Field Guide to the Caribbean Flora Seen Throughout Study Abroad Dominica 2014

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Abstract

The purpose of this study was to identify all flowers encountered during excursions throughout Study Abroad Dominica 2014. Around 50 flowers were obtained and identified, and a field guide was produced describing each flower and its location. The study was able to provide a better knowledge of Dominican flora and can be continued in the future.

Introduction

The island of Dominica is home to countless species of flowers and plants. On a single trail, as many as fifteen flowers or more may be seen. These varieties of Dominican flora were the basis in deciding to produce a sort of guide to the flowers of the island. The intention of this project was to identify as many flowers as possible in the three week time span permitted in the areas travelled to. Overall, a large number of flowers were observed and identified, and hopefully this will be of great use to future researchers.

Materials and Methods

At the beginning of the study abroad program, prior to choosing the distribution of flora as the definite project topic, around twenty flower pictures were obtained. Once it was decided that the project would focus on Dominican flowers, around thirty more were acquired. Using an iPhone 3GS camera/ 2 MP, 1600 x 1200 pixels, a picture of each flower was taken. Flowers were seen on the hikes to Mt. Joy, Middleham Falls, Cabrits National Park, the Kalinago Territory, Freshwater Lake, and Boeri Lake Trail, as well as around the Springfield Station gardens. Flower species were identified using the Dominica Illustrated Flora field guide (James et al., 1997). Further identification was established with the help of Dr. Thomas Lacher, Nancy Osler of Springfield, Top Tropicals online garden center, and the University of the West Indies, "Plants of the Eastern Caribbean" database. Once all specimens were identified, they were organized in a photographic gallery and then transferred to a Microsoft Word 2010 document, where each was given a brief description in addition to the provided picture.

Results

Overall, there were fifty flowers photographed and identified. A couple of photographs were removed as the picture was unclear, and three of the fifty specimens were only identified to family as they are part of a large group. Most of the flowers found at Springfield Station were of ornamental use, as are most flowers found in Dominican gardens. All other flowers identified fall into other categories such as native descent, ornamental use, or introduced species.

Discussion

The purpose of this field guide is to provide a photographic reference of each of the flowering plants encountered on Dominica. Though fifty floral photographs were acquired, there are still many other flowers on the island to be identified. The pictures taken came from some of the popular trails of Dominica and Springfield Station, and will ideally be useful in identifying flowers commonly seen in areas frequently visited by Study Abroad Dominica.

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Dominican Flora

Family: Acanthaceae

Thunbergia alata (Common Name: Black-eyed Susan)

Location: Springfield Station Butterfly Garden, Middleham Falls Trail

Description: Smaller vine. Orange/yellow flower with 5 petals. There are
white varieties as well. Common food source of Antillean Crested
Hummingbird.



Thunbergia grandiflora

Location: Mt. Joy trail, near the old station ruins

Description: Large vine. White or blue flowers with 5 petals. Triangular, lobed or toothed leaves. Yellow tube inside the flower.



Family: Apocynaceae

Allamanda cathartica (Common Name: Yellow Bells or Golden Trumpet)

Location: Kalinago Territory

Description: Mildly poisonous. Five large petals. A vine requiring some support, can be in the form of a shrub. May grow up to 20' tall.



Nerium Oleander

Location: Cabrits National Park

Description: Light pink flower with 5 petals. Long fibrous stamen. Thin, linear leaves.



Plumeria rubra

Location: Springfield Station Butterfly Garden

Description: White flowers with 5 sleek petals and a yellow center. Very long, simple pinnate leaves. Milky sap secreted from the center of broken branches.



Family: Asteraceae

Centratherum punctatum

Location: Cabrits National Park

Description: Purple, thistle-like flower. Toothed, simple leaves. 1-2 feet

tall.



Coreopsis lanceolata

Location: Middleham Falls Trail

Description: 8 yellow petals with toothed tips. Thin stem with small leaves.

Center disk has prominent anther tubes.



Emilia fosbergii

Location: Middleham Falls Trail

Description: Red floret flowers. Simple leaves. Thin stems.



Tithonia diversifolia

Location: Springfield Station Butterfly Garden

Description: Long, slender, yellow petals. 10-12 petals total. Prominent

anther tubes. Broad leaves.



Family: Begoniaceae

Begonia grandis

Location: Springfield Station Veranda

Description: Small white flower with 4 petals. Bright yellow center, and

reddened stems. Large cordate leaves.



Family: Bromeliaceae

Pitcairnia angustifolia

Location: Cabrits National Park

Description: Bright, deep red, narrow flowers. Red, thin stems. Grows

relatively tall.



Family: Campanulaceae

Hippobroma longiflora

Location: Middleham Falls Trail

Description: Small, white flower. 5 thin, pointed petals. Thistle-like leaves

with toothed edges.



Family: Commelinaceae

Commelina diffusa

Location: Middleham Falls Trail

Description: Tiny blue flower. Two larger, circular upper petals. Two

smaller lower petals. Longer, simple leaves.



Family: Convolvulaceae

Ipomea tiliaceae

Location: Mt. Joy Trail, Middleham Falls Trail

Description: Bell-shaped flower of purple color. Heart-shaped, broad

leaves.



Family: Euphorbiaceae

Euphorbia milii

Location: Springfield Station Butterfly Garden

Description: Small bushel of pale yellow flowers. Darker center, with 2 petals. Long pinnate leaves. Small tree structure with thorns along trunk.



Jatropha integerrima

Location: Springfield Station Butterfly Garden

Description: Small, bright pink flowers with 5 petals. Yellow stamens in the center. Larger, lobed leaves with 3 points.



Family: Fabaceae

Centrosema virginianum

Location: Middleham Falls Trail

Description: Purple flower with two large petals. 3 alternating pinnate

leaves.



Chamaecrista glandulosa

Location: Middleham Falls Trail

Description: Small yellow flowers. Short brown stamen in the center of the

flower. Small, compound leaves.



Delonix regia

Location: Cabrits National Park

Description: Large sprawling tree. Large, double pinnate compound leaves.

Flowers of red/orange color, made up of four petals and a fifth upright petal in the center.



Desmodium incanum

Location: Middleham Falls Trail, Mt. Joy Trail, Cabrits National Park Description: Tiny purple flower with one larger petal and a small lip.

Slender, simple leaves with a paler line down the middle.



Mimosa pudica

Location: Middleham Falls Trail

Description: Purple flower resembling a firework. Small, opposite compound leaves. Leaves fold in when touched.



Family: Heliconiaceae

Heliconia bihai

Location: Boeri Lake Trail

Description: Smaller, crab claw-like flower. Tall stem. Actual flower growing within the modified claw.



Heliconia wagneriana

Location: Springfield Station, Mt. Joy Trail, Middleham Falls Trail

Description: Large, modified crab-like leaves. Small flowers within the

claw structure. Attempting to be removed; host to mosquito larvae

due to collected water.



Family: Iridaceae

Trimezia martinicensis

Location: Springfield Station Butterfly Garden

Description: Small yellow flowers. 3 petals and 3 sepals. Center is spotted.

Leaves resemble large blades of grass



Family: Lamiaceae

Clerodendrum chinense

Location: Springfield Station Butterfly Garden

Description: Bushel of white, rose-like flowers resembling a bouquet.

Broad, slightly lobed, toothed leaves.



Holmskioldia sanguinea

Location: Springfield Station Butterfly Garden

Description: Small orange flowers. Flattened petals with short stigma in the

center. Small, simple pinnate leaves.



Family: Lythraceae

Cuphea hyssopifolia

Location: Springfield Station Butterfly Garden

Description: Shrub with small purple flowers with 6 petals. Pale center.

Simple, glossy leaves.



Family: Malvaceae

Sida acuta

Location: Middleham Falls Trail

Description: Small pale yellow flower with 5 bean-shaped petals. Bright

yellow center. Small, lobed leaves.



Hibiscus

Location: Springfield Station Butterfly Garden

Description: Large standard hibiscus. 5 very light pink petals. Dark magenta center. Long red stigma with yellow anthers.



Double Hibiscus

Location: Springfield Station Butterfly Garden

Description: Very full flower. Peach colored, veined petals. Deep red stigma. Large simple pinnate, toothed leaves.



Malvaviscus arboreus

Location: Springfield Station Butterfly Garden

Description: Bright red flower with thin veined petals. Long stigma protruding from the center. Broad simple leaves.



Family: Melastomataceae

Charianthus alpinus

Location: Freshwater Lake

Description: Pink/red flowers. Reddened stems. Large, simple leaves with

the ladder pattern. Produces black fruit.



Clidemia hirta

Location: Mt. Joy Trail

Description: Small white flower with 5 petals and small white stamens in a circle pattern. Furry stems and leaves. Ladder pattern seen in leaf veins. Produces black berries.



Dissotis rotundifolia

Location: Middleham Falls Trail

Description: Bright purple flower with yellow stamens. Small ladder patterned leaves. Ground covering vine. Has become invasive.



Nepsera aquatic

Location: Middleham Falls Trail

Description: Small white flower with 4 sharply pointed petals. Purple stamens. Red, wood-like stems with simple, laddered leaves.



Pterolepis glomerata

Location: Freshwater Lake

Description: Small light pink or white flower with four petals. Thin stem

with few small leaves.



Tibouchina grandiflora

Location: Springfield Station Butterfly Garden

Description: Large, sprawling shrub. Rich purple flowers with pink centers.

Soft, fuzzy leaves with the ladder-like patter of melastomes.



Tibouchina ornata

Location: Freshwater Lake

Description: Deep purple flower with 5 pointed petals. Bright yellow stamens. Tiny pinnate leaves with the ladder-like veins of melastomes.



Family: Nyctaginaceae

Bougainvillea spectabilis

Location: Springfield Station Veranda

Description: Small white flowers. Protruding stamens surrounded by three thin petals. Smaller shrub with heart-shaped, pinnate leaves.



Family: Orchidaceae (Common Name: Terrestrial Orchid)

Spathoglottis plicata

Location: Middleham Falls Trail

Description: Long, tall stem. Light purple flower with 2 petals, 3 sepals, and white lip protruding from the lower portion of the flower.

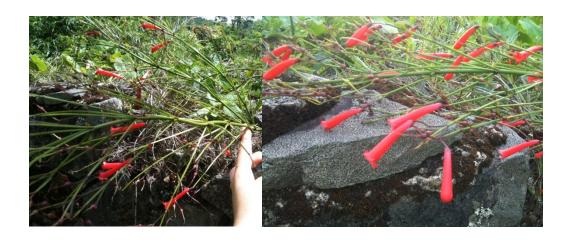


Family: Plantaginaceae (Common Name: Coral Firecracker)

Russelia equisetiformis

Location: Springfield Station Butterfly Garden

Description: Thin, tube like flower. Long, thin stems. Leafless plant.



Family: Rosaceae

Rubus rosifolius

Location: Mt. Joy Trail

Description: White flowers with 5 petals. Several anthers around the stigma. Produces raspberries. Toothed, pinnate leaves. Introduced.



Rose

Location: Springfield Station Butterfly Garden

Description: Very full, pink flower with sprawling petals. Simple pinnate leaves.



Family: Rubiaceae

Gonzalagunia hirsute

Location: Middleham Falls Trail

Description: Small white flowers with 4 petals. Long, glossy pinnate

leaves. Smaller shrub.



Mussaenda erythrophylla

Location: Springfield Station Butterfly Garden

Description: Broad pink flowers. Large pink sepals. Small yellow flower

with 5 petals. Large simple, pinnate leaves



Mussaenda luteola

Location: Springfield Station Butterfly Garden

Description: Small, yellow flower. 5 star-shaped petals. Large white sepal.

Medium sized simple leaves.



Psychotria urbaniana

Location: Middleham Falls Trail

Description: Small light purple sepals, very rose-like. Produces tiny white flower with 5 petals. Linear, thin pinnate leaves.



Family: Solanaceae

Solanum torvum

Location: Mt. Joy Trail

Description: Small white flowers. Star-shaped with 5 petals and protruding yellow stigma. Larger lobed leaves.



Family: Verbenaceae

Lantana camara

Location: Middleham Falls Trail

Description: Tiny yellow and orange flowers. Produces small black berries.

Toothed leaves with prominent veins. Introduced.



Stachytarpheta urticifolia

Location: Middleham Falls Trail

Description: Small purple/blue flower with 5 petals. Long stem continuing past flowers. Toothed, pointy leaves.



Family: Zingiberaceae

Alpinia purpurata

Location: Springfield Station Butterfly Garden

Description: Decorative ginger plant. Flower resembling pinecone structure. Usually of pink or red hue. Long, broad pinnate leaves. Introduced.

