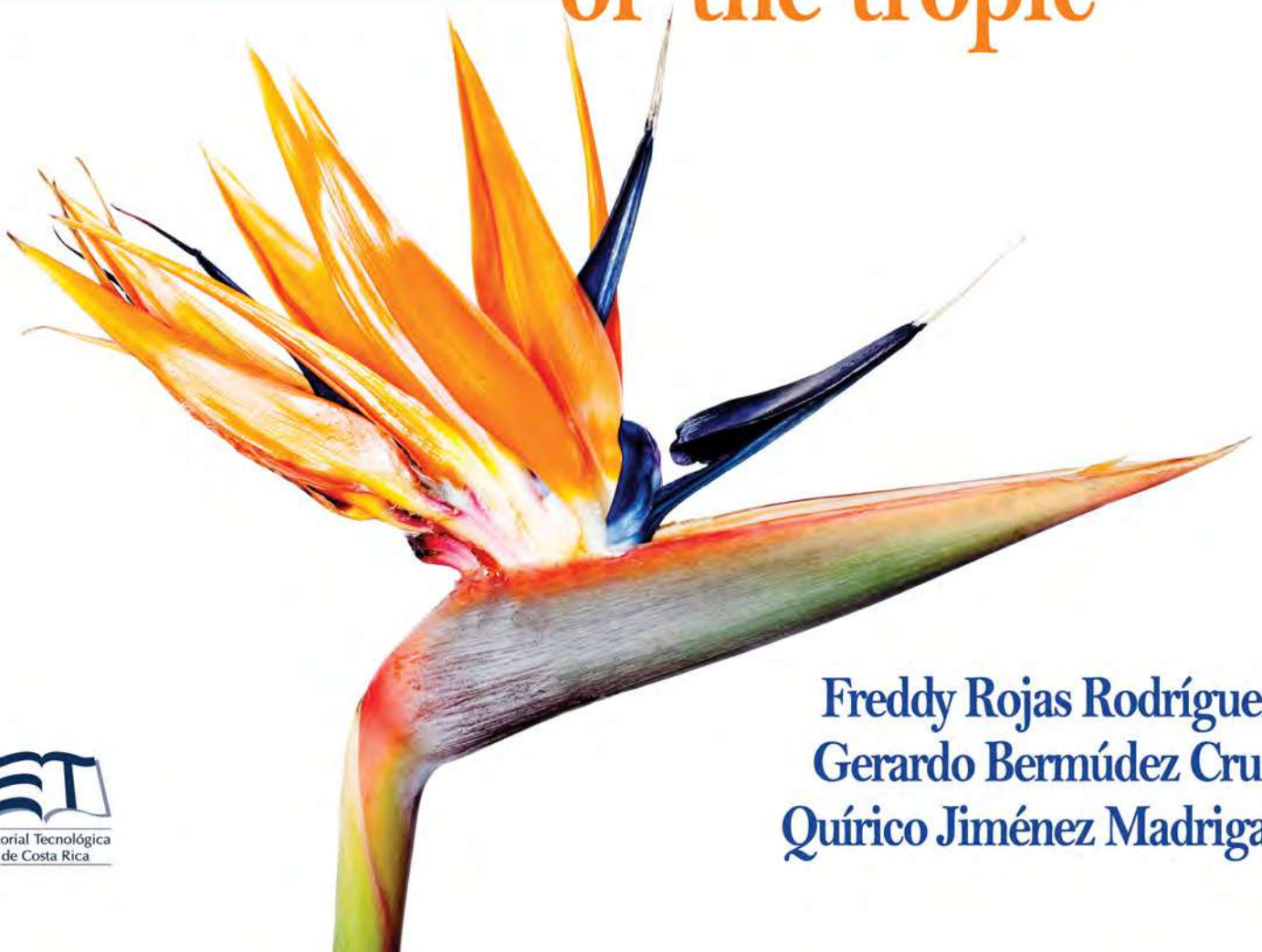
# Ornamental Plants of the tropic



Freddy Rojas Rodríguez
Gerardo Bermúdez Cruz
Quírico Jiménez Madrigal

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Planting and caring for plants dignifies a person;
planting and caring for many plants dignifies a
nation and makes it proud.

Freddy Rojas Rodríguez

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# Acknowledgements

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Finally, our appreciation to our young colleague José Esteban Jiménez Vargas, son of one of the authors, for his help in reviewing and updating the nomenclature of several species included in the document.

# Foreword

It is a great pleasure to present Ornamental Plants of the Tropics, an important book published by the Editorial Tecnológica de Costa Rica, masterfully prepared by excellent companions and friends; special thanks go to engineer Quirico Jiménez Madrigal, who is not just a friend but also a soul mate with whom I have shared many moments in our exuberant and invigorating jungles, as well as many office hours.

This marvelous book is a huge breath of fresh air, a magical and prodigious downpour after a long harsh summer. It is an excellent working guide for architects, engineers, biologists, agronomists, organized groups, and for the many people who want expert advice on beautifying their homes, boulevards, and neighborhoods.

The authors took care to include many important recommendations that should be taken into account when choosing the ideal species to achieve the desired ornamental and environmental results.

Thanks to the organization of the book by sections, including trees, shrubs, herbs, vines, fruit trees, it is very easy to find useful advice and make appropriate choices.

Occasionally, when I have visited urban parks, I have been sad to see that not even 10% of the species were native plants, and, even worse, that sometimes the plants used do not attract butterflies or birds, and are poisonous or produce strong irritants. All of this is due to ignorance, a lack of adequate information and of valuing our native vegetation, perhaps because we are so highly privileged in terms of biodiversity and we take it for granted. All of the marvels we have are highly attractive and also, perhaps, a future resource for exploitation on a large scale. Of course, as the authors state, exotic species should not be treated with disrespect; they must not be abused, but rather used intelligently.

Fortunately, however, there are beautiful parks, such as the one in Palmares, which is a true orchard with incredible diversity; or the park in Turrialba, where José Luis Delgado Alvarado, a self-taught gardener, has created a series of masterful topiary sculptures with the support of the municipality which celebrate our exuberant flora. Much may also be said about the central park of Heredia, with a series of beautiful sculptures made of stone and reinforced concrete. It is here that visionary residents planted trees of the myrtle family (Myrcianthes fragrans), whose foliage is beautiful, dense, and bright, and produce a truly balsamic aroma and delicious fruits that are a delicacy for any passer-by. I have personally used them to make a delicious liquor and an exquisite jam.

And let us not forget the famous park of Zarcero, the work of the tireless Evangelista Blanco, supported by the municipality of this picturesque city, and other beautiful parks that escape my memory. I also remember a beautiful boulevard in Panama, with stately madroño trees (Calycophyllum candidissimum) of the family Rubiaceae, with showy flowers, grooved and interlaced trunks, and unique cinnamon-colored branches.

Our flora is our best friend, and it is therefore important to rescue the impressive Guanacaste tree (Enterolobium cyclocarpum) of the Fabaceae family, our national tree. One of these trees was saved and remained spectacularly located in the middle of a road in the beautiful province of Guanacaste. There is also the impressive Guapinol (Hymenaea courbaril), also of the Fabaceae family, which is located near the Universidad para La Paz, in Ciudad Colón, which was saved by Mr. Cruz Rojas Venett, owner of the property on which it is located, when the road was being planned; it is truly a living monument and has fascinated our distinguished friend, the outstanding ecologist and teacher Gerardo Budowski (†), as well as everyone else who arrives to its refreshing shade, in its welcoming lap, and experiences its magical scent.

Errors have been committed in our cities when lorito trees (Cojoba arborea) of the family Fabaceae have been planted by sidewalks; they are giants of our jungles, growing up to 30 m high with diameters of up to 1 m. I therefore recommended to residents of Alajuela who made the effort to beautifully repair the sidewalks and plant these trees to move them to an extensive plaza, because otherwise their houses were going to end up resembling Tarzan's house.

Many species have been abused, such as the fig tree (Ficus benjamina), of the Moraceae family; the pinto peanut (Arachis pintoi), of the family Fabaceae, has also been used extensively, although these trees host cockroaches and dangerous slugs, and displace native plants that play a predominant role in microenvironments.

It is pleasant to remember the enormous efforts made by our teacher and excellent friend, engineer Hermes Villegas (†), an ICE official in charge of plant nurseries, when he diversified the La Sabana park with native species and propagated the beautiful brachichito (Brachychiton acerifolius) tree using seeds from the only available tree, next to the National Gymnasium.

It is impressive to visit the houses of the ladies of the Club de Jardines de San José and enjoy the wonders they have produced. I can not forget the precious new hybrid of the lovely azaleas, which was developed at home by Mrs. Olguita de Echandi (†), and is recognized worldwide.

In addition, we must remember the beautiful little village gardens where ladies cultivate precious plants even in sardine tins – how marvelous! We may also think of many other trees, herbs, vines, and exotic plants as beautiful as the coral tree (Erythrina poeppigiana), which has been immortalized in a beautiful postage stamp and has provided so many benefits for our coffee trees, shading them and fertilizing the soil. To these may be added the grevileas, the Golden Shower, the Pride of India, the Crepe myrtle tree, the Abyssinian coral tree and the Indian coral tree (Erythrina variegata), orchids, and many other species, some of which some have become naturalized in the country.

Therefore, when you take a moment to think about our sisters the plants, everything they give us in such a silent and disinterested way is truly incredible and comforting.

It has been reported that while a human being consumes between 500 and 600 grams of oxygen per day, a single mature leafy tree can produce that amount of oxygen in just a little more than 20 minutes (Hoyos, 1978). How wonderful! I would like to finish these lines with a very wise maxim of one of the authors of this book who for many years was the excellent and visionary director of the Forest Engineering School of the Instituto Tecnológico de Costa Rica, my friend, engineer Freddy Rojas Rodríguez. His statement, based on his intimate love and vast knowledge about plants, is subtle, inspiring, and full of beauty and profound truth: Planting and caring for plants dignifies a person; planting and caring for many plants dignifies a nation and makes it proud.

Luis Jorge Poveda Álvarez
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# Preface to the second edition

In 2006, the Editorial Tecnológica de Costa Rica published the first edition of this book, which has fortunately managed to reach a large number and variety of readers interested in the subject.

As authors, we have been proud of, and satisfied with, the observations by professionals in architecture and engineering who have constantly consulted this work to assist in the design of replanting programs in infrastructure projects.

In addition, it has been used in ornamental plant nurseries and farmers' fairs as a reference, and for purposes of illustration, sales promotion and plant identification. It has also been sold in bookstores as a special gift for plant lovers.

We have also witnessed its use by housewives, gardeners, tourists and visitors who appreciate tropical ornamental plants and want to know their names, origins and particular characteristics.

Most comments recognize the practical nature and usefulness of the book, and the value of its organization and the separation of information by types of plants. They also have mentioned the usefulness of photographs for plant recognition, as well as the simple and concrete style used in their description, and in the presentation of information about the origins and uses of each one of the species described.

We have used it ourselves as a textbook in university courses, and it has contributed to the academic formation of many students and professionals.

As consultants and trainers, we have used it as a basic material in courses on ornamental plants and garden design delivered to a very wide target population. The book is known and used by professionals in different branches of engineering, architecture, and design, as well as by many persons who are passionate about plants and gardens.

Based on the above, four basic reasons have encouraged us to insist on a second edition:

• Providing a taxonomic update to include the progress made in this area in recent years, a period during which several genera, species and families were changed, due mainly to complex and novel DNA studies that have recently been incorporated into the taxonomic identification of plants. In this edition, the taxonomy and nomenclature of plants follow the classification accepted by the TROPICOS database (Missouri Botanical Garden, 2014. http://www.tropicos.org/), which in turn is based on the APG III classification system for angiosperms (Angiosperm Phylogeny Group (APG), 2009; Bot. J. Linn. Soc. 161: 105-121).

• Revising spelling and editorial style, correcting taxonomic errors and and certain photographs.

• The need to satisfy a general request to modify the book's format, since users have mentioned constant deterioration due to difficulties in handling it when in the field.

• The first edition is sold out and the public continues to demand the book.



Tropical countries have underestimated the role that plants can have in providing for the well-being of their current and future populations.

Open spaces in urban and rural areas should be managed to provide human beings with a landscape that produces satisfaction; improving the ecological environment and the use of vegetation is an excellent tool for achieving this goal.

At present, the presence of plants is becoming a pressing need in places where population growth and increases in the areas under construction have degraded the natural environment.

It is every day more advisable and necessary to enhance the relationship between humans and Nature, since it has been clearly shown that plants contribute to making life more dignified, healthy, sustainable, and pleasant.

Plants have simultaneous effects on the physical and mental aspects of human beings, absorbing noise, mitigating solar heat and reflected sunlight, and constituting an effective filter for solid particles suspended in the air. On the other hand, they help to disguise the infrastructure, pipes, cables and other types of public services construction such as telephones, aqueducts, gas, water, electric power, and television and internet cables which are installed on roads and buildings.

This improvement is possible if adequate plant species are managed in a timely and appropriate fashion, in the right places



# Characteristics of the Book

**Cover:** The cover of this book honors one of the most striking ornamental tropical flowers, the bird of paradise (Strelitzia reginae).

**Back cover:** The back cover includes a detail of the bronze-colored shower flower (Cassia moschata) in the upper left margin, and a detail of the giant granadilla fruit (Passiflora quadrangularis) in the lower right margin.

**Sections:** The first section of the book addresses topics related to the presentation and use of information on more than 500 tropical plants with current or potential ornamental uses.

The final section includes bibliographical references, several indexes that are useful for readers, and information about the authors.

**Presentation of plants:** Each plant is presented as follows:

- Common name: refers to the name or names by which most people know the plant (for example, royal palm).
- Scientific name: this refers to the name by which the plant is scientifically known and taxonomically reported worldwide. It can change in relatively short periods, especially with the recent incorporation of novel DNA studies into the taxonomic identification of plants. Scientific names are written in Latin and consist of two words, the first is the genus, and the second the species to which the plant belongs, for example: Passiflora quadrangularis. In some cases, sp. is written instead of the species, which means the species is unidentified, or spp., which indicates that the genus has many species. In some cases another scientific name or another family is written in parentheses, which corresponds to the name prior to the taxonomic update carried out in this edition of the book.
- Family: refers to the group to which the plant belongs, for example: Fabaceae

- Description: the plant is described in simple terms, without a rigid structure but including the height and shape of the plant, type and position of the leaves, geographical origin, type, shape and color of the fruit and flowers; the region in which it grows; its main uses in urban arboriculture or gardens, its method of reproduction, recommendations for its use, and other useful observations.
- Photographs: each plant is accompanied by one or several photographs taken in Costa Rica, Mexico, Guatemala, Peru, Panama and Colombia, which assist in its recognition. In addition, the group to which the plant belongs is symbolically indicated on the upper margin of photographs.

| Symbol | Presentation |
|---|---|
|  | Trees with attractive flowers and fruits |
|  | Trees with attractive foliage |
|  | Gymnosperms |
|  | Shrubs with attractive flowers |
|  | Shrubs with attractive foliage |
|  | Palms |
|  | Fruit trees |

| Symbol | Presentation |
|---|---|
|  | Zingiberales |
|  | Vines |
|  | Herbs with attractive flowers |
|  | Herbs with attractive foliage |
|  | Others plants |

Ornamental plants are grouped as follows:

Trees with attractive flowers and fruits: emphasis is placed on those trees with ornamental attributes and dimensions that make them suitable for use in cities; they have in common a flower or fruit that makes them worthy representatives of the beautiful and colorful tropical flora.

Trees with attractive foliage: these trees are selected based on the principles mentioned previously, but in this case species that have foliage worthy of representing the tropics are included..

Gymnosperms: In the tropics a wide variety of large long-lived plants, with many branches and small evergreen leaves are used for ornamental purposes, such as the Mexican cypress (Taxodium mucronatum) and other cypresses and pines, as are small ornamental plants such as cycads and zamias. The flowers of all these plants are small and not very showy; their seeds are protected by cones and false fruits, some of which are large and beautiful.

Shrubs with attractive flowers: shrubs are actually “miniature trees”, they have all the attributes of a tree in terms of beauty, flowers, and roles in ecosystems, but are smaller. Because

of their size, they are easily adaptable to narrow spaces in cities; for these reasons they occupy a special section in this book.

**Shrubs with attractive foliage:** greenery and color can also be provided in the city by small but beautiful tropical shrubs such as those included in this book.

**Palms:** these have several important attributes for the tropics, such as their great diversity (more than 2,800 types of palms are reported at a global level), their wonderful shape, their narrow and unaggressive root systems, their capacity to provide shelter and food for many wild animals, and, above all, being one of the groups of plants most associated with human beings.

**Fruit trees:** this section highlights the tropical diversity of traditional fruit trees, the need to encourage the cultivation and use of non-traditional fruit trees for human consumption or food for wildlife, and their beauty, flowers, fruits or aromas.

**Zingiberales:** this section includes representatives of an outstanding group of ornamental tropical plants with current or potential use for attracting wildlife, or as sources of ornamental flowers and foliage of great beauty. Examples include the famous heliconias, birds of paradise and ornamental bananitos, as well as the lesser-known calateas and costus.

**Vines:** some climbing or hanging plants are highlighted in this section because they occupy little space and are used as a strategy for hiding structures, fences or other unsightly features.

**Herbs with attractive flowers:** a book of ornamental plants would not be complete if it did not include a group of plants whose main attribute is to make the environment colorful, either permanently or temporarily

**Herbs with attractive foliage:** the color and greenery of small plants is highlighted in this section of the book.

**Other plants:** this section includes diverse and complex groups of plants, and those of extraordinary ornamental beauty, such as bromeliads, cactiforms (cactus and succulents), ferns and orchids.

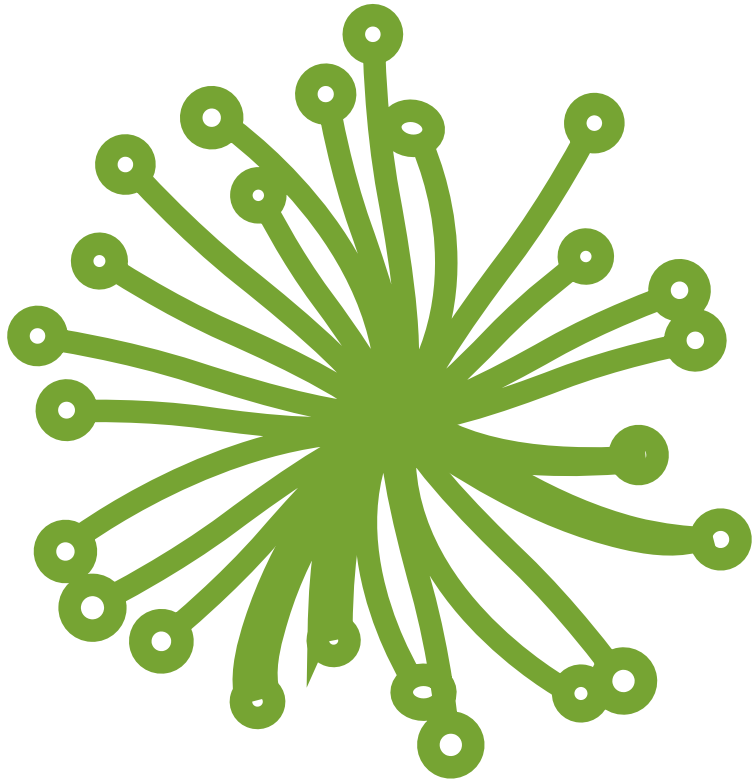
**Bibliographic references:** this section includes the main sources of documentation used in the preparation of this work, either books, brochures or Internet references.

**Indices:** this publication includes indices based on several important ways of classifying its contents:

• By scientific names of plants: for specialists in the field.

• By common names: any user can locate the page where a plant with a particular common name is discussed. It should be remembered that several species of plants are known by the same common name.

• By type of plant: aimed at those who wish to look for members of specific groups of plants, for example, only vines.



# Trees with attractive flowers and fruits

# Illawarra flame tree

## *Brachychiton acerifolius*

## Malvaceae (Sterculiaceae)

A tree that may grow as high as 20 m. It is originally from Australia, and frequently cultivated in America.

Its leaves are bright green, simple, alternate and lobed, and fall from the tree before it blooms.

Its flowers are bright red, grouped in clusters that cover almost the entire crown of the tree.

Its fruits are large and contain yellow seeds.

It is generally found in dry and humid habitats.

It reproduces by seeds.

It is used to decorate gardens, parks, and boulevards.



# Sausage tree
## *Kigelia africana*
## Bignoniaceae



A tree that may grow up to 20 m high. It is native to Africa.

Its leaves are compound and opposite, and have a brilliant dark green color.

It is notable for its racemes of red bell-shaped flowers with yellow centers. It also has striking sausage-shaped fruits, which hang from long stalks.

It reproduces by seeds.

This species is appropriate for green areas such as parks, plazas, and gardens.



# Cannonball tree
## *Couroupita guianensis*
## Lecythidaceae

A tree that may grow up to 35 m high. It is native to Guyana and common only in certain botanical gardens.

Its leaves are simple and alternate.

Its main attractions are its many beautiful reddish to pink flowers, and its many large round brown fruits which hang around the trunk.

It reproduces by seeds.

It can be used in large tropical gardens and green areas in general.





# Burio

## *Heliocarpus appendiculatus*

## Malvaceae (Tiliaceae)



A tree that may grow up to 20 m high, and is common in secondary forests. It is naturally distributed from Mexico to Panama.

Its leaves are simple, alternate, and it has yellowish flowers.

It is striking when it is fruiting, due to the reddish-brown terminal racemes which cover its crown.

It reproduces by seeds.

It can be used in protection zones such as banks of rivers and streams.



# Poas magnolia
## *Magnolia poasana*
## Magnoliaceae

This tree is native to Costa Rica and Panama, and grows up to 20 m high. It is found mainly in mountainous areas above 1800 m elevation.

The leaves are simple and alternate, dark green on the upper side and pale on the underside.

The large flowers with white petals and purple coloring in the interior are striking. The flower buds resemble the flame of a candle.

It reproduces by seeds.

It can be grown in green areas in higher zones.





# Golden shower
## *Cassia fistula*
## Fabaceae





This is a deciduous tree that grows up to 15 m high, with a wide, dense crown. It is native to tropical Asia and has been introduced in many tropical regions.

The leaves are compound and alternate, with large bright green leaflets which are very attractive when they begin to grow.

Its yellow flowers occur in striking hanging racemes that in some cases cover the entire crown.

The fruits are cylindrical pods that can be up to 60 cm long, with seeds surrounded by a sticky black pulp.

It reproduces by seeds.

It is one of the trees of greatest ornamental value in the dry season because of its beautiful flowers.

It is used as a shade and ornamental plant at the edges of roads, avenues, parks, and gardens.

# Stinking toe
## *Cassia grandis*
## Fabaceae

A deciduous tree that reaches heights of up to 25 m, with an open and extended crown. It is naturally distributed from Mexico to the northern part of South America, where it grows in hot and humid climates.

Its leaves are compound and alternate, with rounded leaflets.

Its abundant flowers, which appear in the dry season, are pink or purple, and grow in large racemes that cover the entire crown.

Its fruits are dark brown or blackish cylindrical woody pods, somewhat more than half a meter long, with numerous seeds covered in sweet pulp with a slightly unpleasant smell. They are used to produce a syrup that is used in folk medicine.

It reproduces by seeds.

It can be used in open sites such as parks, plazas and roadsides.





# [COMMON NAME NOT FOUND]

## *Wercklea insignis*

## Malvaceae



A tree that can grow up to 15 m high, which is common in some areas at higher elevations. It is endemic to Costa Rica.

It is easily distinguished by the size and color of its flowers, which are purple and very similar to those of poppies.

The leaves are simple and alternate, bright light green in color, with pink veins.

It reproduces by seeds.

This tree has been used very infrequently as an ornamental plant, but it is very decorative.

# Champak
## *Michellia champaca*
## Magnoliaceae

A tree that grows up to 15 m high, with a compact crown and bright foliage. It is native to the Himalayas.

Its leaves are simple and alternate.

Its flowers are attractive, and have wavy petals, like those of magnolias. They are light yellow and very aromatic.

It is a tree with great potential for urban arboriculture in tropical regions.

It reproduces by seeds.

It can be grown in parks and large green areas.



# Bronze Shower
## *Cassia moschata*
## Fabaceae



A tree that grows up to 15 m high, with compound, alternate leaves. It is distributed throughout dry Pacific areas from Panama to Colombia.

It is characterized by hanging racemes of yellow flowers, which turn brick red when they wither.

The tree is often confused with Cassia fistula.

It reproduces by seeds.

This species is suitable for medium or large green areas.



# Golden shower tree

## *Handroanthus ochraceus* (*Tabebuia ochracea*)

## Bignoniaceae

A deciduous tree that grows up to 15 m high, with an extended crown. It grows in dry and wet areas, and is naturally distributed from Honduras to northern South America.

Its leaves are compound and opposite, with hairy leaflets.

Its abundant intensely yellow flowers are extremely beautiful; they are grouped at the end of the branches and appear in the dry season.

Its fruits are long, thin capsules that open longitudinally and release numerous winged seeds that are dispersed by the wind.

It reproduces by seeds.

It can be used in gardens, parks, plazas, streets and avenues.





# Pink trumpet tree

## *Handroanthus impetiginosum* (*Tabebuia impetiginosa*)

## Bignoniaceae



A deciduous tree that grows up to 20 m high.

It is native to a region that extends from Mexico to South America.

The leaves are compound and opposite.

The main attraction of this species are its striking purple flowers, which cover the entire crown of the tree when it loses its foliage in the dry season. The flowers are bell-shaped, and flowering occurs from November to January.

The fruits are flattened capsules containing multiple seeds which have lateral wings for dispersion.

It reproduces easily by seeds. Its ornamental value is very high and it is recommended to plant it along roadsides and in large gardens.



# Brazilian walnut tree
## *Handroanthus guayacan* (*Tabebuia guayacan*)
## Bignoniaceae

A tree which grows up to 50 m high. It is native to a region that extends from Mexico to Panama.

Its leaves are compound and opposite.

It is a tree of great beauty due to its size and intense yellow blooms, which appear from January to February, when the tree loses all its leaves and the crown is completely covered with flowers.

It is slow-growing, which is why it is not commonly used as an ornamental plant.

It reproduces by seeds.

It can be grown in large green areas such as parks and plazas



# Yellow manwood
## *Vitex cooperi*
## Verbenaceae



A tree that grows up to 25 m high, and is found in the lowlands of the Atlantic and Central and South Pacific regions.

It is naturally distributed from Guatemala to Panama.

It is characterized by opposite compound leaves.

Its blue-purple flowers grow in striking terminal inflorescences.

Its fruits are attractive to birds.

It reproduces by seeds.



# Spring tree
## *Citharexylum donnell-smithii*
## Verbenaceae

A tree that can grow up to 15 m high. It is naturally distributed from Guatemala to Panama in zones with middle to high elevations. It has a very compact crown.

Its leaves are simple and opposite.

The many hanging inflorescences with white flowers are very fragrant, especially at night.

The flowers, once fertilized, give way to racemes of very bright yellow fruits, which change color as they mature from yellow to red, and finally to black. These fruits are very attractive to many species of birds.

It reproduces easily by seeds.

It can be used on roadsides, and in parks and small green areas.





# Cassia tree
## *Senna siamea* (*Cassia siamea*) Fabaceae



A tree that can grow up to 20 m high, and has a narrow crown. It is originally from Malaysia.

Its leaves are compound and alternate.

The main attraction of this species is its yellow flowers, which grow in large terminal panicles.

The original reason for the introduction of this species in most tropical countries was to produce firewood, since it grows rapidly.

It can be found in regions with low to low-medium elevations, in humid climates.

It reproduces by seeds.

It is an ideal tree for green areas, for regeneration of degraded sites, and as a windbreak.



# [COMMON NAME NOT FOUND]

## *Oreopanax nicaraguensis*

## Araliaceae

A tree that grows up to 8 m high and is found in the foothills of mountain ranges. Its distribution ranges from Nicaragua to Panama.

Its crown is dense and extended, with dark foliage.

The leaves are simple, alternate, and large; they are also very attractive and grouped at the ends of branches.

Its fruits are attractive to several species of birds.

It reproduces by seeds.

It is an ideal species to plant in parks, plazas, and large green areas.





# Red jasmine tree
## *Plumeria rubra*
## Apocynaceae





A tree or shrub that can grow up to 8 m high.

It is native to an area extending from Mexico to Ecuador. However, it is widely distributed in all tropical countries, due to the beauty and aroma of its varied flowers, which range from white to reddish purple in color.

It is deciduous (it loses its leaves in the summer), but blooms almost year round.

Its leaves are simple, opposite, and grouped at the end of stems.

Varieties of flowers include white with yellow centers, pink with yellow centers, yellow with pink centers; as well as pink, yellow and red with purple centers.

It reproduces easily by seeds or cuttings; it is not demanding in terms of soils, but requires full exposure to the sun.

They are very appropriate for parks, gardens and median strips in streets. It is an ideal species for slopes.

It is the national flower of Nicaragua.

# Bull oak
## *Jacaranda copaia*
## Bignoniaceae

A tree that grows up to 20 m high. It is native to a region extending from Guatemala and Belize to Brazil.

Its leaves are compound and opposite, with numerous leaflets.

It is very attractive, both because of its characteristic shape and because of its large and striking bell-shaped purple flowers.

The tree has a smooth, whitish trunk whose branches are high above the ground, producing a characteristic umbrella shape.

It reproduces by seeds.

It is ideal for parks, plazas and other green areas.



# Brazilian fern tree
## *Schizolobium parahyba*
## Fabaceae



A tree that grows up to 35 m high. It has a smooth and light-colored trunk, with a round and open crown. It is native to lower-elevation regions of tropical America, from Mexico to Brazil.

The leaves are compound, alternate, and very large (reaching up to 1.5 m long in young trees).

Its main attractions are the abundant yellow flowers that completely cover the crown when the tree has shed its leaves.

It reproduces by seeds.

It is ideal for open areas such as roadsides and parks.



# [COMMON NAME NOT FOUND]

## *Albizia adinocephala*

## Fabaceae

A tree that grows up to 20 m high. It is naturally distributed from Belize to Panama.

The leaves are compound, alternate, and have an opaque green color.

It has a capitulum of very aromatic white flowers at the ends of stems.

The fruits are thin and narrow pods.

It reproduces by seeds.

It can be used in large green areas such as parks, plazas, and roadsides.





# Silky oak
## *Grevillea robusta*
## Proteaceae



A tree that grows up to 25 m high, with a dense and broad crown. It is native to the humid subtropical zone of Australia. It has spread widely in the subtropical regions and mountains of Asia, Africa and some countries in the Americas.

The leaves are compound and alternate, with a grayish color, and resemble those of a fern.

The flowers appear in striking large yellow-orange inflorescences in racemes at the tips of the branches.

It reproduces by seeds.

It is used along streets, avenues, and roadsides.



# Pois duce
## *Inga vera*
## Fabaceae

A tree that grows up to 10 m high. It is naturally distributed from Mexico to South America.

Its leaves are compound and alternate, with a glossy dark green color.

Its flowers are white and grow in the joints between leaves and stems (axils) or towards the end of twigs.

Its fruits are legumes that grow up to 15 cm long, with black seeds wrapped in a white pulp with a sweet flavor.

It reproduces by seeds.

It can be used on roadsides and in green areas.



# Guachipilin
## *Diphysa americana*
## Fabaceae



A tree that grows up to 12 m high. It is native to the region from southern Mexico to Venezuela.

Its leaves are compound and alternate, and have a matte green color.

The flowers appear in small, striking yellow racemes, and are shaped like small butterflies.

Its fruits are brownish pods that contain several seeds.

The crown is extended, thin and irregular. This species grows rapidly.

It reproduces by seeds, although it is usually propagated by using large cuttings.

It is used mainly as a living post in fences, as well as for shade and decoration in parks and gardens.



# White guácimo
## *Luehea speciosa*
## Malvaceae (Tiliaceae)

A tree that grows up to 10 m high, and is found in the Pacific slope regions of countries from Mexico to Colombia.

The leaves are simple, alternate, and hairy, with a serrated edge.

The flowers are large and occur in short terminal inflorescences; they have four yellowish-white petals.

The fruits are capsules with five prominent ribs which contain winged seeds.

It reproduces by seeds.

This tree can be used on roadsides and in green areas.



