sp.
AM130P	<i>Calyptrogyne ghiesbreghtiana</i>	Arecaceae	Calyptrogyne	ghiesbreghtiana
AS020P	<i>Caryota urens</i>	Arecaceae	Caryota	urens
AM135P	<i>Chamaedorea allenii</i>	Arecaceae	Chamaedorea	allenii
AM142P	<i>Chamaedorea robertii</i>	Arecaceae	Chamaedorea	robertii
AM129P	<i>Chamaedorea tepejilote</i>	Arecaceae	Chamaedorea	tepejilote
AF007P	<i>Chrysalidocarpus lutescens</i>	Arecaceae	Chrysalidocarpus	lutescens
AM099P	<i>Cocos nucifera</i>	Arecaceae	Cocos	nucifera
AM150P	<i>Crysophila warszewiczii</i>	Arecaceae	Crysophila	warszewiczii
AM248P	<i>Desmoncus orthacanthos</i>	Arecaceae	Desmoncus	orthacanthos
AF004P	<i>Elaeis guineensis</i>	Arecaceae	Elaeis	guineensis
AM138P	<i>Geonoma congesta</i>	Arecaceae	Geonoma	congesta
AM144P	<i>Geonoma interrupta</i>	Arecaceae	Geonoma	interrupta
AM137P	<i>Geonoma</i> sp.	Arecaceae	Geonoma	sp.
AM145P	<i>Geonoma</i> sp.	Arecaceae	Geonoma	sp.
AM256P	<i>Geonoma</i> sp.	Arecaceae	Geonoma	sp.
AM489P	<i>Geonoma</i> sp.	Arecaceae	Geonoma	sp.
AM132P	<i>Iriartea deltoidea</i>	Arecaceae	Iriartea	deltoidea
AM255P	<i>Oenocarpus mapora</i>	Arecaceae	Oenocarpus	mapora
AM140P	<i>Prestoea decurrens</i>	Arecaceae	Prestoea	decurrens
AS029P	<i>Raphis excelsa</i>	Arecaceae	Raphis	excelsa
AM131P	<i>Reinhardtia koschnyana</i>	Arecaceae	Reinhardtia	koschnyana
AM001P	<i>Roystonea regia</i>	Arecaceae	Roystonea	regia
AM149P	<i>Socratea exorrhiza</i>	Arecaceae	Socratea	exorrhiza
AM151P	<i>Syagrus romanzoffiana</i>	Arecaceae	Syagrus	romanzoffiana
AM141P	<i>Synechanthus warszewiczianus</i>	Arecaceae	Synechanthus	warszewiczianus
AM143P	<i>Welfia regia</i>	Arecaceae	Welfia	regia

# Understorey

The plant list shows a group of plants of high diversity and many flowering plants from America, Asia and Africa.

These plants we find in the shade of the emergent trees or developing in the light gaps of fallen giants or landslide areas.



AM107U *Crinum rubescens*, America



AM100U *Heliconia wagneriana*, America



AM315U *Costus barbatus*, America



AS030U *Zingiber officinalis*, Asia



AM081U *Pentagonia wendlandii*, America

ID NO.	Name	Family	Genera	Species
AM365U	<i>Acrostichum danaeifolium</i>	Pteridaceae	<i>Acrostichum</i>	<i>danaeifolium</i>
AM366U	<i>Adiantum concinnum</i>	Adiantaceae	<i>Adiantum</i>	<i>concinnum</i>
AM513U	<i>Adiantum petiolatum</i>	Pteridaceae	<i>Adiantum</i>	<i>petiolatum</i>
AM352U	<i>Adiantum polyphyllum</i>	Adiantaceae	<i>Adiantum</i>	<i>polyphyllum</i>
AM286U	<i>Aechmea magdalena</i> e	Bromeliaceae	<i>Aechmea</i>	<i>magdalena</i> e
AM152U	<i>Ananas comosum</i>	Bromeliaceae	<i>Ananas</i>	<i>comosum</i>
AM436U	<i>Aneilema</i> sp.	Commelinaceae	<i>Aneilema</i>	sp.
AF001U	<i>Angiopteris evecta</i>	Marattiaceae	<i>Angiopteris</i>	<i>evecta</i>
AM156U	<i>Aphelandra squarrosa</i>	Acanthaceae	<i>Aphelandra</i>	<i>squarrosa</i>
AM201U	<i>Asplundia brunneistigma</i>	Cyclanthaceae	<i>Asplundia</i>	<i>brunneistigma</i>
AM318U	<i>Asplundia sleeperae</i>	Cyclanthaceae	<i>Asplundia</i>	<i>sleeperae</i>
AM319U	<i>Asplundia</i> sp.	Cyclanthaceae	<i>Asplundia</i>	sp.
AM321U	<i>Asplundia</i> sp.	Cyclanthaceae	<i>Asplundia</i>	sp.
AS038U	<i>Bambusa</i> sp.	Gramineae	<i>Bambusa</i>	sp.
AM115U	<i>Begonia heraclefolia</i>	Begoniaceae	<i>Begonia</i>	<i>heraclefolia</i>
AM372U	<i>Blechnum occidentale</i>	Blechnaceae	<i>Blechnum</i>	<i>occidentale</i>
AM364U	<i>Bolbitis</i> sp.	Lomariopsidaceae	<i>Bolbitis</i>	sp.
AM093U	<i>Calathea crotalifera</i>	Maranthaceae	<i>Calathea</i>	<i>crotalifera</i>
AM227U	<i>Calathea leucostachys</i>	Maranthaceae	<i>Calathea</i>	<i>leucostachys</i>
AM095U	<i>Calathea lutea</i>	Maranthaceae	<i>Calathea</i>	<i>lutea</i>
AM216U	<i>Calathea marantifolia</i>	Maranthaceae	<i>Calathea</i>	<i>marantifolia</i>
AM091U	<i>Calathea micans</i>	Maranthaceae	<i>Calathea</i>	<i>micans</i>
AM085U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM086U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM088U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM089U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM092U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM094U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM217U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM218U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM219U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM220U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM221U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM222U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM223U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM224U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM225U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM226U	<i>Calathea</i> sp.	Maranthaceae	<i>Calathea</i>	sp.
AM090U	<i>Calathea veitchiana</i>	Maranthaceae	<i>Calathea</i>	<i>veitchiana</i>
AM087U	<i>Calathea warchzewickii</i>	Maranthaceae	<i>Calathea</i>	<i>warchzewickii</i>
AM490U	<i>Canna indica</i>	Cannaceae	<i>Canna</i>	<i>indica</i>
AM071U	<i>Carludovica drudei</i>	Cyclanthaceae	<i>Carludovica</i>	<i>drudei</i>
AM325U	<i>Carludovica</i> sp.	Cyclanthaceae	<i>Carludovica</i>	sp.
AM251U	<i>Cascabela thevetia</i>	Apocynaceae	<i>Cascabela</i>	<i>thevetia</i>
AM180U	<i>Chlorospatha croatiana</i>	Araceae	<i>Chlorospatha</i>	<i>croatiana</i>
AM329U	<i>Chrysobalanus icaco</i>	Chrysobalanaceae	<i>Chrysobalanus</i>	<i>icaco</i>
AM212U	<i>Chusquea</i> sp.	Gramineae	<i>Chusquea</i>	sp.

AM186U	<i>Clidemia densiflora</i>	Melastomataceae	<i>Clidemia</i>	<i>densiflora</i>
AM315U	<i>Costus barbatus</i>	Costaceae	<i>Costus</i>	<i>barbatus</i>
AM347U	<i>Costus bracteatus</i>	Costaceae	<i>Costus</i>	<i>bracteatus</i>
AM029U	<i>Costus laevis</i>	Costaceae	<i>Costus</i>	<i>laevis</i>
AM033U	<i>Costus malortieanus</i>	Costaceae	<i>Costus</i>	<i>malortieanus</i>
AM036U	<i>Costus pulverulentus</i>	Costaceae	<i>Costus</i>	<i>pulverulentus</i>
AM346U	<i>Costus scaber</i>	Costaceae	<i>Costus</i>	<i>scaber</i>
AM032U	<i>Costus sp.</i>	Costaceae	<i>Costus</i>	<i>sp.</i>
AM034U	<i>Costus sp.</i>	Costaceae	<i>Costus</i>	<i>sp.</i>
AM035U	<i>Costus sp.</i>	Costaceae	<i>Costus</i>	<i>sp.</i>
AM215U	<i>Costus sp.</i>	Costaceae	<i>Costus</i>	<i>sp.</i>
AM314U	<i>Costus sp.</i>	Costaceae	<i>Costus</i>	<i>sp.</i>
AS047U	<i>Costus speciosa</i>	Costaceae	<i>Costus</i>	<i>speciosa</i>
AM030U	<i>Costus stenophyllus</i>	Costaceae	<i>Costus</i>	<i>stenophyllus</i>
AM031U	<i>Costus villosissimus</i>	Costaceae	<i>Costus</i>	<i>villosissimus</i>
AM345U	<i>Costus woodsonii</i>	Costaceae	<i>Costus</i>	<i>woodsonii</i>
AM107U	<i>Crinum erubescens</i>	Amaryllidaceae	<i>Crinum</i>	<i>erubescens</i>
AS019U	<i>Curcuma sp.</i>	Zingiberaceae	<i>Curcuma</i>	<i>sp.</i>
AM070U	<i>Cyclanthus bipartitus</i>	Cyclanthaceae	<i>Cyclanthus</i>	<i>bipartitus</i>
AM511U	<i>Cyclanthus sp.</i>	Cyclanthaceae	<i>Cyclanthus</i>	<i>sp.</i>
AM370U	<i>Danaea media</i>	Mariatiaceae	<i>Danaea</i>	<i>media</i>
AM097U	<i>Dichorisandra amabilis</i>	Commelinaceae	<i>Dichorisandra</i>	<i>amabilis</i>
AM098U	<i>Dichorisandra thyrsifolia</i>	Commelinaceae	<i>Dichorisandra</i>	<i>thyrsifolia</i>
AM187U	<i>Dicranopygium sp.</i>	Cyclanthaceae	<i>Dicranopygium</i>	<i>sp.</i>
AM322U	<i>Dicranopygium wedelii</i>	Cyclanthaceae	<i>Dicranopygium</i>	<i>wedelii</i>
AM402U	<i>Didymochlaena truncatula</i>	Aspidiaceae	<i>Didymochlaena</i>	<i>truncatula</i>
AM111U	<i>Dieffenbachia nitidipetiolata</i>	Araceae	<i>Dieffenbachia</i>	<i>nitidipetiolata</i>
AM110U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM112U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM113U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM114U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM343U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM344U	<i>Dieffenbachia sp.</i>	Araceae	<i>Dieffenbachia</i>	<i>sp.</i>
AM037U	<i>Dimerocostus strobilaceus</i>	Costaceae	<i>Dimerocostus</i>	<i>strobilaceus</i>
AM393U	<i>Diplazium striatastrum</i>	Athyriaceae	<i>Diplazium</i>	<i>striatastrum</i>
AM175U	<i>Dracontium pittieri</i>	Araceae	<i>Dracontium</i>	<i>pittieri</i>
AM374U	Fern sp			
AM375U	Fern sp			
AM376U	Fern sp			
AM377U	Fern sp			
AM378U	Fern sp			
AM380U	Fern sp.			
AM386U	Fern sp.			
AM387U	Fern sp.			
AM388U	Fern sp.			
AM389C	Fern sp.			
AM390U	Fern sp.			
AM392U	Fern sp.			
AM395U	Fern sp.			
AM398U	Fern sp.			
AM399U	Fern sp.			
AM400U	Fern sp.			

AM401U	Fern sp.			
AM510U	Fern sp.			
AM512U	Fern sp.			
AM213U	<i>Guadua</i> sp.	Gramineae	<i>Guadua</i>	sp.
AM076U	<i>Gynerium</i> <i>sagittatum</i>	Poaceae	<i>Gynerium</i>	<i>sagittatum</i>
AS036U	<i>Hedychium</i> <i>coronarium</i>	Zingiberaceae	<i>Hedychium</i>	<i>coronarium</i>
AM244U	<i>Heliconia</i> <i>clinophila</i>	Heloniaceae	<i>Heliconia</i>	<i>clinophila</i>
AM245U	<i>Heliconia</i> <i>imbricata</i>	Heloniaceae	<i>Heliconia</i>	<i>imbricata</i>
AM508U	<i>Heliconia</i> <i>irrasa</i>	Heloniaceae	<i>Heliconia</i>	<i>irrasa</i>
AM242U	<i>Heliconia</i> <i>latisphata</i>	Heloniaceae	<i>Heliconia</i>	<i>latisphata</i>
AM506U	<i>Heliconia</i> <i>longiflora</i>	Heloniaceae	<i>Heliconia</i>	sp.
AM241U	<i>Heliconia</i> <i>mariae</i>	Heloniaceae	<i>Heliconia</i>	<i>mariae</i>
AM243U	<i>Heliconia</i> <i>pogonantha</i>	Heloniaceae	<i>Heliconia</i>	<i>pogonantha</i>
AM240U	<i>Heliconia</i> <i>psittacorum</i>	Heloniaceae	<i>Heliconia</i>	<i>psittacorum</i>
AM507U	<i>Heliconia</i> <i>reticulata</i>	Heloniaceae	<i>Heliconia</i>	<i>reticulata</i>
AM101U	<i>Heliconia</i> sp.	Heloniaceae	<i>Heliconia</i>	sp.
AM246U	<i>Heliconia</i> sp.	Heloniaceae	<i>Heliconia</i>	sp.
AM100U	<i>Heliconia</i> <i>wagneriana</i>	Heloniaceae	<i>Heliconia</i>	<i>wagneriana</i>
AM185U	<i>Homalomena</i> <i>wendlandii</i>	Araliaceae	<i>Homalomena</i>	<i>wendlandii</i>
AM182U	<i>Hymenocallis</i> <i>littoralis</i>	Amaryllidaceae	<i>Hymenocallis</i>	<i>littoralis</i>
AM063U	<i>Ischnosiphon</i> <i>inflatus</i>	Maranthaceae	<i>Ischnosiphon</i>	<i>inflatus</i>
AM348U	<i>Limnocharis</i> <i>flava</i>	Limnocharitaceae	<i>Limnocharis</i>	<i>flava</i>
AM096U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM497U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM499U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM500U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM501U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM502U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM503U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM504U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM505U	Melastomataceae sp.	Melastomataceae	Melastomataceae	sp.
AM446U	<i>Monrichardia</i> <i>arborensens</i>	Araceae	<i>Monrichardia</i>	<i>arborensens</i>
AM249U	<i>Nephrolepis</i> <i>biserrata</i>	Polypodiaceae	<i>Nephrolepis</i>	<i>biserrata</i>
AM247U	<i>Nephrolepis</i> sp.	Polypodiaceae	<i>Nephrolepis</i>	sp.
AM373U	<i>Nephrolepis</i> sp.	Lomariopsidaceae	<i>Nephrolepis</i>	sp.
AM385U	<i>Nephrolepis</i> sp.	Lomariopsidaceae	<i>Nephrolepis</i>	Sp.
AM354U	<i>Niphidium</i> <i>nudulare</i>	Polypodiaceae	<i>Niphidium</i>	<i>nudulare</i>
AM355U	<i>Niphidium</i> sp.	Polypodiaceae	<i>Niphidium</i>	Sp.
AM356U	<i>Niphidium</i> sp.	Polypodiaceae	<i>Niphidium</i>	Sp.
AM357U	<i>Niphidium</i> sp.	Polypodiaceae	<i>Niphidium</i>	Sp.
AM358U	<i>Niphidium</i> sp.	Polypodiaceae	<i>Niphidium</i>	Sp.
AM359U	<i>Niphidium</i> sp.	Polypodiaceae	<i>Niphidium</i>	Sp.

AM079U	Pentagonia macrophylla	Rubiaceae	Pentagonia	macrophylla
AM080U	Pentagonia sp.	Rubiaceae	Pentagonia	sp.
AM081U	Pentagonia wendlandii	Rubiaceae	Pentagonia	wendlandii
AM233U	Philodendron grandipes	Araceae	Philodendron	grandipes
AM362U	Phlebodium sp.	Polypodiaceae	Phlebodium	sp.
AM183U	Piper auritum	Piperaceae	Piper	auritum
AM462U	Piper cenocladom	Piperaceae	Piper	cenocladom
AM473U	Piper evasum	Piperaceae	Piper	evasum
AM483U	Piper friedrichsthali	Piperaceae	Piper	friedrichsthali
AM479U	Piper melanocladum	Piperaceae	Piper	melanocladum
AM476U	Piper multiplinervum	Piperaceae	Piper	multiplinervum
AM481U	Piper ortopodium	Piperaceae	Piper	ortopodium
AM468U	Piper paulifolium	Piperaceae	Piper	paulifolium
AM184U	Piper peltatum	Piperaceae	Piper	peltatum
AM461U	Piper pleiostachopiper	Piperaceae	Piper	pleiostachopiper
AM458U	Piper reticulatum	Piperaceae	Piper	reticulatum
AM459U	Piper sp.	Piperaceae	Piper	sp.
AM464U	Piper sp.	Piperaceae	Piper	sp.
AM465U	Piper sp.	Piperaceae	Piper	sp.
AM466U	Piper sp.	Piperaceae	Piper	sp.
AM467U	Piper sp.	Piperaceae	Piper	sp.
AM469U	Piper sp.	Piperaceae	Piper	sp.
AM470U	Piper sp.	Piperaceae	Piper	sp.
AM471U	Piper sp.	Piperaceae	Piper	sp.
AM474U	Piper sp.	Piperaceae	Piper	sp.
AM475U	Piper sp.	Piperaceae	Piper	sp.
AM477U	Piper sp.	Piperaceae	Piper	sp.
AM478U	Piper sp.	Piperaceae	Piper	sp.
AM480U	Piper sp.	Piperaceae	Piper	sp.
AM482U	Piper sp.	Piperaceae	Piper	sp.
AM484U	Piper sp.	Piperaceae	Piper	sp.
AM485U	Piper sp.	Piperaceae	Piper	sp.
AM486U	Piper sp.	Piperaceae	Piper	sp.
AM463U	Piper urostachyum	Piperaceae	Piper	urostachyum
AM460U	Piper violae	Piperaceae	Piper	violae
AM367U	Pityrogramma calomelanos	Hemionitidaceae	Pityrogramma	calomelanos
AM381U	Polypodium sp.	Polypodiaceae	Polypodium	sp.
AM384C	Polypodium sp.	Polypodiaceae	Polypodium	Sp.
AM351U	Pteris altissima	Pteridaceae	Pteris	altissima
AM379U	Pteris sp.	Pteridaceae	Pteris	sp.
AF003U	Ravenala madagascariensis	Strelitziaceae	Ravenala	madagascariensis
AM103U	Renalmia sp.	Zingiberaceae	Renalmia	sp.
AM102U	Renealmia cernua	Zingiberaceae	Renalmia	cernua
AM105U	Renealmia pluriplicata	Zingiberaceae	Renalmia	pluriplicata
AM371C	Salpichlaena volubilis	Blechnaceae	Salpichlaena	volubilis
AM403U	Selaginella anceps	Selaginellaceae	Selaginella	anceps
AM404U	Selaginella sp.	Selaginellaceae	Selaginella	sp.
AM118U	Spathiphyllum sp.	Araceae	Spathiphyllum	sp.
AM119U	Spathiphyllum sp.	Araceae	Spathiphyllum	sp.
AM120U	Spathiphyllum sp.	Araceae	Spathiphyllum	sp.
AM117U	Spathiphyllum wendlandii	Araceae	Spathiphyllum	wendlandii

AM188U	<i>Sphaeradenia acutitepala</i>	Cyclanthaceae	<i>Sphaeradenia</i>	acutitepala
AM181U	<i>Sphaeradenia</i> sp.	Cyclanthaceae	<i>Sphaeradenia</i>	sp.
AM330U	<i>Stachytarpheta jamaicensis</i>	Verbenaceae	<i>Stachytarpheta</i>	jamaicensis
AM353U	<i>Tectaria brauniana</i>	Dryopteridaceae	<i>Tectaria</i>	brauniana
AM363U	<i>Tectaria</i> sp.	Dryopteridaceae	<i>Tectaria</i>	sp.
AM360U	<i>Thelypteris ghiesbreghtiana</i>	Thelypteridaceae	<i>Thelypteris</i>	ghiesbreghtiana
AM368U	<i>Thelypteris lingulata</i>	Thelypteridaceae	<i>Thelypteris</i>	lingulata
AM498U	<i>Triolena</i> sp.	Melastomataceae	<i>Triolena</i>	sp.
AM116U	<i>Xanthosoma undipes</i>	Araceae	<i>Xanthosoma</i>	undipes
AM121U	<i>Xiphidium caeruleum</i>	Haemodoraceae	<i>Xiphidium</i>	caeruleum
AM058U	<i>Zamia neurophyllidia</i>	Zamiaceae	<i>Zamia</i>	neurophyllidia
AS030U	<i>Zingiber officinalis</i>	Zingiberaceae	<i>Zingiber</i>	officinalis

# .....Epiphytes.....

Epiphyte means "growing on plant" – and these plants you will find growing on the trunks and branches of trees (and palms).

Their roots cling to the tree, but they are not parasitic and not any hazard to the tree in general.



AM287E Aechmea mariae-reginae, America



AM042E Anthurium andreanum, America



AM324E Evodianthus funifer, America



AM283E Tillandsia bulbosa, America

ID NO.	Name	Family	Genera	Species
AM287E	<i>Aechmea mariae-reginae</i>	Bromeliaceae	<i>Aechmea</i>	<i>mariae-reginae</i>
AM284E	<i>Aechmea nudicaulis</i>	Bromeliaceae	<i>Aechmea</i>	<i>nudicaulis</i>
AM290E	<i>Aechmea pubescens</i>	Bromeliaceae	<i>Aechmea</i>	<i>pubescens</i>
AM153E	<i>Aechmea</i> sp.	Bromeliaceae	<i>Aechmea</i>	sp.
AM042E	<i>Anthurium andreanum</i>	Araceae	<i>Anthurium</i>	<i>andreanum</i>
AM039E	<i>Anthurium bakeri</i>	Araceae	<i>Anthurium</i>	<i>bakeri</i>
AM038E	<i>Anthurium clavigerum</i>	Araceae	<i>Anthurium</i>	<i>clavigerum</i>
AM339E	<i>Anthurium consobrinum</i>	Araceae	<i>Anthurium</i>	<i>consobrinum</i>
AM051E	<i>Anthurium crystallinum</i>	Araceae	<i>Anthurium</i>	<i>crystallinum</i>
AM048E	<i>Anthurium cuspidatum</i>	Araceae	<i>Anthurium</i>	<i>cuspidatum</i>
AM337E	<i>Anthurium fatoense</i>	Araceae	<i>Anthurium</i>	<i>fatoense</i>
AM040E	<i>Anthurium gracile</i>	Araceae	<i>Anthurium</i>	<i>gracile</i>
AM047E	<i>Anthurium pentaphyllum</i>	Araceae	<i>Anthurium</i>	<i>pentaphyllum</i>
AM044E	<i>Anthurium prolatum</i>	Araceae	<i>Anthurium</i>	<i>prolatum</i>
AM054E	<i>Anthurium salvinii</i>	Araceae	<i>Anthurium</i>	<i>salvinii</i>
AM045E	<i>Anthurium scandens</i>	Araceae	<i>Anthurium</i>	<i>scandens</i>
AM053E	<i>Anthurium schottianum</i>	Araceae	<i>Anthurium</i>	<i>schottianum</i>
AM041E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM046E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM049E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM050E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM052E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM055E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM056E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM106E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM338E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM340E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM341E	<i>Anthurium</i> sp.	Araceae	<i>Anthurium</i>	sp.
AM336E	<i>Anthurium subsignatum</i>	Araceae	<i>Anthurium</i>	<i>subsignatum</i>
AM043E	<i>Anthurium upalense</i>	Araceae	<i>Anthurium</i>	<i>upalense</i>
AM281E	<i>Catopsis nutans</i>	Bromeliaceae	<i>Catopsis</i>	<i>nutans</i>
AM190E	<i>Catopsis paniculata</i>	Bromeliaceae	<i>Catopsis</i>	<i>paniculata</i>
AM289E	<i>Catopsis sessiliflora</i>	Bromeliaceae	<i>Catopsis</i>	<i>sessiliflora</i>
AM293E	<i>Catopsis</i> sp.	Bromeliaceae	<i>Catopsis</i>	sp.
AM294E	<i>Catopsis</i> sp.	Bromeliaceae	<i>Catopsis</i>	sp.
AM302E	<i>Catopsis</i> sp.	Bromeliaceae	<i>Catopsis</i>	sp.
AM126E	<i>Clusia</i> sp.	Clusiaceae	<i>Clusia</i>	sp.
AM108E	<i>Cochliostema odoratissimum</i>	Commelinaceae	<i>Cochliostema</i>	<i>odoratissimum</i>
AM191E	<i>Columnea</i> sp.	Gesneraceae	<i>Columnea</i>	sp.
AM324E	<i>Evodianthus funifer</i>	Cyclanthaceae	<i>Evodianthus</i>	<i>funifer</i>
AM193E	<i>Guzmania monostachia</i>	Bromeliaceae	<i>Guzmania</i>	<i>monostachia</i>
AM192E	<i>Guzmania</i> sp.	Bromeliaceae	<i>Guzmania</i>	sp.
AM285E	<i>Guzmania</i> sp.	Bromeliaceae	<i>Guzmania</i>	sp.
AM292E	<i>Guzmania</i> sp.	Bromeliaceae	<i>Guzmania</i>	sp.
AM301E	<i>Guzmania</i> sp.	Bromeliaceae	<i>Guzmania</i>	sp.
AM194E	<i>Ludovia integrifolia</i>	Cyclanthaceae	<i>Ludovia</i>	<i>integrifolia</i>
AM122E	<i>Peperomia</i> sp.	Piperaceae	<i>Peperomia</i>	sp.
AM211E	<i>Philodendron davidsonii</i>	Araceae	<i>Philodendron</i>	<i>davidsonii</i>
AM109E	<i>Philodendron wendlandii</i>	Araceae	<i>Philodendron</i>	<i>wendlandii</i>
AM195E	<i>Pitcairnea wendlandii</i>	Bromeliaceae	<i>Pitcairnea</i>	<i>wendlandii</i>
AM283E	<i>Tillandsia bulbosa</i>	Bromeliaceae	<i>Tillandsia</i>	<i>bulbosa</i>
AM282E	<i>Tillandsia pruinosa</i>	Bromeliaceae	<i>Tillandsia</i>	<i>pruinosa</i>
AM196E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM295E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM296E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM297E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM298E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM299E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM300E	<i>Tillandsia</i> sp.	Bromeliaceae	<i>Tillandsia</i>	sp.
AM197E	<i>Tillandsia usneoides</i>	Bromeliaceae	<i>Tillandsia</i>	<i>usneoides</i>

AM199E	<i>Tradescantia zanonia</i>	Commelinaceae	<i>Tradescantia</i>	<i>zanonia</i>
AM198E	<i>Tradescantia zebrina</i>	Commelinaceae	<i>Tracescantia</i>	<i>zebrina</i>
AM291E	<i>Vriesea bicolor</i>	Bromeliaceae	<i>Vriesea</i>	<i>bicolor</i>
AM288E	<i>Vriesea heliconoides</i>	Bromeliaceae	<i>Vriesea</i>	<i>heliconoides</i>
AM349E	<i>Vriesia</i> sp.	Bromeliaceae	<i>Vriesia</i>	sp.

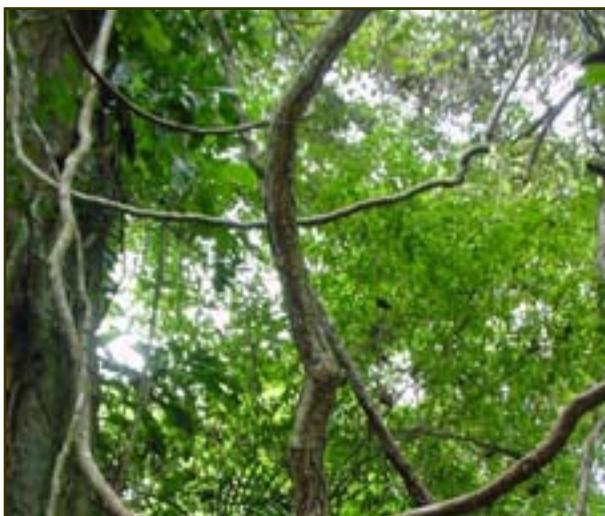
# Climbers

Lianas and climbers are gathered in this group. Lianas are in fact a very slender tree that are unable to sustain itself and therefore uses another tree to rapidly grow all the way up to the crown of the "helper" – and there develop a crown that will compete for the light.

Climbers are also using trees to escalate using their roots to cling to the trunk. Climbers rarely emerge in crown foliage of the "helper" but stays below in the shade.



AM078C *Passiflora vittifolia*, America



AM077C *Gurania makoyana*, America



AM202C *Bauhinia guianensis*, America



AM234C *Philodendron verrucosum*, America

ID NO.	Name	Family	Genera	Species
AM025C	Allamanda cathartica	Apocynaceae	Allamanda	cathartica
AM200C	Aristolochia sp.	Aristolochiaceae	Aristolochia	sp.
AM495C	Aristolochia sp.	Aristolochiaceae	Aristolochia	sp.
AM496C	Aristolochia sp.	Aristolochiaceae	Aristolochia	sp.
AM494C	Aristolochia sprucei	Aristolochiaceae	Aristolochia	sprucei
AM493C	Aristolochia translucida	Aristolochiaceae	Aristolochia	translucida
AM320C	Asplundia sp.	Cyclanthaceae	Asplundia	sp.
AM323C	Asplundia sp.	Cyclanthaceae	Asplundia	sp.
AM202C	Bauhinia guianensis	Fabaceae	Bauhinia	guianensis
AM428C	Bauhinia outimouta	Caesalpiniaceae	Bauhinia	outimouta
AM128C	Bytneria aculeata	Sterculiaceae	Bytneria	aculeata
AM491C	Davilla kunthii	Dilleniaceae	Davilla	kunthii
AM382C	Fern sp.			
AM383C	Fern sp.			
AM077C	Gurania makoyana	Curcurbitaceae	Gurania	makoyana
AM203C	Heteropsis oblongifolia	Araceae	Heteropsis	oblongifolia
AM334C	Heteropsis sp.	Araceae	Heteropsis	sp.
AM332C	Ipomoea pes-caprae	Convolvulaceae	Ipomoea	pes-caprae
AM204C	Monstera sp.	Araceae	Monstera	sp.
AM205C	Mucuna holtonii	Fabaceae	Mucuna	holtonii
AM206C	Mucuna mutisiana	Fabaceae	Mucuna	mutisiana
AM078C	Passiflora vittifolia	Passifloraceae	Passiflora	vittifolia
AM317C	Paullinia sp.	Sapindaceae	Paullinia	sp.
AM445C	Paullinia sp.	Sapindaceae	Paullinia	sp.
AM230C	Philodendron jodavisionum	Araceae	Philodendron	jodavisionum
AM237C	Philodendron rothschuhianum	Araceae	Philodendron	rothschuhianum
AM067C	Philodendron sp.	Araceae	Philodendron	sp.
AM068C	Philodendron sp.	Araceae	Philodendron	sp.
AM069C	Philodendron sp.	Araceae	Philodendron	sp.
AM228C	Philodendron sp.	Araceae	Philodendron	sp.
AM229C	Philodendron sp.	Araceae	Philodendron	sp.
AM231C	Philodendron sp.	Araceae	Philodendron	sp.
AM232C	Philodendron sp.	Araceae	Philodendron	sp.
AM235C	Philodendron sp.	Araceae	Philodendron	sp.
AM236C	Philodendron sp.	Araceae	Philodendron	sp.
AM326C	Philodendron sp.	Araceae	Philodendron	sp.
AM327C	Philodendron sp.	Araceae	Philodendron	sp.
AM333C	Philodendron sp.	Araceae	Philodendron	sp.
AM234C	Philodendron verrucosum	Araceae	Philodendron	verrucosum
AM208C	Smilax sp.	Smilacaeae	Smilax	sp.
AM207C	Smilax spissa	Smilacaeae	Smilax	spissa
AM209C	Stenospermation marantifolia	Araceae	Stenospermation	marantifolia
AM064C	Stenospermation sp.	Araceae	Stenospermation	sp.
AM065C	Stenospermation sp.	Araceae	Stenospermation	sp.
AM066C	Stenospermation sp.	Araceae	Stenospermation	sp.
AM238C	Syngonium angustatum	Araceae	Syngonium	angustatum
AM210C	Syngonium sp.	Araceae	Syngonium	sp.
AM328C	Syngonium sp.	Araceae	Syngonium	sp.
AM335C	Syngonium sp.	Araceae	Syngonium	sp.

# Tropical Zoo Plants

## GLOSSARY

Ever wonder what a distichous leaf arrangement is? Not sure what tomentum is? Then this glossary is for you! You don't have to be a palm expert to appreciate the beauty and diversity of palms, so we don't think you should have to be an expert to be able to order the seeds to grow them. In an effort to make our site more user friendly for the lay gardener, or for those who simply are not conversant with palm terminology, we have added a glossary of terms commonly used throughout this site. Included here are terms that even the good plant glossaries have left out, perhaps because the authors thought they were "too simple," and, perhaps more importantly, we have avoided using even more complex terminology in our definitions. (After all, if you are unsure what a spathe is, then will finding out it's a "sheathing bract enclosing a young inflorescence" really help you?)

The glossary includes a listing of words in the form or forms in which they are used in the site, followed by sample usage (in parenthesis) if important for clarification; the form or "part of speech" in italics (*adj.* = adjective, *adv.* = adverb, *n.* = noun, or *v.* = verb); the plural, if unusual; and finally, the definition.

Example:

**spicate** (~ inflorescence) *adj.* : unbranched, spike-like.

In this example, the term "spicate" is being defined. In parenthesis is an example of how spicate (the ~ symbol stands for the vocabulary word being defined, here "spicate") is used in the text, i.e. a "spicate inflorescence." Since spicate is used here to describe inflorescence, it takes the form of an adjective (adj.). The definition of spicate then follows: "unbranched, spike-like."

Note: any time the ~ symbol appears in the definition, insert the vocabulary word being defined. For instance, after the basic definition of "pinnate," we further explain what it means to be "evenly," "finely," or "sparsely" pinnate in this fashion: "evenly ~, leaflets are the same shape and distance from each other".

Term	Sample usage	Part of sp. Definition
<b>aerial root</b>		<i>n.</i> grows above ground instead of below; usually supports the trunk, then also called a "stilt root"
<b>apex</b>	(leaf ~, leaflet ~)	<i>n.</i> tip
<b>arching</b>	(~ leaves, ~ leaflets)	<i>adj.</i> having a curved or arch shape, not erect
<b>armament</b>		<i>n.</i> protection; see also "armed"
<b>armed</b>		<i>adj.</i> having spines or thorns
<b>ascending</b>	(~ leaves)	<i>adj.</i> upward growing
<b>bifid</b>	(~ leaves, ~ leaflet apexes, ~ fibers)	<i>adj.</i> divided or forked into two parts, or deeply notched
<b>bipinnate</b>	(~ leaf)	<i>adj.</i> twice divided, featherlike leaf
<b>blade</b>	(leaf ~)	<i>n.</i> flat or expanded part of the leaf; the part that is palmate or pinnate
<b>bloom</b>		<i>n.</i> thin, waxy film covering the surface of a leaf or other part of a plant
<b>bract</b>		<i>n.</i> leaflike structure on the inflorescence, typically protecting parts of the young inflorescence (see also "inflorescence bract," "peduncular bract," and "bracteole")
<b>bracteole</b>		<i>n.</i> small bract subtending a flower (see also "bract")
<b>branched</b>	(~ stem, ~ inflorescence, ~ leaflet)	<i>adj.</i> split into two or more parts
<b>bulbous</b>	(~ trunk)	<i>adj.</i> bulging, swollen, bulb-shaped
<b>cabbage</b>	(palm ~)	<i>n.</i> edible growth center of a palm, usually called heart-of-palm
<b>cane</b>		<i>n.</i> thin or reedlike stem or trunk
<b>cirrus</b>		<i>n.</i> [pl. cirri] long extention of the leaf midrib with hooks used by the plant to climb, whiplike climbing organ (see also "flagellum")
<b>climbing palm</b>		<i>n.</i> has a long, thin trunk that uses other trees for support
<b>clump</b>		<i>n.</i> group or cluster
<b>clumping</b>	(~ palm)	<i>adj.</i> forming clumps or groups (see also "clustering" and "suckering")
<b>clustering</b>	(~ palm, ~ habit)	<i>adj.</i> growing side shoots and developing into groups of stems (see also "clumping" and "suckering")
<b>coco-fiber</b>		<i>n.</i> planting compost made from coconut husks
<b>cone of stilt roots</b>		<i>n.</i> mass of stilt or aerial roots forming a cone shape
<b>conical</b>	(~ trunk)	<i>adj.</i> shaped like a cone
<b>conservatory</b>		<i>n.</i> greenhouse for tender plants
<b>container plant</b>		<i>n.</i> grown in a container or pot instead of the ground, typical for nursery production
<b>costa</b>		<i>n.</i> the part of the leaf stalk extending into the leaf blade in a costapalmate leaf
<b>costapalmate</b>	(~ leaves)	<i>adj.</i> shaped like the palm of a hand with part of the leaf stalk extending into the leaf blade
<b>crown</b>		<i>n.</i> head of leaves
<b>crownshaft</b>		<i>n.</i> tubular leaf sheaths or leaf bases tightly wrapped around each other forming a cylinder on top of the trunk
<b>cultivar</b>		<i>n.</i> distinct form of a plant in cultivation, for instance dwarf or variegated
<b>cultivate</b>		<i>v.</i> to grow or raise, aided by humans vs. wild grown
<b>dichotomous</b>	(~ stem)	<i>adj.</i> equally forking
<b>diminutive</b>	(~ palm)	<i>adj.</i> undersized
<b>distichous</b>	(~ leaf arrangement)	<i>adj.</i> arranged in two opposing rows on either side of a trunk
<b>distribution</b>		<i>n.</i> area of natural occurrence
<b>divided</b>	(~ leaves, ~ leaflets)	<i>adj.</i> not entire
<b>dwarf</b>	(~ palm)	<i>adj.</i> small or undersized
<b>elliptic</b>	(~ leaflets, ~ leaves)	<i>adj.</i> like a flattened circle or oval in shape
<b>endemic</b>		<i>adj.</i> growing only in a specific area
<b>entire</b>	(~ leaves, ~	<i>adj.</i> undivided, whole

	leaflets)		
<b>erect</b>	(~ trunk, ~ leaves, ~ leaflets)	<i>adj.</i>	stiffly upward or upright
<b>fan</b>	(~ leaf)	<i>adj.</i>	palmate; shaped like the palm of a hand, semicircular or circular, with leaf segments radiating from a single point
<b>feather</b>	(~ leaf)	<i>adj.</i>	pinnate, divided in segments like a feather
<b>feather-duster</b>	(~ crown)	<i>adj.</i>	shaped like a feather-duster or shuttlecock
<b>fibrous</b>		<i>adj.</i>	having or made up of fibers
<b>fissured</b>	(~ trunk)	<i>adj.</i>	having clefts or splits
<b>flagellum</b>		<i>n.</i>	[pl. flagella] whiplike climbing organ with hooked spines, derived from a flower stalk. (see also "cirrus")
<b>flange</b>		<i>n.</i>	flat ridge or protrusion; also called a wing
<b>flexuous</b>		<i>adj.</i>	lax or flexible
<b>flower</b>		<i>n.</i>	reproductive organ
<b>flush</b>		<i>n.</i>	fresh, new growth
<b>forked</b>		<i>adj.</i>	divided into two equal parts
<b>fronds</b>		<i>n.</i>	leaves of palms, ferns, or the like
<b>fruit</b>		<i>n.</i>	seed-bearing organ
<b>genus</b>		<i>n.</i>	group of closely related species (for example, <i>Trachycarpus</i> , <i>Sabal</i> , <i>Phoenix</i> , etc.) in the Linnean system of biological taxonomy & classification
<b>germinate</b>		<i>v.</i>	to sprout a seed
<b>glaucous</b>		<i>adj.</i>	dull grayish green or blue usually created by a waxy bloom covering a surface
<b>habit</b>	(clustering ~)	<i>n.</i>	mode of growth
<b>habitat</b>		<i>n.</i>	natural environment in which a plant grows
<b>hardy</b>	(cold ~)	<i>adj.</i>	able to withstand adverse conditions for prolonged periods of time (see also "tolerant")
<b>hastula</b>		<i>n.</i>	protrusion at the joint between leafstalk and leafblade in a palmate leaf
<b>humus</b>	(~ rich soil)	<i>n.</i>	decomposing organic matter
<b>hybrid</b>		<i>n. or adj.</i>	offspring of two plants of different species or genera, not pure
<b>inflorescence</b>		<i>n.</i>	flower stalk
<b>inflorescence bract</b>		<i>n.</i>	a leaflike structure on the rachis of the flowerstalk subtending a partial flowerstalk (see also "bract")
<b>infructescence</b>		<i>n.</i>	fruit stalk; like an inflorescence but in fruit vs. in flower
<b>interandean</b>	(~ valleys)	<i>adj.</i>	dry, high altitude valleys between the main ridges of the Andes mountains in South America
<b>internode</b>		<i>n.</i>	space between "nodes" or points of leaf attachment on a trunk or stem
<b>irregular</b>	(~ly arranged)	<i>adv. or adj.</i>	unevenly arranged, leaflets are inserted at different distances from each other
<b>lanceolate</b>	(~ leaflets)	<i>adj.</i>	shaped like a spearhead, tapering to each end
<b>leaf base</b>		<i>n.</i>	lower, expanded part of the leaf that attaches to the trunk
<b>leaf blade</b>		<i>n.</i>	lamina; upper, expanded part of the leaf; part most commonly thought of as the leaf itself
<b>leaf segment</b>		<i>n.</i>	section of a palmate or costapalmate leaf
<b>leaf sheath</b>		<i>n.</i>	leaf base or lowest part of the leaf that is enveloping or "sheathing" the trunk. Tubular while developing, then splitting or remaining entire (if entire, then it is called a "crownshaft")
<b>leaf stalk</b>		<i>n.</i>	petiole; part of leaf found between the base and the blade
<b>leaflet</b>		<i>n.</i>	segment of a pinnate leaf
<b>leathery</b>		<i>adj.</i>	having a texture like leather, thick and strong vs. papery
<b>marbled</b>		<i>adj.</i>	showing various colors in blotches; mottled
<b>midrib</b>		<i>n.</i>	main vein of a leaflet
<b>montane</b>		<i>adj.</i>	specific zone of altitude in mountains, at least 500 m (1600 ft.)
<b>mottled</b>		<i>adj.</i>	having blotches of various colors; marbled
<b>mulch</b>		<i>n.</i>	top dressing (wood chips, peat, straw, leaves, etc.) around a plant's roots
<b>mulch</b>		<i>v.</i>	to apply a top dressing
<b>nodal scar</b>		<i>n.</i>	scar left on the stem where a leaf was attached
<b>nodding</b>	(~ leaves, ~ leaflets)	<i>adj.</i>	drooping
<b>node</b>		<i>n.</i>	point where a leaf is or was attached to the stem; see also

			"internode"
<b>notch</b>		<i>n.</i>	small V-shaped cut in leaf or leaflet
<b>orbicular</b>	(~ leaf blade)	<i>adj.</i>	spherical or circular, like an orb
<b>palmette</b>	(~ leaf)	<i>adj.</i>	shaped like a fan, or the palm of a hand, semicircular or circular, with leaf segments radiating from a single point
<b>peat</b>		<i>n.</i>	decomposed peat moss, partly carbonized
<b>peduncle</b>		<i>n.</i>	inflorescence stalk
<b>peduncular bract</b>		<i>n.</i>	a leaflike structure subtending the inflorescence stalk
<b>pendent</b>		<i>adj.</i>	drooping
<b>pendulous</b>	(~ leaflets)	<i>adj.</i>	drooping, suspended (strongly ~, hanging vertically)
<b>petiole</b>		<i>n.</i>	leaf stalk, located between the base and the blade
<b>pinna</b>		<i>n.</i>	[pl. pinnae] primary leaflet of a pinnate leaf
<b>pinnate</b>	(~ leaves, ~ palm)	<i>adj.</i>	featherlike in appearance with leaflets on either side of the leaf midrib [rachis] (regularly ~, leaflets are the same distance from each other; finely ~, having thin pinnae; sparsely ~, having few pinnae)
<b>pinnule</b>		<i>n.</i>	secondary leaflet of a bipinnate leaf
<b>plumose</b>	(~ leaves)	<i>adj.</i>	bushy, feathery; having leaflets orientated in different directions
<b>pollen</b>		<i>n.</i>	plant "sperm"
<b>pollination</b>		<i>n.</i>	transference of genetic material through the pollen from a male flowering organ to a female flowering organ
<b>pot plant</b>		<i>n.</i>	usually grown in a pot inside a house vs. in the greenhouse or outside
<b>prickly</b>	(~ crownshaft)	<i>adj.</i>	indicates it has spines
<b>pseudostem</b>		<i>n.</i>	literally "false stem," looks like a stem but is actually tightly packed leafbases
<b>pseudotrunk</b>		<i>n.</i>	literally "false trunk," looks like a trunk but is actually tightly packed leafbases
<b>pubescence</b>		<i>n.</i>	felt of hairs
<b>rachis</b>		<i>n.</i>	midrib of a leaf or inflorescence
<b>recurved</b>	(~ leaves)	<i>adj.</i>	strongly arching
<b>regular</b>	(~ outline)	<i>adj.</i>	even
<b>rein</b>		<i>n.</i>	threadlike tissue connecting the leaftips of developing leaves in pinnate palms
<b>rhizome</b>		<i>n.</i>	underground stem or rootstock
<b>ring</b>		<i>n.</i>	nodal scar
<b>ring scars</b>		<i>n.</i>	internodes
<b>ringed</b>	(~ trunk)	<i>adj.</i>	having nodal scars
<b>root-shaped</b>		<i>adj.</i>	reduplicate; A-shaped in cross section (as opposed to induplicate or "valley-shaped")
<b>root hardy</b>		<i>adj.</i>	surviving the winter underground by the means of rhizomes, bulbs, etc
<b>rotund</b>		<i>adj.</i>	rounded
<b>runners</b>		<i>n.</i>	long, extended rhizomes
<b>savanna</b>		<i>n.</i>	dry tropical or subtropical grassland or very open forest
<b>scale</b>		<i>n.</i>	dry, flattened plates
<b>seed</b>		<i>n.</i>	mature ovule
<b>seedling</b>		<i>n.</i>	very young plant, recently germinated
<b>segment</b>		<i>n.</i>	section of a palmate or costapalmate leaf
<b>self-cleaning</b>	(~ trunk)	<i>adj.</i>	the leaves falling off completely, leaving a smooth trunk
<b>serpentine</b>	(~ soil)	<i>adj.</i>	mineral or rock that is rich in magnesium. Soil derived from serpentine is ultrabasic and poor in nutrients
<b>sheath</b>		<i>n.</i>	leaf base or lowest part of the leaf that is enveloping or "sheathing" the trunk. Tubular while developing, then splitting or remaining entire (if entire, then it is called a "crownshaft"); (see "leaf sheath")
<b>sheathing</b>		<i>v.</i>	enveloping the trunk or another organ of the plant
<b>shuttlecock</b>	(~ crown)	<i>adj.</i>	looking like a feather-duster or the tail feathers of a rooster
<b>sickle-shaped</b>		<i>adj.</i>	curved, wide at one end, tapering towards the other
<b>side shoot</b>		<i>n.</i>	sucker or sprout off the main trunk
<b>simple</b>	(~ leaves)	<i>adj.</i>	undivided
<b>sinker</b>		<i>n.</i>	the elongated leaf stalk of the first leaf (shoot) produced in some palms after germination, whose purpose is to push the plant down into the soil

<b>site</b>		<i>v.</i>	to place in the landscape
<b>solitary</b>	(~ palm, ~ stem, ~ trunk)	<i>adj.</i>	not suckering, only producing a single stem
<b>spathe</b>		<i>n.</i>	sheathing bract that encloses and protects the young flower stalk
<b>species</b>		<i>n.</i>	taxonomic group of closely related plants with common characteristics that set it apart from another group. Subdivision of a genus in the Linnean system of biological taxonomy & classification (for example, <i>fortunei</i> , <i>martianus</i> , <i>humilis</i> etc.; see also "genus")
<b>sphagnum</b>		<i>n.</i>	fresh peat moss
<b>spicate</b>	(~ inflorescence)	<i>adj.</i>	unbranched, spikelike
<b>spike</b>		<i>n.</i>	inflorescence, usually unbranched
<b>spine</b>		<i>n.</i>	protruding, thornlike protective organ
<b>spreading</b>	(~ crown)	<i>adj.</i>	expansive, not upright
<b>sprout</b>		<i>n.</i>	germinated seed
<b>stalk</b>		<i>n.</i>	see "leaf stalk," "flower stalk," etc
<b>stem</b>		<i>n.</i>	main axis of a plant; trunk
<b>stilt root</b>		<i>n.</i>	prop root, grows above ground instead of below and supports the trunk (also see: "aerial root")
<b>stratification</b>		<i>v.</i>	process of planting seed in moist sand and exposing it to low temperatures to trigger germination
<b>subcanopy</b>		<i>n.</i>	plants in a forest that grow taller than the understorey but do not quite reach the canopy
<b>subterranean</b>		<i>adj.</i>	underground
<b>subtropical</b>		<i>adj.</i>	climatic region between temperate and tropical
<b>sucker</b>		<i>n.</i>	sideshoot or sprout off the main trunk
<b>suckering</b>	(~ trunk, ~ stem)	<i>adj.</i>	clumping, clustering vs. solitary
<b>tap root</b>		<i>n.</i>	thick root that grows vertically into the soil to tap a source of water
<b>taxonomy</b>		<i>n.</i>	classification of plants or animals
<b>temperate</b>		<i>adj.</i>	roughly, a climate where the yearly amplitudes of temperature are greater than the daily amplitudes
<b>tolerant</b>		<i>adj.</i>	suggests a plant will tolerate conditions for a limited period of time but is not necessarily "hardy" towards those conditions (see also "hardy")
<b>tomentose</b>		<i>adj.</i>	covered with fine scales, fur, hair, or wool
<b>tomentum</b>		<i>n.</i>	layer of thin scales, fur, hair, or wool
<b>toothed</b>	(~ leaf, ~ leaflet, ~ leafstalk)	<i>adj.</i>	with toothlike edges
<b>tristichous</b>	(~ leaf arrangement)	<i>adj.</i>	arranged in three vertical rows on a trunk
<b>tropical</b>		<i>adj.</i>	roughly, a climatic area where the daily amplitudes of temperature are greater than the yearly amplitudes. Geographically located roughly between the Tropic of Cancer in the north and the Tropic of Capricorn in the South
<b>trunk</b>		<i>n.</i>	stem
<b>trunkless</b>		<i>adj.</i>	without a trunk or with a subterranean trunk
<b>undergrowth</b>		<i>n.</i>	lowest layer of plants in a forest
<b>understorey</b>		<i>n.</i>	lower layers of plants in a forest that do not reach the canopy and are shade loving
<b>undivided</b>	(~ leaves)	<i>adj.</i>	entire, whole, not broken down into segments or leaflets
<b>undulate</b>		<i>adj.</i>	wavy
<b>upright</b>	(~ crown, ~ leaves, ~ trunk)	<i>adj.</i>	erect, vertical
<b>valley-shaped</b>		<i>adj.</i>	induplicate; V-shaped in cross section, trough-shaped (as opposed to reduplicate or "roof-shaped")
<b>vein</b>		<i>n.</i>	the conducting tissue of leaves
<b>viable</b>		<i>adj.</i>	alive and able to germinate
<b>wild</b>		<i>n. or adj.</i>	n. natural habitat; adj. unaided by humans (~ collected, collected in its natural habitat vs. from cultivated plants)