

Cultivated Plants of Dominica

Abstract:

Landscapes are a very important aspect of the urban environment. Due to this fact, I set out to document the most commonly cultivated plants of Dominican landscapes. This guide contains twenty-four plants, which I observed to be the most commonly used in the urban landscape. Throughout my research I attempted to select plants that are primarily used for aesthetic purposes. A table of contents lists the plants found, alphabetically by scientific name. The families for each plant are also listed along with their descriptions.

Introduction:

Man has always utilized plants for food, shelter, medicine, and aesthetic purposes. Many studies have shown that the presence of plants near humans can improve mental and emotional well being. It is obvious that plants are very important because they affect our lives everyday. Hospitals and businesses throughout the world utilize plants in their landscapes and interior-scapes, because it provides a more pleasing atmosphere for patients \ customers and employees. In the urban environment, people surround themselves with plants to improve the area closest to them, their homes. It is because of this, that I decide to study and document the plants used in the landscapes of Dominica. During the course of this study, I attempted to exclude those plants which are more commonly used for other purposes such as food production.

Materials and Methods:

Data were collected at many sites including Massacre, Roseau, Springfield, and at sites along the Imperial Highway. Identification of plants in the field were made by Dr. Tom Lacher or Dr. Bob Wharton and then referenced using Lack et al. (1997), Gentry et al. (1993), or Seddon and Lennox (1988) Some specimens were collected for further identification using the Springfield herbarium. Pictures were taken, when possible, using a Sony Digital camera and or a 35mm-80mm camera. When taking specimens or pictures, permission was requested before continuing. A brief description was written for each plant including any other important information.

Results:

This guide contains the twenty-four most common plants used in Dominican landscapes that I observed. It is in no way, the definitive guide to Dominican landscape plant, it is rather an observation to be expanded upon.

Discussion:

It is very interesting to observe how plants are growing in the landscapes of Dominica, and compare them to how we use the same plants in the US. Due to the environmental constraints of Dominica, certain plants vary in growth habit and form. Plants such as Poinsettia (*Euphorbia pulcherrima*), Coleus (*Coleus spp.*), and Bush morning glory (*Ipomea fistulosa*) all are able to reach a much larger growth form. Due to time constraints an experiment on growth habit and forms was not feasible. General statements and observations can be made regarding growth habit/form, however accurate statements of phenotype could not be made without further experimentation. Perhaps preliminary studies of phenotype can be made in future experiments. A project expansion dividing the landscape plants into groups such as groundcovers, shrubs, trees, and vines would be interesting. Another suggestion would be to study the ornamental crop production & market in Dominica.

Acknowledgements:

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Works cited:

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2. *Agave caribaecola*
3. *Allamanda cathartica*
4. *Alpinia purpurata*
5. *Anthurium andraeanum*
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7. *Canna indica*
8. *Catharanthus roseus*
9. *Codiaeum variegatum*
10. *Colocasia esculenta*
11. *Coleus* spp.
12. *Delonix regia*
13. *Euphorbia pulcherrima*
14. *Ficus* spp.
15. *Heliconia caribae/bihai*
16. *Hibiscus* spp.
17. *Ipomea tiliacea*
18. *Ipomea fistulosa*
19. *Lagerstromia indica*
20. *Lantana* spp.
21. *Malvaviscus arboreus*
22. *Nerium oleander*
23. *Pilocerus royenii*
24. *Plumeria alba*
25. *Sabinea carinalis*

Descriptions:

1. Family: Euphorbiaceae: *Acalypha hispida* - large irregular shrub planted as screens or hedges. Characteristic red cat tail like flowers hang from the plant.



2. Family: Agavaceae: *Agave caribaeicola* - distinct large rosette form, large spiny leaves. Used as an accent plant for its grey-green foliage.
3. Family: Apocynaceae: *Allamanda cathartica* - Yellow flowered medium-large shrub with dark green foliage.
4. Family: Zingiberaceae: *Alpinia purpurata* - Large red inflorescence with green alternate leaves. Some variegated forms are used in the landscape.



5. Family: Araceae: *Anthurium andreanum* – Single showy pink to red flowers used in bed plantings as borders. The *Anthurium* is also used as a cut flower sold in markets.
6. Family: Nyctaginaceae: *Bougainvillea spp.* – Irregular/sprawling growth form, used as a shrub and in hanging baskets
7. Family: Cannaceae: *Canna indica* - has an upright form, dark green foliage and a bright colored inflorescence. *Canna* can be utilized as a screen in wet or dry areas.

8. Family: Apocynaceae: *Catharanthus roseus* – Seen frequently in walkways as a border. *Catharanthus* has mauve colored flowers
9. Family: Euphorbiaceae: *Codiaeum variegatum* – brightly variegated foliage, bright venation. Used extensively throughout the island as a hedge plant.



10. Family: Araceae: *Colocasia esculenta* – characteristic large peltate leaves. This plant is used for food however, it is also used for its attractive foliage in border plantings.
11. Family: Lamiaceae: *Coleus spp.* – used as a small to medium shrub, *Coleus* are valued for their diverse variegated foliage.
12. Family: Fabaceae: *Delonix regia* – small to medium sized tree with showy flowers. Red and orange occur more frequently. *Delonix* are tolerant of many environmental conditions, which makes them ideal for coastal plantings.
13. Family: Euphorbiaceae: *Euphorbia pucherrima* – medium/large shrub to small tree, that is used in hedges.



14. Family: Moraceae: *Ficus spp.* – There is a wide range of use due to the varied growth form and habits of many species. They can be used as formal hedges, small trees, and even large shade trees.

15. Family: Heliconiaceae: *Heliconia spp.* – Foliage resembles banana plants, they have showy red and yellow bracts. They can be used as screens and are also good understory plants. *Heliconia caribaea* is the larger of the species and live in lower elevations. *Heliconia bihai* has a smaller form, and usually occurs in higher elevations. *Heliconia rostrata* is interesting because it has hanging inflorescence.



16. Family: Malvaceae: *Hibiscus spp.* – green foliage with colorful and showy flowers. They are variable in form used as irregular hedges, screens, or sprawling across fences.
17. Family: Convolvulaceae: *Ipomea fistulosa* – white, pink, or purple colored flowers. Medium to large shrub, can be used as a hedge or screen.
18. Family: Convolvulaceae: *Ipomea tiliaceae* – A scrambling vine, perhaps not always intentionally planted in the landscape, it grows well on a host plant.
19. Family: Lythraceae: *Lagerstromia indica* – Small to medium sized tree. Valued for its flushes of flowers and silver grey bark.
20. Family: Verbenaceae: *Lantana camara* – Straggling shrub with a small growth form. Valued for its bunches of small attractive flowers.
21. Family: Malvaceae: *Malvaviscus arboreus* – Shrub to small tree used as a hedge. Called sleeping *Hibiscus* because the flower resembles a *Hibiscus* flower that has not opened.
22. Family: Apocynaceae: *Nerium oleander* – Medium to large shrub, has leathery pinnate leaves. It can be used as a hedge, screen, or an accent plant. Available with a variety of flower colors from white to red.
23. Family: Cactaceae: *Pilosocereus royenii* – Upright growing columnar cactus used as an accent plant. Although this plant was not seen as frequently, I felt it important to include, to stress the diversity of the island.
24. Family: Apocynaceae: *Plumeria alba* – Medium sized native tree with white flowers which are very fragrant. Utilized for its visual and fragrant affect.



25. Family: Fabaceae: *Sabinea carinalis* – Small deciduous tree with bright red color.
The National Flower of Dominica

