Photographic Field Guide to Mushrooms on the Caribbean Island of Dominica

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Introduction:

Mushrooms are the fruiting bodies of some fungi and are a primary source for decomposing organic matter. They are the ultimate recyclers. Up to this point, 80,000 species have been identified plus 1,700 new species each year (Shaw 2008). The objective was to collect and identify as many mushrooms as possible, except for shelf fungi, on the Caribbean island of Dominica over a three week period. There is no field guide, therefore mushrooms in Dominica are poorly known. Four books were used in the identification process along with pictures from the internet for comparison.

Every mushroom collected was under the Phylum: Ascomycota and Basidiomycota. Mushrooms were found in secondary rain forest, Montane Rain Forest, Elfin Forest and Dry Forest.

Materials and Methods:

For this project, mushrooms were collected around the Archbold Tropical Research and Education Center (ATREC), Massacre Trail, Mt. Joy Trail, Middleham Falls, Cabrits National Park, Syndicate Trail, Freshwater Lake, Boeri Lake, Elfin Forest, and St.David's Bay. Close attention was paid to both sides of the trails, especially on rotting wood. In some cases biodegradable flagging tape was placed by the fruiting bodies to mark the spot until we were ready to collect them. Upon seeing mushrooms, pictures were taken with a Nikon D1X camera with a 105 mm macro lens and for tiny mushrooms; a 55mm extension tube was added. A pocket shovel was used to dig up mushrooms and box cutters were used to cut off the mushrooms from the wood. Medium and large paper bags along with glass vials were used to store the mushrooms in until we got back to ATREC. Immediately upon arrival to the station the stipes were cut off the mushrooms and then placed on either black or white construction paper and left over night to take the spore prints. Pictures were then taken of the spore prints that were left. Due to the size and texture of some mushrooms, spore prints were not able to be taken. Each mushroom was identified as best as possible, some up to the species and others not.

Results:

<u>Cyathus striatus</u>

Common Name: Splash cup

Description: Tan to a brownish color, gradually getting darker as it ages. Cone shaped; hairy outer wall; striated inner wall. Eggs are a dark chocolate color.

Habitat: On rotting wood found on Massacre and Mt. Joy trail, around ATREC.

Source: Lincoff (1981)





Figure 1c: Later stage







Figure 1d: eggs/ spores



<u>Lentinus spp.</u>

Description: Cream to tan in color; depressed center; hairy/ fibrous cap; gills descend along the stipe; close gill spacing; spore print is white.

Habitat: On rotting wood usually in clusters; found around ATREC, Massacre Trail, Middleham Falls Trail, Boeri Lake Trail and the Carib Territory.

Source: Pegler (1983)

Figure 2a: Lateral view



Figure 2b: Lateral view

Figure 2d: Spore print



Figure 2c: Dorsal view





Hygrocybe occidentalis var. occidentalis

Description: Red-orange in color with yellow on the outer edges; pileus is convex then flat and becoming perforated in the center. The stipe is hollow and yellow to orange in color. Attached gills; distant gill spacing. Spore print is white.

Habitat: On the ground along Syndicate Trail and the hike to Boeri Lake.

Source: Pegler (1983)

Figure 3a: Ventral view



Figure 3b: Lateral view



Figure 3c: Spore print



Hygrocybe chloochlora

Description: Yellow; pileus is convex then flat and becoming perforated in the center. The stipe is hollow. Attached gills; distant gill spacing.

Habitat: On the ground; found along Syndicate Trail.

Source: Pegler (1983)

Figure 4a: Ventral view



Figure 4b: Dorsal/ Lateral view



<u>Coprinus plicatilis</u>

Description: Gray in color with a tan to brownish spot in the center; pileus is convex and pleated; translucent stipe. Attached gills; distant gill spacing. Black spore print.

Habitat: Found on the ground on the north side of ATREC.

Source: Pacioni (1981)

Figure 5a: Lateral/ Ventral view



Figure 5b: Spore print



<u>Pleurotus ostreatus</u>

Common name: Oyster mushroom

Description: Whitish to tan in color; oyster shaped; crowded gill spacing; white spore print.

Habitat: On rotting wood; found around ATREC and along Syndicate Nature Trail.

Source: Lincoff (1981)

Figure 6a: Ventral view



Figure 6b: Ventral view



Figure 6c: Dorsal view



Figure 6d: Spore print



<u>Auricularia polytricha</u>?

Common name: Cloud Ear Fungus

Description: Brown in color; jelly like inner lining; hairy outer lining.

Habitat: On rotting wood; found along the trail to Mt. Joy.

Source: "Guyane" (2008)

Figure 7: Ventral view



Unidentified Mushrooms

Description: Light brown to tan; puffball. Brown spores.

Habitat: Found on rotting wood on the hike to Mt. Joy.

Figure 8a: Lateral view





Figure 8b: Inside lateral view



Description: Brown to tan having a grayish tint; bell to knobbed shaped cap. Tan colored stipe. Close gill spacing.

Habitat: On rotting wood found along Syndicate Nature Trail.

Figure 9a: Lateral view



Figure 9b: Spore print



Description: Dark to light gray, gradually getting darker at the top of the pileus; bell shaped. Stipe is white to gray, velvety texture.

Habitat: On rotting wood found on the hike to Middleham Falls.

Figure 10a: Lateral view



Figure 10b: Dorsal view



Description: Light gray, dark in the center; convex cap; slightly pleated. Gray, velvety stipe. Attached gills; distant gill spacing

Habitat: On twigs found on the hike to Middleham Falls.

Figure 11a: Lateral view



Figure 11b: Dorsal view



Description: Light to dark gray; convex to bell-shaped cap; slightly pleated. White to grayish stipe.

Habitat: On twigs; found on the hike to Middleham Falls.

Figure 12a: Lateral view





Figure 12b: Ventral view

Description: Light gray; small; convex to bell-shaped cap with sunken center. Free gills; distant gill spacing

Habitat: On wood covered in moss; found on a step along Syndicate Nature Trail.

Figure 13a: Lateral view



Figure 13c: Dorsal view



Figure 13b: Ventral view



Description: Orange; convex cap; orange stipe; attached gills; distant gill spacing.

Habitat: On rotting wood; found on the trail to Mt. Joy.



Description: Brown gradually getting lighter around the edges; flat to convex cap; cream colored stipe. Attached gills; close gill spacing.

Habitat: On chips of wood; found on the trail to Mt. Joy.

Figure 15: Ventral and Dorsal view



Description: Reddish-brown; convex cap; sunken in the center. Light brown to tan stipe.

Habitat: On wood; found on the trail to Mt. Joy.

Figure 16: Ventral view



Description: Red-orange to yellow; red in the center; convex cap; velvety texture; stipe is yellow-orange and velvety; distant gill spacing.

Habitat: On the ground; found on the trail to Mt. Joy.

Figure 17: Lateral/ Ventral view



Description: Light brown with a grayish tint, darker at the center; convex cap, curving upward around the edges; slightly pleated. Stipe is brown with a grayish tint; distant gill spacing.

Habitat: On a stick; found on the hike up to Mt. Joy.

Figure 18: Lateral view



Description: Dark brown; knoblike shape.

Habitat: On wood, found on a step along the trail to Middleham Falls.

Figure 19: Lateral view



Description: White; bell-shaped cap; translucent, velvety stipe. Free gills; distant gill spacing.

Habitat: On a fallen branch; found on the trail to Middleham Falls.

Figure 20a: Lateral view



Figure 20b: Dorsal view



Description: Brown with the center and edges slightly darker; convex cap. Brown to cream colored stipe. Attached gills; distant gill spacing.

Habitat: Fallen leaves; found along the trail to Middleham Falls.









Description: White to translucent; convex cap; yellowish stipe. Attached gills; distant gill spacing.

Habitat: On fallen leaves; found along the trail to Middleham Falls.

Figure 22a: Ventral view



Figure 22b: Dorsal view



Description: Cream colored with a grayish tint; knobbed cap; whitish, almost translucent stipe; distant gill spacing; slimy cap.

Habitat: On rotting wood; found along Syndicate Nature Trail.

Figure 23a: Lateral view



Figure 23b: Dorsal view



Description: Gray, gradually getting darker in the center; convex cap; white stipe. Free gills; close gill spacing.

Habitat: On wood covered in moss; found on the trail to Mt. Joy.

Figure 24a: Lateral/ Ventral view



Figure 24b: Dorsal view



Description: White; wrinkled around the edges, descending in the center; translucent stipe; attached gills; distant gill spacing.

Habitat: On rotting wood; found along the trail to Mt. Joy.

Figure 25a: Lateral/ Ventral view



Figure 25b: Lateral/ Dorsal view



Description: Cream to translucent; convex cap; whitish/ cream stipe. Free gills; distant gill spacing. Slimy cap.

Habitat: On rotting wood; found along the trail to Mt. Joy.

Figure 26a: Lateral/ Ventral view



Figure 26b: Dorsal view



Description: Brown to tan in color; convex to bell-shaped; cream colored stipe.

Habitat: On the ground; found in the grass where we parked at St. David's Bay.

Figure 27: Lateral view



Description: Brown, gradually getting lighter around the edges; bell-shaped cap; white stipe.

Figure 28: Lateral view



Description: Yellow; knoblike shape.

Habitat: On wooden step at Freshwater Lake.



Description: Light gray to tan in color; convex to bell-shaped; translucent and velvety stipe.

Figure 30: Lateral view



Description: Tangerine colored inner lining; light peach outer lining. Cup fungus.

Habitat: On rotting wood; found along the trail to Mt. Joy.



Description: Cream colored; convex cap; white stipe. Free gills; distant gill spacing.



Description: Dark brown getting lighter around the edges, the pileus is not fully circular; dark brown stipe; attached gills; distant gill spacing.

Habitat: On rotting wood, found along Syndicate Nature Trail.

Figure 33a: Ventral view



Figure 33b: Dorsal view



Description: Tan to cream colored; convex then flat and descending slightly in the center; gills descend; attached gills; distant gill spacing.

Figure 34: Lateral view



Description: Dark brown; convex cap; translucent stipe.

Habitat: On rotting wood found along the trail to Mt. Joy.

Figure 35: Ventral view



Description: White to translucent; cream colored center; white to translucent stipe; stipes where more to one side than being in the center. Attached gills; distant gill spacing; usually in cluster.

Figure 36a: Ventral view

Figure 36b: Dorsal view





Description: White cap; brownish circular ring in the center; white to cream stipe. Annular ring on the stipe.

Habitat: On rotting wood; found along the trail to Mt. Joy.

Figure 37: Ventral view



Description: Brown; convex cap; white stipe; free gills; distant gill spacing.

Figure 38a: Ventral view

Figure 38b: Dorsal view





Description: Brown to grayish; the cap curves upward, almost to where the cap cannot be seen. Grayish to white stipe; close gill spacing.

Habitat: On wood, found on a step along Syndicate Nature Trail.

Figure 39: Lateral view



Description: White to grayish at the tips and turning black about ¾ of the length. Coral like fungus.

Figure 40a: Lateral view







Description: White; rounded at the base and lobed at the top.

Habitat: On wood; found on a step along Syndicate Nature Trail.

Figure 41: Lateral view



Description: White; brown circle in the center; convex to bell-shaped; white stipe.

Habitat: On the ground; found along Syndicate Nature Trail.

Figure 42: Lateral/ Ventral view



Description: Cream colored, darker in the center; bell-shaped.

Habitat: On wood; found on a step along Syndicate Nature Trail.

Figure 43: Ventral view



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