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Plants in Tropical Cities

Book · March 2014

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Plants

in Tropical Cities

Uvaria grandiflora



Boo Chih Min is passionate about plants! She studied botany at the National University of Singapore and has a keen interest in native and exotic plants of Singapore and the South-East Asian region. She has previously worked at the National Parks Board where she wrote the 1001 Garden Plants of Singapore which greatly improved accessibility of plant information to many nurseries, researchers, schools, governmental entities, and the general public. Her interests in the other aspect of plants, such as ecology, conservation and propagation has led to the set up of her current company, Uvaria Tide, which specializes in providing professional services for floristic survey, plant selection, plant supply and science-based consultancy for sustainable and ecologically-orientated multi-disciplinary projects: mangrove restoration, rainforest restoration, vertical greenery, rooftop greenery, greening of waterways, floating wetlands and the use of native plants in urban landscapes and forested areas.

Email: uvaria@hotmail.com

Sharon Y. J. Chew graduated from University of Queensland (Applied Science, major in Plants). Prior to that, she studied Horticulture and Landscape Management at Ngee Ann Polytechnic. She has a keen interest in turfgrass management. She has previously worked at the Orchid Country Club, a golf club where she managed the entire golf course and its associated landscaping needs. At the Singapore University of Technology and Design, Sharon manages several environmental science research projects such as the cleansing of canal waters using a selection of aquatic plants and developing the greening initiatives for Jurong island.

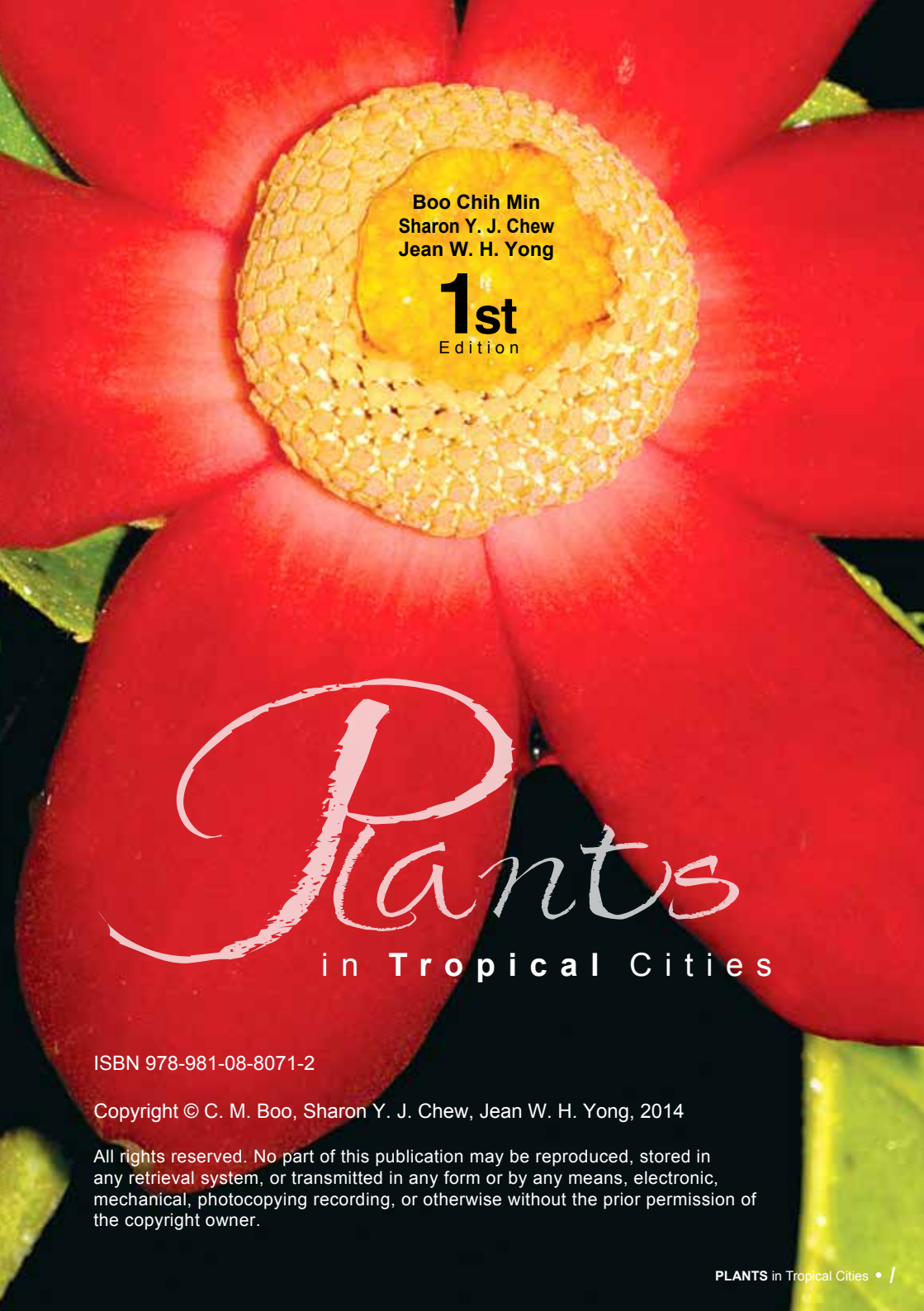
Email: sharonjing22@gmail.com



Jean W. H. Yong (John) finds bio-inspiration in plant diversity and adaptations! He is an Associate Professor at the Singapore University of Technology and Design and runs the Green Solutions Laboratory. John studied botany at the National University of Singapore and later, biochemistry and physiology at the Australian National University. He has written numerous scientific papers as well as several plant-science books such as *The Physiology of Orchids* in relation to the Industry and *A Selection of Plants for Greening of Waterways and Waterbodies in the Tropics* that greatly improved the availability of tropical plant scientific information to researchers, institutions, and the plant industry sectors.

Email: jwhyong@gmail.com

***Pellucieria rhizophorae* (Tea Mangrove)**



Boo Chih Min
Sharon Y. J. Chew
Jean W. H. Yong

1st
Edition

Plants
in Tropical Cities

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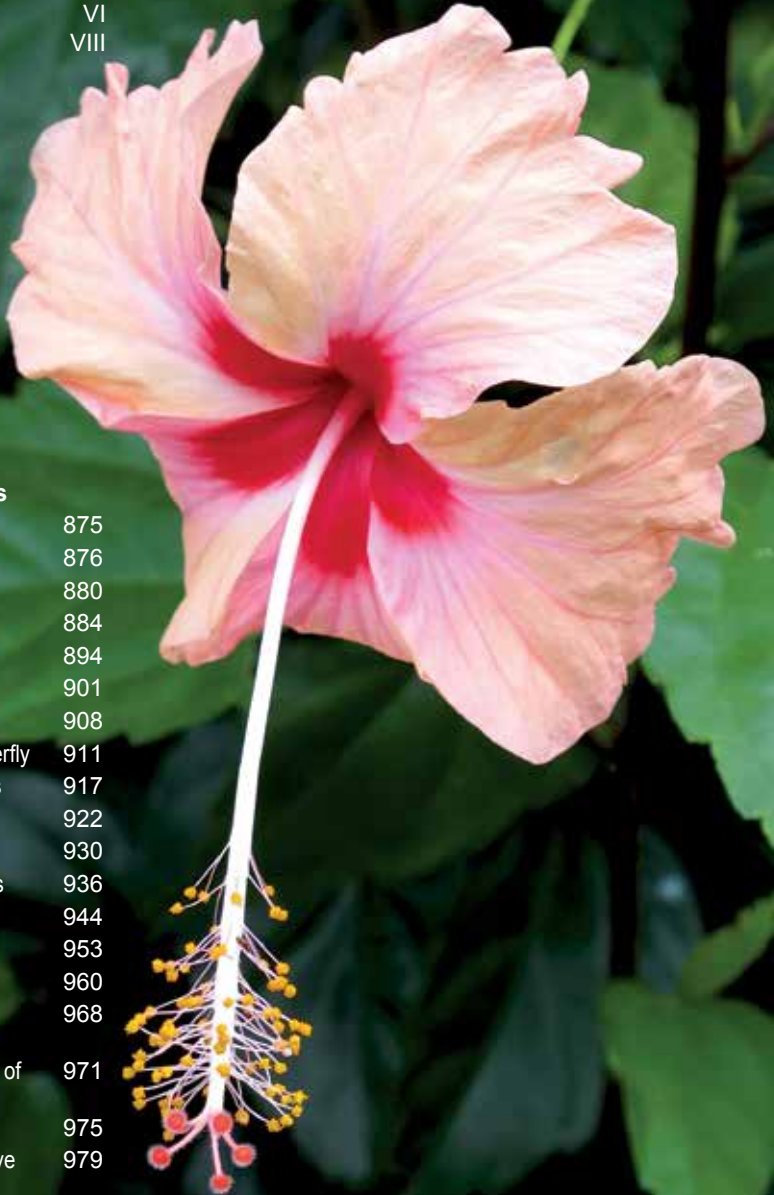
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Hibiscus sp.

Acknowledgements

This book was produced with the objective to enhance the level of awareness and interest in tropical plant species amongst the general public, as well as to raise the standard of horticultural and landscaping industry in tropical cities to a greater height.

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Last but not least, we would like to thank our families for their patient support and encouragement.

How to use this book?

Uvaria grandiflora



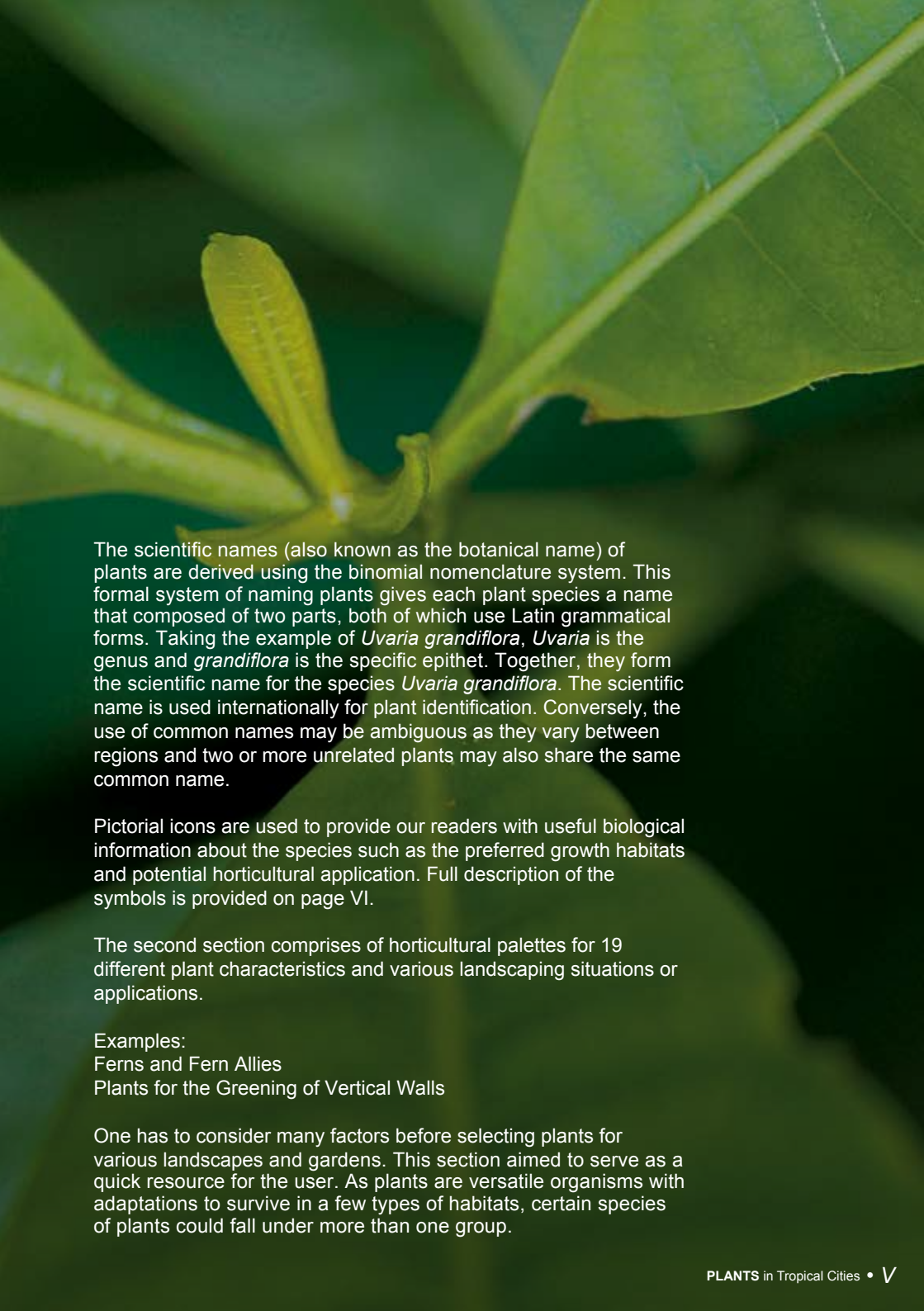
Annonaceae

Red Hot Poker, 山椒子、山椒、
大花紫玉盘

Unona grandiflora, *U. setigera*,
Uvaria purpurea, *U. platypetala*,
U. rhodantha, *U. rufa*, *U. setigera*

'Plants in Tropical Cities' is a pictorial reference to the vast selection of plants found in tropical cities. This book serves as a guide for horticulturists, landscapers and researchers in plant identification.

The main section of the book provides botanical information of the plant species using photos that illustrate their various morphological features. The plant species are arranged in alphabetical order according to their scientific name. Information pertaining to the individual species includes the Scientific Name, Family, Common Name and possible Synonym. Other useful botanical information and plant cultural needs are provided using various pictorial icons.



The scientific names (also known as the botanical name) of plants are derived using the binomial nomenclature system. This formal system of naming plants gives each plant species a name that composed of two parts, both of which use Latin grammatical forms. Taking the example of *Uvaria grandiflora*, *Uvaria* is the genus and *grandiflora* is the specific epithet. Together, they form the scientific name for the species *Uvaria grandiflora*. The scientific name is used internationally for plant identification. Conversely, the use of common names may be ambiguous as they vary between regions and two or more unrelated plants may also share the same common name.

Pictorial icons are used to provide our readers with useful biological information about the species such as the preferred growth habitats and potential horticultural application. Full description of the symbols is provided on page VI.

The second section comprises of horticultural palettes for 19 different plant characteristics and various landscaping situations or applications.

Examples:

Ferns and Fern Allies

Plants for the Greening of Vertical Walls

One has to consider many factors before selecting plants for various landscapes and gardens. This section aimed to serve as a quick resource for the user. As plants are versatile organisms with adaptations to survive in a few types of habitats, certain species of plants could fall under more than one group.

Key to Symbols

Plant Habits

- T** **Trees** — Plants which usually grow more than 3 metres in height and 10 centimetres in trunk diameter.
- S** **Shrub** — Plants with multiple stems and shorter in height, usually under 5 m.
- Cl** **Climbers** — Plants with soft, flat or round stems with a small diameter, which enable them to creep upwards along the trunk/ branches of trees or any other supporting structures.
- F** **Ferns** — Plants that do not bear flowers and thus produce no fruits or seeds; reproduce by spores instead.
- P** **Palms** — Plants with large, palmately or pinnately compound, evergreen leaves spirally arranged at the top of an unbranched trunk.
- Cy** **Cycads** — Palm-like plants with stout, woody trunk and a crown of hard and stiff evergreen leaves.

Plant Care Requirements

-  Prefers full-shade condition
-  Prefers semi-shade condition
-  Prefers full-sun condition
-  Requires occasional spraying
-  Requires little water for maintenance
-  Requires moderate watering for maintenance
-  Requires lots of water for maintenance and to be given on a regular basis

Plant Use/Characteristics



Tropical natives — Plants which thrive well in the tropics, where the climate is warm and generally moist all year round. These plants are found in Singapore and the neighbouring countries.



Suitable for roadside planting — Trees or palms which require little maintenance are suitable for roadside planting. Generally, larger trees and palms are planted along main roads, whereas smaller trees and palms are planted along minor roads.



Suitable for seaside planting — These plants tend to be tolerant of salt-sprays and the periodic strong coastal winds. Some may have varying degree of salt-tolerance to sea water.



Aquatic plants — Plants which are adapted to live in an aquatic environment.



Drought tolerant plants — Also known as xerophytes with high water-use efficiency. These plants are either morphologically or physiologically (or both) adapted to periodic water deficit.



Indoor Plants



Ornamental flowers



Herbs & Spices



Attracts birds



Ornamental foliage



Attracts butterflies

Preface

The use of plants in landscaping goes back a long way since 5000 years ago. In ancient civilisations, the choice of plants used for landscaping purposes may take into consideration of their botanical, cultural or mythological significance. During the mid-20th century and especially in urban cities, plants were primarily grown for simple aesthetic purposes within a man-made environment.


There are many avenues for using plants in our contemporary living environment. Plants can be used simply to form canopies that provide shade for any desired place, such as those planted along the road sides and in the parks. Plants are also grown to form “green” screens which block off unsightly views from an aesthetic perspective. The variety and availability of plants that can be used for any landscaping activity is indeed unlimited and this is especially true for the warmer tropical and sub-tropical cities. At present, a broad assortment of plant species is used to meet the ever increasing demand of compatible planting materials for urban landscapes and recreational areas.

Advancement made in the fields of horticulture and plant sciences had helped us to better understand the immense potential of using plants to improve the urban environment in which we live in. Within this context, plants are no longer cultivated solely for food, shade or aesthetic purposes but for the added

and often unseen “Ecological services” they provide. Apart from adding colours onto the seemingly boring concrete buildings, these plants are able to reduce the negative effects of our contemporary built environment. For example, recent studies have shown that green roofs and green walls can reduce the heat entering and “trapped” within the buildings. Many urban-dwellers also choose to grow potted plants indoor over artificial plants, which can improve the air quality of their homes and offices.

Plants also play a pivotal role in many Water-sensitive Urban Design, where landscaping practices and selected plants are carefully incorporated within modern civil engineering works in order to reduce flooding and even improving the water quality of the associated waterways and waterbodies. With the increasing desire among urban dwellers to have more greenery within the built environment, city planners are increasingly naturalizing former concrete canals with suitable plants to re-create natural Waterscapes in a bid to improve the livability of the area for the people

With an appropriate selection of plants from the ecological perspective, horticultural landscaping will help to re-introduce biodiversity back to the built environment by restoring the natural habitats that were previously lost as a result of urbanisation. As such, the role of plant introduction in any urban setting has gradually evolved over the years,



from its simple aesthetic purpose and towards improving the livability of the built environment using essentially the intrinsic biological properties of plants.

With the intention to conserve and restore the dwindling biological diversity and natural heritage within the built environment, suitable plant species, especially native or indigenous species, can be re-introduced back into cities through the process of urban

landscaping. The planting of native plants can restore the natural biodiversity and heritage of any given area by attracting some previously lost fauna.

In order to enjoy the beauty and multiple benefits of what plants can provide, it is important to first understand the biological features of these plants, and their basic growth requirements and compatibility with the tropical environment. This includes understanding the interactions between the plant species and the other organisms of the ecosystem (e.g. a legume plant and its symbiotic bacteria Rhizobium in the root nodules; potential pollinator of a fruit tree), as well as the influence of environmental factors on the growth of these plants. Therefore, having good horticultural and scientific understanding of the selected plants will provide landscapers and researchers with the necessary knowledge to choose the appropriate plants for their site of interest.

Plants in Tropical Cities aims to be a pictorial reference to the vast selection of plants found in many tropical and even sub-tropical cities. This book serves as a quick and easy-to-use guide for horticulturists, landscapers and researchers in plant identification. The first part of the book categorises the plants in alphabetical order according to their scientific name. In this part of the book, photos describing the plants will be shown to facilitate quick and reliable identification purpose. Each plant will then be further classified, in accordance to its



Begonia sp.

probable usage, in the later sections. The second segment contains 19 arbitrary growth habitat categories, with some brief descriptions for each growth habitat and their potential horticultural application. Photographs and iconic labels (e.g., sun-loving; low watering frequency) are used to describe each plant species and their basic growth preferences. It is noteworthy that certain species of plants can be classified under more than one group as the characteristics of plants are usually not “black and white” per se, and may be variable over a typical biological continuum.

As quoted from Baba Dioum, a well-known Senegalese conservationist:
“In the end, we will conserve only what we love, we will love only what we understand and we will understand only what we are taught.”

We sincerely hope that this book can increase the awareness, understanding and appreciation of tropical city plants. With greater and in-depth understanding of tropical plants and their growth habits, appropriate choice of plants can then be made for landscaping or any other activity involving plant selection leading to plant introduction on sites. From a broader perspective, the continual selection, introduction and integration of ecologically compatible plants into urban greenery is the most ideal approach to improve the livability of our cities while restoring and conserving our natural heritage and living environment in tropical cities.

Acanthus ilicifolius



Abelmoschus esculentus



Malvaceae Lady's-Finger, Okra, Gumbo, Bendi, 咖啡黄葵、黄苏葵、黄秋葵 *Hibiscus esculentus*

Abelmoschus sagittifolius



Malvaceae Tuberose Mallow, 箭叶秋葵 *Hibiscus sagittifolius*

Abroma augusta



Malvaceae Devil's Cotton, Indian Hemp, 昂天莲

Bixa orellana



Butia capitata



Arecaceae

Butià, Wine Palm, Jelly Palm,
Pindo Palm, 冻子椰子

Butia bonnettii, *Cocos capitata*

Byrsonima crassifolia



Malpighiaceae

Nance, Savanna Serrette,
Golden Spoon, 比尔松尼木属乔木

Malpighia crassifolia

Byttneria maingayi



Sterculiaceae

Cerbera manghas



Cyrtosperma johnstonii



Araceae

Arbi

Cyrtosperma merkusii



Araceae

Swamp Taro, Giant Swamp Taro

Cyrtostachys renda



Areaceae

Sealing-Wax Palm, Pinang Rajah,
Maharajah Palm, Lipstick Palm,
Red Sealing Wax, 印章棕

Cyrtostachys lakka

Delonix regia



Dypsis lutescens



Areaceae

Yellow Cane Palm, Golden Cane Palm, Butterfly Palm, Golden Fruited Palm, Madagascar Palm, Yellow Palm, Golden Cane Palm, Pinang Kuning, Bamboo Palm, Yellow Areca Palm, 散尾葵、黄椰子

Chrysalidocarpus baronii var. *littoralis*,
C. glaucescens, *C. lutescens*

Dypsis madagascariensis



Areaceae

Malagasy Palm, Butterfly Palm, Lucuba Palm, Mahajanga Palm, Farhazo, Hirihiy, Kizohazo, 马达加斯加椰子

Chrysalidocarpus lucubensis,
C. madagascariensis, *C. oleraceus*

Dysoxylum cauliflorum



Meliaceae

Stem Dysoxylon

Euphorbia sp.



E

Excoecaria agallocha



Euphorbiaceae

Blind-Your-Eyes, Buta-Buta, Bebuta, Milky Mangrove, 海漆

Excoecaria cochinchinensis



Euphorbiaceae

Buta-Buta, Bebuta, Daun Sambang, Daging, 红背桂, 青紫木

Excoecaria bicolor

Fagraea fragrans



Friesodielsia desmoides



Annonaceae Wedding Canange

Fuchsia Hybrids



Onagraceae Ladies' Eardrop, 倒挂金钟

Furcraea foetida 'Striata'



Agavaceae Giant False Agave, 黄纹万年麻 *Furcraea gigantea* 'Striata'

Grammatophyllum speciosum



Gynura procumbens



Asteraceae

Longevity Spinach, Sambung Nyawa, Green Harmony,
尖尾凤

Gynura pseudochina var. *hispida*



Asteraceae

紫绒草

Helianthus annuus



Hyophorbe verschaffeltii



Arecaceae

Spindle Palm, Palmiste Marron

Hypolytrum nemorum



Cyperaceae

割鸡芒

Hypolytrum formosanum, *H. latifolium*,
Schoenus nemorum

Hyptis capitata



Lamiaceae

Knobweed

Ixora congesta



Ixora Cultivars



Ixora Hybrid



Ixora 'Siam Ribbon'



Ixora 'Super Pink'



Ixora 'Super King'



Ixora 'Super Orange'



Ixora 'Light Pink'

Rubiaceae

Jatropha gossypifolia



Jacaranda obtusifolia



Bignoniaceae

Jacaranda, Green Ebony,
Jambol Merah, Jambul Merak, 蓝花楸

Bignonia filicifolia, *Jacaranda filicifolia*,
J. rhombifolia

Jackiopsis ornata



Rubiaceae

Merbuluh Merah, Selimbar, Selumar

Knema globularia

K

Kaempferia elegans



Zingiberaceae

Limestone Kaempferia, 紫花山柰

Kaempferia pulchra

Kaempferia galanga



Zingiberaceae

Cekur, Kencur, Sand Ginger, Lesser Galangale, Resurrection Lily, 沙姜 (Rhizome), 山柰 (Whole Plant)

Lepironia articulata

L



Labisia pumila



Labisia pumila
Cultivar (Pink Leaf)



Primulaceae

Akar Fatimah, Kunci Fatimah, Rumpun Siti Fatimah, Selusoh Fatimah, Akar Kecil Fatimah, Kacip Fatimah, Pokok Pinggan, Mata Pelandok Rimba, 卡西法蒂玛

Lablab purpureus



Fabaceae

Hyacinth Bean, Lablab Bean, 扁豆

Dolichos lablab, *D. purpureus*, *Lablab niger*, *L. lablab*, *L. vulgaris*, *Vigna aristata*

Melaleuca cajuputi

NM

Macaranga bancana



Euphorbiaceae

Mahang Plant, Common Mahang

Macaranga tenuifolia

Macaranga conifera



Euphorbiaceae

Macaranga populifolia

Macaranga gigantea



Euphorbiaceae

Giant Mahang

Macaranga incisa, *M. megalophylla*

Nymphaea cultivar

N



Nandina domestica



Berberidaceae

Heavenly Bamboo, Sacred Bamboo, Nandina, 南天竹、天竺、兰竹

Narcissus Species



Amaryllidaceae

Daffodil, 水仙

Nauclea orientalis



Rubiaceae

Bangkal, Leichhardt Tree, 东方鸟檀

Oryza sativa



Ochanostachys amentacea



Oleaceae

Petaling, Tamggal

Ochanostachys bancana, *Petalinia bancana*

Ochna integerrima



Ochnaceae

Vietnamese Mickey Mouse Plant,
金蓮木

Elaeocarpus integerrimus, *Ochna andamanica*, *O. wallichii*, *O. harmandii*

Ochna kirkii



Ochnaceae

Mickey Mouse Plant, 米老鼠花, 桂叶黄梅

Passiflora sp.



Pachira aquatica



Malvaceae

Guiana Chestnut, Provision Tree, Shaving-Brush Tree, Malabar Chestnut, Water Chestnut, Saba Nut, Fortune Tree, Money Tree, Oje, 瓜栗、马拉巴栗、发财树

Bombax aquaticum, *B. macrocarpum*, *Carolinea macrocarpa*, *Pachira macrocarpa*

Pachira glabra



Malvaceae

French Peanut, Guinea Peanut, Money Tree, Lucky Tree

Bombacopsis glabra

Quisqualis indica



Quassia amara



Simaroubaceae

Bitter-Wood, Bitterwood, Surinam Quassia, 括矢亚

Quassia indica



Simaroubaceae

Samadera indica, *S. madagascariensis*, *S. tetrapetala*

Quisqualis indica



(Single Petal)

Combretaceae

Rangoon Creeper, Drunken Sailor, Akar Dani, Akar Suloh, Dani, Ara Dani, Akar Pontianak, Red Jasmine, 使君子

Combretum indicum, *Kleinia quadricolor*, *Mekistus sinensis*, *Ouroparia enormis*, *Quisqualis glabra*, *Q. grandiflora*, *Q. indica* var. *oxypetala*, *Q. indica* var. *villosa*, *Q. longiflora*, *Q. loureiroi*, *Q. obovata*, *Q. pubescens*, *Q. sinensis*, *Q. spinosa*, *Q. villosa*

Rhizophora stylosa

RR

Radermachera 'Kunming'



Bignoniaceae

Dwarf Tree Jasmine, Peep Thong

Rapanea porteriana



Primulaceae

Kicar, Kicar-Kicar

Myrsine porteriana

Raphanus sativus



Brassicaceae

Radish, 萝卜

Senna alata



Sabal palmetto



Areaceae

Blue Palmetto, Cabbage Palmetto, Cabbage Tree, Common Palmetto, 菜棕

Sabal jamesiana, *S. parviflora*, *S. vitoris*

Saccharum officinarum



Poaceae

Sugarcane, Tebu, 甘蔗

Saccharum spontaneum



Poaceae

African Fodder Cane, Asian Fodder Cane, Fodder Cane, Kans Grass, Wild Sugarcane, 甜根子草

Imperata spontanea, *Saccharum canaliculatum*, *S. propinquum*, *S. semidecumbens*

Tunera subulata



Tabebuia aurea



Bignoniaceae

Paraguayan Silver Trumpet Tree,
Silver Trumpet Tree, Tree of Gold,
银鳞风铃木

Tabebuia argentea

Tabebuia haemantha



Bignoniaceae

Roble Cimarron, 血红风铃木

Bignonia haemantha, *Tecoma haemantha*, *Spathodea portoricensis*

Tabebuia ochracea



Bignoniaceae

Gold Trumpet Tree, Cortez,
Corteza, Guayacan, Piuva

Tabebuia hypodidtion, *T. neochrysantha*, *Tecoma heterotricha*, *T. ochracea*

Utricularia aurea



U

Uncaria cordata



Rubiaceae 叶儿茶钩藤

Uncaria longiflora var. *pteropoda*



Rubiaceae

Uncarina grandidieri



Pedaliaceae Mouse Trap Tree, Succulent Sesame, 黄花胡麻 *Harpagophytum grandidieri*

Victoria amazonica



Vallaris glabra



Apocynaceae

Bread Flower, 纽子花

Vanda 'Miss Joaquim'



Orchidaceae

Singapore Orchid, 卓锦万黛兰

Wodyetia bifurcata



Wallichia disticha



Arecaceae

Wallich Palm, 二列瓦理棕

Waltheria indica



Malvaceae

Sleepy Morning, 蛇婆子、和他草

Waltheria americana, *W. elliptica*

Washingtonia robusta



Arecaceae

Mexican Fan Palm, Washington Palm, 墨西哥扇形棕榈、华盛顿葵

Xanthorrhoea johnsonii



Xanthophyllum flavescens



Polygalaceae

Xanthophyllum affine

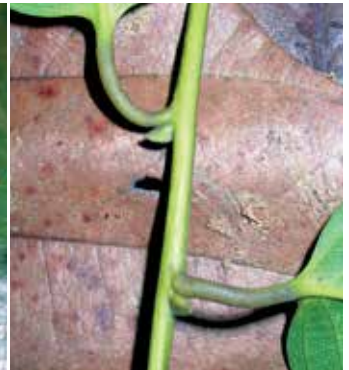
Xanthophyllum obscurum



Polygalaceae

Kiu, Nyalin

Xanthophyllum vitellinum



Polygalaceae

Minyak Berok, Nyalin

Yucca aloifolia



Youngia japonica



Asteraceae

Oriental Hawksbeard, Asiatic Hawksbeard, 黄鹤菜

Yucca aloifolia



Asparagaceae

Spanish Bayonet, Dagger Plant, 芦荟叶丝兰、千寿兰

Yucca gloriosa



Asparagaceae

Spanish Dagger, Palm Lily, Mound-Lily Yucca, 凤尾兰

Zingiber ottensii



Zamia fischeri



Zamiaceae

Fernleaf Cycad, 费切尔泽米

Zamia forsteri, *Zamia tenuifolia*

Zamia furfuracea



Zamiaceae

Cardboard Palm, Sago Cycad, 砗鳞壮泽米

Zamia pumila



Zamiaceae

Florida Arrowroot, Coontie

Zamia integrifolia



Cycads

Cycads (Cycadaceae) are gymnosperms as they bear seeds that are not enclosed by a structure. Although these plants resemble palms, both families of plants are taxonomically unrelated. Morphologically similar to certain palm species, cycads generally have cylindrical trunks that do not branch. Pinnate leaves will form a crown on the top of the trunk as part of the vegetative growth cycle. Cycads are either male or female and they bear reproductive cones in the centre of the crown. Unlike palms, cycads generally grow at a slower rate and they have a longer life span. Cycads are popular plants for landscaping purposes due to their interesting and unique features and low maintenance requirement.



Ceratozamia robusta
174



Dioon edule
270



Zamia furfuracea
868



Cycas clivicola
241



Dioon spinulosum
271



Zamia pumila
868



Cycas edentata
242



Macrozamia moorei
513



Cycas revoluta
242



Zamia fischeri
868



Palms

Palms (Arecaceae) is a family of plants which are generally recognised for their large, palmately (fan-shaped) or pinnately (feather-shaped) compound, evergreen leaves that are spirally arranged at the top of an unbranched trunk. A palm tree can either grow as a single trunk ending with a crown of leaves, or in clusters where shoots emerge from axillary buds near the base of the trunk resulting in clustering. Palms thrive well in tropical, sub-tropical and warm temperate climates. In many cities, palms are widely used in landscaping as these plants are considered iconic plants and are often selected as the main aesthetic feature of a place/locality.



Acoelorrhaphe wrightii
10



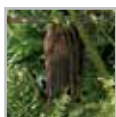
Arenga hookeriana
71



Bismarckia nobilis
109



Adonidia merrillii
17



Arenga pinnata
72



Bismarckia nobilis
'Silver'
109



Aiphanes horrida
29



Arenga undulatifolia
72



Borassodendron machadonis
113



Archontophoenix alexandrae
68



Arenga westerhoutii
72



Borassus flabellifer
113



Areca catechu
70



Asterogyne martiana



Butia capitata
126



Areca triandra
71



Beccariophoenix madagascariensis
105



Calyptrocalyx micholitzii
148



Areca vestitaria
71



Bentinckia nicobarica
107



Carpentaria acuminata
161



Uncarina grandidieri
832



Washingtonia robusta
852



Ziziphus mauritiana
873



Uvaria grandiflora
838



Xanthorrhoea johnsonii
859



Ziziphus nummularia
873



Vanilla planifolia
841



Yucca aloifolia
866



Zornia diphylla
874



Vanilla planifolia
'Variegata'
841



Yucca aloifolia
(Variegated)
866



Zoysia Species
874



Vitex trifolia
846 – 847



Yucca gloriosa
866





Fragrant Plants

To further enhance the multiple roles of any gardens, fragrant plants are introduced to give an additional dimension to our senses – smell! Many fragrant plants are well known for their positive benefits in aromatherapy. Growing fragrant plants in gardens also improves the biodiversity as the scent will attract more pollinators. Based on our experiences, it is best to grow these plants at places where there is minimal external wind movements in order to retain the fragrance which are essentially natural chemicals secreted by the plants



Aglaea borneensis
23



Alstonia scholaris
42



Anisomeles indica
53



Aglaia duperreana
24



Alstonia spathulata
42



Annona cherimola
54



Aglaia odorata
24



Amorphophallus atroviridis
47



Anredera cordifolia
55



Allium tuberosum
33



Amorphophallus paeoniifolius
47



Antigonon leptopus
60



Aloysia virgata
37



Amorphophallus titanum
47



Arachnotryx leucophylla
65



Alstonia angustifolia
41



Anaxagorea javanica
50



Areca triandra
71



Alstonia angustiloba
41



Angelonia angustifolia
52



Aristolochia grandiflora
74



Syzygium syzygioides
783



Syzygium zeylanicum
784



Tabebuia aurea
786



Tabebuia pallida
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Tabebuia rosea
787



Talipariti tiliaceum
794



Tamarindus indica
795



Tecoma stans
798



Tectona grandis
799



Terminalia brassii
799



Terminalia calamansanai
800



Terminalia catappa
800



Terminalia mantaly
801



Terminalia mantaly 'Tricolor'
801



Tristaniopsis obovata
827



Tristaniopsis whiteana
827



Washingtonia robusta
852



Wodyetia bifurcata
854



Xanthostemon chrysanthus
860



Xanthostemon
Species (Orange Flower)
861



Xanthostemon
Species (Pink Flower)
861



Xanthostemon youngii
861



Plants for Green Roof Planting

A green roof is generally defined as the cultivation of plants on growth medium over a waterproof membrane on buildings. In many cities, green roofs are popular and are widely installed on many buildings due to the many positive attributes associated with improving the liveability of any urban environment. The availability of water on the roof top will determine the type of plants chosen for any green roof planting exercise. If irrigation system is absent, plants which employ Crassulacean Acid Metabolism (CAM) mode of photosynthesis are more suitable as they tend to use much less water, i.e., have higher water use efficiency. More variety of plants can be grown on green roofs if a well-established irrigation system is available.



Agave angustifolia
'Marginata'
22



Agave desmettiana
22



Agave potatorum
22



Agave tequilana
23



Alternanthera ficoidea
43



Alternanthera sessilis
44



Alternanthera sessilis 'Red'
44



Alysicarpus vaginalis
44



Arachis pintoii
65



Arachis pintoii
cultivar orange
flowers
65



Asparagus densiflorus
'Sprengeri'
81



Axonopus compressus
89



Axonopus compressus
'Pearl Grass'
89



Beaucarnea recurvata
104



Callisia repens
143



Carissa macrocarpa
159



Carissa macrocarpa
'Nana'
159



Carissa macrocarpa
(Variegated)
159



Carpobrotus edulis
161



Chrysopogon zizanioides
186



Codiaeum variegatum
Cultivars
206



Mangrove and Mangrove Associates

A mangrove area is typically characterised by muddy shores of sheltered coasts and river estuaries which are subjected to movements of tides and periodic overflow of rivers. Hence the soil is often waterlogged, anaerobic and they may have high salinity (may be fluctuating) and pH. Mangrove is a plant community which inhabit the mangrove areas whereas mangrove associates may extend its habitat colonisation further into terrestrial communities. Mangrove species are well adapted to grow and thrive in such ecologically-challenging environment with several unique biological features which are not present in mangrove associates. Many mangrove species develop unique structures to help them to survive in this coastal environment such as breathing roots (pneumatophores) and their seeds tend to germinate while attached to the parent plant (vivipary). Some mangrove plants have succulent leaves that contain specialized glands which secrete excess salt. It is important to recognise that mangrove and mangrove associates can be planted for landscaping purposes under certain unique circumstances or special requirements for selected project sites.



Acanthus ebracteatus
8



Acanthus ebracteatus
(Variegated)
8



Acanthus ilicifolius
8



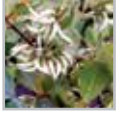
Acanthus volubilis
9



Acrostichum aureum
12



Acrostichum speciosum
12



Aegiceras corniculatum
19



Allophylus cobbe
34



Ardisia elliptica
69



Avicennia alba
87



Avicennia marina
88



Avicennia rumphiana
88



Barringtonia asiatica
97



Barringtonia edulis
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Barringtonia racemosa
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Brownlowia tersa
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Bruguiera cylindrica
120



Bruguiera gymnorhiza
121



Bruguiera hainesii
121



Bruguiera parviflora
122



Caesalpinia crista
129



Pandanus tectorius 'Sanderi'
600



Pemphis acidula
610



Podocarpus polystachyus
651



Planchonella obovata
663



Rhizophora apiculata
689



Rhizophora mucronata
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Rhizophora stylosa
690



Scaevola taccada
718



Scyphiphora hydrophylacea
728



Sonneratia alba
747



Sonneratia apetala
748



Sonneratia caseolaris
748



Sonneratia ovata
749



Talipariti tiliaceum
794



Talipariti tiliaceum 'Dwarf'
794



Talipariti tiliaceum 'Tricolor'
794



Talipariti tiliaceum var. *purpurascens*
794



Terminalia catappa
800



Thespesia populnea
806



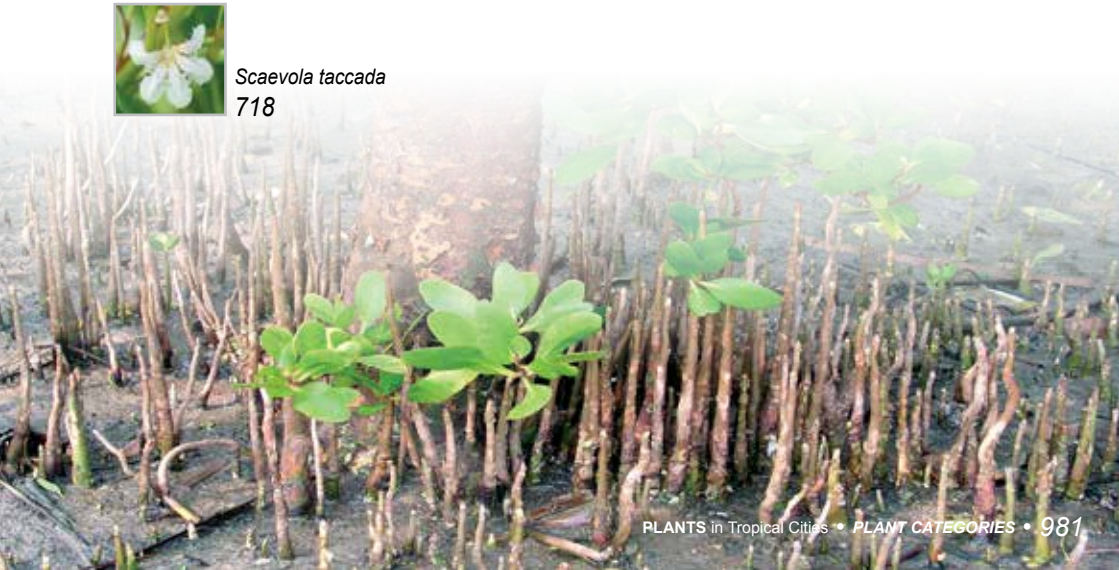
Xylocarpus granatum
863



Xylocarpus moluccensis
863



Xylocarpus rumphii
864



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- <http://www.pfaf.org/>
- <http://www.theplantlist.org/>

Quick Resource to the 19 Categories of Plant Grouping / Applications



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Mangrove
and
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Uvaria Tide

Email: uvaria@hotmail.com | Contact: +65 9783 4314