PTERIDOPHYTES

Key to the families

1. Fronds megaphyllous; venation well developed, with primary, secondary, or tertiary veins.
   2. Sori on the abaxial surface of the frond.
   3. Fronds monomorphic, the fertile and sterile ones similar.
      4. Fern scandent or climbing by the twining leaf rachis, with indeterminate growth.
         5. Sori naked (without indusia), dispersed on the abaxial surface of the frond, usually near the midvein .............................................................................................................. Gleicheniaceae
         5. Sori covered with an indusium in the form of a pocket, produced on digitiform marginal projections of the pinnae ........................................................................ Schizaeaceae
      4. Fern climbing by adventitious roots.
         6. Blades of the fronds entire ........................................................................ Davalliaceae
         6. Blades of the fronds pinnatisect .............................................................. Polypodiaceae
   3. Fronds dimorphic, the fertile ones significantly different from the sterile ones.
      7. Sori dispersed on the lower surface, not grouped; indusium absent ...
         1. Fronds microphyllous (minute), with only one vein ........................................ Selaginellaceae
      7. Sori in elongate-linear groups, lateral to the midvein; indusium entire, elongate
         .................................................................................................................... Blechnaceae
   2. Sori marginal or submarginal on the fronds .................................................... Dennstaedtiaceae

1. Family BLECHNACEAE

1. BLECHNUM

Distribution: In moist forests at middle and upper elevations along the Cordillera Central and the Sierra de Luquillo. Also in Jamaica, Cuba, Hispaniola, southern Mexico, and Central America.
Public Forests: Carite, El Yunque, Guilarte, and Toro Negro.

2. Family DAVALLIACEAE

1. OLEANDRA

1. Oleandra articulata (Sw.) C. Presl, Tent. Pterid. 78. 1836.
Distribution: In moist forests at middle and upper elevations along the Cordillera Central and the Sierra de Luquillo. Also in Jamaica, Cuba, Hispaniola, the Lesser Antilles, and throughout the Neotropics.
Public Forests: Carite, El Yunque, Guilarte, Maricao, Rio Abajo, and Toro Negro.

3. Family DENNSTAEDTIACEAE

Key to the genera
1. Rhizomes without scales; sori marginal or submarginal, at the tips of the veins, covered by the reflexed margins of the blade ........................................................................................................ 1. Hypolepis
1. Rhizomes covered with scales; sori in marginal pockets ........................................... 2. Odontosoria

1. Hypolepis

Key to the species of Hypolepis

1. Stipe and rachis densely spiny.
   2. Leaf rachis brown, with some of the spines recurved and dark brown; blades 4-pinnate-pinnatifid; pinnules distally emarginate .......................................................................................... 1. H. nigrescens
   2. Leaf rachis creamy yellow, with straight, pale spines; blades 3-pinnate-pinnatifid; pinnules distally obtuse, entire ................................................................................................. 2. H. repens

1. Stipe and rachis unarmed or with some scattered spines.
   3. Leaf blade membranaceous with light brown venation; the upper surface with a flat midvein; the lower surface glabrous or puberulent ........................................................................ 3. H. tenerrima
   3. Leaf blade chartaceous with yellowish venation; the upper surface with a sulcate midvein; the lower surface pubescent .................................................................................. 4. H. urbanii

Distribution: Known from three localities in Puerto Rico, in the interior or at the edges of moist forests. Also in the Greater Antilles and from Mexico to Bolivia.
Public forest: Toro Negro.

Distribution: In moist secondary and disturbed forests along the Cordillera Central and the Sierra de Luquillo. Also in the Antilles (except Jamaica) and continental tropical America.
Public forests: Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

Distribution: Known in Puerto Rico from two collections made by Paul Sintenis at the end of the nineteenth century from primary forests in Adjuntas (Sintenis 4105) and Utuado (Sintenis 6454). Also in Hispaniola.
Public forest: Toro Negro.

Distribution: Known in Puerto Rico from only one collection from Monte Jayuya (Proctor 40130). Also in Hispaniola.
Public forest: Toro Negro.

2. Odontosoria

Key to the species of Odontosoria

1. Rachis of the fronds spiny ........................................................................................................ 1. O. aculeata
1. Rachis of the fronds unarmed .............................................................................................. 2. O. scandens

1. Odontosoria aculeata (L.) J. Sm, Cult. Ferns 67. 1857.
Distribution: In secondary forests and moist disturbed areas from sea level to 950 m. Also in St. John, St. Thomas, and Tortola; Cuba and Hispaniola.
Public forests: Carite, El Yunque, Guilarte, Maricao, Rio Abajo, and Toro Negro.

2. Odontosoria scandens (Desv.) C. Chr., Ind. Fil. 354, 465. 1906.
Distribution: Sporadic along the Cordillera Central, in moist secondary and disturbed forests. Also in Cuba and Hispaniola.
Public forests: El Yunque, Guilarte, Maricao, and Toro Negro.

4. Family GLEICHENIACEAE
   Key to the genera

1. Leaf blade with secondary venation (between the midvein and the margin) 2-5 times bifurcate; rhizomes and fronds without scales ................................................................. 1. Dicranopteris
1. Leaf blade with secondary venation (between the midvein and the margin) only once bifurcate; rhizomes and fronds with scales (fronds with scales at least at the apical meristems) . 2. Gleichenia

1. DICRANOPTERIS
   Key to the species of Dicranopteris

1. Area of frond bifurcation with a pair of accessory pinnae; tertiary rachis of the fronds slightly angular; lower surface pale green, glabrous ................................................................. 1. D. flexuosa
1. Area of frond bifurcation without accessory pinnae or sometimes with accessory pinnae only in the primary bifurcations; tertiary rachis of the fronds with narrow longitudinal keels; lower surface glaucous, glabrous, or sometimes with scattered stellate hairs ........................................ 2. D. pectinata

Distribution: Widely distributed in moist disturbed areas along varying elevational gradients. Also in the Antilles, the United States (Florida), Central America, and tropical South America.
Public forests: Carite, El Yunque, Maricao, Rio Abajo, Toro Negro, and Tortuguero.

Distribution: Widely distributed in moist disturbed areas at various elevations. Of wide distribution in the Neotropics.
Public forests: Carite, El Yunque, Maricao, and Rio Abajo.

2. GLEICHENIA
   Key to the species of Gleichenia

1. Lower surface of the pinnae tomentose or woolly.
2. Lower surface of the pinnae densely ferruginous-tomentose to woolly; principal rachis of the young pinnae densely covered with pale brown, ciliate scales on the upper surface, of woolly appearance ................................................................. 1. G. bifida
2. Lower surface of the pinnae white-woolly; principal rachis of the young pinnae covered with a few brown-purple, short-ciliate, and deciduous scales on the lower surface ...... 2. G. brevipubis
1. Lower surface of the pinnae glaucous, glabrous except for the main veins, which are covered with reddish scales or cilia ................................................................. 3. G. rubiginosa

Distribution: Widely distributed in Puerto Rico, in moist disturbed areas at middle to upper elevations. Also throughout the Neotropics.
Public forests: Carite, Guilarte, El Yunque, Maricao, and Rio Abajo.

Distribution: Known in Puerto Rico from two recent collections (Proctor 39420 and 41419). Also from Mexico to Costa Rica.
Public forest: Toro Negro.

Distribution: Restricted to the highest areas of the Cordillera Central, in moist disturbed areas, on roadsides and in forests. Also in mountainous areas of Venezuela, Colombia, Ecuador, and Peru.
Public forests: Guilarte and Toro Negro

5. Family LOMARIOPSIDACEAE
Key to the genera

1. Secondary venation reticulate .................................................................................. 1. Lomagramma
1. Secondary venation free .............................................................................................. 2. Lomariopsis

1. LOMAGRAMMA

Distribution: In moist forests at lower and middle elevations. Also in Cuba, Hispaniola, Venezuela, French Guiana, and Brazil.
Public forest: Maricao.

2. LOMARIOPSIS
Key to the species of Lomariopsis

1. Pinnae of the sterile fronds unequal at the base, with inconspicuous venation; pinnae of the fertile fronds ca. 2 mm wide ................................................................. 1. L. amydrophlebia
1. Pinnae of the sterile fronds equilateral at the base, with prominent venation on the lower surface; pinnae of the fertile fronds 3-8 mm wide.
2. Margin of the sterile pinnae acutely incised-serrate; rhizomes sparsely covered with reddish brown, lanceolate-caudate, denticulate to ciliate scales, 2-5 mm long; pinnae 20-46  2. L. kunzeana
2. Margin of the sterile pinnae finely serrate; rhizomes densely covered with light brown, narrowly lanceolate-caudate, ciliate scales, 8-12 mm long; pinnae 30-54 ....................... 3. L. sorbifolia

Distribution: In moist forests of the Cordillera Central and the Sierra de Luquillo. Also in the Dominican Republic.
Public forests: Carite, El Yunque, and Toro Negro.

**Distribution:** Known in Puerto Rico from few collections from the region of Utuado, Lares, and Bayamón, probably from forests on mogotes. Also in the United States (Florida), Cuba, and Hispaniola.

**Distribution:** Of wide distribution in all of Puerto Rico, especially in the northwest. Also in St. Thomas; Hispaniola and the Lesser Antilles.

Public forests: El Yunque, Maricao, and Rio Abajo.

6. **Family POLYPODIACEAE**

   Key to the genera

1. Blades simple, entire ........................................................................................................ 1. *Microgramma*
2. Blades pinnatisect .......................................................................................................... 2. *Polypodium*

1. **MICROGRAMMA**

   Key to the species of *Microgramma*

1. Blades glabrous; paraphyses inconspicuous.  
   2. Rhizomes 0.5-2 mm wide; blades chartaceous, with deeply crenate margins  
      ............................................................................................................................... 1. *M. heterophylla*
   2. Rhizomes 2-4 mm wide; blades coriaceous, with entire or slightly crenate margins  
      ............................................................................................................................. 2. *M. lycopodioides*

**Distribution:** In moist or dry forests, in the coastal lowlands and in the zone of mogotes. Also in Vieques, St. Croix, St. John, and Virgin Gorda; the United States (Florida), the Bahamas, the Greater Antilles, the Cayman Islands, and the northern Lesser Antilles.  
**Public forests:** El Yunque and Rio Abajo.

**Distribution:** In moist forests, along the cordilleras and in the zone of mogotes. Also in St. John and Tortola. Pantropical.  
**Public forests:** Carite, El Yunque, Maricao, and Rio Abajo.

**Distribution:** In moist forests, along the cordilleras, in the zone of mogotes, or less frequently in the coastal lowlands. Also in St. Thomas and Tortola; the Greater and Lesser Antilles and South America.  
**Public forests:** El Yunque, Maricao, Rio Abajo, and Toro Negro.

2. **POLYPODIUM**
**Distribution:** In moist forests in the cordilleras. Also throughout the Antilles and continental tropical America.
**Public forests:** Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

7. *Family SCHIZAEACEAE*

1. *LYGODIUM*

**Distribution:** Native to Japan, cultivated and apparently naturalized in several localities in Puerto Rico. Widely cultivated in tropical and subtropical areas.
**Public forest:** Rio Abajo.

8. *Family SELAGINELLACEAE*

1. *SELAGINELLA*

1. Selaginella willdenovii (Desv. ex Poir.)
**Distribution:** Native to tropical Asia and Indonesia, introduced in Puerto Rico as an ornamental where it is found to be naturalized (Cayey, El Verde, Rio Piedras, and Mayagüez). It has also become naturalized throughout the Neotropics.
**Public forest:** El Yunque.

**DICOTYLEDONS**

Key to the families of Dicotyledons

1. Plants without leaves or with inconspicuous, minute (< 2 mm long), ovate-triangular leaves . . **Key 1**
1. Plants with well developed leaves (> 5 mm long), simple or compound.
   2. Leaves compound .......................................................... **Key 2**
   2. Leaves simple or unifoliolate ................................................. **Key 3**

**Key 1: LEAVES ABSENT OR INCONSPICUOUS**

1. Plants not parasitic, without leaves; stems green, with clustered spines ..................... Cactaceae
1. Plants parasitic, with haustoria that penetrate the tissues of the host plant; leaves very reduced, ovate-triangular; stems yellow or yellowish green, without spines.
   2. Inflorescences spicate; anthers dehiscent by two small windows that open upwards; perianth of 3 tepals; style solitary ................................................................. **Lauraceae**
2. Inflorescences cymose; anthers dehiscent by longitudinal sutures; perianth of a calyx and a tubular corolla; styles 2 ................................................................. Cuscutaceae

Key 2: LEAVES COMPOUND

1. Leaves alternate.
2. Plants climbing by tendrils.
3. Tendrils opposite the leaves ................................................................. Vitaceae
3. Tendrils axillary or lateral to the leaves.
4. Leaves palmately lobed or palmatifid; tendrils lateral to the leaves, filiform, simple or branched, spiral-shaped ................................................. Cucurbitaceae
4. Leaves pinnate, biternate, or triternate; tendrils axillary, in pairs, spirally twisted, usually at the base of the inflorescence .......................................... Sapindaceae
2. Plants twining or scandent, without tendrils.
5. Plants clambering, with numerous recurved spines.
6. Flowers with numerous pistils (apocarpous carpels) that develop into concrescent fleshy follicles to form an aggregate fruit ........................................ Rosaceae
6. Flowers with a single unicarpellate pistil that develops into a dry fruit that dehisces by the ventral suture (legume) .................................................. Fabaceae
5. Plants twining or with twining branches, without spines.
7. Lateral branches sometimes twining and with determinate growth, resembling a tendril; flowers with 5 apocarpous pistils, of which usually only one develops (the rest abort) into a fleshy follicle ....................................................... Connaraceae
7. Lateral branches twining, with indeterminate growth, not forming a structure similar to a tendril (except for Dalbergia); flowers with a single unicarpellate pistil that develops into a dry fruit that dehisces by the ventral suture (legume) ................... Fabaceae
1. Leaves opposite.
8. Plants climbing by tendrils ................................................................. Bignoniaceae
8. Plants scandent, twining, or with the leaf rachis twining, without tendrils.
9. Plants scandent; flowers minute, yellow, aggregated on a common receptacle (head or capitulum) ................................................................. Asteraceae
9. Plants twining or with the leaf rachis twining.
10. Leaf rachis not twining; corolla gamopetalous.
11. Plant woody, 5-10 m in length, not fetid; corolla hypocrateriform, 1.5-2.5 cm long ... Oleaceae
11. Plant herbaceous, 1.5-2 m in length, fetid; corolla tubular, ca. 1.5 mm long ................................................................. Valerianaceae
10. Leaf rachis twining; corolla of free petals ............................................ Ranunculaceae

Key 3: LEAVES SIMPLE OR UNIFOLIOLATE

1. Leaves opposite.
2. Plants scandent or clambering.
3. Perianth differentiated into a calyx and corolla; corolla gamopetalous.
4. Stipules present (sometimes early deciduous, but leaving a scar); ovary inferior or superior.
5. Ovary inferior ................................................................. Rubiaceae
5. Ovary superior ................................................................. Buddlejaceae
4. Stipules absent; ovary superior.
   6. Corolla infundibuliform, the stamens slightly or not at all exserted; fruit capsular, opening in two longitudinal halves to reveal 2-4 seeds .......................... **Acanthaceae**
   6. Corolla hypocrateriform, the stamens twice as long as the corolla, exserted; fruit drupaceous, with 4 pyrenes .......................... **Verbenaceae**

3. Perianth not differentiated into a calyx and corolla, consisting of 5 tepals.
   7. Plant herbaceous or slightly woody, without spines; tepals in two series, free; fruit circumscissile, membranaceous, not glandular .......................... **Amaranthaceae**
   7. Plant woody, with axillary spines; tepals united, forming a cone; fruit an anthocarp, with stipitate glands on its outer surface .......................... **Nyctaginaceae**

2. Plants twining or climbing by adventitious roots.
   8. Plants climbing by adventitious roots.
   9. Corolla white; plants with prominently elongate stipules .......................... **Rubiaceae**
   9. Corolla pink; plants without stipules .......................... **Bignoniaceae**

8. Plants twining.
  10. Plants with white or yellowish milky latex.
  11. Latex of the plant yellowish; stamens numerous; fruit a multilocular capsule
  11. Latex of the plant white; stamens 5; fruit a unilocular follicle.
  12. Corona present; stamens fused around the ovary and united to the stigma to form a gynostegium .......................... **Asclepiadaceae**
  12. Corona absent; stamens free or concrescent around the style, without forming a gynostegium .......................... **Apocynaceae**

10. Plants without colored latex.
  13. Flowers with tepals (not differentiated in a calyx and corolla); cross section of the stem with areas of phloem included in the xylem .......................... **Amaranthaceae**
  13. Flowers with a calyx and corolla; cross section of the stem with the phloem external to the xylem.
  15. Calyx elongate, tubular; petals pink to red .......................... **Combretaceae**
  15. Calyx short, not tubular; petals yellow, green, yellowish green, or pink.
  16. Plant with short lateral branches that intertwine like tendrils; flowers minute (< 5 mm wide); calyx crateriform, with minute lobes; petals green or yellowish green; fruit capsular, with numerous winged seeds **Celastraceae**
  16. Plant lacking branches that resemble tendrils; flowers medium-sized (≥ 8 mm wide); calyx reduced to a pair of glands per sepal; petals yellow or pink; fruit a samaroid schizocarp, with only one seed per mericarp . **Malpighiaceae**

  17. Ovary inferior.
  18. Flowers aggregated in heads or capitula (with a receptacle in common), the heads forming a compound paniculiform or corymbiform inflorescence .......................... **Asteraceae**
  18. Flowers in panicles or aggregated in the leaf axils, not clustered in heads.
  19. Stipules present; corolla < 8 mm long, actinomorphic, with 5 similar lobes .......................... **Rubiaceae**
  19. Stipules absent; corolla > 2 cm long, zygomorphic, bilabiate (4 lobes united and one separate) .......................... **Caprifoliaceae**
17. Ovary superior.

20. Stipules intrapetiolar, glandular; flowers or inflorescences not showy; corolla cream-colored; stamens 5, concrescent around the stigma; fruits of two follicles, with numerous seeds crowned with long, silky hairs ................................................................. **Apocynaceae**

20. Stipules absent; flowers or inflorescences showy; corolla of various colors, but not cream-colored; stamens 2 or 4; fruits capsular, fleshy, or dry, not follicular; seeds without long, silky hairs.

21. Fruits capsular, opening in two longitudinal halves; placental tissue persistent, projecting like a spur ............... **Acanthaceae**

21. Fruits fleshy, indehiscent; placental tissue inconspicuous.

22. Stamens 4; fruits with 2 or 4 pyrenes, containing 2 seeds ........................................................................ **Verbenaceae**

22. Stamens 2; fruits without pyrenes, containing a single seed .... **Oleaceae**

1. Leaves alternate.

23. Plants climbing by adventitious roots.

24. Plant with abundant milky latex; inflorescence a pear-shaped syconium (resembling a fruit) .......................................................................................................................... **Moraceae**

24. Plant without latex; inflorescence umbelliform, with large nectaries in the center of the inflorescence .......................................................................................... **Marcgraviaceae**

23. Plants twining, scandent, clambering, or climbing by tendrils.

25. Plants climbing by tendrils.

26. Tendrils opposite the leaves ................................................................. **Vitaceae**

26. Tendrils axillary (or in axillary inflorescences) or lateral to the leaves.

27. Tendrils lateral to or subopposite the leaves, usually branched ........................................................................... **Cucurbitaceae**

27. Tendrils axillary.

28. Base of the petiole forming an ocrea around the stem; tendrils representing a modification of the distal portion of the inflorescence axis **Polygonaceae**

28. Base of the petiole not covering the stem to form an ocrea; tendrils not forming part of the inflorescences.

29. Tendrils spiral-shaped; flowers with a corona and an androgynophore ...

**Passifloraceae**

29. Tendrils spirally twisted; flowers with neither a corona nor an androgynophore, stamens and ovary sessile on the receptacle .......................................................................................... **Rhamnaceae**

25. Plants twining or scandent or clambering.

30. Plants clambering or scandent.

31. Ovary inferior.

32. Flowers aggregated in a head or capitulum, with a receptacle in common; fruits dry, crowned with a tuft of scales or plumose hairs ................................................................. **Asteraceae**

32. Flowers in corymbs; fruits fleshy, crowned by the calyx lobes .... **Ericaceae**

31. Ovary superior.

33. Flowers apetalous or with tepals (not discernible as a calyx and corolla).

34. Branches and main stem with a pair of spines in the leaf axils; fruits orange when ripe .............................................. **Ulmaceae**

34. Branches without spines; fruits violet or yellowish when ripe.
35. Perianth of 5 yellowish tepals, ovate-lanceolate, concave, with a keel along their dorsal portion; stigmas 2, elongate, recurved; fruits membranaceous, circumscissile, yellowish

............................................................................. Amaranthaceae

35. Perianth of 4 white tepals, oblong-elliptical, without a dorsal keel; stigma sessile, capitate; fruits fleshy, indehiscent, dark purple

Phytolaccaceae

33. Flowers with a calyx and corolla.
   36. Corolla gamopetalous; stamens 5; ovary sessile on the floral receptacle; fruit an indehiscent berry
   ................................................................. Boraginaceae
   36. Corolla of free petals; stamens numerous; ovary borne on a gynophore; fruit a dehiscent follicle
   ............................................................................. Capparaceae

30. Plants twining.
   37. Corolla absent.
   38. Calyx well developed, elongate, tubular, the limb expanded or with a pendulous tail; flowers usually solitary
   ................................................................. Aristolochiaceae
   38. Calyx minute; flowers usually aggregated in an inflorescence with showy bracts
   ................................................................................ Euphorbiaceae

37. Corolla present.
   40. Flowers clustered in heads or capitula
   40. Flowers in various kinds of inflorescences, but not in heads.
   41. Stamens dehiscent by terminal pores
   41. Stamens dehiscent by longitudinal sutures.
   42. Fruits fleshy, indehiscent; stamens with short filaments or the anthers sessile, united to the corolla in its middle to upper portion
   ................................................................. Boraginaceae
   42. Fruits dry, capsular; stamens with more or less long filaments, united to the base of the corolla
   ............................................................................. Convolvulaceae

39. Corolla of free petals.
   43. Flowers actinomorphic; petals white, all similar.
   44. Stamens numerous; fruit capsular
   44. Stamens 4-6; fruit indehiscent.
   45. Flowers unisexual; stamens 4 or 6; fruits fleshy, without a persistent style
   45. Flowers bisexual; stamens 5; fruits dry, crowned with 3 persistent styles
   ............................................................................. Menispermaceae
   ............................................................................. Basellaceae

43. Flowers zygomorphic; petals pink or red, unequal, modified into a standard, wings, and a keel.
   46. Fruit a legume
   46. Fruit an indehiscent samara

1. Family ACANTHACEAE
   Key to the genera

1. Plants with axillary spines; leaves up to 2 cm long, coriaceous; corollas 1.2-1.5 cm long; stamens 2 .
   2. Oplonia
1. Plants without spines; leaves > 2.5 cm long, chartaceous to coriaceous; corollas > 2.3 cm long; stamens 4.
2. Plants twining; stems cylindrical ................................................................. 3. Thunbergia
2. Plants decumbent or clambering, not twining; stems quadrangular ...................... 1. Asystasia

1. ASYSTASIA

Distribution: On roadsides and in open places. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola. A species of Asiatic origin, cultivated throughout the tropics.
Public forests: Ceiba, El, Yunque, Río Abajo, and Tortuguero.

2. OPLONIA

Distribution: In coastal thickets and in the zone of mogotes. Also on Vieques, Cayo Icacos, Buck Island, St. John, St. Croix, St. Thomas, Tortola, and Virgin Gorda; the Bahamas, Cuba, Hispaniola, and the Lesser Antilles.
Public forests: Guajataca, Guánica, Maricao, Piñones, Río Abajo, and Susúa.

3. THUNBERGIA

Key to the species of Thunbergia

1. Petioles winged; corolla orange or pale yellow, with the center dark violet .................. 1. T. alata
1. Petioles not winged; corolla white or violet, with the center white or light yellow.
2. Herbaceous vine, 2-3 m in length; corolla white, with the limb 4-5 cm in diameter

Thunbergia alata Bojer ex Sims, Bot. Mag. 52, t. 2591. 1825.
Distribution: Throughout Puerto Rico, especially in moist disturbed areas, at lower to upper elevations. Also on St. Croix. Native to eastern Africa, but introduced throughout the tropics.
Public forests: Cambalache, Carite, El Yunque, Guilarte, Maricao, Río Abajo, Toro Negro, and Tortuguero.

2. Thunbergia fragrans Roxb, Pl. Coromandel. 1: 47. 1796.
Distribution: In areas of disturbed vegetation throughout Puerto Rico. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola. Native to India and Sri Lanka, but naturalized in the tropics.
Public forests: Maricao, Piñones, Río Abajo, and Tortuguero.

3. Thunbergia grandiflora (Roxb. ex Rottler) Roxb., Hort. Geng. 45. 1814.
Distribution: In moist disturbed areas at moderately low to middle elevations. Native to India, but widely cultivated in the tropics. Cultivated on St. Croix and St. Thomas.
Public forests: Maricao and Río Abajo.
2. Family AMARANTHACEAE
   Key to the genera

1. Leaves alternate; tepals glabrous.
   2. Clambering herbs, 0.5-1 m in length; utricle with numerous naked seeds
      ................................................................................................................................... 1. Celosia
   2. Scandent lianas or shrubs, 5-10 m in length; utricle with only one seed, covered by a fleshy
      arillode .................................................................................................................... 2. Chamissoa

1. Leaves opposite; tepals densely covered with tufts of long hairs on the outer surface.
   3. Clambering herbs, 1.5-2 m in length; stigma divided in 2 divergent filiform branches 3. Iresine
   3. Scandent shrubs or twining lianas, > 5 m in length; stigmas bilobate .......................... 4. Pfaffia

1. CELOSIA

   Distribution: In understory and thickets in sandy coastal areas and in disturbed areas in the interior at
   middle elevations. Also on Caja de Muerto, Cayo Ratones, Culebra, Mona, Vieques, St. Croix, St.
   John, St. Thomas, Tortola, and Virgin Gorda; in the southern United States (Florida), Mexico, the
   Antilles, and northern South America.
   Public forests: Guánica, Mona, Piñones, and Río Abajo.

2. CHAMISSOA

   1817.
   Distribution: In moist secondary forests, at middle and lower elevations. Also on Vieques, St. Croix,
   St. Thomas, and Tortola; in the Antilles and continental tropical America.
   Public forests: Cambalache, El Yunque, Guilarte, Maricao, Río Abajo, and Toro Negro.

3. IRESINE
   Key to the species of Iresine

1. Bracts and bracteoles with a dorsal keel, aristate at the apex; bracteoles > 1.5 mm long, of the same
   size as the tepals; leaves lanceolate ................................................................. 1. I. angustifolia
1. Bracts and bracteoles not keeled or aristate; bracteoles < 1 mm long, smaller than the tepals; leaves
   lanceolate or ovate ................................................................. 2. I. diffusa

   Distribution: In disturbed areas at lower elevations. Also on Cayo Santiago, Culebra, Desecheo,
   Vieques, St. Croix, St. John, St. Thomas, and Tortola; from Mexico to Ecuador, including the Antilles.
   Public forests: Guánica and Río Abajo.

Distribution: In disturbed areas at lower or middle elevations. Also on Desecheo and Vieques; the Lesser Antilles, Colombia, and Venezuela.
Public forests: Ceiba, El Yunque, Maricao, Río Abajo, Toro Negro, Tortuguero, and Vega.

4. PFAFFIA

Distribution: In moist areas along the Cordillera Central, along rivers and at the base of mogotes in the zone where they occur. Also in the Lesser Antilles, Panama, Colombia, Venezuela, Ecuador, Peru, and Brazil.
Public forests: Maricao and Río Abajo.

3. Family APOCYNACEAE

Key to the genera

1. Upper surface of the leaves with numerous cystolithic hairs that give it a scabrous texture; inflorescence opposite the leaf ......................................................... 2. Anechites
2. Upper surface of the leaves glabrous; inflorescences axillary, terminal or pseudo-terminal.
2. Plants with watery latex; corolla cream-colored or greenish ...................... 3. Echites
3. Corolla < 1 cm long, cardinal red, the lobes oblong, long (as long as or longer than the tube of the corolla) ................................................................. 4. Forsteronia
4. Corolla white, with a yellow center ...................................................... 6. Rhabdadenia
5. Corolla > 2.5 cm long, white, yellow, or purple, the rounded lobes short (much shorter than the tube of the corolla).
4. Corolla yellow or purple.
5. Leaves opposite; stems copper-colored; corolla tube 3-6 cm long .......... 5. Pentalinon
6. Leaves whorled; stems grayish; corolla tube 7-9 cm long .................... 1. Allamanda

1. ALLAMANDA

1. Allamanda cathartica L., Mant. 214. 1771.
Distribution: Widely cultivated in Puerto Rico, Vieques, and the Virgin Islands. Native to South America, but found throughout the tropics due to its cultivation as an ornamental.
Public forests: Carite, El Yunque, Piñones, Río Abajo, and Tortuguero.

2. ANECHITES

Distribution: Known from Puerto Rico from a single collection of Stahl in 1888 in Vega Baja. Recently recollected in Bo. Dominguito, Arecibo. In addition, this species has been collected in Cuba, Hispaniola, Jamaica, Panama, Colombia, and Ecuador.

3. ECHITES

**Distribution:** Abundant in thickets and coastal forests. Also on Desecheo, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, and Tortola; Hispaniola.

**Public forests:** Guánica, Maricao, Mona, Piñones, Río Abajo, and Susúa.

4. **FORSTERONIA**


**Distribution:** In moist forests at middle and upper elevations, along the Cordillera Central and the Sierra de Luquillo and in the zone of mogotes.

**Public forests:** Carite, El Yunque, Guajataca, Guilarte, Maricao, Río Abajo, Susúa, and Vega.

5. **PENTALINON**


**Distribution:** Coastal forests and thickets. Also on Cayo Icacos, Culebra, Mona, Vieques, Anegada, Guana Island, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the Antilles and the United States (Florida).

**Public forests:** Guánica, Mona, Piñones, and Río Abajo.

6. **RHABDADEIA**

1. **Rhabdadenia biflora** (Jacq.) Müll. Arg. in Mart., Fl. Bras. 6(1): 175. 1860.

**Distribution:** Abundant in mangroves and marshy coastal forests. Cited for St. Thomas by Britton, but probably extirpated since most of its mangroves have been destroyed. Also in the Antilles, the United States (Florida), Mexico, Central America, and South America.

**Public forest:** Piñones.

4. **Family ARISTOLOCHIACEAE**

1. **ARISTOLOCHIA**

Key to the species of *Aristolochia*

1. Leaves trilobed. ........................................................................................................................................... 7. **A. trilobata**

1. Leaves entire, not lobed.

2. Pseudostipules absent

3. Leaves lanceolate, hastate, or less frequently ovate; floral limb 4-6 cm in diameter, without a tail ................................................................................................................................. 5. **A. odoratissima**

3. Leaves ovate or broadly ovate; floral limb 12-31 cm in diameter with a long tail, 7-150 cm long ................................................................................................................................................3. **A. grandiflora**

2. Pseudostipules present.

4. Leaves oblong, oblong-lanceolate, lanceolate-deltoid or less frequently ovate; floral limb 2.5 cm wide or smaller.
5. Leaves oblong or oblong-lanceolate, the apex obtuse to rounded; lower surface
tomentulose, with prominently reticulate venation; limb sub-bilabiate, the lower lip not
well developed, the upper lip laterally expanded

.............................................................................................................................................. 4. A. oblongata subsp. calceiformis

5. Leaves lanceolate-deltoid or ovate, the apex acute to obtuse; lower surface puberulous, the
venation not prominent; floral limb unilabiate, the erect lip forming a right angle with the
tube ......................................................................................................................................... 1. A. anguicida

4. Leaves broadly ovate, reniform or orbicular; floral limb > 5 cm wide.
6. Limb of the flower bilabiate (the lips elongate); pseudostipules 2.5-5 cm long
.........................................................................................................................................................6. A. ringens

6. Limb of the flower peltate, crateriform, the lower margin retuse; pseudostipules 1-1.5 cm
long.
7. Limb of the flower concave; capsules straight, 5-6 cm long ......................2. A. elegans
7. Limb of the flower flat to convex; capsules curved, 7-10 cm long
.............................................................................................................................................. 5. A. odoratissima

Distribution: Known from St. Croix from a single collection; Central America, Colombia, Trinidad,
and Martinique.

Distribution: On the edge of dry secondary forests. Native of South America but cultivated throughout
the Antilles. Naturalized on St. John and Tortola, cultivated on St. Croix.

3. Aristolochia grandiflora Sw., Prodr. 126. 1788.
Distribution: In areas of secondary vegetation. Also in Jamaica, Cuba, Mexico, Central America,
Colombia, and Ecuador; cultivated throughout the tropics.

Distribution: In moist forests at lower and middle elevations in the Cordillera Central and in the
northern limestone zone. Also in Cuba and Hispaniola.
Public forest: Río Abajo.

Distribution: In areas of secondary vegetation, in coastal thickets on St. John. Collected on St. Thomas
but possibly from a cultivated individual; Mexico, Central America, and South America.

Distribution: On roadsides and in open areas. Native to Brazil; widely cultivated in the Neotropics.

Distribution: In forests and coastal thickets. Also on Cayo Santiago, Vieques, and St. John; along the
Antilles, from Belize to Panama, Colombia, and the Guiana’s.
Public forest: Piñones.

5. Family ASCLEPIADACEAE
Key to the genera
1. Stamens with the filaments free; corolla violet, 5 cm long or longer, the floral tube 2 cm long or longer. .................................................................................................................. 1. Cryptostegia

1. Stamens with the filaments connate into a tube that is united to the style or to the stigma to form a gynostegium; corolla white, cream-colored, pale yellow, or pale green, < 2.5 cm long, the floral tube < 5 mm long.
2. Pollinium erect.
3. Leaves fleshy, broadly elliptical; inflorescences of 25 or more flowers; lobes of the corona horizontal, adnate to the staminal tube. ................................................................. 4. Hoya
4. Pollinium horizontal or pendulous.
5. Leaves coriaceous, elliptical; inflorescence of 8-20 flowers; lobes of the corona erect, each of them borne on the basal portion of the dorsal side of the anthers. 5. Marsdenia

2. Pollinium horizontal or pendulous.
4. Petals 1.5-2 cm long, lanceolate or oblong.
5. Petals ca. 1.5 mm wide at the base; stems with soft, whitish hairs; leaves cordiform at the base, with 5 acicular glands at the union with the petiole. ................................................................. 8. Oxytalam
5. Petals ca. 4 mm wide at the base; stems with reflexed, somewhat rough hairs, glabrous when mature; leaves deeply cordiform at the base, with 2 triangular glands at the union with the petiole. ........................................................................................................ 3. Funastrum
4. Petals < 0.5 cm long, ovate, lanceolate, oblong, or deltoid.
6. Inflorescences with peduncles 1.5 cm long or longer; pedicels 1 cm long or longer. 8. Sarcostemma
6. Inflorescences with short or subsessile peduncles; pedicels < 1 cm long.
7. Corolla rotate; pollinium horizontal. ................................................................. 6. Matelea
7. Corolla campanulate; pollinium pendulous. ..................................................... 7. Metastelma

1. CRYPTOSTEGIA

Key to the species of Cryptostegia
1. Corona with bifid lobes; follicles 10-15.4 cm long ........................................... 1. C. grandiflora
1. Corona with simple lobes; follicles 5.8-13 cm long. ........................................ 2. C. madagascariensis

Distribution: Along the coast. Also on Vieques. Native to Madagascar, but widely cultivated in the Neotropics.

2. Cryptostegia madagascariensis Bojer ex Decne. in DC., Prodr. 8: 492. 1844.
Distribution: In thickets and coastal forests. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; native to Madagascar, but of wide distribution in the Neotropics.
Public forests: Guánica and Río Abajo.

2. FUNASTRUM

Distribution: Cited from St. Croix by West (1793) and by Eggers (1879) and from St. Thomas by Krebs (1847). From southern North America to Argentina, including the Antilles.
3. GONOLOBUS

**Distribution:** In moist or wet forests of the Cordillera Central, the Sierra de Luquillo, and the zone of mogotes. Also in Cuba and Hispaniola.
**Public forests:** El Yunque, Guiltarte, Río Abajo, and Toro Negro.

4. HOYA

**Distribution:** Native to Australia; widely cultivated in the Neotropics.

5. MARSDENIA

Key to the species of Marsdenia

1. Leaves with 5 or more minute glands on the portion adjacent to the petiole; corolla hypocrateriform or campanulate, white.
2. Leaves usually obovate; corolla campanulate, the tube ca. 3 mm long, the lobes ca. 5 mm long  1. **M. elliptica**
2. Leaves elliptical; corolla hypocrateriform, the tube 2-2.5 cm long, the lobes ca. 1 cm long  2. **M. floribunda**
1. Leaves with 2 acicular glands on the portion adjacent to the petiole; corolla rotate, purple-pink ... 3. **M. woodburyana**

1. Marsdenia elliptica Decne. in DC., Prodr. 8: 616. 1844.
**Distribution:** Originally known from two collections, the type collection, made by Wydler (no. 308) in 1827 but without a specific locality, and the second collection, made by Sintenis (no. 1452) in June of 1885 from Monte Jiménez in the Sierra de Luquillo. Recently rediscovered in the Río Abajo Forest, Monte Torresilla and in Sabana Hoyos.
**Public forests:** El Yunque and Río Abajo.

**Distribution:** Native to Madagascar. Commonly cultivated in gardens for its attractive, fragrant flowers. Also in St. Croix.

**Distribution:** Known only from Caña Gorda, Guánica (Acevedo-Rdzg. and L. Ramírez 10174; Proctor 39358; L. Ramírez 48).
**Public forest:** Guánica.

6. MATELEA

Key to the species of Matelea

1. Plants robust, scarcely woody; stems 4 mm or more in diameter; leaves densely pubescent on the lower surface; follicles ovoid-fusiform, verrucose ................................................... 1. **M. maritima**
1. Plants herbaceous; stems 2 mm or less in diameter; leaves glabrous or puberulous on the lower surface; follicles elongate-fusiform, smooth.

2. Leaves rounded, truncate, or subcordiform at the base, never obtuse or acute; sepals ovate, ca. 1.5 mm long; lobes of the corolla lanceolate-triangular, not overlapping ........................................................................................................................ 2. M. sintenisii

2. Leaves variable at the base, sometimes rounded, but always with some obtuse or acute; sepals obovate, 2-2.5 mm long; lobes of the corolla rounded, imbricate ............................................................................................................................... 3. M. variifolia

**Distribution:** In thickets and coastal forests. Also on Culebra, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; Cuba, Hispaniola, the Lesser Antilles, and from Panama to northern South America.
**Public forests:** Guánica, Mona, Piñones, and Susúa.

**Distribution:** In moist forests in the cordilleras and the zone of mogotes.
**Public forests:** El Yunque, Maricao, Rio Abajo, and Toro Negro.

**Distribution:** In moist forests in the cordilleras and on mogotes.
**Public forests:** El Yunque, Guilarte, Maricao, Rio Abajo, and Toro Negro.

7. **METASTELMA**

Key to the species of *Metastelma*

1. Vine deciduous or with very few leaves during the flowering period; leaves without glands at the union with the petiole.

2. Lobes of the corolla glabrous ............................................................................. 3. M. leptocladon

2. Lobes of the corolla strigulose on the inner surface .............................................. 5. M. monense

1. Vine with abundant leaves during the flowering period; leaves with or without glands at the union with the petiole.

3. Upper surface without glands at the union with the petiole.

4. Leaves linear ........................................................................................................ 4. M. lineare

4. Leaves oblong or oblanceolate.

5. Leaves oblong to oblanceolate; lobes of the corolla ovate-lanceolate, acute to obtuse; gynostegium sessile; segments of the corona lanceolate, almost as long as the lobes of the corolla .............................................................................................................................. 5. M. monense

5. Leaves oblanceolate; lobes of the corolla lanceolate, acuminate; gynostegium stipitate; segments of the corona spiniform, much shorter than the lobes of the corolla 1. M. anegadense

3. Upper surface with acicular glands at the union with the petiole.

6. Leaves ovate, oblong-ovate, or lanceolate.

7. Gynostegium long-stipitate (1.5-2 mm long); corolla 3-3.5 mm long .............................................................................................................................. 6. M. parviflorum

7. Gynostegium sessile or short-stipitate (< 0.3 mm long); corolla ca. 2 mm long ............................................................................................................................ 2. M. decipiens

**Distribution**: Known from few collections from the sandy coasts of Anegada and Tortola.

**Distribution**: Common in coastal thickets and in the zone of mogotes. Also on Culebra, Desecheo, Cayo Icacos, Cayo Lobos, Cayo Luis Peña, Vieques, St. Croix, St. John, St. Thomas, and Virgin Gorda; Cuba, Hispaniola, the Lesser Antilles, and Tobago.
**Public forests**: Boquerón, Cela, Guajataca, Maricao, Piñones, Río Abajo, and Tortuguero.

**Distribution**: In moist or dry forests in central and western Puerto Rico. Also in Cuba, Jamaica, and Hispaniola.
**Public forests**: Guárate, Maricao, Río Abajo, and Toro Negro.

**Distribution**: In secondary forests at middle and upper elevations, in central and western Puerto Rico. Also on Mona and St. Thomas; Cuba.
**Public forests**: Guánica, Maricao, Mona, Río Abajo, Susúa, and Toro Negro.

**Distribution**: Locally common on Mona Island and recently discovered by Franklin Axelrod (UPRRP) in the Guánica Forest.
**Public forests**: Guánica and Mona.

**Distribution**: Throughout Puerto Rico in areas of secondary or disturbed vegetation, at lower elevations. Also on St. Croix, St. Thomas, Tortola, and Virgin Gorda; the Lesser Antilles, Trinidad, and Isla Margarita.
**Public forests**: Guánica, Piñones, Río Abajo, and Tortuguero.

8. **OXYPETALUM**

**Distribution**: Known from Puerto Rico from a single collection of Read (according to Urban, 1910). Also on St. Thomas (according to Urban, 1910); Cuba, Hispaniola, Jamaica, and from Mexico to South America.

6. **Family ASTERACEAE**

Key to the genera

1. Leaves opposite.
   2. Capitula heterogamous, radiate, the central flowers with actinomorphic, tubular corollas, the peripheral ones zygomorphic, ligulate (with one of the lobules elongate in the form of a ligule).
   3. Leaves compound .............................................................. 2. **Bidens**
   3. Leaves simple ............................................................... 11. **Sphagneticola**
   2. Capitula homogamous, discoid, with all the flowers actinomorphic, tubular.
4. Capitula of 4 phyllaries and 4 flowers ......................................................... 6. Mikania
4. Capitula of more than 4 phyllaries and more than 4 flowers.
5. Receptacle (of the capitulum) with paleas at the base of each flower; branches of the style with 2 stigmatic lines along their entire length ........................................ 10. Salmea
5. Receptacle without paleas; branches of the style with one stigmatic line, only on the lower half, or stigmatic lines absent.
6. Capitula with several series of deciduous phyllaries, overlapping to form a cylindrical involucre; receptacle conical ......................... 3. Chromolaena
6. Capitula with persistent phyllaries, in 1-2 series, forming a crateriform involucre; receptacle flat or convex ......................................................... 4. Koanophyllon

1. Leaves alternate.
7. Capitula heterogamous, radiate, the peripheral flowers zygomorphic, with orange ligules, the central flowers actinomorphic, with yellow corollas ...................... 9. Pseudogynoxys
7. Capitula homogamous, discoid, with all the flowers tubular.
8. Corollas bilabiate; margin of the leaves usually spinulose; stem with an obtuse or spiny, usually bifurcate, hardened or thickened area (callosity) at the base of the leaf ................. 1. Berylsimpsonia
8. Corollas tubular, 4-5-lobed; margin of the leaves entire, crenate, or denticulate; stem not forming a callosity nor spiny.
9. Leaves with scales or with stellate hairs.
10. Pappus composed of bristles and short, irregular scales; corollas pale violet ................................................................. 8. Piptocoma
10. Pappus composed exclusively of bristles, without scales; corollas white ............................................................... 7. Piptocarpa
9. Leaves with simple hairs ........................................................................ 5. Lepidaploa

1. BERYLSIMPSONIA

Distribution: In forests and pastures on the southern slope of the Cordillera Central and in southwestern Puerto Rico, at middle and lower elevations. Also in Cuba and Hispaniola.

2. BIDENS

Key to the species of Bidens

1. Leaves 3-5-lobed or 3-5-foliolate, slightly pubescent; involucre ca. 7 mm high ................................................................. 1. B. reptans
1. Leaves 2-3 times pinnatisect, glabrous; involucre 8-10 mm high ................................ 2. B. urbanii

Distribution: Abundant in forests in the Cordillera Central, also in the zone of mogotes, in moist areas at middle and upper elevations. Also in Cuba, Jamaica, the Lesser Antilles to St. Vincent, and from Mexico to Venezuela.
Public forests: Guajataca, Maricao, Rio Abajo, and Susúa.

**Distribution:** In thickets and disturbed areas on serpentine soil. Known from Puerto Rico, eastern Cuba, and Campeche in Mexico. Has been cited erroneously for Jamaica, based on *B. dissecta* (O.E. Schultz) Sherff.

**Public forests:** Maricao and Susúa.

### 3. CHROMOLAENA

   **Distribution:** On slopes of forests or thickets in the zone of mogotes.
   **Public forest:** Río Abajo.

### 4. KOANOPHYLLON

   **Distribution:** On slopes in forests or thickets in the zone of mogotes and serpentine.
   **Public forests:** Maricao, Río Abajo, and Susúa.

### 5. LEPIDAPLOA

   **Distribution:** In forests and pastures of the Cordillera Central and the zone of mogotes.
   **Public forests:** Carite, Guajataca, Guilarte, Maricao, Río Abajo, and Toro Negro.

### 6. MIKANIA

**Key to the species of Mikania**

1. Pseudostipules present.
   2. Pseudostipules entire, rounded, reflexed, 8-10 mm wide; leaves thick, fragile, slightly aromatic 3. *M. fragilis*
   2. Pseudostipules divided into lanceolate or filiform segments. 3. Capitula arranged in glomerules; lower surface densely covered with resinous dots .... 1. *M. congesta*
   3. Capitula arranged in corymbss; lower surface without dots or sparsely punctate.
   4. Involucre 3-4 mm high .................................................................4. *M. micrantha*
   4. Involucre 6-9 mm high.
   5. Leaves pubescent on both surfaces; stems hexagonal .........................2. *M. cordifolia*
   5. Leaves glabrous or puberulous; stems subcylindrical or obscurely angular.
   6. Leaves coriaceous, the upper surface scabrid, the lower surface puberulous .... 8. *M. stevensiana*
   6. Leaves membranaceous, glabrous ............................................. 5. *M. odoratissima*

1. Pseudostipules absent.
   7. Blade of the leaves 3-6 cm long, with the venation pinnate, the margins entire .................................................................7. *M. porosa*
   7. Blade of the leaves 5-9 cm long, with 3 main veins from the base, the margins denticulate 6. *M. pachyphylla*
1. **Mikania congesta** DC., Prodr. 5: 197. 1836.
**Distribution:** Of wide distribution, in disturbed areas at lower and middle elevations. Also in Jamaica, Martinique, northern South America, Peru, Bolivia, and Brazil.
**Public forests:** Guánica, Maricao, Piñones, Río Abajo, and Susúa.

**Distribution:** In pastures or along rivers or roads, at middle and lower elevations. Also on Vieques and the Virgin Islands; throughout the Neotropics.
**Public forests:** Carite, El Yunque, Guilarte, Maricao, Río Abajo, Toro Negro, Tortuguero, and Vega.

**Distribution:** In forests of the cordilleras, at middle and upper elevations.
**Public forests:** Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

**Distribution:** In disturbed areas, such as pastures, along rivers, and marshy areas, at low elevation. Also throughout tropical America.
**Public forest:** Maricao, Río Abajo, and Susúa.

**Distribution:** In moist forests, at middle and upper elevations, along the Cordillera Central.
**Public forests:** Maricao and Río Abajo.

**Distribution:** In forests at upper elevations along the Cordillera Central and the Sierra de Luquillo.
**Public forests:** Carite, El Yunque, Guilarte, and Toro Negro.

**Distribution:** In moist forests, in the zone of mogotes and on serpentinic soils.
**Public forests:** Maricao and Río Abajo.

**Distribution:** Uncommon in moist forests on serpentine soils.
**Public forest:** Maricao.

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**7. PIPTOCARPHA**

**Distribution:** In forests and on forest margins along the Cordillera Central and the Sierra de Luquillo.
**Public forests:** Carite, Guilarte, El Yunque, Maricao, and Toro Negro.

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**8. PIPTOCOMA**

1. **Piptocoma acevedoi** Pruski, Novon 6: 98. 1996.
**Distribution:** Known from two localities in Puerto Rico, in forests on limestone or serpentine substrate.
**Public forests:** Guajataca and Maricao.
9. PSEUDOGYNOXYS

Distribution: Exotic species, cultivated for its showy flowers; naturalized in more or less moist areas in Puerto Rico. Native to Central America, cultivated and naturalized in the tropics and subtemperate climates. Also on St. Croix and St. Thomas.
Public forests: El Yunque, Rio Abajo, and Vega.

10. SALMEA

Distribution: Uncommon in moist thickets and forests at lower and middle elevations; locally common in the area of mogotes. Also in the Greater Antilles, Trinidad, and continental tropical America.
Public forests: Carite, El Yunque, and Rio Abajo.

11. SPHAGNETICOLA

Distribution: Cultivated in gardens and parks in Puerto Rico and the Virgin Islands. Native to the New World, but naturalized throughout the tropics and subtropics.
Public forests: El Yunque, Maricao, and Rio Abajo.

7. Family BASELLACEAE

Key to the genera

1. Corolla with petals connate only at the base, neither accrescent nor fleshy; stamens inserted at the base of the corolla .................................................................1. Anredera
1. Corolla urceolate, tubular, 5-lobed, accrescent, fleshy, surrounding the fruit; stamens inserted on the upper portion of the corolla tube .........................................................2. Basella

1. ANREDERA

Key to the species of Anredera

1. Pedicellar glands persistent; petals 2-3 mm long, turning blackish on drying; stigmatic branches as long as the style .................................................................1. A. cordifolia
1. Pedicellar glands deciduous; petals 1.5-2.2 mm long, turning cream-colored on drying; stigmatic branches 2 times as long as the style .........................................................2. A. vesicaria

Distribution: In disturbed areas, at middle and lower elevations. Native to the New World, but extensively cultivated and naturalized throughout the tropics and subtemperate zones.
Public forests: Guánica and Susúa.

Distribution: In disturbed areas, at middle and lower elevations. Also on Cayo Santiago, Vieques, St. Croix, St. John, St. Thomas, and Tortola; from the southern United States to northern South America, including the Antilles.
Public forests: Susúa and Tortuguero.

2. BASELLA

Distribution: Probably native to Africa, but widely cultivated and naturalized throughout the tropics.

8. Family BIGNONIACEAE
Key to the genera

1. Leaves imparipinnate, without tendrils.
   2. Corolla violet-pink; stamens inserted; calyx > 10 mm long .........................8. Podranea
   2. Corolla orange or reddish orange; stamens exserted; calyx < 8 mm long .........11. Tecomaria

1. Leaves 2- or 3-foliolate, usually with a terminal tendril.
   4. Tendrils bifid or trifid.
   5. Branches acutely hexagonal, with obtuse ribs.
      6. Leaflets cordiform or truncate at the base; calyx double, the interior margin short, the exterior margin undulate, elongate; corolla white with a purple tinge .......................................................... 1. Amphilophium
      6. Leaflets rounded at the base; calyx simple; corolla orange .................. 9. Pyrostegia
   5. Branches cylindrical or quadrangular.
      7. Tendrils trifid, forming a small claw (harpidium); corolla yellow .................................................. 5. Macfadyena
      7. Tendrils bifid or trifid, not forming a claw; corolla white, lilac, or purple.
         8. Branches quadrangular; interpetiolar zones not glandular; leaves without odor; tendrils trifid, with one division deciduous and two developing into an adventitious disc; corolla white, with the tube yellow inside .......... 4. Distictis
         8. Branches cylindrical; interpetiolar zones glandular; leaves usually with a strong garlic odor; tendrils trifid, each division simple, perennial, without an adventitious disc; corollas lilac or purple ........................................ 6. Mansoa
   4. Tendrils simple, spiral or spiral-shaped, sometimes absent.
      9. Corolla bilabiate, white, ca. 4 mm long .................................................12. Tynanthus
      9. Corolla with 5 lobes of similar size, lilac, violet, or purple, > 1.5 cm long.
         10. Stems lepidote, with pseudostipules; leaflets cuneate at the base, upper and lower surface lepidote, with domatia in the axils of the basal secondary veins; corolla 8-9 cm long .............................................................10. Saritaea
         10. Stems glabrous, without pseudostipules or these inconspicuous; leaflets truncate, rounded, or subcordiform at the base; upper surface glabrous, lower surface glabrous or lepidote, without domatia; corolla < 8 cm long.
11. Calyx 2.1-4.1 cm long, in the form of a spathe, open distally along \( \frac{3}{4} \) of its length; corolla lilac with the lobes purple and the center white or purple

**Phryganocydia**

11. Calyx 3-10 mm long, crateriform, truncate or denticulate at the apex; corolla violet or lilac with the center yellow.

12. Corolla infundibuliform, 1.5-3 cm long, violet; mature stems quadrangular, sulcate; cross section of the stem with 4 dark arms formed by the phloem tissue; foliage turning reddish on drying

**Arrabidaea**

12. Corolla tubular-campanulate, 2.5-7.5 cm long, lilac with the center yellow; mature stems cylindrical; cross section of the stem with 8 dark arms formed by the phloem tissue; foliage remaining green or turning brown on drying.

**Cydista**

1. **AMPHILOPHIUM**

**Distribution:** In secondary forests and thickets, at middle to upper elevations, especially in the zone of mogotes. From Mexico to northern Argentina, including the Antilles.
**Public forest:** Río Abajo.

2. **ARRABIDAEA**

**Distribution:** Known from Puerto Rico from two collections made in 1885 in Bayamón, Stahl 79 and Sintenis 1096. Also on St. John; throughout the Neotropics.

3. **CYDISTA**

**Distribution:** In river-bank forests, on the edges of mangrove swamps, and in coastal forests. Also on St. Croix, St. John, and St. Thomas; Cuba, Hispaniola, the Lesser Antilles, and continental tropical America.
**Public forest:** Guánica.

4. **DISTICTIS**

**1. Distictis lactiflora** (Vahl) DC., Prodr. 9: 191. 1845.
**Distribution:** In forests and coastal thickets. Also on Cayo Luis Peña, Vieques, St. Croix, and St. Thomas; Cuba and Hispaniola.
**Public forests:** Cambalache, Ceiba, Guajataca, Guánica, Río Abajo, Susúa, and Vega.

5. **MACFADYENA**

**Distribution:** In moist forests at middle and lower elevations, from the coast to the Cordillera Central. Also on Culebra, Desecheo, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles and tropical and subtropical America.

**Public forests:** Cambalache, Ceiba, Desecheo, El Yunque, Guánica, Maricao, Río Abajo, Susúa, Toro Negro, and Vega.

6. **MANSOA**

Key to the species of *Mansoa*

1. Leaflets 9-30 cm long; lower surface with a group of minute punctiform glands in the axils of the secondary veins (frequently of the basal and sub-basal veins); corolla 7.5-9 cm long; fruit 30-35 cm long, woody, swollen, with a very prominent rib along each valve ......................... 1. *M. alliacea*


   **Distribution:** Cited by Britton and P. Wilson (1925) for the Agricultural Experiment Station in Trujillo Alto. Species native to central South America, from the Amazonian regions of Peru and Brazil, also in Guyana.

2. Leaflets 6-10 cm long; lower surface without glands in the axils of the secondary veins; corolla 4.5-6.5 cm long; fruits 15-25 cm long, coriaceous, compressed, with a slight rib along each valve 2. *M. hymenaea*


   **Distribution:** Along roads. Species native to the Neotropics, distributed from Mexico to southeastern Brazil.

7. **PHRYGANOCYDIA**


   **Distribution:** Native to continental tropical America, from Costa Rica to Bolivia. Cultivated on St. Croix and St. Thomas.

8. **PODRANEA**


   **Distribution:** Native to South Africa, but widely cultivated throughout the tropics. Cultivated along the Cordillera Central. Cultivated and possibly naturalized on St. Croix, St. John, and St. Thomas.

9. **PYROSTEGIA**


   **Distribution:** Native to southern Brazil, Paraguay, and northern Argentina; cultivated throughout the tropics. Widely cultivated along the Cordillera Central.
10. SARITAEA

**Distribution**: Native to Colombia and Ecuador but cultivated throughout the tropics.

11. TECOMARIA

**Distribution**: Cultivated in gardens along the Cordillera Central, also on St. Croix and St. Thomas. Native to South Africa, but widely cultivated throughout the tropics.

12. TYNANTHUS

**Distribution**: Native to western Amazonia, sporadically cultivated in Puerto Rico, Jamaica, Cuba, and the Dominican Republic.

9. Family **BORAGINACEAE**

Key to the genera

1. Corolla campanulate; style bifid, each branch again bifid, for a total of 4 stigmas ............ 1. **Cordia**
1. Corolla infundibuliform; style simple, bilobed ........................................................... 2. **Tournefortia**

1. CORDIA

Key to the species of **Cordia**

1. Inflorescences of unbranched glomerules; lobes of the corolla almost as long as the tube
........................................................................................................................................ 1. **C. bellonis**
1. Inflorescences of paniculate or corymbose heads; lobes of the corolla much shorter than the tube 2. **C. polycephala**


**Distribution**: Along the banks of rivers and streams or in the interior of forests on substrates of limestone (mogotes) or serpentine.
**Public forests**: Maricao, Río Abajo, and Susúa.

Distribution: In weedy areas and along paths, at lower and middle elevations. Also on Vieques, St. Croix, St. Thomas, Tortola, and Virgin Gorda; Hispaniola, the Lesser Antilles, and northern South America.

Public forests: Cambalache, Carite, Ceiba, El Yunque, Guajataca, Guánica, Maricao, Río Abajo, Susúa, Toro Negro, and Tortuguero.

2. TOURNEFORTIA

Key to the species of Tournefortia

1. Leaves rigid-coriaceous, scabrous on the upper surface .......................................................... 5. T. scabra
2. Twining vines; fruits white.
   3. Fruits completely white.
      4. Stems, leaves, and inflorescences hirsute or tomentose ..................................... 2. T. hirsutissima
      4. Stems strigose, becoming glabrous when mature; leaves glabrous or puberulous on the venation; inflorescences strigose ................................................................. 1. T. bicolor
3. Fruits with 2-4 circular black spots.
   5. Leaves 1.5-3 (3.5) cm long, the apex acute or obtuse .................................... 4. T. microphylla
   5. Leaves (3.5) 4-10 cm long, the apex acute or acuminate ...................................... 6. T. volubilis
2. Clambering subshrubs; fruits orange .................................................................................. 3. T. maculata

1. Tournefortia bicolor Sw, Prodr. 40. 1788.
Distribution: In moist forests and along stream banks. Also on St. John and St. Thomas; throughout tropical America.
Public forests: El Yunque, Río Abajo, and Toro Negro.

Distribution: In pastures or areas of disturbed vegetation, in moist zones at middle and lower elevations. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, and Tortola; the Greater and Lesser Antilles, Central America, South America, and the United States (Florida).
Public forests: El Yunque, Guilarte, Maricao, Mona, Piñones, Río Abajo, Toro Negro, Tortuguero, and Vega.

Distribution: In moist forests on substrates of limestone or serpentine. Also in Jamaica and Hispaniola.
Public forests: Guajataca, Guilarte, Maricao, Río Abajo, and Susúa.

Distribution: In thickets and dry forests at lower elevations. Also on Culebra, Culebrita, Desecheo, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; Hispaniola and the Lesser Antilles.
Public forests: Boquerón, Guánica, and Mona.

5. Tournefortia scabra Lam., Ill. 1: 417. 1791.
**Distribution**: In thickets and dry forests at lower elevations in southern and northwestern Puerto Rico. Also in Cuba and Hispaniola.
**Public forests**: Guajataca and Guánica.

**Distribution**: In coastal thickets and dry forests, in southern Puerto Rico, at lower and middle elevations. Also on Vieques, St. Croix, and Virgin Gorda; throughout tropical America, including the Antilles.
**Public forest**: Guánica.

10. **Family BUDDLEJACEAE**

1. **BUDDLEJA**

1. **Buddleja madagascariensis** Lam., Encycl. 1: 513. 1785.
**Distribution**: Ornamental, cultivated in the gardens of the Cordillera Central, escaped or persistent in the Villalba area. Native to Madagascar, but widely cultivated in the subtropics.
**Public forest**: Toro Negro.

11. **Family CACTACEAE**

Key to the genera

1. Stems dark brown, cylindrical, without ribs; leaves present .............................................. 2. **Pereskia**
   1. Stems green, angular, compressed, or cylindrical, but then with longitudinal ribs; leaves absent.
   2. Stems cylindrical, with 5-8 scarcely prominent ribs; spines acicular; hypanthium densely lanate-pubescent ............................................................................................................... 3. **Selenicereus**
   2. Stems angular, with 3-4 prominent ribs; spines conical or subconical; hypanthium glabrous ........
      1. **Hylocereus**  

1. **Hylocereus**

Key to the species of **Hylocereus**

1. Stems with 3 or 4 longitudinal ribs, with the groups of spines on small mounds ...............................................................................................................1. **H. trigonus**
   1. Stems with 3 longitudinal ribs, forming a depression in the areas where the groups of spines are borne ...............................................................................................................2. **H. undatus**  

**Distribution**: In dry forests or coastal thickets. Also on Culebra, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; Hispaniola.
**Public forests**: Ceiba, Guajataca, Guánica, and Rio Abajo.

Distribution: Cultivated from the coast to the Cordillera Central, naturalized in dry or coastal areas. Native to Mexico, but widely cultivated in the tropics. Also on St. John and St. Thomas.
Public forest: Guánica.

2. PERESKIA

Distribution: In dry thickets. Also on Vieques, St. Croix, St. John, and St. Thomas; throughout the Neotropics, its place of origin unknown.

3. SELENICEREUS

Distribution: In coastal forests and thickets. Also on St. Croix, St. John, St. Thomas, and Tortola; species native to Jamaica and Cuba, but widely cultivated throughout the tropics.

12. Family CAPPARACEAE

1. CAPPARIS

Distribution: In coastal forests and thickets or in semi-humid forests on karst limestone. Also on Culebra, Deschecho, Vieques, Mona, and the Virgin Islands; the Antilles and from the United States (Florida) to South America.
Public forests: Ceiba, Guánica, Mona, Piñones, and Susúa.

13. Family CAPRIFOLIACEAE

1. LONICERA

Distribution: Native of Asia, but naturalized in the Cordillera Central in Puerto Rico in the Villalba area (Cerro Maravilla sector) and throughout the New World. This species seems not to have been naturalized in Puerto Rico at the end of the nineteenth century, because it was only known from a single collection made by Sintenis in 1886 from a plant cultivated in the Adjuntas area. At present this species is naturalized along Highway 143 in the Toro Negro Forest Reserve. It seems to reproduce in Puerto Rico exclusively by vegetative means, since it has never been collected with fruits.
Public forest: Toro Negro.

14. Family CELASTRACEAE
Key to the genera

1. Leaves slightly shiny on the upper surface, chartaceous, the margins crenulate or serrate, the tertiary veins inconspicuous; filaments of the stamens broadened gradually toward the base, adnate to the floral disc; petals pubescent on the distal portion ......................................................1. **Hippocratea**

1. Leaves dull on the upper surface, coriaceous, the margins subentire, denticulate, or crenulate, the tertiary veins conspicuous; filaments of the stamens more or less of the same width along their length, inserted on the floral disc; petals glabrous ........................................................2. **Pristimera**

### 1. HIPPOCRATEA

1. **Hippocratea volubilis** L., Sp. Pl. 1191. 1753.

**Distribution:** In secondary forests and along roadsides at middle and lower elevations in moist areas. Also on Vieques; the Antilles, Central America, South America, and the United States (Florida).

**Public forests:** Cambalache, Ceiba, El Yunque, Guajataca, Maricao, Río Abajo, Susúa, and Vega.

### 2. PRISTIMERA

1. **Pristimera caribaea** (Urb.) A. C. Sm., Brittonia 3: 378. 1940.

**Distribution:** Of wide distribution in Puerto Rico, in forests in the zone of mogotes, the Cordillera Central, Sierra Bermeja, and Cerro de La Pandura. Also in Hispaniola, the Lesser Antilles, and Guyana.

**Public forests:** Guajataca, Maricao, and Río Abajo.

### 15. Family CLUSIACEAE

### 1. CLUSIA

1. **Clusia gundlachii** A. Stahl, Estud. 2: 122. 1884.

**Distribution:** Principally in moist forests along the Cordillera Central and the Sierra de Luquillo, but extending toward the dry forests of the south coast.

**Public forests:** Carite, El Yunque, Guánica, Guiltarte, Maricao, Río Abajo, Susúa, and Toro Negro.

This species is superficially similar to **Clusia minor** L., which can be distinguished from *C. gundlachii* by the following key.

1. Clambering shrub with long, pendulous branches; leaves oblanceolate, elliptical, oval, or ovate, the apex acute or less frequently obtuse; flowers functionally unisexual, the pistillate ones with staminodia; corolla tubular, ellipsoid or ovoid, 2-3 mm long, closed at the apex to form a calyptra; fruit ovoid or ellipsoid ..............................................**C. gundlachii**

1. Erect shrub; leaves oblanceolate or spatulate, the apex rounded or obtuse; flowers hermaphroditic or pistillate (the latter with a resinous ring in place of the staminodia); corolla of free petals, rounded, ca. 1.5 cm long; fruit ovoid or subglobose .................**C. minor**
16. **Family COMBRETACEAE**

1. **COMBRETUM**
   
   Key to the species of *Combretum*

   1. Hypanthium infundibuliform, red-purple; stamens exserted, in a single whorl; inflorescences spicate, with the flowers densely clustered.......................... 1. *C. grandiflorum*

   1. Hypanthium long-tubular, green; stamens inserted in two whorls; inflorescences racemose, with the flowers dispersed................................................................. 2. *C. indicum*

   **Distribution:** Ornamental plant, native to central Africa, cultivated, naturalized in the Cerro Las Mesas area in Mayagüez.

   **Distribution:** Ornamental plant, native to tropical Asia, naturalized along roadsides. Also on St. Croix, St. John, and St. Thomas.
   **Public forest:** Rio Abajo.

17. **Family CONNARACEAE**

1. **ROUREA**

   **1. Rourea surinamensis** Miq., Linnaea 26: 221. 1853.
   **Distribution:** in mature or secondary moist forests, at middle elevations. Also in Haiti, the Lesser Antilles, Trinidad, the Guianas, and eastern Venezuela.
   **Public forests:** El Yunque and Rio Abajo.

18. **Family CONVOLVULACEAE**

   Key to the genera

   1. Flowers arranged in panicles; corolla white, 4-6 mm long ................................. 8. *Poranopsis*

   1. Flowers solitary or in simple or compound cymes; corolla of diverse colors, when white they exceed 2.5 cm long, when violet-pink, lavender, or yellow they are ca. 5 mm long.

   2. Stigmas globose, subglobose, biglobose, or bilobate.

   3. Sepals conspicuously unequal, the outer ones broader, concealing the inner ones ................................................................. 1. *Aniscea*

   3. Sepals more or less equal or slightly unequal, the outer ones usually smaller than the inner ones.

   4. Fruits indehiscent, irregularly dehiscent or dardily dehiscent by the dissolution of the pericarp.

   5. Lower surface of the leaves densely pubescent; axes of the inflorescences densely pubescent or tomentose.
6. Fruit indehiscent, fleshy, covered by the accrescent sepals; corolla violet-pink
.........................................................................................................2. Argyreia

6. Fruit with the exocarp separating like an operculum, endocarp opening irregularly, sepals not covering the fruit; corolla white or white with a yellow center .................................................................7. Operculina

5. Lower surface of the leaves and axes of the inflorescences glabrous or puberulous; fruits indehiscent or irregularly or tardily dehiscent, fibrous or crustaceous.
7. Fruit covered by the accrescent, overlapping sepals; corolla violet-pink, 6-8 cm long; fruit fibrous, tardily dehiscent by the dissolution of the pericarp ..........9. Stictocardia

7. Fruit exposed, the sepals although accrescent, not covering the fruit; corolla white or yellow, 2.5-3 cm long; fruit crustaceous, indehiscent or irregularly dehiscent.
8. Fruit ellipsoid, indehiscent, 1-1.2 cm long, with only one seed inside; corolla white with the center violet ................................. 10. Turbina
8. Fruit ovoid, irregularly indehiscent, 1.5-2.5 cm long, seeds generally 4; corolla yellow ............................................................6. Merremia (in part)

4. Fruits capsular, 4-valvate, sometimes with the exocarp operculate.
9. Leaves narrowly lanceolate or linear, 0.5-6 mm wide, with the base hastate or auriculate; corolla yellow, 1-2 cm long ......................... 11. Xenostegia
9. Leaves of diverse forms, if lanceolate and hastate then with the corolla white, 3-4 cm long.
10. Anthers twisted after opening; sepals accrescent at the base of the fruit; leaves usually palmately compound (except in the case of M. umbellata); corolla yellow or white with a purple center .................................................................6. Merremia (in part)
10. Anthers straight (not twisted) after opening; sepals generally not accrescent; leaves simple, or if palmately compound then with the corolla violet-pink or red ............................................ 4. Ipomoea

2. Stigmas elongate (filiform or oblong).
11. Stigmas filiform; corolla white ..............................................................3. Convolvulus
11. Stigmas oblong; corolla blue, white, or red ......................................... 5. Jacquemontia

1. ANISEIA

Distribution: In marshy areas near Laguna Tortuguero and at the mouth of the Humacao River. Throughout the Neotropics.
Public forest: Tortuguero.

2. ARGYREIA

1. Argyreia nervosa (Burm. f.) Bojer, Hort. Maurit. 224. 1837.
Distribution: Native to India, cultivated and naturalized in the Antilles and throughout the tropics.
3. CONVOLVULUS


**Distribution:** In thickets along the coastal zone. Also on Caja de Muerto, Culebra, Desecheo, Isla Ramos, Vieques, Guana Island, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles, Central America, and South America.

**Public forests:** Boquerón, Ceiba, Guajataca, Guánica, and Susúa.

4. IPOMOEA

Key to the species of *Ipomoea*

1. Corollas hypocrateriform.

2. Corolla white.

3. Leaves pinnatisect

4. Sepals lanceolate, aristate and revolute at the apex; corolla 10-12 cm long, the tube light green inside, the limb with 5 light green lines forming a star; stamens exserted .... 1. *I. alba*

4. Sepals ovate, concave, obtuse or rounded at the apex; corolla 5-7 cm long, the tube white, with cardinal red fringes inside at the base; stamens not exserted ...........................................................23. *I. violacea*

2. Corolla cardinal red, red-orange or bright pink.

5. Corolla cardinal red.

6. Leaves entire, reniform, with the apex retuse, 0.3-1.8 cm long .......... 18. *I. steudelii*

6. Leaves pinnatisect, 2-10 cm long .......................................................... 15. *I. quamoclit*

5. Corolla bright pink or red-orange.

7. Corolla bright pink; sepals pink; leaf with the base truncate, obtuse, or sometimes subcordiform.

8. Corolla with the limb entire or with 5 shallow, ovate, and expanded lobes10. *I. microdactyla*

8. Corolla with the limb deeply 5-lobed, the lobes oblong and reflexed .......................................................................................................................... 16. *I. repanda*

7. Corolla red-orange; sepals green; leaf cordiform at the base

8. Corolla pink or lavender; leaves oblong to rounded, the apex deeply emarginate and mucronate .......................... 13. *I. pes-caprae*

8. Corolla white with a yellow center; leaves oblong to lanceolate, the apex emarginate and mucronate .................................................. 7. *I. imperati*

11. Plants creeping or sometimes the younger portions of the stem twining, producing roots in the area of the nodes that are in contact with the soil.

12. Plants strictly creeping; common on sandy coasts of the littoral zone.

13. Corolla pink or lavender; leaves oblong to rounded, the apex deeply emarginate and mucronate ........................................... 13. *I. pes-caprae*

13. Corolla white with a yellow center; leaves oblong to lanceolate, the apex emarginate and mucronate .................................................. 7. *I. imperati*

12. Plants with the basal portion creeping, the younger portions ascending, twining; plants cultivated or escaped from cultivation ...................................... 2. *I. batatas*
11. Plants ascending, twining, rarely producing roots at the nodes (I. setifera).
14. Leaves reniform or lyrate, < 1.5 cm long, clustered on short axillary branches; petioles usually longer than the leaf blade......................................................... 4. I. eggersii
14. Leaves not reniform or lyrate, alternate, not clustered on short axillary branches.
15. Corolla yellow with the center purple ........................................... 12. I. ochracea
15. Corolla of other colors.
16. Plant with at least some or all of the leaves trilobed.
17. Corolla 1.4-1.6 cm long ............................................................... 22. I. triloba
17. Corolla 1.8 cm long or longer.
18. Calyx glabrous or puberulous; corolla 5-7 cm long, violet to violet-pink .......................................................... 8. I. indica
18. Calyx hirsute; corolla 1.5-4.5 cm long, lilac, pale blue, whitish, pink, or violet-blue.
19. Corolla 1.5-3 cm long; inflorescences of double dichasia resembling a head; bracts 1.5-3 cm long, forming an involucre at the base of the inflorescences ........ 9. I. meyeri
19. Corolla 4-4.5 cm long; inflorescences of simple dichasia or sometimes the flower solitary; bracts 4-4.5 mm long, not forming an involucre.
20. Sepals with apices long-acuminate, elongate, much longer than the body ........................................... 11. I. nil
20. Sepals with apices acute or slightly acuminate 14. I. purpurea
16. Leaves entire, never lobed.
21. Leaves elliptical, oblong, or lanceolate, hastate or auriculate at the base ............................................................... 19. I. tenuissima
21. Leaves ovate, broadly ovate, or oblong, cordiform or truncate at the base.
22. Corolla pink or violet-pink; sepals with the margins not hyaline.
23. Sepals with three parallel veins, prominent, like a keel ...... 17.I setifera
23. Sepals without prominent veins.
24. Young stems 4-winged; sepals obtuse or retuse at the apex ........................................................................................................ 3. I. calantha
24. Young stems cylindrical; sepals apiculate at the apex 20. I. tiliae
22. Corolla blue, turning violet when mature; sepals with hyaline margins .................................................................................. 22. I. tricolor

Distribution: In moist areas, along roads and in pastures at middle and lower elevations. Also on Vieques. Cultivated throughout the tropics but native to continental tropical America.
Public forests: El Yunque, Guánica, Maricao, and Río Abajo.

Distribution: Widely cultivated in Puerto Rico and the Virgin Islands. Native to the Neotropics but cultivated throughout the tropics and subtropics.

Distribution: In thickets and disturbed areas in southern Puerto Rico. Also in Cuba, Hispaniola, Colombia, and Venezuela.

Public forest: Guánica (according to Quevedo et al. 1990) and Maricao (according to Cedeño, 1991).

Distribution: In thickets and coastal forests on Vieques, St. Croix, St. John, St. Thomas, Tortola, Virgin Gorda, and Water Island; the Lesser Antilles.

Distribution: In thickets, forest margins, and disturbed areas of the coast or the interior of Puerto Rico. Also on Vieques, St. Croix, St. John, and St. Thomas; the Antilles, Central America, and South America, introduced in the Old World tropics.

Public forest: Toro Negro.

Distribution: In moist forests of the Cordillera Central and in the zone of mogotes. This species was originally described based on material cultivated in the gardens at Kew, but of uncertain origin. The species is considered by some as native to Jamaica and introduced in other places due to its showy flowers.

Public forests: Maricao and Toro Negro.

Distribution: Along the sandy coasts of the northern littoral zone. Also on Culebra and Vieques. A pantropical species, distributed along the sandy coasts of the littoral zone.

Public forest: Guánica and Piñones

Key to the varieties

1. Plants glabrous; leaves usually trilobed
   ....................................... I. indica var. acuminata
1. Plants appressed-pubescent; leaves cordiform, not lobed
   ....................................... I. indica var. indica

Distribution: Along the sandy coasts of the littoral zone and in moist areas at middle elevations. Also on Cayo Santiago, Culebra, Desecheo, Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout the Antilles and tropical America.

Public forests: Cambalache, Ceiba, El Yunque, Guirarte, Piñones, Río Abajo, Tortuguero, and Vega.

8b. Ipomoea indica var. indica

Distribution: Known from a single collection in Piedras Chiquitas in Coamo, Puerto Rico. This variety predominates on the coasts of the Indo-Pacific region, and apparently is also found from Mexico to Brazil and Argentina.

9. Ipomoea meyeri (Spreng.) G. Don, Gen. Syst. 4: 275. 1838.
Distribution: Common in southern and western Puerto Rico. Also in the Antilles, Central America, and northern South America.

Public forests: Guánica.
**Distribution:** On the central plateau of Mona Island. Also in the Bahamas, Cuba, and the United States (Florida).
**Public forest:** Mona.

**Distribution:** Common in southwestern Puerto Rico. Also on Desecheo, Vieques, St. Croix, St. John, St. Thomas, and Tortola; native to Mexico but found distributed throughout the tropics.
**Public forest:** Boquerón and Guanánica.

**Distribution:** Common in southwestern Puerto Rico. Also on St. Croix and St. John; probably native to tropical Africa, widely cultivated throughout the tropics.
**Public forests:** Guanánica, Maricao, and Susúa.

**Distribution:** On the sandy coasts of the littoral zone, probably on all the islands and keys of Puerto Rico and the Virgin Islands. A pantropical species, very common on the sandy coasts of the littoral zone.
**Public forests:** Guanánica, Mona, and Piñones.

14. *Ipomoea purpurea* (L.) Roth, Bot. Abh. 27. 1787.
**Distribution:** Along roads and in disturbed places. Also on Vieques, St. Croix, St. Thomas, and Tortola. Probably native to Mexico, but found distributed throughout the tropics.

**Distribution:** In disturbed areas. Cultivated on St. Croix and St. Thomas. Possibly native to Mexico, but today found distributed throughout the tropics.
**Public forests:** Cambalache and Tortuguero.

**Distribution:** In moist forests of the Cordillera Central, in the Sierra de Luquillo, and in the zone of mogotes. Also on St. John, St. Thomas, and Tortola; the Lesser Antilles.
**Public forests:** Carite, El Yunque, Guajataca, Guilarte, Maricao, Rio Abajo, and Toro Negro.

17. *Ipomoea setifera* Poir in Lam., Encycl. 6: 17. 1804.
**Distribution:** In moist disturbed areas. Also on St. John; throughout the Antilles, continental tropical America, naturalized in western Africa.
**Public forests:** Carite, Cambalache, Ceiba, El Yunque, Guilarte, Maricao, Rio Abajo, Toro Negro, and Tortuguero.

**Distribution:** In thickets and dry forests of the coast and in the dry limestone zone. Also on Culebra, Culebrita, and Vieques; cited for Hispaniola, perhaps in error.
**Public forests:** Boquerón, Guanánica, Maricao, and Susúa.

19. *Ipomoea tenuissima* Choisy ex DC., Prodr. 9: 376. 1845.
**Distribution:** Known from Puerto Rico by a single collection from Joyuda (Cabo Rojo) in 1913. This species is known from Cuba, Hispaniola (whence it was described), and the United States (Florida).
**Distribution:** One of the most common species of *Ipomoea* in Puerto Rico. It is found on roadsides and river banks, on fences, in pastures, and in forests at lower and middle-upper elevations. Also on Culebra, Vieques and the Virgin Islands; the Antilles, the United States (Florida), the Bahamas, and from Mexico to Brazil.
**Public forests:** Carite, Ceiba, El Yunque, Guánica, Guilar, Maricao, Piñones, Río Abajo, Toro Negro, Tortuguero, and Vega.

21. *Ipomoea tricolor* Cav, Icon. 3: 5, t. 208.
**Distribution:** On roadsides and in disturbed areas. Also on St. Croix, St. John, and St. Thomas. Native to Central America, but distributed throughout the tropics because of its cultivation.

**Distribution:** In grasslands and pastures and on roadsides. Also on Icacos, Caja de Muerto, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda. Naturalized in tropical regions of the Old World.
**Public forests:** Boquerón, Guánica, Mona, Piñones, and Río Abajo.

**Distribution:** On the sandy coasts of the littoral zone. Also on Cayo Ratones, Culebra, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, and Tortola; the Antilles, the Bahamas, the Cayman Islands, the United States (Florida), and from Mexico to the Guianas. Introduced in the tropics of the Old World.
**Public forests:** Guánica, Mona, and Piñones.

**Distribution:** Known only from three collections in Puerto Rico, one from the Guánica Lagoon (*Sintenis 3619*), another from Sabana Grande (*Sintenis 7019*), and the last from Dorado (*Woodbury, s.n.*). A pantropical species of unknown origin, widely distributed in the New World.

5. **JACQUEMONTIA**
   Key to the species of *Jacquemontia*

1. Corollas tubular, red or crimson .................................................................5. *J. solanifolia*
   1. Corollas infundibuliform or rotate, white, blue, pink, or lavender.
   2. Cymes compact, forming a head; bracts foliaceous, > 1.5 cm long, forming an involucre at the base of the inflorescence; plant hirsute.................................................................6. *J. tamnifolia*
   2. Cymes open, not forming a head; bracts minute, not forming an involucre at the base of the inflorescence; plant tomentose, pubescent, or glabrous.
   3. Corollas rotate, blue, the limb pentagonal in outline.
      4. Plant ferruginous-tomentose; corolla violet-blue ................................2. *J. cumanenis*
      4. Plant sparsely pubescent; corolla brilliant blue ..........................4. *J. pentanths*
   3. Corollas infundibuliform, white, lavender, or pink, the limb deeply lobed.
   5. Inflorescences pedunculate; corolla white, sometimes with a pink or lavender tinge.
      6. Leaves coriaceous or subfleshy, the apex rounded or less frequently acute, emarginate and mucronate, the base acute, obtuse, or cuneate; lateral branches numerous, short, densely leafy, persistent on the main stem even after the loss of the leaves; inflorescences of simple dichasial cymes ........................................3. *J. cayensis*
6. Leaves coriaceous, the apex obtuse and mucronate, the base truncate or rounded, unequal; lateral branches elongate or short, sparsely leafy, deciduous; inflorescences of double dichasial cymes .............................................................................................................. 3. J. havanensis

5. Inflorescences sessile; corolla lavender or pink ................................................................. 7. J. verticillata

Distribution: Along the south coast of Puerto Rico. Also on Mona and Anegada; the Bahamas, Cuba, and the Turks Islands.
Public forests: Guánica and Mona.

Distribution: In thickets and dry forests of the littoral zone. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; the Lesser Antilles and Venezuela.
Public forest: Guánica.

Distribution: In dry thickets along the southern littoral zone. Also on Mona, Cayo Ratones, Cayo Icacos, Culebra, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the Antilles, the United States (Florida), the Bahamas, southern Mexico, and Belize.
Public forests: Guánica and Mona.

Distribution: In thickets and dry forests and on sandy coasts of the littoral zone. Also on Cayo Santiago, Culebra, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Neotropics, introduced in Malaysia and Sri Lanka.
Public forests: Cambalache, Ceiba, Guajataca, Guánica, Maricao, Mona, Río Abajo, and Susúa.

Distribution: In dry forests and thickets of the littoral zone. Also on Mona, Vieques, St. Croix, St. John, and St. Thomas; the Lesser Antilles.
Public forests: Guajataca, Guánica, Mona, Piñones, and Río Abajo.

Distribution: In thickets and dry forests of the littoral zone. Also in the southeastern United States, Cuba, Hispaniola, the Bahamas, the Lesser Antilles, Central America, South America, Africa, and the Mascarenes.
Public forests: Boquerón and Guajataca.

Distribution: Known from the area of mogotes. Also Cuba, Hispaniola, Jamaica, and the Bahamas.
Public forest: Río Abajo.

6. MERREMLA
Key to the species of Merremia

1. Leaves with simple blades; flowers in umbelliform cymes ............................................ 6. M. umbellata
1. Leaves palmately compound or palmatifolied; flowers solitary or in few-flowered dichasia.
   2. Leaves palmatifolied.
      3. Plants glabrous; margin of the leaf entire or slightly undulate; corolla brilliant yellow .......... 5. **M. tuberosa**
      3. Plants hispid; margin of the leaf sinuate or sinuate-dentate; corolla white with reddish or pink center..............................................................3. **M. dissecta**

2. Leaves palmately compound.
   4. Leaflets with the margin entire.
      5. Sepals hispid, acute at the apex .................................................................1. **M. aegyptia**
      5. Sepals glandular-pubescent, acuminate at the apex .......................................2. **M. cissoides**
   4. Leaflets with the margin serrate ..................................................................4. **M. quinquefolia**

   **Distribution**: Occasional in disturbed areas at lower and middle elevations. Also on Mona, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the tropics.
   **Public forests**: Boquerón, Cambalache, and Mona.

2. **Merremia cissoides** (Lam.) Hallier f., Bot. Jahrb. 16: 552. 1893.
   **Distribution**: Occasional in disturbed areas at lower elevations in eastern Puerto Rico. Also in Cuba, continental tropical America, and tropical Asia.

   **Distribution**: In disturbed areas at lower elevations. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout the tropics.
   **Public forests**: Guajataca, Guánica, and Susúa.

   **Distribution**: In disturbed areas, on roadsides and in pastures, at lower elevations. Also on Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout tropical America.
   **Public forests**: Cambalache, Ceiba, Guajataca, Guánica, Mona, Río Abajo, Susúa, and Toro Negro.

   **Distribution**: Ornamental plant, sometimes naturalized in disturbed areas. Also on St. Croix and St. John. Native to tropical America but found widely distributed throughout the tropics.

   **Distribution**: In disturbed areas, on roadsides and in pastures and vacant lots, at lower to middle elevations. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout tropical America.
   **Public forests**: Guánica and Susúa.

7. **OPERCULINA**

   Key to the varieties
   1. Leaves (mature) 5-16 cm long; corollas 3-4.5 cm long .............. **O. turpethum** var. turpethum
1. Leaves (mature) 16-24 cm long; corollas 7-8 cm long ……………… O. turpethum var. ventricosa

1a. Operculina turpethum var. turpethum

Distribution: Species native to the Old World, introduced to the Antilles as an ornamental, where it can be found naturalized. Also on St. Croix and St. Thomas.

8. PORANOPSIS

Distribution: Species native to India, cultivated throughout the tropics, where it can be found naturalized in disturbed areas. Also on Vieques, St. Croix, and St. Thomas.

9. STICTOCARDIA

Distribution: In areas of low elevation, on the north and west coasts. Also on Cayo Santiago, Vieques, St. Croix, St. John, St. Thomas, and Tortola. Native to tropical Asia, but dispersed throughout the tropics because of its cultivation.

10. TURBINA

Distribution: On roadsides or in recent secondary forests. Also throughout the Antilles, from Mexico to Bolivia, and the United States (Florida), introduced in the Old World tropics.
Public forests: Cambalache, Río Abajo, and Susúa.

11. XENOSTEGIA

Distribution: Native to the Old World tropics (Africa-Pacific), naturalized in some localities of the northern littoral zone (Manati-Santurce), on sandy substrates. Also in South America and the Old World tropics.
Public forest: Tortuguero.

19. Family CUCURBITACEAE
Key to the genera

1. Fruits < 7 cm long.
2. Fruits capsular, dehiscent, with numerous pendulous seeds, covered by a fleshy red aril
   11. **Momordica**
2. Fruits indehiscent, the seeds without an aril.
   3. Fruits red; corolla white, the limb 3-5 cm in diameter.................................3. **Coccinia**
   3. Fruits green, yellowish, or orange; corolla of various colors, when white then the limb 1-1.5 cm
      in diameter.
      4. Fruits spinulose, spiny, or smooth, 4-5 cm long ........................................4. **Cucumis**
      4. Fruits smooth, 1-4 cm long.
      5. Infructescences short, with the fruits densely clustered; stems articulate; roots tuberous ...6.
         **Doyerea**
      5. Infructescences elongate, racemose, or the fruits solitary; stems not articulate; roots not
         tuberous.
      6. Plants herbaceous, usually 1-2 (4) m long; stems slender, < 5 mm in diameter; corolla
         yellow ..........................................................10. **Melothria**
      6. Plants robust, usually 5 m or more in length; stems > 5 mm in diameter; corolla orange,
         cream-colored, white, or greenish yellow.
         7. Corolla orange; stems cylindrical ...........................................................12. **Psiguria**
         7. Corolla cream-colored, white, or greenish yellow; stems angular ........1. **Cayaponia**
   4. Fruits smooth, 1-4 cm long.
   5. Infructescences elongate, racemose, or the fruits solitary; stems not articulate; roots not
      tuberous.
   6. Plants herbaceous, usually 1-2 (4) m long; stems slender, < 5 mm in diameter; corolla
      yellow ..........................................................10. **Melothria**
   6. Plants robust, usually 5 m or more in length; stems > 5 mm in diameter; corolla orange,
      cream-colored, white, or greenish yellow.
      7. Corolla orange; stems cylindrical ...........................................................12. **Psiguria**
      7. Corolla cream-colored, white, or greenish yellow; stems angular ........1. **Cayaponia**
   9. Fruits with thin and fragile walls on drying, the interior formed by a conglomeration of fibers that
      form a network ................................................................................................................ ... 9. **Luffa**
   8. Fruits fleshy, juicy when ripe.
   11. Fruits white or light green, pyriform, spinulose ........................................13. **Sechium**
   11. Fruits dark green, orange, reddish brown, or with light green bands alternating with dark green,
      not pyriform, smooth.
      12. Fruits cylindrical (3 to 4 times longer than wide), reddish brown, aromatic
          ..........................................................................................................................14. **Sicana**
      12. Fruits almost as wide as long, green, orange, or with dark green bands.
         13. Corolla campanulate, the limb ca. 10 cm in diameter ...............................5. **Cucurbita**
         13. Corolla rotate, the limb ca. 2 cm in diameter .................................................2. **Citrullus**

1. **CAYAPONIA**

Key to the species of **Cayaponia**

1. Calyx 5-9 mm long; lobes of the corolla 12-15 mm long; margin of the leaves entire or crenate 1. **C. americana**
   1. Calyx 3-4 mm long; lobes of the corolla 3-5 mm long; margin of the leaves spinulose
      2. **C. racemosa**

1. **Cayaponia americana** (Lam.) Cogn in A.DC. & C.DC., Monogr. Phan. 3: 785. 1881.
Distribution: On roadsides and in dry forests and coastal thickets. Also on Culebra, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the United States (Florida), Cuba, Hispaniola, and the Lesser Antilles.
Public forests: Carite, Ceiba, El Yunque, Maricao, Río Abajo, and Toro Negro.

2. Cayaponia racemosa (Mill.) Cogn. in DC., Mon. Phan. 3: 768. 1881.
Distribution: In pastures and on roadsides at lower elevations. Cited for Tortola by Britton (1925); also in the Greater Antilles, Central America, Barbados, Trinidad, and northern South America.
Public forests: Guárate, Maricao, Río Abajo, Susúa, and Toro Negro.

2. CITRULLUS

Distribution: Species cultivated for its edible fruits. Spontaneous in sandy areas and on roadsides. Native to tropical Africa, but widely cultivated throughout the tropics.

3. COCCINIA

Distribution: In southwestern Puerto Rico and in Quebradillas. Also on St. Croix, and cited for St. Thomas (Britton and P. Wilson, 1925). Native to Africa, but naturalized throughout the tropics.

4. CUCUMIS

Key to the species of Cucumis

1. Leaves deeply 3-5-palmatifolioted ................................................................. 1. C. anguria
1. Leaves ovate, entire or slightly 3-lobed.
   2. Fruits densely spiny (spines ca. 1 cm long) ............................................ 2. C. dipsaceus
   2. Fruits smooth, not spiny .............................................................................. 3. C. melo

Distribution: Along the coast or in coastal thickets, in southern and southwestern Puerto Rico. Also on Culebra, Mona, Vieques, Anegada, St. Croix, St. Thomas, and Tortola. Native to Africa, but naturalized in the Antilles, Central America, and South America.
Public forest: Guánica and Mona.

Distribution: In coastal pastures in southern Puerto Rico. Also on Tortola. Native to Africa, but naturalized throughout the tropics.

Distribution: In disturbed areas at lower elevations, collected in Gurabo and Lajas. An African species that has given rise to several races with edible fruits through artificial selection. Among these are the “cantaloupe” and the “honeydew.”
5. CUCURBITA

   **Distribution:** On roadsides, along trails, and in pastures.
   **Public forests:** Maricao, Píñones, and Río Abajo.

6. DOYEREA

   **Distribution:** In thicketes and coastal forests. Also on Culebra, Vieques, St. Croix, St. John, and St. Thomas; the Antilles and from Mexico to northern South America.
   **Public forests:** Boquerón and Guánica.

7. FEVILÉA

   **Distribution:** In disturbed areas along rivers, roads, and moist forest margins in central Puerto Rico. Also in Jamaica, Cuba, Hispaniola, Trinidad, and continental tropical America.
   **Public forests:** Maricao and Río Abajo.

8. LAGENARIA

   **Distribution:** In disturbed areas along roads and moist forest margins in central Puerto Rico. Native to the Old and New World tropics, where it is rather frequently cultivated.

9. LUFFA

   Key to the species of *Luffa*

   1. Stamens 3; fruits with 10 longitudinal ribs; seeds rugose ........................................1. *L. acutangula*
   2. Stamens 5; fruits trigonal, slightly sulcate longitudinally; seeds smooth .................... 2. *L. aegyptiaca*

   1. Luffa acutangula (L.) Roxb., Hort. Beng. 70. 1814.
      **Distribution:** Probably native to the paleotropics, in disturbed areas along roads and moist forest margins in central Puerto Rico. Cultivated throughout the tropics and subtropics.

      **Distribution:** Native to the paleotropics, cultivated, escaped, or naturalized, in disturbed areas along roads and moist forest margins in central Puerto Rico. Also on St. Croix, St. John, and St. Thomas. Cultivated throughout the tropics and subtropics.
10. MELOTHRIA

Distribution: In disturbed areas such as pastures, at upper to lower elevations. Also on Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles, the Bahamas, the southern United States, and continental tropical America.
Public forests: El Yunque, Maricao, Río Abajo, Toro Negro, and Vega.

11. MOMORDICA

Distribution: On fences and roadsides and in coffee plantations and pastures at middle and lower elevations. Also on Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; native to China and Asia but found naturalized throughout the tropics and subtropics of the New World.
Public forests: Cambalache, El Yunque, Maricao, Mona, Río Abajo, Susúa, and Vega.

12. PSIGURIA

Key to the species of Psiguria

1. Leaves 3-lobed.
   2. Calyx of the staminate flowers urceolate, with deltate lobes; corolla papillose outside; anthers broadly lanceolate ................................................................. 2. P. pedata
   2. Calyx of the staminate flowers cylindrical, with lanceolate-acuminate lobes; corolla puberulous outside; anthers subulate ................................................................. 1. P. ottoniana
1. Leaves 3-5-foliolate.
   3. Pistillate flowers solitary or in pairs; calyx cylindrical-urceolate, ca. 12 mm long; petals 6-7 mm long .................................................. 2. P. pedata
   3. Pistillate flowers in groups of 2-4, axillary; calyx fusiform, 3-3.2 cm long; petals ca. 2.8 cm long 3. P. trifoliata

Distribution: Its distribution in Puerto Rico is unknown, since the collection of Plée did not include the specific locality. It is also found in Cuba and the Bahamas (according to Jeffrey and Trujillo, 1992).

Distribution: In moist forests along the Cordillera Central and in the zone of mogotes. Cited for St. Croix by Cogniaux (1916); also in Hispaniola, Cuba, and the Bahamas.
Public forest: Río Abajo and Vega.

Distribution: Known from few old collections from Coamo, Vega Baja, and Cayey. Also in Hispaniola.

13. SECHIUM
Distribution: In disturbed areas. Native to Central America, widely cultivated throughout the tropics for its edible fruits.
Public forests: Maricao and Río Abajo.

14. SICANA

Distribution: Species native to South America, cultivated in Puerto Rico and the Greater Antilles for its edible fruits, which are found for sale in the public markets.

20. Family CUSCUTACEAE

1. CUSCUTA

Distribution: In coastal thickets. Also on Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Neotropics.
Public forests: Ceiba, Guánica, and Mona.

21. Family DILLENIACEAE

Key to the genera

1. Leaves acuminate at the apex; ovary unicarpellate; inflorescence fasciculate; fruits subglobose, pubescent ........................................................................................................1. Doliocarpus
1. Leaves obtuse or apiculate at the apex; ovary bicarpellate; inflorescence paniculate; fruits bilobate, glabrous ........................................................................................................2. Pinzona

1. DOLIOCARPUS

Distribution: Known from the zone of mogotes. Its distribution in the Neotropics is rather widespread, being found in Hispaniola, Nicaragua, Panama, Colombia, Venezuela, the Guianas, Brazil, and Bolivia.

2. PINZONA

**Distribution:** In moist, mature forests of montane areas, in the Cordillera Central and the Sierra de Luquillo. From Belize to Bolivia, including the Antilles.

**Public Forests:** Carite and El Yunque.

### 22. Family **ERICACEAE**

#### Key to the genera

1. Corolla tubular or tubular-campanulate, 1.4-1.8 cm long, white, pink, or red; leaves rounded or rounded-ovate, 1.2-2.7 cm long, the lateral veins inconspicuous; flowers solitary (in our species)
   ……………………………………………………………………………………………………………………………………………………………………………………… 1. **Gonocalyx**

1. Corolla campanulate, 6-8 mm long, yellowish green; leaves 4-11 cm long, usually ovate, with the secondary and tertiary veins visible; flowers in terminal racemes ……….. 2. **Vaccinium**

#### 1. GONOCALYX

**Key to the species of Gonocalyx**

1. Calyx green; corolla tubular-cylindrical, white or pink, with the lobes erect; stigma white, slightly exserted; leaves rounded or ovate-elliptical, the margins markedly revolute (the blade convex), the apex rounded ……………………………………………………… 2. **G. portoricensis**

1. Calyx red; corolla tubular-campanulate or campanulate, red, with the lobes expanded; stigma red, exserted; leaves ovate, ovate-elliptical, or rarely rounded, the margins scarcely revolute (the blade almost flat), the apex acute or obtuse ……………………………………………………… 1. **G. concolor**

   **Distribution:** Known only from the Carite forest.
   **Public Forest:** Carite.

   **Distribution:** On mountaintops, usually in dwarf forest, along the Cordillera Central and the Sierra de Luquillo.
   **Public Forests:** Carite, El Yunque, Guilarte, and Toro Negro.

#### 2. VACCINIUM

   **Distribution:** From high and moist regions along the Cordillera Central and the Sierra de Luquillo. Also throughout the Antilles.
   **Public Forests:** Carite, El Yunque, Guilarte, and Toro Negro.

### 23. Family **EUPHORBIACEAE**

#### Key to the genera
1. Inflorescences of cymes with two trilobate foliaceous bracts at the base, forming a pseudanthium; staminate flowers with numerous stamens; leaves deeply trilobate (in our species) ................................................................. 1. Dalechampia

1. Inflorescences of racemes, lacking foliaceous bracts; staminate flowers with 2-3 stamens; leaves simple (in our species) ........................................ 2. Tragia

1. DALECHAMPIA

Distribution: In coastal or dry forests and thickets. Also on Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles (except for Jamaica) and from Mexico to South America.
Public Forests: Boquerón, Guánica, and Susúa.

2. TRAGIA

Distribution: In pastures and secondary forests, at lower elevations, in the limestone zone and in dry areas. Also on Culebra, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout tropical America.
Public Forests: Cambalache, Ceiba, Guajataca, Guánica, Maricao, Río Abajo, and Susúa.

24. Family FABACEAE
Key to the subfamilies

1. Flowers zygomorphic; corolla of free petals; inflorescences usually racemose.
  2. Corolla of 5 equal or almost equal petals ........................................ Caesalpinioideae
  2. Corolla with the central petal (standard) elongate, 2 lateral ones connate into a keel and 2 lateral ones smaller ................................................ Faboideae

1. Flowers actinomorphic; corolla of connate petals; inflorescences usually of densely flowered heads or spikes ................................................................. Mimosoideae

24a. Subfamily CAESALPINIOIDEAE
Key to the genera

1. Leaves bipinnate; rachis lacking stipitate glands; fruits slightly flattened ........................................................................................................ 1. Caesalpinia
1. Leaves pinnate; rachis with a stipitate gland; fruits cylindrical ............. 2. Senna

1. CAESALPINIA

Key to the species of Caesalpinia

1. Stipules foliaceous, up to 1.5 cm long, persistent; seeds gray ......... 1. C. bonduc
1. Stipules minute, < 5 mm long, deciduous; seeds yellow-orange, brown, or black.

2. Legumes not spiny.
   3. Stems spiny; leaflets oblong; legume 2-3 cm broad; seeds oblong
   4. C. decapetala
   5. Stems not spiny; leaflets elliptical or broadly elliptical; legume ca. 4 cm broad; seeds almost globose.
   4. Rachis of the leaf with minute spines; leaves with 3-5 pairs of pinnae; seeds dark brown or almost black
   6. C. portoricensis
   4. Rachis of the leaf not spiny; leaves with 7 pairs of pinnae; seeds yellow-orange
   3. C. culebrae

2. Legumes spiny.
   5. Leaflets 4-8 cm long, acute or short-acuminate at the apex; petals ca. 15 mm long
   5. C. major
   5. Leaflets 1-3 cm long, obtuse, rounded, or emarginate at the apex; petals 7-8 mm long
   2. C. ciliata

   Distribution: Along the sandy coasts of the littoral zone. Also on Culebra, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; along the tropical littoral coasts.
   Public Forests: Guánica, Mona, and Piñones.

   Distribution: Along the sandy coasts of the littoral zone. Also on Caja de Muerto, Cayo Ratones, Culebra, Icacos, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the Bahamas, Hispaniola, and throughout the Lesser Antilles.
   Public Forests: Guánica, Mona, and Piñones.

   Distribution: Sandy dunes on Culebra and Cayo Diablo.

   Distribution: On roadsides, along rivers, or in pastures, at lower and middle elevations. Native to India, but naturalized throughout the Neotropics and western Africa.
   Public Forests: Maricao, Río Abajo, and Toro Negro.

   Distribution: In the zone of mogotes. Also in Cuba, Jamaica, the Bahamas, and Hispaniola.
   Public Forest: Río Abajo.

   Distribution: Known from a single collection from Salinas de Guánica.
   Public Forest: Guánica.

2. SENNA
   Key to the species of Senna

1. Leaves with 2-5(6) pairs of sub-fleshy leaflets .............................................1. S. bicapsularis
1. Leaves with 2 pairs of chartaceous leaflets .......................................................... 2. S. nitida

Distribution: In disturbed areas, usually on roadsides and in pastures, at lower elevations. Also on Culebra, Vieques, Anegada, St. Croix, St. Thomas, Tortola, and Virgin Gorda; the Antilles, tropical continental America, and Bermuda. Has been introduced into the Old World tropics.
Public Forest: El Yunque.

Distribution: On roadsides and in forests and pastures, in moist areas, at middle and lower elevations. Also on St. Thomas and Tortola; St. Kitts and probably Haiti.
Public Forests: Carite, El Yunque, Guajataca, and Maricao.

24b. Subfamily FABOIDEAE

Key to the genera

1. Leaves unifoliolate or pinnately compound.
   2. Leaves unifoliolate.
      3. Leaflets cordiform, with a pair of stipels at the base; flower 3-5 cm long; calyx and corolla bright red; legume oblong, 6-8 cm long ............15. Neorudolphia
      3. Leaflets ovate to oblong, without stipels at the base; flower < 1 cm long; calyx green; corolla pink; legume almost circular, 2-2.3 cm long
         ........................................................................................................7. Dalbergia ecastaphyllum
   2. Leaves paripinnate or imparipinnate.
      4. Leaves paripinnate; seeds subglobose, brilliant red with a black spot at the base.................................................................1. Abrus
      4. Leaves imparipinnate; seeds brown, black, or cream-colored.
      5. Leaflets opposite, with stipels at the base; legume oblong.
         6. Leaves with 5-7 leaflets; calyx with the dorsal lobes connate at the base; corolla blue-violet, the standard broadly ovate or circular, the wings as long as or longer than the keel; anthers yellow
            ........................................................................................................6. Clitoria (in part)
         6. Leaves with 11-21 leaflets; calyx with the dorsal lobes free to the base; corolla red-orange, the standard oblong, elongate, the wings shorter than the keel; anthers white
            ........................................................................................................2. Barbieria
      5. Leaflets alternate, without stipels at the base; corolla pink; legume circular or almost circular in outline.
         7. Stipules spiny, persistent; fruit semicircular, woody ....... 12. Machaerium
         7. Stipules minute, deciduous, not spiny; fruit flattened, circular, chartaceous
             ........................................................................................................7. Dalbergia monetaria
   1. Leaves trifoliolate.
      8. Legume obtusely 4-angular; seeds sticky .....................6. Clitoria falcata
      8. Legume flattened or almost cylindrical, not quadrangular; seeds not sticky.
      9. Leaves lacking stipels at the base of the leaflets ..................4. Canavalia
      9. Leaves with stipels at the base of the leaflets.
         10. Standard oblong, elongate; legumes with rigid, elongate, stinging hairs
             ........................................................................................................14. Mucuna
         10. Standard circular to reniform in outline; legumes lacking stinging hairs.
11. Standard 3-4 cm wide, more than twice as long as the keel and the wings

-----------------------------------------------------------------------------5. *Centrosema*

11. Standard < 2.5 cm wide, less than twice as long as the keel and the wings.

12. Legume cylindrical or almost cylindrical, sometimes compressed in the portion between the seeds.

13. Corolla maroon or purple ...............................................13. *Macroptilium*

13. Corolla pink, lavender, or yellow.

14. Stipules auriculate; nodes of the rachis of the inflorescence swollen, with extrafloral nectaries; corolla yellow

-----------------------------------------------------------------------------21. *Vigna luteola*

14. Stipules truncate at the base; nodes of the rachis of the inflorescence not swollen, lacking extrafloral nectaries; corolla lavender or pink

...............17. *Phaseolus*

12. Legume not cylindrical, flattened or compressed laterally.

15. Legumes conspicuously septate between the seeds.

16. Legume with the apex straight ......................18. *Pueraria*

16. Legume with the apex recurved.

17. Legumes ca. 3 mm wide; terminal leaflet elliptical or lanceolate

-----------------------------------------------------------------------------20. *Teramnus*

17. Legumes > 4 mm wide; terminal leaflet rhombic or ovate.

18. Margin of the leaflets entire or sinuate

-----------------------------------------------------------------------------3. *Calopogonium*

18. Margin of the leaflets serrate-mucronate

-----------------------------------------------------------------------------16. *Pachyrhizus*

15. Legumes not septate between the seeds.

19. Legumes ca. 5 cm wide, with 2 or 3 circular seeds, 3-4 cm in diameter.................................................9. *Dioclea*

19. Legumes < 2.5 cm wide, with numerous seeds, < 1 cm long.

20. Legumes falcate.

21. Lower surface with resinous dots … 19. *Rhynchosia*

21. Lower surface lacking resinous dots.

22. Terminal leaflet broadly ovate or broadly rhombic-ovate; corolla white or lavender, ca. 1.5 cm long; legume up to 2 cm wide 11. *Lablab*

22. Terminal leaflet lanceolate-triangular; corolla blue or purple, ca. 5 mm long; legume up to 1.3 cm wide …17. *Phaseolus lunatus* (in part)

20. Legumes oblong.

23. Legume articulate, with the margin constricted in the portion between the seeds, with a pubescence of uncinate hairs with which it adheres to the fur or clothing

-----------------------------------------------------------------------------8. *Desmodium*

23. Legume not articulate, the margin straight and pubescence of simple hairs or glabrous.

24. Style glabrous ……………………10. *Galactia*

24. Style barbate.

25. Keel of the corolla twisted by 360 degrees or more; corolla pink or lavender …17. *Phaseolus* (in part)
25. Keel of the corolla recurved or twisted by less than 180 degrees; corolla yellow, pink, or lavender

……………… ……21. Vigna

1. ABRUS

Distribution: In disturbed areas, such as secondary forests or along trails. Also on Culebra, Vieques, and the Virgin Islands. Native to the paleotropics, but found naturalized throughout the Neotropics.
Public Forests: Cambalache, Ceiba, Guánica, Piñones, and Susúa.

2. BARBIERIA

Distribution: In forests in the zone of mogotes, in secondary forests, and on roadsides in moist places at middle elevations. Also in Cuba, Hispaniola, Central America, and South America.
Public Forests: El Yunque, Maricao, and Río Abajo.

3. CALOPOGONIUM

Key to the species of Calopogonium

1. Terminal leaflet rhombic or rounded-rhombic; stems villous, glabrescent when mature; bracteoles ca. 2 mm long, deciduous; legumes 7-10 mm wide .…………1. C. coeruleum
1. Terminal leaflet ovate or rhombic-ovate; stems hirsute; bracteoles 4-6 mm long, persistent; legumes 3-5 mm wide .……………………………………2. C. mucunoides

Distribution: In moist pastures and disturbed areas, at lower and middle elevations. Also in Cuba, Hispaniola, St. Vincent, Trinidad and Tobago, and tropical continental America.

Distribution: In disturbed areas such as pastures and roadsides, in moist zones at lower and middle elevations. Also in Cuba, Hispaniola, Jamaica, tropical America, and naturalized in Africa and Asia.
Public Forest: Río Abajo.

4. CANAVALIA

Key to the species of Canavalia

1. Seeds brown or white; legumes with a keel on each side of both sutures (each valve with three longitudinal ribs); flowers in groups of 2-3 on the nodal swellings along the rachis.
   2. Plants climbing, cultivated or in areas of secondary vegetation; legumes up to 30 cm long; seeds white .……………………………………1. C. ensiformis
   2. Plants creeping or climbing, common on the sandy coasts of the littoral zone; legumes 7-15 cm long; seeds brown .…………………………………………3. C. rosea
1. Seeds red; legumes with a rib on each side of the ventral suture; flowers in groups of 3-5 on the nodal swellings along the rachis .................................................................2. C. nitida

Distribution: Native to the Neotropics, but known only in cultivation. This species was described based on material collected by Sloane in Jamaica.

Distribution: In forests in moist areas, at middle and lower elevations in central, northern, and western Puerto Rico. Also on St. John and St. Thomas; Hispaniola.

3. Canavalia rosea (Sw.) DC, Prodr. 2: 404. 1825.
Distribution: Along the sandy coasts of the littoral zone. On all the islands and keys of Puerto Rico and the Virgin Islands; throughout the tropical and subtropical coasts of the planet.
Public Forests: Guánica, Mona, and Piñones.

5. CENTROSEMA
Key to the species of Centrosema

1. Corolla pink-burgundy; standard 4.5-6 cm wide; legume 7-10 mm wide.................................................................1. C. plumieri
2. Corolla pale violet; standard 2-4.5 cm wide; legume 4-6 mm wide.
   2. Lobes of the calyx very unequal, the lateral ones deltate, as long as the tube of the calyx, the central ones subulate, much longer than the tube; legume ca. 6 mm wide .................................................................2. C. pubescens
   3. Lobes of the calyx subequal, subulate, longer than the tube of the calyx; legume ca. 4 mm wide .................................................................3. C. virginianum

Distribution: In disturbed areas, such as roadsides and pastures, at lower elevations in moist areas. Throughout the Neotropics, introduced in Africa and tropical Asia.
Public Forests: Guajataca and Río Abajo.

Distribution: In disturbed areas, such as abandoned fields, pastures, or roadsides, at middle and lower elevations. Native to tropical America, introduced in Asia and Africa.
Public Forests: Maricao, Río Abajo, and Susúa.

Distribution: In disturbed areas such as roadsides, fences, and pastures, in thickets and dry forests, usually along the coasts, in the zone of mogotes, and in areas of the Cordillera Central. Also on Culebra, Culebrita, Icacos, Mona, Vieques, and the Virgin Islands; throughout the Antilles and from southern North America to Argentina. Introduced in Africa.
Public Forests: Cambalache, Ceiba, El Yunque, Guánica, Maricao, Mona, Piñones, Río Abajo, Susúa, Toro Negro, and Tortuguero.
6. CLITORIA
Key to the species of Clitoria

1. Leaves 3-foliolate; corolla light yellow, white, or white with lilac lines; legumes obtusely quadrangular; seeds sticky ........................................1. C. falcata
1. Leaves 5-7-foliolate; corolla blue-violet; legumes flattened; seeds not sticky
 ........................................................................................................2. C. ternatea

Distribution: In disturbed areas such as pastures, fences, and along trails, at middle and lower elevations. Native to tropical America; introduced in western Africa.
Public Forests: El Yunque and Río Abajo.

Distribution: In disturbed areas, such as pastures or roadsides. Native to Africa but found widely distributed throughout the tropics and subtropics of the New World. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola.
Public Forests: Guánica and Río Abajo.

7. DALBERGIA
Key to the species of Dalbergia

1. Leaves unifoliolate; calyx ferruginous-tomentose; plants usually of the littoral zone .................................................................1. D. ecastaphyllum
1. Leaves 3-5-foliolate; calyx puberulent; plants usually along rivers in the interior of the island
 ........................................................................................................2. D. monetaria

1. Dalbergia ecastaphyllum (L.) Taub in Engl. & Prantl, Nat. Pflanzenfam. 3(3): 335. year
Distribution: In thickets and dry forests of the littoral zone. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout tropical America and Africa.
Public Forests: Guánica, Mona, Piñones, and Tortuguero.

Distribution: Along the banks of rivers and streams, in the interior of the island, at middle and lower elevations. Also throughout the Antilles and in tropical South America.
Public Forests: El Yunque, Guajataca, Maricao, Río Abajo, and Susúa.

8. DESMODIUM
Key to the species of Desmodium

1. Stems cylindrical; legume crenate only along the ventral margin.
  2. Legume with 2-3 segments; leaflets with the apex acute or acuminate or less frequently obtuse, distal leaflet cuneate at the base ........................................1. D. axillare
  2. Legume with 5-8 segments; leaflets with the apex obtuse or acute, distal leaflet obtuse or rounded at the base .................................................................2. D. inanum
1. Stems trigonal; legume crenate along both margins ..................3. D. intortum
1. **Desmodium axillare** (Sw.) DC., Prodr. 2: 333. 1825.  
**Distribution:** On the ground in dry to moist forests and in areas of disturbed vegetation along the Cordillera Central. Also on St. Croix; distributed throughout the Antilles, Central and South America.  
**Public Forests:** El Yunque, Guajataca, Maricao, Rio Abajo, and Toro Negro.

Key to the varieties in Puerto Rico

1. Leaflets acute or acuminate at the apex.  
   2. Plants densely pubescent ........... **D. axillare** var. **acutifolium**  
   2. Plants puberulent  
   ............. **D. axillare** var. **stoloniferum**
1. Leaflets obtuse  
   .................. **D. axillare** var. **axillare**

2. **Desmodium incanum** DC, Prodr. 2: 332. 1825.  
**Distribution:** In the understory of dry to moist forests and in areas of disturbed vegetation. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; distributed throughout the tropics as a weed.  
**Public Forests:** El Yunque, Guajataca, Guánica, Maricao, Mona, Rio Abajo, and Susúa.

**Distribution:** On the edges of forests along the Cordillera Central. Also in Hispaniola and Jamaica; southwestern United States, Mexico, and Central America to Peru.  
**Public Forest:** Toro Negro.

9. **DIOCLEA**

1. **Dioclea reflexa** Hook. f., Niger Fl. 306. 1849.  
**Distribution:** In forests and pastures at lower or middle elevations. Also in Cuba, Hispaniola, Jamaica, Central America, South America, and tropical western Africa.  
**Public Forest:** El Yunque.

10. **GALACTIA**  
Key to the species of *Galactia*

1. Corolla brilliant red; standard 14-18 mm long; species endemic to the Virgin Islands  
   ..............................................................................................................2. **G. eggersii**
1. Corollas pink or lavender; standard 5-15 mm long; species of wide distribution.  
   2. Leaflets linear or linear-oblong; inflorescences usually of a single flower; calyx strigose  
   ..............................................................................................................3. **G. longifolia**
   2. Leaflets ovate, elliptical, oblong, or lanceolate; inflorescences of 4 or more flowers; calyx pilose or pubescent (sometimes strigulose).  
   3. Legumes 5-5.5 mm wide; standard 12-15 mm long ...........1. **G. dubia**  
   3. Legumes 6-9 mm wide; standard 8-10 mm long ...........4. **G. striata**
1. **Galactia dubia** DC, Prodr. 2: 238. 1825.
**Distribution:** In areas of disturbed vegetation, at lower elevations, mostly near the coast. Also on Culebra, Culebrita, Desecheo, Icacos, Mona, Vieques, St. Croix, Little St. James, St. John, St. Thomas, and Tortola; the Lesser Antilles.
**Public Forests:** Cambalache, Guánica, Mona, Río Abajo, and Susúa.

**Distribution:** In coastal thickets or in areas of disturbed vegetation, along the littoral zone. Endemic to Guana Island, St. John, St. Thomas, and Tortola.

**Distribution:** Known only from the Guayama area. Also in Hispaniola, the Lesser Antilles, the United States (Texas), and the Gran Chaco of Argentina and Paraguay.

**Distribution:** In areas of secondary vegetation, at lower and middle elevations. Also on Culebra, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Neotropics.
**Public Forests:** Cambalache, Guánica, Guajataca, Mona, Río Abajo, and Tortuguero.

11. **LABLAB**

**Distribution:** In disturbed areas, such as along roadsides, on fences, and in pastures. Probably native to Africa, found distributed throughout the tropics. Also on Vieques, St. Croix, St. John, and St. Thomas.
**Public Forests:** El Yunque Maricao, Río Abajo, and Toro Negro.

12. **MACHAERIUM**

**Distribution:** In the coastal swamps that border on the mangroves. Also on Vieques, St. Croix, St. John, and St. Thomas; Hispaniola, the Lesser Antilles, tropical continental America and tropical Africa.
**Public Forest:** In all probability, found in Piñones.

13. **MACROPTILIUM**

Key to the species of *Macroptilium*

1. Twining vine; terminal leaflet usually trilobate; lower surface densely white-pubescent; corolla purple ........................................1. **M. atropurpureum**
1. Erect or clambering herb; terminal leaflet not lobed; lower surface puberulent; corolla maroon, pink, or white .........................................................2. **M. lathyroides**

**Distribution:** In disturbed, ruderal areas. Also on St. Thomas. Native to tropical continental America, but distributed throughout the tropics.
Public Forest: Piñones.

Distribution: In areas of disturbed vegetation throughout the island. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout the Antilles, United States (Florida), Central and South America, and the tropics of the Old World.
Public Forests: Guánica, El Yunque, Maricao, and Río Abajo.

14. **MUCUNA**

Key to the species of *Mucuna*

1. Seeds oblong (in the form of a bean), with a short hilum; legume 4-9 cm long, ca. 1.5 cm wide, cylindrical, densely hispid
   1. *M. pruriens*
2. Lower surface of leaflets sericeous-pubescent; corolla yellow
   2. *M. sloanei*
3. Lower surface of leaflets glabrous; corolla bluish or violet-pink
   3. *M. urens*

1. *Mucuna pruriens* (L.) DC., Prodr. 2. 405. 1825.
Distribution: In disturbed areas such as pastures, forest edges, and roadsides, at lower and middle elevations. Also on St. Croix; of widespread distribution throughout the tropics.
Public Forests: Guajataca, Río Abajo, and Susúa.

Distribution: Known from few collections from the western or central-western area (Aguada, Mayagüez, Sabana Grande, Lares). Also in Jamaica, Cuba, Hispaniola, some of the Lesser Antilles, Central and South America.
Public Forests: Maricao and Susúa.

Distribution: On river banks, in moist forests at middle and lower elevations, in the zone of mogotes. Reported for St. Thomas by Krebs (1847), probably in error. Also in Jamaica, Cuba, Hispaniola, the Lesser Antilles, Trinidad, Central America, and northern South America.
Public Forests: El Yunque, Guilarte, Maricao, and Río Abajo.

15. **NEORUDOLPHIA**

Distribution: In the moist or wet forests of the Cordillera Central, the Sierra de Luquillo, and in the area of mogotes, at middle and upper elevations.
Public Forests: Carite, Guajataca, Guilarte, El Yunque, Maricao, Río Abajo, Susúa, and Toro Negro.

16. **PACHYRHIZUS**

Distribution: In areas of degraded vegetation, along trails and in secondary forests. Native of southern Mexico, widely cultivated throughout the tropics for its edible tuberous roots.
Public Forest: Guajataca.

17. PHASEOLUS
Key to the species of Phaseolus

1. Legume falcate, curved, up to 2 cm wide; leaflets truncate at the base ……1. P. lunatus
1. Legume oblong, straight or slightly curved, up to 1 cm wide; leaflets rounded or cuneate at the base…………………………………………………………………………………………..2. P. vulgaris

Distribution: In areas of degraded vegetation, along trails, on fences, and in thickets. Also in the Antilles. Probably native to tropical continental America, where it is widely cultivated. Introduced in the tropics of the Old World.

Distribution: In areas of degraded vegetation, along trails, on fences, and in thickets. Also throughout the Antilles. Native to Mesoamerica, with numerous forms cultivated for millennia in tropical continental America. Widely cultivated throughout the world.

Excluded Species: Phaseolus polystachyos (L.) Britton was reported for Puerto Rico by Liogier (1982, as P. polystachios), based on an erroneous identification of Phaseolus lunatus (Liogier, et al. 31642).

18. PUERARIA
Distribution: In moist disturbed areas, at middle and lower elevations. Also on St. John. Native to tropical Asia, introduced in Africa and the Americas as a forage plant.
Public Forests: Carite, El Yunque, Maricao, Río Abajo, and Tortuguero.

19. RHYNCHOSIA
Key to the species of Rhynchosia

1. Robust lianas that attain 8-10 m in length; mature stems flattened, forming a ribbon up to 2.5 cm wide; seeds red and black ……………..2. R. phaseoloides
1. Scarcely woody vines, usually less than 5 m in length; mature stems cylindrical, less than 5 mm in diameter; seeds brown.
   2. Lower surface of the leaflets with the reticulate tertiary venation prominent; calyx 2.5-3 mm long, the sepals short-subulate, as long as or twice as long as the tubular portion of the calyx ………………………………………………………………………………1. R. minima
    3. Lower surface of the leaflets with the tertiary venation not prominent; calyx 6-10 mm long, the sepals linear-lanceolate, three times as long as the tubular portion of the calyx …………………………………………………………………………………..3. R. reticulata

1. Rhynchosia minima (L.) DC, Prodr. 2: 385. 1825.
Distribution: Abundant on fences and in weedy places at middle and lower elevations. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; generalized in the tropics and subtropics of the world. Although this species is very abundant in the New World, it is believed to be
native to the Old World, because in the latter region it exhibits a great diversity of differentiation at the
varietal level.
Public Forests: Cambalache, Guánica, Guajataca, Mona, and Río Abajo.

Distribution: In secondary forests in the zone of mogotes. Also on St. Thomas; throughout the
Antilles, southern Panama, and South America.
Public Forests: Maricao and Río Abajo.

Distribution: In disturbed areas such as pastures, weedy places, roadsides, and fences, at lower and
middle elevations. Also on Culebra, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas,
Tortola, and Virgin Gorda; also throughout the Antilles, tropical continental America.
Public Forests: Cambalache, Carite, Ceiba, Guajataca, Guánica, Maricao, Mona, Río Abajo, and
Susúa.

**20. TERAMNUS**
Key to the species of *Teramnus*

1. Stems pilose; leaflets elliptical, ovate to almost rounded, strigose on the lower surface; legume
pilose or glabrous, 2-5 cm long ……………………………1. *T. labialis*
1. Stems tomentose or sericeous; leaflets oblong or lanceolate, sericeous on the lower surface; legume
ferruginous-tomentose, 4-7 cm long ………………………2. *T. uncinatus*

Distribution: In disturbed areas such as pastures, forest edges, and roadsides, at lower and middle
elevations. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda;
throughout the Antilles and Central America.
Public Forest: Guánica, Mona, and Río Abajo.

Distribution: In disturbed areas such as roadsides, pastures, secondary forests, and thickets, at middle
and lower elevations. Also in the Greater Antilles, tropical continental America and introduced in
tropical Africa.
Public Forests: Carite, Guajataca, Maricao, Río Abajo, and Toro Negro.

**21. VIGNA**
Key to the species of *Vigna*

1. Corolla uniformly brilliant yellow.
   2. Standard ca. 1.5 cm long; legumes 4-7 cm long.
      3. Leaflets chartaceous, ovate, acute at the apex; stipules sagittate at the base; legumes 4-7 cm
long ………………………………………………………………………5. *V. luteola*
      3. Leaflets fleshy, obovate, obtuse, or rounded at the apex; stipules truncate at the base; legumes
5-6 cm long ………………………………………………………………..6. *V. marina*
   2. Standard 6-10 mm long; legumes 1-4 cm long.
4. Standard ca. 6 mm long; legume 8-15 mm long, with 1-3 seeds

3 V. hosei

4. Standard ca. 1 cm long; legume 3-4 cm long, with 5-7 seeds

4. V. longifolia

1. Corolla pink or violet-pink, changing to white or pale yellow with purplish lines.

5. Standard < 1 cm long; legumes ascendant

7 V. peduncularis

5. Standard 1.5-3 cm long; legumes sparse or pendulous.


7. Stipules truncate at the base; peduncle of the inflorescence as long as or shorter than the accompanying leaf; legume oblong, 8-9 mm wide, curved in the middle

1. V. adenantha

7. Stipules asymmetrical, the base auriculate on only one side; legume linear, curved in the distal portion, 3-4 mm wide

2. V. antillana

6. Style erect or sigmoid.

8. Plant more or less glabrous; legume 10-40 cm long

8. V. unguiculata

8. Plant ferruginous-pilose; legume 7-11 cm long

9. V. vexillata


Distribution: Moist disturbed areas at lower and middle elevations. Native to tropical America, cultivated in Africa and Asia.

Public Forests: El Yunque, Guajataca, and Río Abajo.


Distribution: In more or less dry and disturbed areas, at lower elevations. Also on Caja de Muerto, Vieques, St. Croix, St. John, and Tortola; throughout the Antilles.

Public Forest: Guánica.


Distribution: In moist disturbed areas. Native to Borneo and Java, introduced in the Antilles.

Public Forests: Carite, El Yunque, and Río Abajo.


Distribution: Known only on the margins of the Tortuguero Lagoon, on a substrate of white sands. Native to tropical continental America, from Panama to Argentina and Uruguay.

Public Forest: Tortuguero.


Distribution: On the sandy coasts of the littoral zone, also in disturbed areas such as roadsides and pastures. Also on Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout tropical and subtropical America, especially along the coasts of the littoral zone, also in Africa and Asia.

Public Forests: Cambalache, Carite, Ceiba, Guánica, El Yunque, Mona, Piñones, Río Abajo, Toro Negro, and Tortuguero.


Distribution: Known from a single collection from Boca de Cangrejos, apparently along the sandy coast. Predominant along the tropical coasts of the Old World. In the New World, it is known from a few collections from Panama and Brazil.

Distribution: In disturbed places like roadsides and pastures. Also in the Antilles, Central America, and South America.
Public Forest: Río Abajo.

Distribution: In disturbed places like roadsides and pastures. Cultivated throughout the tropics for food; apparently native to the tropics of the Old World.
Public Forest: Río Abajo.

Distribution: In disturbed places like roadsides and pastures. Also in the Antilles, Central America, South America, Africa, and tropical Asia.
Public Forest: Río Abajo.

24c. Subfamily MIMOSOIDEAE
Key to the genera

1. Inflorescences racemes of spikes, 4-5 cm long……………………… 2. Entada
1. Inflorescences racemes of heads or solitary heads.
   2. Corolla white, cream-colored, or yellowish ………………………..… 1. Acacia
   2. Corolla pink ………………………………………………………………..3. Mimosa

1. ACACIA
Key to the species of Acacia

1. Plant spiny; stems obtusely quadrangular; legume 1.5-2 cm wide ………1. A. retusa
1. Plant not spiny; stems more or less cylindrical; legume 2.5-3 cm wide ……2. A. vogeliana

Distribution: In dry disturbed areas, at middle and lower elevations. Also on Culebra, Vieques, St. Thomas, St. John, Tortola, and Virgin Gorda; also in Hispaniola, the Lesser Antilles, and northern South America.
Public Forests: Cambalache, Ceiba, Guánica, Río Abajo, and Susúa.

Distribution: Known from a single collection in Puerto Rico (at the entrance to La Parguera) and another on St. John (entrance toward Bordeaux); also in Hispaniola and probably on Martinique.

2. ENTADA

1. Entada polystachya (L.) DC. var. polyphylla (Benth. ex Hook.) Barneby, ??
Distribution: Known from a single collection (Sintenis 1240), from the base of Monte de Mula in Fajardo. Also on Dominica and in northern South America.

3. MIMOSA
Key to the species of Mimosa
1. Fruits obtusely quadrangular, with numerous longitudinal ribs ........4. **M. quadrivalvis**

1. Fruits flattened, without longitudinal ribs.
   2. Leaves with a single pair of pinnae; leaflets 3-4 pairs, elliptic-oblong-lanceolate, acute at the apex…………………………………………………………………………………………………….1. **M. casta**
   2. Leaves with 2-7 pairs of pinnae; leaflets 3-20 pairs, obliquely obovate or oblong, rounded or obtuse at the apex.
      3. Leaflets 15-20 pairs, 3-4 mm long, oblong; heads ca. 6 mm in diameter………………………………………………………………………………………………….3. **M. diplotricha**
      3. Leaflets 3-8 pairs, 1-1.5 cm long, obliquely obovate; heads 1.3-1.7 cm in diameter………………………………………………………………………………………………….2. **M. ceratonia**

**Distribution:** On roadsides and in pastures at lower and middle elevations. Also in the Lesser Antilles and from Panama to Brazil.

**Distribution:** On roadsides and in pastures at lower and middle elevations. Also on Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; Hispaniola and the Lesser Antilles as far as St. Vincent, reported for Venezuela.
**Public Forests:** Cambalache, Carite, El Yunque, Guajataca, Maricao, Río Abajo, Susúa, and Toro Negro.

**Distribution:** On roadsides and in pastures at lower and middle elevations. Also in Cuba, Hispaniola; Mexico, Central and South America.
**Public Forest:** El Yunque.

**Distribution:** Known from Piedras Chiquitas, Coamo.

25. **Family LAURACEAE**

1. **CASSYTHA**

1. **Cassytha filiformis** L., Sp. Pl. 35. 1753.
**Distribution:** In disturbed areas at low elevation, predominantly near the littoral zone. Also on Cayo Diablo, Isla Piñéiros, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; a cosmopolitan species.
**Public Forests:** Guánica, Mona, Piñones, and Tortuguero.

26. **Family MALPIGHIACEAE**

   Key to the genera

1. Mericarp with a single dorsal wing well developed (lateral wings not developed).
   2. Stamens 10, subequal, fertile; styles obtuse at the apex ..........1. **Heteropterys**
2. Stamens 10, unequal, 4-6 fertile, with the anthers thicker; styles with the apex broadened

2. **Stigmaphyllon**

1. Mericarp with 4 wings (two pairs of lateral wings, the dorsal wing not developed)

3. **Tetrapterys**

1. **HETEROPTERYS**

   **Key to the species of Heteropterys**

1. Petals pink; leaves 1.5-2 cm long ...........................................2. *H. purpurea*

   1. Petals yellow; leaves 7-15 cm long.
   2. Stems not lenticellate; leaves with the lower surface densely appressed-ferruginous-pubescent; petioles with two glands in the middle ..........3. *H. wydleriana*
   2. Stems densely lenticellate; leaves with the lower surface glabrous; petioles without glands

   .................................................................1. *H. laurifolia*


   **Distribution:** In secondary forests or pastures or along roads or rivers. Also throughout the Antilles, from Central America to Bolivia. Reported for St. Croix by Niedenzu (according to Britton and Wilson, 1924).

   **Public Forests:** Ceiba, El Yunque, Guajataca, Guánica, Maricao, Río Abajo, Susúa, and Toro Negro.


   **Distribution:** In dry forests and disturbed areas at lower elevations, usually along the coast. Also on Culebra, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the United States (Florida), the Antilles, Trinidad, and Venezuela.

   **Public Forests:** Cambalache, Ceiba, Guánica, Guajataca, and Susúa.


   **Distribution:** In secondary and mature forests in the zone of mogotes and serpentine.

   **Public Forests:** Maricao, Río Abajo, and Susúa.

2. **STIGMAPHYLLON**

   **Key to the species of Stigmaphyllon**

1. Mericarp with a dorsal wing, divaricately (projecting horizontally); leaves coriaceous.
   2. Young stems strigulose; leaves glabrescent on both surfaces, the tertiary veins inconspicuous; samaras glabrescent .......2. *S. emarginatum*
   2. Young stems tomentose; leaves densely appressed-pubescent on the lower surface, the tertiary veins conspicuously reticulate; samaras tomentose

   .................................................................3. *S. floribundum*

1. Mericarp with a distal wing, ascendent or rudimentary; leaves chartaceous.
   3. Leaves acute, obtuse, or sometimes apiculate at the apex; wing of the mericarp rudimentary, reduced to an apical crest of the seminiferous locule, 4-9 mm
   long .............................................................1 *S. bannisterioides*
   3. Leaves acuminate at the apex; wing of the mericarp distal, ascendent, well developed, 2.6-3.7 cm long ...........................................4. *S. puberum*
**Distribution:** Known only from the Naguabo area on the edge of a mangrove between the mouth of the Santiago River and the Antón Ruiz River. Also on Vieques; the Greater Antilles, Martinique, St. Lucia, and Barbados, from the Caribbean coast of Mexico to the north coast of Brazil, east of the mouth of the Amazon, and from the Pacific coast of Colombia to northern Peru.

**Distribution:** In disturbed areas and dry forests near the littoral zone. Also on Caja de Muerto, Culebra, Desecheo, Icacos, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, Virgin Gorda; Jamaica, Hispaniola, and the Lesser Antilles southward to Martinique.
**Public Forests:** Ceiba, Guánica, Maricao, Mona, Piñones, and Susúa.

**Distribution:** In coastal forests and disturbed areas of the littoral zone. Also on Mona, St John, and Virgin Gorda.
**Public Forests:** Cambalache, El Yunque, Guánica, Guajataca, Guilarte, Maricao, Mona, Río Abajo, Susúa, and Tortuguero.

**Distribution:** Known from few localities in eastern Puerto Rico, from Fajardo to Naguabo. Also in Jamaica, the Dominican Republic, the Lesser Antilles, Central America, and northern South America.

3. **TETRAPTERYS**

1. **Tetrapterys inaequalis** Cav., Diss. 433. 1790.
**Distribution:** In disturbed areas like along roads and rivers and in secondary forests, at lower and middle elevations, found along the northern limestone zone. Also on Vieques; reported for St. Thomas and St. Croix (Britton and Wilson, 1924) but not confirmed; the Lesser Antilles.
**Public Forest:** Cambalache and Maricao.

27. **Family MARCGRAVIACEAE**

1. **Marcgravia**

   **Key to the species of Marcgravia**

1. Adult leaves with glandular dots only along the margin; inflorescences with 6-25 flowers; pedicels 4-7 cm long, usually densely lenticellate; flower straight; calyx 8-9 mm wide; nectaries light brown, 4-5 mm wide ................................................................. 1. **M. rectiflora**

1. Adult leaves with glandular dots distributed along the lower surface; inflorescences with ca. 50 flowers; pedicels ca. 3 cm long, not lenticellate or with sparse lenticels; flower geniculate; calyx 3-6 mm wide; nectaries reddish, 1-1.3 cm wide ..........2. **M. sintenisii**

**Distribution:** In forests at lower and moderately high elevations. Also on Tortola; Cuba and Hispaniola.
Public Forests: Carite, El Yunque, Guajataca, Guilarte, Maricao, Rio Abajo, and Toro Negro.

Distribution: In moist and wet forests at upper elevations.
Public Forests: Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

28. Family MENISPERMACEAE
Key to the genera

1. Scarcely woody vine; leaves broadly ovate to rounded, with the lower surface pubescent and the base peltate; anthers sessile; fruits globose, red-orange, pilose …..1. Cissampelos
1. Liana; leaves ovate to broadly ovate, with the lower surface glabrous and the base not peltate; anthers on long filaments; fruits obovoid, purple 2. Hyperbaena

1. CISSAMPELOS

Distribution: In moist and disturbed areas throughout Puerto Rico. Also on Culebra, Vieques, St. Croix, St. John, St. Thomas, and Tortola; of pantropical distribution.
Public Forests: Cambalache, Carite, Ceiba, El Yunque, Guajataca, Guilarte, Maricao, Rio Abajo, Susúa, Toro Negro, and Tortuguero.

2. HYPERBAENA
Key to the species of Hyperbaena

1. Leaves ovate or broadly ovate; monocarps 1.0-1.5 cm long 1. H. domingensis
1. Leaves elliptical; monocarps 2.3-2.7 cm long 2. H. laurifolia

Distribution: In moist forests. Also on St. John and St. Thomas; in the Greater and Lesser Antilles and from northern South America to Bolivia.
Public Forests: El Yunque, Guajataca, Guilarte, and Rio Abajo.

Distribution: In moist forests in the zone of mogotes. Also on St. Thomas and Hispaniola.
Public Forest: Rio Abajo.

29. Family MORACEAE

1. FICUS
Key to the species of Ficus

1. Plants with long pendulous or scendent branches, without adventitious roots; plants with a single phase; syconium globose, depressed-globose, or obovoid, 6-12 mm long .1. F. citrifolia
1. Plants ascending by adventitious roots; plants with a dimorphic juvenile phase; syconium pyriform, 4-6 cm long. …2. *F. pumila*


**Distribution:** Although this is a tree of widespread distribution, the lianescent form has only been documented for the zone of mogotes in Puerto Rico. The arboreal form is also found on Caja de Muerto, Culebra, Desecheo, Mona, Vieques, Anegada, Jost van Dyke, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; the United States (Florida), the Greater and Lesser Antilles.

**Public Forests:** Mona and Rio Abajo.


**Distribution:** A plant widely cultivated in Puerto Rico.

**Public Forests:** El Yunque and Maricao.

**30. Family NYCTAGINACEAE**

**Key to the genera**

1. Herbaceous plants that attain 2-3 m in length; anthocarps (fruits) with a ring of stipitate glands on the distal portion ………………………………………………………………………………1. *Boerhavia*

1. Woody plants that attain 10 m or more in length; anthocarps lacking glands or with 5 or 10 longitudinal lines of stipitate glands.

2. Leaves alternate; branches cylindrical; flowers produced in threes, each of which is subtended by a foliaceous bract of various colors (white, pink, red, or orange); flowers bisexual, 2-2.5 cm long, hypocrateriform, the tube angular, compressed in the central portion, the lobes revolute; stamens not exposed ……………2. *Bougainvillea*

2. Leaves opposite; branches quadrangular; flowers produced in axillary cymes, the bracts minute, green; flowers unisexual, 2.5-3 mm long, campanulate; stamens much longer than the perianth ………………………………………………………………………………………………3. *Pisonia*

**1. BOERHAVIA**


**Distribution:** In pastures on roadsides, near the coast. Also on Anegada, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; from the southern United States to Guatemala, the Antilles, Venezuela, and from Colombia to Peru.

**Public Forest:** Guánica.

**2. BOUGAINVILLEA**

Key to the species of *Bougainvillea*

1. Stems and leaves pubescent with curved and short trichomes or glabrous; floral tube with ascendent and curved trichomes ……………………………………………………………………………1. *B. glabra*

1. Stems and lower surface of the leaves with numerous straight and elongate trichomes (pilose); floral tube with numerous straight and erect trichomes ………2. *B. spectabilis*
1. **Bougainvillea glabra** Choisy in DC., Prodr. 13(2): 437. 1849.
**Distribution:** Much cultivated throughout Puerto Rico. This is the most common species of its genus in Puerto Rico and the Virgin Islands. It grows well in dry areas and requires little watering, for which reasons it is cultivated along avenues and highways. Also throughout the Antilles. Native to South America, but widely cultivated around the globe.

**Distribution:** Little cultivated in Puerto Rico. Also throughout the Antilles. Native to South America, but widely cultivated on a worldwide level.

3. **PISONIA**

**Distribution:** In disturbed areas, secondary or mature forests, moist to dry, at lower to middle elevations. Also on Vieques, St. Croix, St. John, and St. Thomas; throughout the Neotropics.
**Public Forests:** Guajataca and Río Abajo.

31. **Family OLEACEAE**

1. **JASMINUM**
   Key to the species of *Jasminum*

1. Leaves compound.
   2. Leaves trifoliolate; sepals acuminate.........................1. *J. fluminense*
   2. Leaves pinnately 5-7-foliolate; sepals filiform ..............2. *J. grandiflorum*

1. Leaves simple.
   3. Leaves subtruncate or cordiform at the base; lower surface pubescent 3. *J. multiflorum*
   3. Leaves rounded or cuneate at the base; lower surface glabrous, barbate in the axils of the secondary veins ......................................................... 4. *J. sambac*

1. *Jasminum fluminense* Vell., Fl. Flumin. 10. 1825 [1829].
**Distribution:** Along roads, in pastures, or in disturbed areas. Species native to Africa but described from material collected in Brazil. Naturalized on Vieques, St. Croix, St. John, and St. Thomas. Cultivated as an ornamental and naturalized throughout the tropics.
**Public Forests:** Cambalache, Ceiba, and Guánica.

**Distribution:** Although not very common, it is cultivated in our gardens. Species native to Arabia, but widely cultivated throughout the tropics.

**Distribution:** Native to Asia, introduced as an ornamental, which is found naturalized in Puerto Rico, Vieques, St. John, and throughout the tropics.
Public Forests: Maricao, Río Abajo, and Toro Negro.

**Distribution:** Species native to India, introduced as an ornamental. Also on Vieques; cultivated throughout the tropics.

32. **Family PASSIFLORACEAE**

1. **PASSIFLORA**

   Key to the species of *Passiflora*

1. Leaves trifoliolate ………………..1.  *P. berteroana*

   1. Leaves simple.

   2. Leaves entire, not lobed.

   3. Stipules foliaceous, ovate or elliptical; petioles with 3 pairs of glands  …………………………………………………………………………………………………9.  *P. quadrangularis*

   3. Stipules filiform; petioles with one pair of glands.

   4. Flowers subtended by a minute subulate bract or without bracts.

   5. Plants tomentose; flowers in groups of 2-6, axillary; petals linear, ca. 3.5 mm long; fruits depressed-globose  …………………………………………….7.  *P. multiflora*

   5. Plants puberulent or glabrous; flowers solitary or in pairs, axillary; petals absent; fruits ovoid or ellipsoid………………………….……13.  *P. suberosa*

4. Flowers subtended by an involucre of foliaceous bracts.

   6. Bracts of the involucre connate in the lower ½; leaves with three main veins that are borne almost from the base ………………………………..6.  *P. maliformis*

   6. Bracts of the involucre free to the base; leaves pinnately veined …………………………………………………….5.  *P. laurifolia*

2. Leaves variably lobate.

   7. Leaves with the lateral lobes divergent, as long as or longer than the central lobe (apex of the leaf), the leaf then bilobate or with the apex truncate or retuse.

   8. Leaves with the lateral lobes projecting well beyond the apex.

   9. Lateral lobes ca. 3 times longer than the central lobe (apex of the leaf), forming an angle of divergence of 45-93°; corolla green ……………………..2.  *P. bilobata*

   9. Lateral lobes 1.5-2 times longer than the central lobe, forming an angle of divergence of 108-160°; corolla brilliant red ………8.  *P. murucuja*

8. Leaves with the lateral lobes as long as the central lobe (the apex), or slightly longer.

  10. Leaf cordiform at the base; flowers < 2.5 cm in diameter, the sepals green, the petals white.

  11. Flowers solitary; sepals 2-2.5 cm long; fruit dehiscent, pyriform, reddish when ripe, ca. 2 cm in diameter ………………………………..10.  *P. rubra*

  11. Flowers grouped in axillary cymes; sepals ca. 1.5 cm long; fruit indehiscent, depressed-globose, purple when ripe, 5-8 mm in diameter ………………………………………………………………………………………12.  *P. sexflora*

10. Leaf rounded or cuneate at the base; flowers ca. 5 cm in diameter, the sepals and petals pink-violet …………………………………………………………………………………….14.  *P. tulae*

7. Leaves with the central lobe longer than the lateral lobes.

12. Leaves with margins serrate.
13. Leaves lobate-digitate, with 7 deep lobes; petioles with two pairs of stipitate, conical glands
11. P. serrato-digitata
13. Leaves trilobate; petioles with a pair of prominent sessile glands or lacking glands.
14. Plant pilose, foul-smelling; stipules laciniate, with numerous marginal glands; petioles lacking glands; bracts of the involucre deeply laciniate, with marginal glands; fruits ovoid, 2-2.5 cm long, orange when ripe 4. P. foetida
14. Plant glabrous, not foul-smelling; stipules filiform, without glands; bracts of the involucre ovate, not laciniate; fruits ovoid, 5-7 cm long, yellow when ripe 3. P. edulis
12. Leaves with margins entire or undulate 13. P. suberosa

**Distribution:** Known from two collections from Guánica, in dry forests and thickets of the south coast. Also in Hispaniola.
**Public Forest:** Guánica.

**Distribution:** In dry forests and thickets of the south coast. Also in Hispaniola.
**Public Forest:** Guánica, Maricao, and Susúa.

**Distribution:** In disturbed areas of secondary vegetation. Native to South America, but cultivated throughout the tropics for its edible fruits.
**Public Forests:** El Yunque, Maricao, Río Abajo, Susúa, and Toro Negro.

**Distribution:** In dry or moist disturbed areas at lower elevations. Also on Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, and Tortola; common throughout the Neotropics.
**Public Forests:** El Yunque, Maricao, Mona, and Susúa

Key to the varieties

1. Plants essentially glabrous; fruits red (Puerto Rico; the United States (Florida), the Bahamas, Cuba, and Hispaniola) 3. P. foetida var. riparia (Griseb.) Killip
1. Plants hirsute; fruits orange.
2. Ovary pubescent; fruit pubescent or puberulent, less than 2.5 cm in diameter; bracts of the involucre scarcely laciniate (Puerto Rico, St. Croix; Jamaica, the Lesser Antilles, and South America) 4. P. foetida var. foetida
2. Ovary glabrous; fruit glabrous, 2-3 cm in diameter; bracts of the involucre quite laciniate (Puerto Rico, Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola; the Antilles, South America, and the tropics of the Old World) 5. P. foetida var. hispida (DC.) Gleason

**Distribution:** Known in Puerto Rico only from the collection Sintenis 1890, which came from a plant cultivated in Fajardo. In the Virgin Islands (St. Croix, St. John, St. Thomas and Tortola) it is found in disturbed areas, thickets, and secondary forests at low elevation. Also throughout the Antilles and South America, extensively cultivated for its flowers and fruits.
**Distribution:** Known in Puerto Rico from several collections of Sintenis, one of which comes from a primary forest in Utuado. Also on St. Thomas; the Antilles, Venezuela, Colombia, and Ecuador.

**Distribution:** In dry forests or in the zone of mogotes. Also on St. John, St. Thomas, Tortola; the United States (Florida), the Bahamas, Cuba, and Hispaniola.
**Public Forest:** Río Abajo.

**Distribution:** Known from the mogotes in the zone of Quebradillas. Also in Hispaniola.
**Public Forests:** Guajataca and Río Abajo.

**Distribution:** In disturbed areas. Also on St. Croix; of uncertain origin, cultivated throughout the Neotropics for its edible fruits.

**Distribution:** In disturbed areas, at lower to middle elevations. Also on Vieques, St. Croix, St. John, St. Thomas, Tortola, and throughout tropical America.
**Public Forests:** Carite, El Yunque, Maricao, Río Abajo, and Susúa.

**Distribution:** Known in Puerto Rico from the Sierra de Luquillo, in moist gallery forests. Also in Hispaniola, the Lesser Antilles, and South America.
**Public Forest:** El Yunque.

**Distribution:** In forests and weedy places at middle and upper elevations in moist zones. Also on Tortola; Cuba, Hispaniola, Jamaica, the Lesser Antilles, the United States (Florida), and Mexico.
**Public Forests:** Carite, El Yunque, Guajataca, Guilandarte, Maricao, Río Abajo, and Toro Negro.

**Distribution:** In disturbed areas, on roadsides, in thickets, and in coastal forests. Also on Caja de Muerto, Cayo Santiago, Culebra, Desecheo, Icacos, Mona, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles, tropical America, and introduced in the tropics of the Old World.
**Public Forests:** Cambalache, Guajataca, Guánica, Maricao, Mona, Piñones, Río Abajo, and Susúa.

**Distribution:** Along the Cordillera Central and in some localities in the zone of mogotes.
**Public Forests:** Carite, Guilandarte, Maricao, and Río Abajo.

33. **Family PHYTOLACCACEAE**
**Key to the genera**

1. Fruits woody or subwoody.
   2. Fruits indehiscent, with the sepals much longer than the fruit ……………1. **Agdestis**
2. Fruits capsular, with the sepals shorter than the fruit ................2. Stegnosperma
1. Fruits fleshy ....................................................................................3. Trichostigma

1. AGDESTIS

1. Agdestis clematidea Moçîño & Sessé ex DC.
Distribution: Occasional in our gardens. Native to Mexico, cultivated sporadically in the Antilles and South America.

2. STEGNOSPERMA

Distribution: Known from a single collection made by Britton and Horne (9628) in 1931 in Barrio Asomante near Aibonito. Also in Cuba, Hispaniola, Jamaica, and from Mexico to Nicaragua.

3. TRICHOSTIGMA

Distribution: In mature or secondary forests from the littoral zone to the Cordillera Central. Also on Culebra, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles and tropical continental America.
Public Forests: Cambalache, Ceiba, El Yunque, Guánica, Mona, Guilarte, Río Abajo, Susúa, and Tortuguero.

34. Family PIPERACEAE

1. PEPEROMIA

Distribution: On trees and rocks in moist forests of the Cordillera Central. Also in Cuba, Jamaica, the Lesser Antilles, Trinidad, and tropical continental America.
Public Forests: Carite, El Yunque, Guajataca, Guilarte, Maricao, Río Abajo, and Toro Negro.

35. Family PLUMBAGINACEAE

1. PLUMBAGO

Distribution: Cultivated, rather common, also naturalized in disturbed areas, roadsides, and in pastures. Also on Desecheo, Mona, St. Croix, St. John, St. Thomas, and Tortola; throughout tropical America.
Public Forest: Mona.
35. Family **POLYGALACEAE**

**1. SECURIDACA**

Key to the species of *Securidaca*

1. Leaves narrowly ovate, ovate, or oblong, 3.5-12 cm long, the apex obtuse or short-acuminate

1. Leaves ovate, elliptical, or obovate, 1-2 cm long, the apex rounded or emarginate

**Distribution**: Uncommon in our gardens, cultivated at the Agricultural Experiment Station in Mayagüez. Its natural distribution is from Mexico to Peru and the Lesser Antilles.

**Distribution**: In disturbed areas, on roadsides, in pastures, and in secondary forests at lower and middle elevations. Also on Vieques, Cuba and Hispaniola.
**Public Forests**: Cambalache, Ceiba, El Yunque, Guajataca, Maricao, Río Abajo, and Susúa.

36. Family **POLYGONACEAE**

**1. ANTIGONON**

Key to the species of *Antigonon*

1. Lower surface of leaves tomentose; outer tepals circular, 2.6-3.2 mm long, sagittate at the base, with the lobes overlapping; petioles < 1 cm long

1. Lower surface of leaves puberulent or glabrous; outer tepals ovate, 5-7 mm long, subcordiform at the base, the lobes not overlapping; petioles > 1 cm long

**Distribution**: Cultivated in Puerto Rico and the Virgin Islands (St. Croix and St. Thomas), although not very common. Native to Guatemala, but cultivated in Central and South America as well.

**Distribution**: Originally cultivated, but escaped and naturalized, very prolific. In disturbed coastal areas, thickets, and dry forests. Also on Vieques, Anegada, St. Croix, St. John, St. Thomas, and Tortola. Native to Mexico but widely cultivated throughout the Antilles, South America, and the tropics in general.
**Public Forests**: El Yunque and Río Abajo.

37. Family **RANUNCULACEAE**
1. CLEMATIS
Key to the species of *Clematis*

1. Mature leaves trifoliolate.
   2. Plants essentially glabrous ........................................1. *C. dioica*
   2. Plants pubescent ......................................................2. *C. polygama*
1. Mature leaves 5- or 9-foliolate........................................3. *C. flammulastrum*

**Distribution:** Known from a single collection made by *Sintenis (5843)* in 1887 in the area of Barrio Callejones in Lares. Recently collected in a mogotes in Aguadilla. Known from southern Mexico, Belize, and the Greater Antilles.

**Distribution:** Although not very common, this species is found throughout Puerto Rico, except for the wet areas. Also in the Greater Antilles.
**Public Forests:** Guajataca, Guilarte, and Maricao.

**Distribution:** In disturbed areas, secondary vegetation, and thickets. Also from central Mexico to Panama and the Greater Antilles.
**Public Forests:** Guajataca, Guilarte, Maricao, and Río Abajo.

38. **Family RHAMNACEAE**

1. GOUANIA
Key to the species of *Gouania*

1. Leaves 4.5-7.5 cm long, glabrous or puberulent .......................1. *G. lupuloides*
1. Leaves 5-15 cm long, pubescent ........................................2. *G. polygama*

**Distribution:** In disturbed areas, secondary forests, and dry forests at lower and middle elevations. Also on Vieques, St. Croix, St. John, St. Thomas, and Tortola; throughout the Antilles, the United States (southern Florida) and from southern Mexico to northern South America.
**Public Forests:** Cambalache, Ceiba, Guajataca, Guánica, Maricao, Río Abajo, and Susúa.

**Distribution:** In disturbed areas, more or less moist, at middle elevations, in western and central Puerto Rico. Also in Cuba, Hispaniola, Tobago, Trinidad, and tropical continental America.
**Public Forests:** Guánica, Guajataca, Guilarte, Río Abajo, and Susúa.

39. **Family ROSACEAE**
1. RUBUS


**Distribution:** Known only from the Cordillera Central, in Adjuntas, Jayuya, Maricao, and Orocovis.

**Public Forests:** Guilarte, Maricao, and Toro Negro.

40. **Family RUBIACEAE**

Key to the genera

1. Herbaceous vines or clambering herbs.
2. Stems markedly quadrangular; fruits capsular, light brown........2. Diodia
3. Stems cylindrical, fruits fleshy, white or red.
   3. Herb or scarcely woody shrub, clambering, with a strong, fetid odor; stems glabrous; fruits white when ripe ........................................4. Lascianthus
   3. Herbaceous vine, twining, without a fetid odor; stems hirsute; fruits red or wine-colored when ripe ..................................................6. Sabicea

1. Twining vines or clambering shrubs.
4. Twining vines. 1. Chiococca
4. Clambering shrubs.
6. Shrubs climbing by means of aerial roots; corollas 2 cm or more in length.
   7. Flowers solitary; tube of the corolla 6-10 cm long; fruit capsular, green, 5-12 cm long .................................................................3. Hillia
   7. Flowers in heads; tube of the corolla 1.5-2.5 cm long; fruit a berry, white, ca. 1.5 cm long ..........................................................7. Schradera
6. Scandent shrub without aerial roots; corolla less than 1 cm long .5. Psychotria

1. CHIOCOCCA


**Distribution:** In forests and on roadsides, in dry and moist areas at lower and middle elevations. Also on Mona, Vieques, St. Croix, St. John, St. Thomas, and Virgin Gorda; throughout the Antilles, the United States (Florida), and tropical continental America.

**Public Forests:** Cambalache, Carite, Ceiba, Guajataca, Guánica, Maricao, Mona, Río Abajo, Susúa, and Tortuguero

1. Woody vine, twining; stems with cortical bundles; inflorescences 2-5 cm long, of 5-30 flowers; corolla intense yellow, 4.5-6 mm long ................................. C. alba
1. Erect shrub with arcuate stems; stems without cortical bundles; inflorescences less than 1 cm long, with 2-3 flowers; corolla pale yellow, ca. 2 mm long ............. C. micrantha

2. DIODIA

1. Diodia sarmentosa Sw., Prodr. 30. 1788.
**Distribution:** In thickets and pastures and on forest edges and roadsides, in moist areas at lower and middle elevations. Reported for St. Thomas (Britton, 1925). Also in the Antilles, Mexico, Central America, northern South America, and introduced in the tropics of the Old World.

**Public Forests:** Carite, El Yunque, Maricao, Río Abajo, Susúa, and Tortuguero.

3. **HILLIA**


**Distribution:** In moist upper regions along the Cordillera Central and in the Sierra de Luquillo. Also throughout the Antilles and in tropical South America.

**Public Forests:** Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

4. **LASCIANTHUS**


**Distribution:** In the interior of moist and wet forests of the Cordillera Central and the Sierra de Luquillo. Also in the Greater Antilles.

**Public Forests:** Carite, El Yunque, Guilarte, and Toro Negro.

5. **PSYCHOTRIA**


**Distribution:** In disturbed areas, dry forests and thickets. Also on Isla Piñeiro, Vieques, Guana, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; Cuba, Hispaniola, the Lesser Antilles, northern South America and along the Pacific coast of South America to Peru.

**Public Forests:** Ceiba, Guánica, and Guajataca.

6. **SABICEA**

1. **Sabicea villosa** Roem. & Schult., Veg. 5: 265. 1819.

**Distribution:** In pastures and forests in moist and wet areas at middle elevations. Also tropical continental America.

**Public Forests:** Carite, El Yunque, Maricao, Río Abajo, and Toro Negro.

7. **SCHRADERA**


**Distribution:** In moist and wet forests of the Cordillera Central and the Sierra de Luquillo. Also in Cuba, Hispaniola, and the Lesser Antilles.

**Public Forests:** Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

41. **Family SAPINDACEAE**

Key to the genera
1. Herbaceous vines, 2-3 m in length, without latex; stems simple (cross section with a single central vascular cylinder); fruits capsular, membranaceous, inflated; seeds black, with a white reniform or cordiform hilum .................................................................1. **Cardiospermum**

1. Woody vines, 5-10 m in length, with milky latex; stems simple or compound (cross section with a central vascular cylinder and three or more peripheral vascular cylinders); fruits capsular or schizocarpous, neither membranaceous nor inflated; seeds black or brown, with an aril at the base or with a light brown circular hilum.

2. Fruit red, capsular, dehiscent, exposing 1-3 black seeds with a white aril, fleshy at the base ........................................................................................................2. **Paullinia**

2. Fruit light brown, schizocarpous (indehiscent), which separates into three samaroid units with a basal wing; seeds not exposed, brown, with a circular scar, lacking an aril ........................................................................................................3. **Serjania**

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1. **CARDIOSPERMUM**

Key to the species of *Cardiospermum*

1. Petals 5 mm or more in length; glands of the floral disc 2, oblong, 1.2-2 mm long; capsules ellipsoid, up to 6 cm long..............................................2. **C. grandiflorum**

1. Petals less than 5 mm long; glands of the floral disc 4(2), ovoid or rounded, ca. 0.4 mm long; capsules subglobose or turbinate-trigonal, up to 3 cm long.

2. Plants slightly robust; leaflets sinuate-dentate; inflorescences of 4 or more cincinni; capsules ellipsoid or globose-trigonal; seed with a reniform hilum .................................................................1. **C. corindum**

2. Plants herbaceous; leaflets deeply lobate or laciniate; inflorescences of 3 cincinni; capsules trigonal, depressed at the apex; seed with a cordiform hilum ........................................................................................................3. **C. halicacabum**

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**Distribution:** In disturbed areas and dry forests at low elevation. Also on Desecheo, Mona, Vieques, Guana Island, St. Croix, St. John, and St. Thomas; throughout the tropics and subtropics. Cultivated for its curious capsules.

**Public Forests:** Guajataca, Guánica, and Mona.

2. **Cardiospermum grandiflorum** Sw., Prod. 64. 1788.

**Distribution:** Naturalized at the Experimental Station in Mayagüez. Reported for St. Croix and St. Thomas. Native to the Neotropics, apparently introduced in the tropics of the Old World. Cultivated for its curious capsules.


Key to the varieties

1. Capsules subglobose, as long as wide, 2.5-3.5 cm long, with the apex retuse.

.....**C. halicacabum var. halicacabum**

1. Capsules turbinate-trigonal, wider than long, 0.8-1.5 cm long, with the apex truncate

 .. **C. halicacabum var. microcarpum**

3a. **Cardiospermum halicacabum** var. **halicacabum** L.
Distribution: In disturbed or open areas, like roadsides and thickets. In all probability native to the Neotropics, but distributed in the tropics of the Old World. Cultivated as an ornamental for its curious capsules.

Public Forest: Guánica.

2b. Cardiospermum halicacabum var. microcarpum (Kunth) Blume, Rumphia 3: 183. 1847.
Distribution: In disturbed, well illuminated areas, like roadsides and pastures. Also on St. Croix, St. John, and St. Thomas; throughout the tropics and subtropics.
Public Forests: Mona and Tortuguero.

2. PAULLINIA
Key to the species of Paullinia

1. Stems cylindrical, tomentose or tomentulose; cross section of the mature stems simple; leaves biternate (three trifoliolate pinnae, for a total of 9 leaflets); petioles not winged; fruits three-winged, 1-1.5 cm long.
2. Flowers sessile or almost sessile; calyx puberulent; lower surface with numerous glandular papillae, not lineate; fruits oblong in outline ………1. P. fusescens
2. Flowers pedicellate; calyx tomentose; lower surface not papillose, with dark lines; fruit elliptical or obovate in outline …………………………………….3. P. plumieri

Distribution: In disturbed areas at lower elevations; cultivated and locally naturalized at the Experimental Station in Mayagüez. Native to Cuba, Mexico, Central America, Trinidad, Tobago, and northern South America.

Distribution: In forests and pastures at middle and lower elevations, in moist or dry places. Also on Vieques and Tortola; throughout the Neotropics and tropical Africa.
Public Forests: Carite, El Yunque, Guilarte, Maricao, Río Abajo, Susúa, and Toro Negro.

Distribution: Known from one side of Sage Mountain on Tortola. Also on some of the Lesser Antilles.

3. SERJANIA
Key to the species of Serjania

1. Leaves 5-foliolate pinnate or less often biternate; stems with a single vascular cylinder ... 1. S. diversifolia
1. Leaves biternate trinertate or bipinnate; stems with 5 or more vascular cylinders.
2. Leaves biternate (9 leaflets); glands of the floral disc pubescent at the base; ovary tomentose; seminiferous locules of the fruit tomentose ………………….2. S. lucida
2. Leaves triternate or bipinnate (more than 9 leaflets); glands of the floral disc glabrous or puberulent; ovary glabrous or puberulent; seminiferous locules of the fruit glabrous or puberulent

………….. S. polyphylla

Distribution: Known in Puerto Rico from a steril collection of Sintenis (6999) from the vicinity of Utuado. Recently rediscovered in Guajataca (Acevedo-Rdgz. 13462) and Bayamón (Chinea s.n.) in late secondary forests on limestone substrate. Also in Hispaniola, Cuba and the Bahamas.
Public Forests: Guajataca.

Distribution: On forest edges and roadides, in dry forests and coastal thickets. In eastern (Ceiba) and northeastern (Vacia Talega to Fajardo) Puerto Rico, to the Virgin Islands (Culebra, Palominos, Vieques, Anegada, St. Croix, St. John, St. Thomas, Tortola, Virgin Gorda).
Public Forests: Ceiba and Piñones.

Distribution: On forest edges and roadides, in dry forests, coastal thickets, and forests in the zone of mogotes. Found from Cayey to Hispaniola, with collections in Utuado and the south and west coasts of Puerto Rico. Also on Caja de Muerto.
Public Forests: Cambalache, Guajataca, Guánica, Maricao, Río Abajo, and Susúa.

43. Family SCHLEGELIACEAE

1. SCHLEGELIA

Distribution: In moist forests at middle and upper elevations. Also in Cuba and Hispaniola; cited for Panama and Venezuela.
Public forests: Carite, El Yunque, Guilarte, Maricao, Rio Abajo, and Toro Negro.

44. Family SCROPHULARIACEAE

1. LOPHOSPERMUM

Distribution: Native to Mexico, but found cultivated and naturalized throughout the tropics.

45. Family SOLANACEAE

Key to the genera

1. Corolla rotate, 1-2 cm in diameter, violet; anthers dehiscent by a terminal pore.
2. Leaves deeply lobate; calyx of 5 sepals, without appendages .............3. Solanum
2. Leaves entire; calyx with 10 linear appendages ..........................1. Lycianthes
1. Corolla cyathiform, greenish white or yellow, 15-23 cm long; anthers dehiscent by longitudinal
 sutures .....................................................................................2. Solandra

Distribution: In forests and weedy places at middle elevations, in the Cordillera Central and in the area
of mogotes. Also in Cuba and Hispaniola.
Public Forests: Guilarte, Rio Abajo, and Toro Negro.

2. Solandra

Distribution: Cultivated or sometimes at the margin of forests along the Cordillera Central. Cultivated
on St. Thomas. Apparently native to Jamaica, today found throughout the Antilles, Panama, Venezuela,
and Brazil.
Public Forests: Guilarte and Maricao.

3. Solanum
Key to the species of Solanum

1. Plants markedly spiny; corolla white ......................................1. S. lancifolium
1. Plants not spiny or inconspicuously spiny; corolla lavender or pale violet.
   2. Corolla deeply lobate, the limb 2-2.5 cm wide; anthers 3-5 mm long
       .........................................................................................2. S. seaforthianum
   2. Corolla rotate (the lobes short), the limb 3.5-6 cm wide; anthers 9-10.5 mm long
       .........................................................................................3. S. wendlandii

1. Solanum lancifolium Jacq, Collectanea 2: 286. 1788 [1789].
Distribution: In forests and thickets. Vieques (according to Liogier, 1995), St. John, St. Thomas
(according to Krebs, 1847), and Tortola; also in Hispaniola, the Lesser Antilles, Mexico, Central
America, Colombia, Venezuela, and Ecuador.

Distribution: In disturbed areas, like roadsides and pastures. Also on Vieques, St. Croix, and St.
Thomas. Native to South America, but cultivated throughout the tropics.
Public Forests: Carite and Rio Abajo.

Distribution: In moist areas of the cordilleras. Native to Costa Rica, but widely cultivated in the
tropics for the beauty of its flowers.

46. Family TROPAEOLACEAE
1. TROPAEOLUM

Distribution: In moist areas of the Cordilleras Central. Native to the Andean cordillera, but widely cultivated for the beauty of its flowers.
Public Forest: Guilarte.

47. Family ULMACEAE

1. CELTIS

1. Celtis iguanaea (Jacq.) Sarg, Silva 7: 64. 1895.
Distribution: In dry areas along the coast, and in the area of mogotes. Also on Culebra, Desecheo, Icacos, Vieques, St. Croix, St. John, and St. Thomas; throughout the Neotropics.
Public Forest: In all probability, found in Guánica.

48. Family VALERIANACEAE

1. VALERIANA

Distribution: In moist areas of the Cordillera Central and in the area of mogotes. Also in tropical continental America, Cuba, Hispaniola, and the United States (Florida).
Public Forests: Guilarte and Río Abajo.

49. Family VERBENACEAE

Key to the genera

1. Flowers sessile, subtended by an involucre of 3(4) elongate bracts, expanded, pink or lilac at the base, much longer than the calyx. 2. Congea

2. Calyx gamosepalous, acetabuliform, orange, the sepals not apparent. 3. Holmskioldia

2. Calyx of free sepals or sepals connate only at the base, of various colors, but not orange.

3. Inflorescences corymbiform; calyx green, white, or pink, the sepals imbricate. 1. Clerodendrum

3. Inflorescences racemose; calyx violet, the sepals expanded. 4. Petrea

1. CLERODENDRUM

Key to the species of Clerodendron
1. Branches with conical spines, opposite or whorled, in the area of the nodes
   ..............................................................................................................1. *C. aculeatum*
1. Branches unarmed.
   2. Calyx reddish, 1-1.5 cm long ........................................... C. × speciosum
   2. Calyx white, 1.5-2.5 cm long ............................................. C. thomsonae

   **Distribution:** In dry forests and thickets, along the littoral zone. Also on Mona, Anegada, Jost van Dyke, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; throughout the Antilles, Venezuela, and the Guianas.
   **Public Forests:** Guánica and Mona.

2. Clerodendrum × speciosum Dombrain, Flor. Mag. 8, pl. 432. 1869.
   **Distribution:** Common in gardens in Puerto Rico and the Virgin Islands. Cultivated throughout the tropics.
   **Public Forests:** Río Abajo and Tortuguero.

   **Distribution:** Common in gardens in Puerto Rico and the Virgin Islands. Cultivated throughout the tropics.

2. **CONGEA**

   **Distribution:** Common in gardens in Puerto Rico and the Virgin Islands, and naturalized in disturbed vegetation in the Cordillera Central. Native to Indomalasia. Cultivated throughout the tropics.

3. **HOLMSKIOLDIA**

   **Distribution:** Common in gardens in Puerto Rico. Native of southern Asia. Cultivated throughout the tropics.

4. **PETREA**

   **Distribution:** Common in gardens in Puerto Rico and the Virgin Islands. Native to tropical continental America. Cultivated throughout the tropics.

50. *Family VITACEAE*
    Key to the genera
1. Stems generally herbaceous and fleshy; inflorescences ascendent or expanded toward the sides, as broad as long or broader than long; flowers 4-merous; petals persistent after anthesis

........................................................................................................1. **Cissus**

1. Stems woody when mature; inflorescences pendulous, much longer than broad; flowers 5-merous; petals concrescent at the apex, forming a deciduous aggregate during anthesis

...........................................................................................................2. **Vitis**

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1. **CISSUS**

Key to the species of **Cissus**

1. Leaves simple.
   2. Leaves ovate, coriaceous .................................................................5. **C. verticillata**
   2. Leaves elliptical, fleshy .................................................................3. **C. rotundifolia**

1. Leaves trifoliolate.
   3. Stems angular, 4-6-winged; terminal leaflet 4.3-15 cm long, usually elliptical, lanceolate, or ovate .................................................................1. **C. erosa**
   3. Stems cylindrical, sometimes sulcate; terminal leaflet 1.6-4 cm long, rhombic or obovate.
      4. Terminal leaflets obovate, obtuse, or rounded at the apex, the margins crenate or scattered-dentate; flowers red.................................2. **C. obovata**
      4. Terminal leaflets rhombic, acute at the apex, the margins sinuate-dentate on the upper half; flowers yellowish green .................................4. **C. trifoliata**

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   **Distribution**: In disturbed areas on roadsides, on fences, and in pastures at lower and middle elevations. Also on Anegada; Hispaniola and tropical continental America.
   **Public Forests**: El Yunque, Gualarté, Maricao, Río Abajo, and Tortuguero.

   **Distribution**: At lower and middle elevations in coastal areas and in the zone of mogotes. Also on Mona, St. Croix, St. John, and St. Thomas; Hispaniola and the Lesser Antilles.
   **Public Forests**: El Yunque, Guajataca, Guánica, Mona, and Río Abajo.

   **Distribution**: Cultivated in the Virgin Islands; escaped on St. Croix. Native to Yemen and Africa, but cultivated as an ornamental throughout the tropics.

   **Distribution**: At lower and middle elevations in coastal areas. Also on Caja de Muerto, Cayo Ratones, Mona, St. Croix, St. John, St. Thomas, and Tortola; the Bahamas, Cuba, Jamaica, Hispaniola, Colombia, Venezuela, and Ecuador.
   **Public Forests**: Guánica, Mona, and Tortuguero.

   **Distribution**: In disturbed areas such as pastures and roadsides, at middle and lower elevations. Also on Culebra, Deschecho, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda; from southern North America to northern South America, including the Antilles.
   **Public Forests**: Cambalache, Carite, Ceiba, El Yunque, Guánica, Maricao, Mona, Río Abajo, Suúsua, and Toro Negro.
2. VITIS


**Distribution:** In moist forested areas, at middle elevations. Also on St. Croix, St. John, and St. Thomas; throughout the Antilles and from Mexico to northern South America.

**Public Forests:** El Yunque, Guajataca, and Río Abajo.

### MONOCOTYLEDONS

**Key to the families**

1. Plants climbing by means of adventitious aerial roots.
   2. Flowers minute, < 3 mm long, produced in spadices, subtended by a spathe (foliaceous bract)
      
      ………………………………………………………………………………………………. \*Araceae*

1. Flowers showy, > 5 cm wide, solitary or in racemes

2. Plants twining, clambering, or climbing by means of tendrils.
   3. Plants like a fern, with verticillate phylloclades (needle-like)
      
      ………………………………………………………………………………………………. \*Asparagaceae*

3. Plants not like a fern, with true leaves whose blade is not needle-like.
   4. Leaves petiolate (not forming a leaf sheath or this not enclosing the stem); blades ovate, rounded to cordiform at the base, with 5-7 parallel-arcuate main veins that are borne from the base (or nearly so).
   5. Plants twining, lacking tendrils; fruits capsular or samaroid
      
      ………………………………………………………………………………………………. \*Dioscoreaceae*

4. Leaves not petiolate, with a leaf sheath that encloses the stem; blades obleng, lanceolate, or rarely ovate, not cordiform at the base, with a single main vein.
   6. Stems triangular; leaf blades usually with cutting margins; leaf sheath closed; flowers subtended by a single scale
      
      ………………………………………………………………………………………………. \*Cyperaceae*

6. Stems cylindrical; leaf blades with margins not cutting; leaf sheath open; flowers subtended by a pair of scales

1. *Family ARACEAE*

**Key to the genera**

1. Flowers bisexual.
   2. Spathes chartaceous and reflexed, the spadix completely exposed; stems up to 5 mm in diameter; leaves entire, green, not perforated ………………………………………1. \*Anthurium*

1. *Family ARACEAE*

**Key to the genera**

1. Flowers bisexual.
   2. Spathes fleshy and erect, enclosing the spadix; stems up to 2 cm in diameter; leaves pinnately compound, or entire and variegated, or entire and perforated, not variegated.
   3. Leaves entire and variegated (green and yellow) or green and pinnately compound, not perforated; ovary unilocular; seeds reniform ………………………………………2. \*Epipremnum*
3. Leaves with entire margins, the blade with large perforations; ovary bilocular; seeds ovoid or cylindrical ..........................................................3. Monstera

1. Flowers unisexual.
4. Leaves entire, cordiform or elliptical, or pinnately compound ..................4. Philodendron
4. Leaves digitate ................................................................................5. Syngonium

1. ANTHURIUM

Distribution: Epiphytic herb in moist or rain forests. Of widespread distribution in the Neotropics.
Public Forests: Carite, El Yunque, Guilarte, Maricao, and Río Abajo.

2. EPIPREMNUM

Key to the taxa of Epipremnum

1. Leaves green, not variegated, pinnately compound or the juvenile leaves entire; stems and petioles green; usually producing flowers and fruits ......................................1. E. pinnatum
1. Leaves variegated (green-yellow), entire or less frequently pinnately compound; stems and petioles yellow-orange; rarely in fertile condition .............2. E. pinnatum ‘Aureum’

1. Epipremnum pinnatum (L.) Engler, Pflanzenr. IV (23B) 37: 60. 1908.
Distribution: Cultivated in Puerto Rico, naturalized on St. Thomas. Native to southeastern Asia and Oceania.

Distribution: Along roads and on abandoned farms. Known only in cultivation or naturalized, throughout the tropics.
Public Forests: El Yunque, Rio Abajo, and Toro Negro.

3. MONSTERA

Distribution: Cultivated in gardens and naturalized in areas of disturbed vegetation. Native to tropical continental America.
Public Forests: El Yunque.

4. PHILODENDRON

Key to the species of Philodendron

1. Petioles winged or marginate almost to the apical portion .......................4. P. lingulatum
1. Petioles not winged or with the wing only on the lower half.
2. Blades of the leaves 25-60 cm long; petioles 40-100 cm long; cataphylls persistent.
3. Stems 8-10 cm in diameter; spathe short-stipitate, ca. 45 cm long, thick, green on the outer surface, white on the inner surface ........2. P. giganteum
3. Stems 2-2.5 cm in diameter; spathe ca. 18 cm long, long-stipitate, moderately thick, whitish on the outer surface, maroon on the inner surface ............5. P. ornatum

2. Blades of the leaves 13.5-35 cm long; petioles 10-35 cm long; cataphylls deciduous.
4. Leaves oblong or lanceolate ..............................................1. P. consanguineum
4. Leaves cordiform .................................................................3. P. hederaceum

Distribution: In moist forests at lower to middle elevations. Also on St. Thomas; Cuba and Hispaniola.
Public Forests: El Yunque, Guilarte, Maricao, Río Abajo, and Susúa.

2. Philodendron giganteum Schott, Syn. Aroid. 89. 1856.
Distribution: Occasional in moist forests at the base of mogotes in the northern limestone zone. Also on St. John, St. Thomas, and Tortola; Hispaniola, the Lesser Antilles, Trinidad, and Venezuela.
Public Forests: El Yunque and Río Abajo.

Distribution: Abundant in moist forests at lower to middle elevations. Also on St. John, St. Thomas, and Tortola. Of widespread distribution in the Neotropics.
Public Forests: Carite, El Yunque, Guilarte, Maricao, Río Abajo, and Toro Negro.

Distribution: In wet and rain forests, in the Cordillera Central, the Sierra de Luquillo, and the zone of mogotes. Also on Tortola; Hispaniola and the Lesser Antilles.
Public Forests: El Yunque, Guilarte, and Rio Abajo.

Distribution: Rare, at the base of mogotes with abundant organic soil. Native to South America, Venezuela, Trinidad, Tobago, Surinam, and Brazil.
Public Forest: Guajataca.

5. SYNGONIUM

Distribution: Species escaped from cultivation and naturalized, of rapid proliferation, found throughout Puerto Rico in moist disturbed areas. Also on St. John and St. Thomas. Native to Mexico, but widely cultivated throughout the Antilles and tropical continental America.
Public Forests: Carite, El Yunque, Maricao, Río Abajo, and Toro Negro.

2. Family ASPARAGACEAE

1. PROTASPARAGUS

Distribution: Ornamental plant, very common in our gardens. Also on St. Thomas. Native to South Africa, but widely cultivated throughout the tropics.
3. **Family CYPERACEAE**

**1. SCLERIA**

Key to the species of *Scleria*

1. Contraligule entire; hypogynium conspicuously trilobate.
   2. Panicles not congested; margin of the leaves with thick retroflexed hairs (0.2-0.5 mm long), very cutting; scales of the spikelets dark brown or purple-brown; achenes ovoid-globose or globose, 2.6-3 mm long ……… ……1. *S. canescens*
   2. Panicles congested; margin of the leaves with minute retroflexed hairs (almost not cutting); scales of the spikelets greenish brown; achenes globose, 2.3-2.6 mm long. …2. *S. scindens*

   **Distribution:** In moist or rain forests of the cordilleras. Reported for Cuba, but no specimens seen or found.
   **Public Forests:** Carite, El Yunque, Guilarte, Maricao, and Toro Negro.

   **Distribution:** In moist or semi-moist disturbed areas in the Virgin Islands (St. John, Tortola, and Virgin Gorda). Also in Cuba, Hispaniola, and the Lesser Antilles.

   **Distribution:** In thickets, along trails, and at the margin of moist forests along the Cordillera Central and the Sierra de Luquillo. Also in the Antilles, Mexico, Central America, and South America.
   **Public Forests:** Carite and El Yunque.

4. **Family DIOSCOREACEAE**

   Key to the genera

1. Fruit a trivalvate capsule, with three flattened locules ………………………..1. *Dioscorea*
   1. Fruit a unilocular samara, flattened, with a distal wing……………………2. *Rajania*

   **1. DIOSCOREA**

   Key to the species of *Dioscorea*

1. Stems predominantly quadrangular or 4-winged (cylindrical at the base in *D. alata*).
   2. Leaves opposite, entire ……………………………………………………………..1 *D. alata*
   2. Leaves alternate, 3-6-lobate ……………………………………………………………7. *D. trifida*

1. Stems cylindrical or triangular, not winged.
   3. Leaves pilose on the lower surface along the venation …………………5. *D. pilosiuscula*
   3. Leaves glabrous.
   4. Stems cylindrical.
5. Stems unarmed; leaves alternate.
   6. Staminate flowers in lateral cincinni along the axis of the inflorescences; fertile stamens 3; bulbils angular, smooth; base of the petiole with the margin slightly winged, this not extended on the stem like a pseudostipule …6. **D. polygonoides**
   6. Staminate flowers solitary along the axis of the racemes; fertile stamens 6; bulbils rounded, verrucose; base of the petiole winged, projecting toward the stem on each side like a semicircular pseudostipules ……3. **D. bulbifera**

5. Stems usually aculeate; leaves usually opposite ……… ……4 .
   4. Stems acutely triangular, spiny …………………………………………………2. **D. altissima**

   **Distribution**: Very common in disturbed areas and moist secondary forests, at lower and middle elevations. Also on St. John. Native to southeastern Asia, extensively cultivated throughout the tropics for its edible bulbils.
   **Public Forests**: Carite, El Yunque, Guajataca, Maricao, Río Abajo, Susúa, and Toro Negro.

   **Distribution**: Occasional in moist forests at lower to middle elevations. Also in Hispaniola, the Lesser Antilles, and Brazil.
   **Public Forests**: Carite and El Yunque.

   **Distribution**: In moist secondary forests, at middle elevations, in the zone of mogotes and in the Sierra de Luquillo. Native to the tropics of the Old World. Introduced in the tropics and sub-tropics of the New World.
   **Public Forests**: El Yunque and Río Abajo.

   **Distribution**: In areas of disturbed or secondary vegetation. Although this species was described based on material from French Guiana, it is native to western Africa, where it has been cultivated for centuries (Burkill, 1985). Today it is cultivated throughout the tropics, where it has become naturalized.
   **Public Forests**: Río Abajo.

   **Distribution**: Uncommon in disturbed areas of secondary vegetation, in moist zones at lower and middle elevations. Also on St. John, St. Thomas, and Tortola; throughout the Antilles and South America.
   **Public Forests**: El Yunque, Guajataca, and Río Abajo.

6. **Dioscorea polygonoides** Humboldt & Bonpland ex Willd., publication???
   **Distribution**: In forests of secondary succession, at middle elevations. Also throughout the Antilles and tropical America.
   **Public Forests**: El Yunque, Maricao, and Río Abajo.

   **Distribution**: According to Britton and Wilson (1924) this species grows spontaneously in Puerto Rico in areas where it was formerly cultivated; I know collections only from the Agricultural Experiment Station. Also throughout the Antilles and South America.
2. RAJANIA


**Distribution:** In moist forests at middle to upper elevations, along the Cordillera Central and in the northern limestone zone. Also on Vieques, St. Croix, and St. Thomas; throughout the Antilles.

**Public Forests:** Carite, El Yunque, Guajataca, Guilarte, Maricao, Río Abajo, Susúa, and Toro Negro.

5. **Family ORCHIDACEAE**

1. **VANILLA**

Key to the species of *Vanilla* (from Ackerman, 1995)

1. Leaves shorter than the internodes, early deciduous or persistent.
2. Leaves persistent, as long as or longer than half the length of the internode, the blade flat; lip green, with cardinal red margins and veins, the margins irregular, the pubescence of yellowish hairs ..................................................6. *V. poitaei*
3. Leaves early deciduous (although some persistent), shorter than half the length of the internode; lip of a different color, the margins more or less entire or trilobate.
4. Lip mostly red-purple; some leaves persistent, these with the apex curved in the form of a hook..................................................3. *V. dilloniana*
5. Lip completely white, white with reddish lateral spots, or reddish with a yellowish midrib; all the leaves deciduous.
6. Lip trilobate (the lateral lobes as long as the central lobe), red with white margins, the midrib yellowish; leaves chartaceous, with the margins not revolute 1. *V. barbellata*
7. Lip more or less simple, completely white or with lateral submarginal and sub-basal spots; leaves thick-coriaceous, with the margins revolute ....... 2. *V. claviculata*

1. Leaves longer than the internodes, persistent.
2. Sepals and petals with the margins undulate and the apex reflexed; lip glabrous, with three keels, white with a yellow throat; stems less than 5 mm in diameter; leaves broadly elliptical or ovate, fleshy-coriaceous ........................................4. *V. mexicana*
3. Sepals and petals with the margins and the apex straight; lip with a tuft of barbate hairs, yellow-green or yellow-orange; stems 5-15 mm in diameter; leaves oblong or less frequently elliptical or ovate; fleshy-rigid.
4. Floral bracts 12-25 mm long; lip entire ............................7. *V. pompona*
5. Floral bracts 5-10 mm long; lip trilobate .......................... 5. *V. planifolia*


**Distribution:** Uncommon in the southern and southwestern zone, in dry forests and coastal thickets at lower to middle elevations. Also on St. Thomas, St. John, and Virgin Gorda; Florida, Cuba, and the Bahamas.

**Public Forests:** Guánica, Maricao, and Susúa.


**Distribution:** In the dry limestone zone and on serpentine soils. Also in the rest of the Greater Antilles.
Public Forests: Guajataca, Guánica, and Maricao.

**Distribution:** In moist forests on serpentine soils, in the region of Sabana Grande, San Germán, and Yauco. Also in Florida, Cuba, and Hispaniola.
**Public Forests:** Maricao and Susúa.

**Distribution:** Escaped from cultivation by vegetative reproduction. In moist forests at middle elevations. Also on St. Croix; Mexico, Guatemala, Nicaragua, the United States (Florida), the Antilles, and northern South America.
**Public Forests:** El Yunque and Maricao.

**Distribution:** Formerly cultivated in Puerto Rico for the commercial production of vanilla. Today, some of these plantations persist, with some populations naturalized in moist forested areas at middle elevations. Species native to Mexico, but widely cultivated in the tropics. Also on St. Croix, St. John, and St. Thomas.
**Public Forests:** El Yunque and Maricao.

**Distribution:** In moist or rain forests, at lower to middle elevations. Also on Vieques, St. Thomas, the Bahamas, Cuba, and Hispaniola.
**Public Forests:** El Yunque, Guajataca, Río Abajo, and Maricao.

**Distribution:** Formerly cultivated for the production of vanilla, and still found on abandoned farms. Species native to Mexico and Guatemala, but widely cultivated in the neotropics.
**Public Forests:** Maricao.

6. **Family POACEAE**

   Key to the genera

   1. Leaves of the culm different from the leaves of the branches; branches short, whorled in the area of the nodes.
   2. Leaves 7-13 per branch; apex of the leaf sheath with setose appendages
      ...................................................................................................................1. **Arthrostylidium**
   2. Leaves 15-40 per branch; apex of the leaf sheath lacking setose appendages
      ...................................................................................................................2. **Chusquea**

   1. Leaves of the culm similar to those of the branches; apex of the leaf sheath lacking setaceous appendages; branches short or elongate, alternate.
   3. Leaf blades 0.2-3.4(4.6) cm wide; glumes not aristate .................3. **Lasiacis**
   3. Leaf blades 3-11 cm wide; glumes aristate, the arista 5-22 mm long ......4. **Olyra**

   1. **ARTHROSTYLIDIOUM**

   Key to the species of *Arthrostylidium*
1. Leaves of the branches 0.7-2 mm wide ................................. 1. A. farctum
1. Leaves of the branches 3-30 mm wide.
   2. Foliaceous leaves 6-11 × 1-3 cm; culms markedly scabrous; rachis of the inflorescence straight
      ............................................................................. 2. A. multispicatum
   2. Foliaceous leaves 2.5-6 × 0.3-0.7 cm; culms smooth; rachis of the mature inflorescence flexuous
      ............................................................................. 3. A. sarmentosum

   Distribution: Uncommon on forested slopes, forest margins, and in dry thickets on limestone and
   serpentine. Also on Vieques, St. John, and St. Thomas; in the Bahamas, Cuba, and Hispaniola. This
   species was erroneously accredited to French Guiana in the original description.
   Public Forests: Maricao, Río Abajo, and Susúa.

   Distribution: Uncommon on forested slopes along the Cordillera Central. Also in Cuba, Hispaniola,
   and Trinidad.
   Public Forests: Carite, Guilarte, Maricao, and Toro Negro.

   Distribution: In moist forests at middle to upper elevations; along the Cordillera Central and the Sierra
   de Luquillo. Also throughout the Antilles and in Venezuela.
   Public Forests: Carite, El Yunque, Guilarte, Maricao, and Toro Negro

2. CHUSQUEA

   Distribution: Uncommon in moist forests at 600-1205 m in elevation; along the Cordillera Central.
   Also in the rest of the Greater Antilles.
   Public Forests: Maricao and Toro Negro.

3. LASIACIS
   Key to the species of Lasiacis

1. Ligules of the upper leaves 0.2-0.6 mm long ......................... 1. L. divaricata
1. Ligules of the upper leaves > 1.6 mm long.
   2. Primary branches reflexed or spreading; leaf sheath glabrous or pubescent .... 2. L. ligulata
   2. Primary branches appressed or spreading; leaf sheath papillose, hirsute, or pubescent
      ............................................................................. 3. L. sorghoidea

   Distribution: In areas of secondary vegetation, along roads and in open and disturbed areas. Also on
   Caja de Muerto, Desecheo, Mona, Vieques, St. Croix, St. John, St. Thomas, Tortola, and Virgin Gorda;
   throughout the Antilles, the United States (Florida), and from Mexico to South America.
   Public Forests: Cambalache, Carite, Ceiba, Guajataca, Guánica, Maricao, Mona, Río Abajo, and
   Susúa.
**Distribution:** Uncommon in areas of secondary vegetation. Also on St. Croix, St. John, St. Thomas, and Tortola; throughout the Antilles and from Central America to Bolivia.  
**Public Forests:** Carite, El Yunque, Maricao, Río Abajo, and Susúa.

**Distribution:** Uncommon in areas of secondary or disturbed vegetation. Also on Vieques, St. Croix, St. John, St. Thomas, and Virgin Gorda; throughout the Antilles and from Mexico to Argentina.  
**Public Forests:** Carite, El Yunque, Maricao, and Susúa.

4. **OLYRA**

1. **Olyra latifolia** L., Syst. Nat. ed. 10, 1261. 1759.  
**Distribution:** In forests, pastures, and along rivers, in moist areas, at middle and lower elevations.  
**Public Forests:** Guajataca, Maricao, Río Abajo, and Susúa.

7. **Family SMILACACEAE**

1. **SMILAX**  
   **Key to the species of Smilax**

1. Leaves coriaceous to rigid-coriaceous, with the margins usually spiny and the apex obtuse or acute; stems spiny .................................................................1. **S. coriacea**

1. Leaves chartaceous, with the margins entire and the apex acuminate; stems not spiny  
   ........................................................................................................................................2. **S. domingensis**

1. **Smilax coriacea** Spreng., Syst. Veg. 2: 103. 1825.  
**Distribution:** Of widespread distribution, in coastal thickets, dry forests, and moist forests of the Cordillera Central. Also on Vieques, Guana Is., St. Croix, St. John, St. Thomas, Tortola, Virgin Gorda; Hispaniola and the Lesser Antilles.  
**Public Forests:** Carite, El Yunque, Guánica, Guajataca, Maricao, Río Abajo, Susúa, Toro Negro, and Tortuguero.

2. **Smilax domingensis** Willd, Sp. Pl. 4: 783. 1806.  
**Distribution:** In moist forests at middle to upper elevations, along the Cordillera Central and in the zone of mogotes. Also in the Greater Antilles, Mexico, Guatemala, and Belize.  
**Public Forests:** Cambalache, El Yunque, Guajataca, Maricao, Río Abajo, Susúa, and Tortuguero.