

**Key to the Families of Trees and Shrubs at the Archbold Tropical Research and Education Centre (formerly Springfield and Mt. Joy Estates) Dominica, W.I.**

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The following key is based on vegetative rather than floral characteristics and is designed to identify with a 10X hand lens the correct families of individual dicotyledonous trees and shrubs found on the Springfield property of the Archbold Tropical Research and Education Centre (ATR&EC) in Dominica. Springfield is located at 380m elevation in the Antrim Valley north of Roseau in the lower rain forest zone. Secondary forest characterizes most of the property which between 1936 and 1979 was cultivated and comprised of Springfield and Mt. Joy estates.

Species belonging to thirty-five families of Dicotyledoneae including three sub-families have been identified. Names of genera appear in parentheses when the genera noted are the only ones having the given character(s) and are the only genera of the family found at Springfield. New families, if found, will be added as necessary in the future and the key updated.

Vegetative Characteristic  
Family

1. Compound leaves	2
1. Simple leaves	10
2. Opposite leaves	
Bignoniaceae	
2. Alternate leaves	3
3. Leaves with stipules	4
3. Leaves without stipules	7
4. Leaves palmate	
Bombacaceae	
4. Leaves pinnate or bipinnate	5
5. Leaves imparipinnate	Papilionaceae
(Fabaceae)	
5. Leaves paripinnate or bipinnate	6

6. Leaves paripinnate ( <u>Inga spp.</u> ) or bipinnate with nectaries (Fabaceae)	Mimosaceae	
6. Leaves paripinnate or bipinnate without nectaries (Fabaceae)	Caesalpinaceae	
7. Leaves with pellucid dots Rutaceae		
7. Leaves without pellucid dots		8
8. Leaves with mango or turpentine odor and without bitter taste Burseraceae		
8. Leaves without mango or turpentine odor		9
9. Leaves with bitter taste, clear sap Simaroubaceae		
9. Leaves with milky sap Caricaceae		
10. Leaves opposite or whorled		11
10. Leaves alternate		17
11. Leaves with stipules		12
11. Leaves without stipules		13
12. Stipules interpetiolar Rubiaceae		
12. Stipules intrapetiolar or free Malpighiaceae		
13. Leaves with scalariform veins Melastomataceae		
13. Leaves without scalariform veins		14
14. Leaf veins prominent		15
14. Leaf veins obscure, finger-like with creamy latex Clusiaceae		
15. Leaves with pinnate veins and with fused marginal vein, Myrtaceae lacking latex		
15. Leaves with pinnate, but open veins		16
16. Branchlets quadrangular Verbenaceae		
16. Branchlets with white latex Apocynaceae		

17. Leaves with stipules	18
17. Leaves without stipules	27
18. Bark stringy when peeled from twig	19
18. Bark not stringy when peeled from twig	21
19. Stems mucilaginous, leaves 3-5 veined	20
19. Stems not mucilaginous, leaves 3-5 veined Elaeocarpaceae	
20. Petals yellow ( <u>Guazuma</u> ) or united sepals a cream color ( <u>Sterculia</u> ) Sterculiaceae	
20. Petals orange-red to dark crimson ( <u>Hibiscus</u> ) Malvaceae	
21. Stems with white latex	22
21. Stems without white latex	23
22. Prominent terminal stipule scar, false marginal leaf vein, Moraceae transverse lenticels on the stem	
22. Extrafloral nectaries present, leaves spirally arranged Euphorbiaceae	
1. Stems with brownish exudation, prominent terminal stipule scar, Cecropiaceae	
leaves palmately lobed, white beneath	
23. Stems without exudation	24
24. Stipules intrapetiolar	25
24. Stipules not intrapetiolar	26
25. Stipules hairy, bark brittle Chrysobalanaceae	
25. Stipules not hairy, bark not brittle, central leaf area different texture Erythroxylaceae	
26. Leaf nodes swollen, inflorescence a vertical spike Piperaceae	
26. Trunk fluted, blaze turns orange Dichapetalaceae	

27. Bark stringy	28
27. Bark not stringy	30
28. Leaves aromatic, distichous Annonaceae	
28. Leaves not aromatic or distichous	29
29. Sympodial branching, verticillate at ends ( <u>Cordia</u> ) Boraginaceae	
29. Nonsympodially branched shrub or tree to 15m, bitter inner bark Thymelaeaceae	
30. Leaves aromatic (or with bad odor)	31
30. Leaves nonaromatic	34
31. Leaves with mango odor, resinous exudate is dark upon drying Anacardiaceae	
31. Leaves with other than mango odor	32
32. Leaves with bad odor, often having stellate hairs Solanaceae	
32. Leaves with pleasant smell	33
33. Leaves with pellucid dots, citrus smell Rutaceae	
33. Leaves without pellucid dots, spirally arranged, sulcate stem Lauraceae	
34. Leaves with white latex	35
34. Leaves with other than white latex or none	36
35. Turbinate buds, fruit in pairs, finger-like glands Apocynaceae	
35. Buds not turbinate, bottle-shaped petiole Sapotaceae	
1. Leaves with reddish exudation, falsely whorled long branches, Myristicaceae	
distichous	
1. Leaves without latex, obovate, crowded near branch ends, Combretaceae	

sympodial branching

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