

## 46. Malpighiaceae (Barbados Cherry Family)

Trees, shrubs, or vines; pubescence simple or with T-shaped (malpighiaceae) hairs. Leaves opposite, simple and entire, often bearing glands on petioles or blades; stipules minute. Flowers subtly to strongly zygomorphic, bisexual, in axillary or terminal racemes, corymbs, cymes, or panicles; sepals 4–5, usually 4 of them with 1 or 2 extrafloral nectaries; corolla of 5 free petals, alternating with the sepals, clawed, the posterior petal usually smaller than the remaining four; stamens 10 or fewer by reduction, the anthers opening by longitudinal slits; ovary superior, of 2–3 uniovular carpels, the placentation axile, the styles free or less often connate into 1. Fruit a fleshy drupe or dry, samaroid schizocarp; seeds 1 per carpel.

A family of about 70 genera and 1250 species, pantropical but predominantly in the New World.

### Key to the Genera of Malpighiaceae

1. Trees or shrubs; fruits wingless, fleshy or dry.
  2. Leaf blades conspicuously glandular; plant without bristles or stiff hairs.
    3. Leaf glands 2, cone-shaped, on lower portion of leaf margins; sepals without glands; stamens with free filaments; fruit capsular ..... *Galphimia* (cultivated)
    3. Leaf glands 2, impressed at base of blade between midrib and margins; sepals with a pair of elongate glands on lower surface; fruit a fleshy drupe ..... 1. *Bunchosia*
  2. Leaf blades eglandular or if glandular then the plant with bristles or stiff hairs.
    4. Styles slender and subulate, the stigma minute; fruits turning from green to yellow; plant not covered with stiff hairs ..... 2. *Byrsonima*
    4. Styles stout and cylindrical, the stigma elongate; fruits red when mature; plant with stiff hairs causing dermatitis on contact (not very obvious in the cultivated *M. emarginata*) ..... 4. *Malpighia*
1. Twining vines or lianas; fruit winged, samaroid schizocarps.
  5. Corolla yellow; inflorescence as wide or wider than long; leaves (at least some) >5 cm long ... 5. *Stigmaphyllon*
  5. Corolla pink; inflorescence longer than wide; leaves <2 cm long ..... 3. *Heteropteris*

### 1. BUNCHOSIA Kunth

Shrubs or trees, usually armed with simple or T-shaped hairs. Leaves entire, pinnately veined, with a pair of impressed glands on lower portion of blade; petioles glandless; stipules small, free, borne at base of petiole. Flowers pedicellate, in axillary or terminal racemelike inflorescences; bracteoles with a large, fleshy gland; calyx of 5 sepals, all or 4 of them bearing a pair of fleshy glands without; petals yellow or nearly white; stamens 10, the anthers uniform; ovary of 2–3 connate carpels, the style free to completely connate. Fruit a fleshy drupe containing 2 or 3 1-seeded pyrenes.

A genus of about 55 species throughout tropical and subtropical areas of the New World.

1. *Bunchosia glandulosa* (Cav.) DC., Prodr. 1: 581. 1824.  
*Malpighia glandulosa* Cav., Diss. 8: 411. 1789.

Fig. 134L–Q.

Shrub or small tree 3–7 m tall; bark gray, fissured, rough, with strong fetid smell when cut; stems cylindrical, gray, with

numerous whitish lenticels, pubescent when young. Leaf blades 3.5–10.5 × 1.4–5.6 cm, elliptic, chartaceous, glabrous, the apex obtuse acute or acuminate, the base narrowed, with a pair of impressed glands, the margins entire; petioles glabrescent, 3–10 mm long. Flowers long-pedicellate, in axillary, racemelike cymes; bracteoles minute, with a large nectary; pedicels 5–10 mm long,

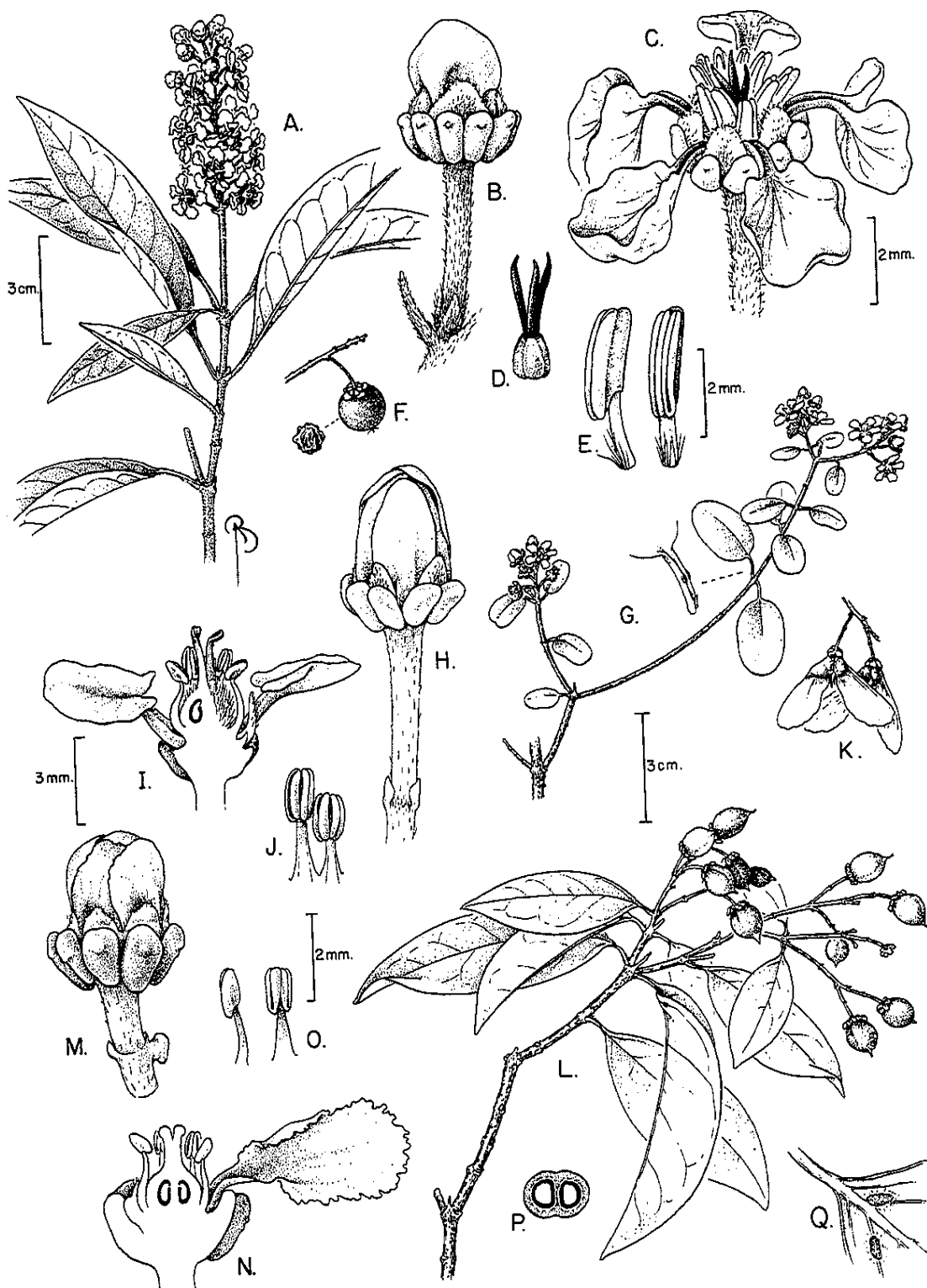


FIG. 134. A-F. *Byrsonima spicata*. A. Flowering branch. B. Flowerbud showing biglandular sepals and bracts at base of pedicel. C. Flower. D. Pistil. E. Stamen, lateral and frontal views. F. Drupe and stone. G-K. *Heteropterys purpurea*. G. Flowering branch and detail of leaf petiole. H. Flowerbud showing biglandular sepals and paired bracts at base of pedicel. I. L.s. flower. J. Stamens. K. Winged mericarps. L-Q. *Bunchosia glandulosa*. L. Fruiting branch. M. Flowerbud showing biglandular sepals and bracteoles with nectary gland. N. L.s. flower. O. Stamen, lateral and frontal views. P. C.s. fruit. Q. Detail of blade with basal glands.

slender; calyx bearing 8 fleshy glands; petals light yellow, obovate to ovate-lanceolate, 8–9 mm long, long-clawed; filaments connate at base; ovary of 2 carpels, glabrous, the style single. Drupe ovoid to globose, 8–10 mm long, dark orange.

**DISTRIBUTION:** A common shrub of coastal dry forests or thickets. Carolina (A2819), Lameshur (B646). Also on Anegada, Jost van Dyke, St. Croix, and St. Thomas; the Bahamas, Hispaniola, Puerto Rico, and Lesser Antilles.

## 2. BYRSONIMA Kunth

Shrubs or trees, usually covered with simple or T-shaped hairs. Leaves entire, pinnately veined, eglandular; petioles eglandular; stipules small, free or partially to completely connate, borne at base of petiole or intrapetiolar. Flowers pedicellate, in axillary or terminal racemelike inflorescences; bracteoles eglandular. Calyx of 5 sepals, all bearing a pair of fleshy glands or all eglandular; petals yellow, white, pink, or reddish, the posterior petal usually smaller; stamens 10, the anthers uniform; ovary of 3 connate carpels, the styles free to completely connate. Fruit a fleshy drupe containing a trilocular stone.

A genus of about 150 species throughout tropical and subtropical America, mostly South American.

### Key to the Species of *Byrsonima*

1. Leaves elliptic to oblong-lanceolate, 5–15 cm long, secondary veins prominent on lower surface; petals yellow ..... 2. *B. spicata*
1. Leaves obovate or oblanceolate, 1.5–4 cm long, secondary veins inconspicuous; petals turning from white to pink, becoming red at maturity ..... 1. *B. lucida*

#### 1. *Byrsonima lucida* (Mill.) DC., Prodr. 1: 580. 1824.

*Malpighia lucida* Mill., Gard. Dict., ed. 8. 1768.

*Malpighia cuneata* Turcz., Bull. Soc. Imp. Naturalistes

Moscov 31: 390. 1858. *Byrsonima cuneata* (Turcz.)

P. Wilson, Bull. New York Bot. Gard. 8: 394. 1917.

Shrub or small tree (1–)3–4(–7) m tall, usually many-branched from base; bark gray, smooth; stems cylindrical, gray, with numerous lenticels, densely sericeous when young, hairs fading to white. Leaf blades 1.5–4 × 0.8–1.5 cm, obovate or oblanceolate, coriaceous, sparsely covered with appressed, rusty hairs, the apex rounded or obtuse, the base attenuate, the margins entire; petioles 3–10 mm long. Flowers long-pedicellate, in terminal racemes; bracts minute, subulate; pedicels 8–12 mm long, slender, with reddish brown pubescence; calyx pinkish, of 5 biglandular sepals, the glands fleshy, elongate, whitish to yellowish; petals spreading, turning from white to pink, becoming red at maturity, 6–8 mm long, long-clawed, the limb widely ovate to reniform; anthers white at margins; ovary glabrous, tricarpellate, the styles 3, free to base. Drupe globose or ovoid, 8–12 mm diam., glabrous, apiculate at apex, turning from green to yellow and finally to yellowish brown.

**DISTRIBUTION:** A common shrub of dry to moist forests or coastal thickets. Coral Bay Quarter along Center Line Road (A2942), White Cliffs (A2035). Also on Anegada, St. Croix, and St. Thomas; Florida, Bahamas, Greater and Lesser Antilles.

**COMMON NAME:** gooseberry.

**NOTE:** *Byrsonima lucida* seems to hybridize with *B. spicata*. A few individuals with intermediate characters between these two species have been collected at a few localities on St. John. The plants have leaves resembling *B. lucida* in shape and *B. spicata* in having prominent secondary veins, but leaf size is intermediate between the two. Coloration of petals is yellow to orange as in *B. spicata*, and the posterior petal lacks the claw glands, a character typical of *B. spicata* but absent in *B. lucida*. None of the individuals collected on St. John is known to set fruit, although I sought

fruit repeatedly. This fact may indicate that the individuals belong to a sterile population. Both species seem to hybridize in the Lesser Antilles (Howard, 1988; Nicolson et al., 1991). The names *Byrsonima ophiticola* Britton and *Byrsonima horneana* Britton & Small have been applied to similar plants in western Puerto Rico.

#### 2. *Byrsonima spicata* (Cav.) DC., Prodr. 1: 580. 1824.

*Malpighia spicata* Cav., Diss. 8: 409, pl. 237. 1789.

*Byrsonima coriacea* Sw. var. *spicata* (Cav.) Nied.

in Engl., Pflanzenr. IV, 141: 700. 1928.

Fig. 134A–F.

*Byrsonima coriacea* sensu Little & Wadsworth, 1964, non Sw., 1788.

Tree 3–15 m tall; bark gray, smooth or finely fissured; twigs cylindrical, densely sericeous when young. Leaf blades 5–15 × 1.8–5.5 cm, elliptic to oblong-lanceolate, chartaceous, sparsely covered with appressed, rusty hairs especially along midvein, secondary veins prominent on lower surface, the margins entire obtuse to acute, the base obtuse; petioles 5–15 mm long, sericeous. Flowers in terminal, ascending racemes, 4–10 cm long; bracts minute, subulate; pedicels 7–8 mm long, slender, sericeous; calyx yellow, of 5 biglandular sepals, the glands fleshy, elongate, whitish to yellowish; petals spreading, yellow, turning orange in age, 5–8 mm long, long-clawed, with a widely ovate to reniform limb, the posterior petal with 2 or more marginal glands at apex of the claw; anthers yellowish; ovary tricarpellate, sericeous, the styles 3, glabrous, free to base. Drupe nearly globose to obovoid, 10–12 mm diam., glabrous, apiculate at apex, turning from green to yellow, becoming yellowish brown at maturity.

**DISTRIBUTION:** A common tree of moist forests. Bordeaux area (A3820), Cruz Bay Quarter along Center Line Road (A2939), Rosenberg (B319). Also on St. Croix, St. Thomas, Tortola, and Virgin Gorda; Cuba, Hispaniola, Puerto Rico, Lesser Antilles, northern South America, south to Bolivia.

## 3. HETEROPTERIS Kunth

Twining woody vines, shrubs, or small trees, usually covered with simple or T-shaped hairs. Leaves entire, pinnately veined, usually with impressed glands on blade; petioles often bearing a pair of stipitate glands; stipules minute or wanting. Flowers pedicellate, in axillary or terminal umbels, corymbs, or pseudoracemes; calyx of 5 basally connate sepals, 4 of them bearing a pair of fleshy glands externally, or seldom glandless; petals yellow, pink, or white; stamens 10, somewhat unequal, all fertile, the filaments connate at base,

the anthers ellipsoid to oblong; ovary of 3 connate carpels, the styles free, erect, thickened. Fruit a schizocarp containing 3 samaras, each with a well-developed dorsal wing.

A genus of about 125 species distributed in the neotropics, except for a single African species.

1. *Heteropteris purpurea* (L.) Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 5: 164. 1821 [1822].  
*Banisteria purpurea* L., Sp. Pl. 427. 1753.

Fig. 134G-K.

*Banisteria parvifolia* Vent., Choix Pl. 51. 1808. *Heteropteris parvifolia* (Vent.) DC., Prodr. 1: 591. 1824.

Twining, slender woody vine 3-5 m long, with numerous lateral branches; stems cylindrical, slender, wiry, with numerous lenticels, puberulent. Leaf blades 1.5-2 × 1-1.5 cm, oblong, elliptic, or ovate, chartaceous, puberulent, the apex obtuse or rounded, the base obtuse or rounded, the margins entire; petioles

3-10 mm long, with a pair of stipitate glands at middle. Flowers long-pedicellate, in terminal or axillary racemes; bracts minute, eglandular; pedicels 5-6 mm long, slender, reddish brown, pubescent; calyx bearing 8 fleshy, elongate, green glands; petals pink, widely ovate, 4.5-5 mm long, long-clawed; filaments glabrous, the anthers yellowish; stigma green. Samara winged on distal portion, 1.5-3 cm long, turning from green to brown when dried.

DISTRIBUTION: Common in dry open areas and coastal scrub. Coral Bay (A2658), Lameshur (B627). Also on St. Croix, St. Thomas, Tortola, and Virgin Gorda; Florida, Bahamas, Greater and Lesser Antilles.

DOUBTFUL RECORD: *Heteropteris laurifolia* (L.) A. Juss. Was listed by Woodbury and Weaver (1987) as occurring on St. John; however, no specimens have been located. Numerous attempts to find this species on St. John have failed.

#### 4. MALPIGHIA L.

Small to medium-sized shrubs, usually covered with simple or T-shaped hairs. Leaves entire, wavy, or toothed, pinnately veined, usually with impressed glands on blade; petioles eglandular; stipules minute, interpetiolar. Flowers pedicellate, solitary or in axillary, elongate racemes or congested into a corymb- or umbel-like inflorescence; calyx of 5 free, ovate sepals, bearing 1 or 2 fleshy glands externally (for a total number of 6, 8, or 10); petals pink, violet, light yellow, or white, the posterior petals usually larger; stamens 10, in 2 whorls, the external whorl usually larger, all fertile, the filaments slightly connate at base; ovary globose, glabrous, 3-locular, of 3 connate carpels, the styles connate at base, erect, thickened. Fruit a fleshy drupe, containing 3 pyrenes, some of which may fail to develop.

A neotropical genus of about 40 species, most of which occur in the West Indies.

REFERENCE: Vivaldi, J. L. 1979. The systematics of *Malpighia* L. (Malpighiaceae), Dissertation, Cornell University, Ithaca, New York.

NOTE: Most species of *Malpighia* have bristles or sharp stiff hairs that may penetrate the skin on contact, causing irritation or dermatitis.

#### Key to the Species of *Malpighia*

1. Leaves <2.5 cm long, the margins sinuate-dentate, with marginal bristles; corolla pink ..... 1. *M. coccigera*
1. Leaves >2.5 cm long, the margins entire; corolla white, light yellow, or pink.
  2. Corolla pink.
    3. Leaves linear or narrowly elliptic, 4-10 cm long, with acute apices; fruits 1-1.3 cm wide ..... 3. *M. linearis*
    3. Leaves elliptic, 2.5-7 cm long, with retuse apices; fruits 1.5-2.5 cm wide, edible ..... *M. emarginata* (cultivated)
  2. Corolla whitish, sometimes yellowish- or pinkish-tinged.
    4. Leaf margins with perpendicular, T-shaped bristles, 2.5-5 mm long; leaf blade scabrous on upper surface (because of V-shaped hairs), lower surface strigose, with T-shaped hairs 2.5-5 mm long; corolla white to yellowish-tinged ..... 4. *M. woodburyana*
    4. Leaf margins without bristles; leaf blades nearly smooth (hairs T-shaped, 1-1.5 mm long), lower surface strigillose, with T-shaped hairs 1-1.5 mm long; corolla white to pinkish-tinged .... 2. *M. infestissima*

#### 1. *Malpighia coccigera* L., Sp. Pl. 426. 1753.

Erect (seldom prostrate) shrub 1-5 m tall, many-branched from base; bark light brown, fissured; branches reddish-tinged when young, glabrous to strigillose. Leaf blades 1-2.5 × 0.8-2 cm, oblong, ovate to obovate, coriaceous, glabrous, or the lower surface sparsely covered with T-shaped hairs, the apex obtuse, truncate, or emarginate, the base obtuse, the margins sinuate-dentate, with T-shaped bristles; petioles 0.5-1.5 mm long; stipules minute, glabrous or strigillose. Flowers 2-5, congested in leaf axils; bracteoles minute, ciliate; pedicels 9-20 mm long, slender; calyx bearing (6-)8-10 fleshy glands; petals light pink, 11-12.5 mm long, long-clawed; filaments glabrous; anterior style short, slender; posterior styles longer, thicker. Drupe 5-15 mm diam., depressed-globose, 3-lobed, fleshy, bright red.

DISTRIBUTION: A rare species of coastal scrub and dry deciduous forests. Salt Pond Trail (M17064), trail to Drunk Bay (A4133). Also in Cuba, Hispaniola, and Puerto Rico, cultivated elsewhere.

NOTE: Populations of *M. coccigera* on St. John seem to belong to subspecies *coccigera*, but they differ from typical material by their robust habit. Subspecies *coccigera* is restricted to Hispaniola, Puerto Rico, and the Virgin Islands and is known only from cultivation in the Lesser Antilles. Two other subspecies (*horrida* and *apiculata*) are known from Cuba and Hispaniola. They differ from subspecies *coccigera* by their smaller leaves and thinner, shorter posterior styles.

#### 2. *Malpighia infestissima* Rich. ex Nied., *Malpighia* 15. 1899.

*Malpighia pallens* Small, N. Amer. Fl., 25(2): 157. 1910.

*Malpighia thompsonii* Britton & Small in Britton & P. Wilson, Bot. Porto Rico 5: 443. 1924.

Shrub 2-2.5 m tall, many-branched from base; bark light brown to grayish, slightly fissured; stems nearly cylindrical, gray-

ish, puberulent. Leaf blades 3.5–8(–11) × (1–)2–5 cm, elliptic to ovate, chartaceous to nearly coriaceous, sparsely covered with T-shaped hairs on both surfaces, the hairs 1–1.5 mm long, or glabrescent, lower surface strigillose, the apex obtuse to acute, emarginate and sometimes mucronate, the base rounded to subcordate, with a pair of impressed glands, the margins without bristles; petioles 1–3 mm long; stipules minute. Flowers in short, axillary racemes or panicles; bracteoles minute; pedicels 9–17 mm long, slender; calyx bearing 10 fleshy glands, unequal; petals white to pinkish-tinged, reflexed, 8–11 mm long, clawed; filaments glabrous; anterior style slightly shorter. Drupe ca. 2 cm diam., depressed-globose, obscurely 9-lobed, red when mature.

**DISTRIBUTION:** A rare species of coastal scrub and dry deciduous forests. Probably extirpated on St. John; known only from a single collection by Vest in 1906. Also on Buck Island and St. Croix.

**COMMON NAMES:** mad dog, stinging bush, touch me not.

### 3. *Malpighia linearis* Jacq., Enum. Syst. Pl. 21. 1760.

Fig. 135A–F.

Erect shrub 1–2 m tall, many-branched from base; bark light brown, fissured; branches slightly flattened, grayish, strigillose, soon glabrescent. Leaf blades 4–8(–10) × 0.4–1.2 cm, linear to narrowly elliptic, nearly coriaceous, sparsely covered with T-shaped hairs, especially on lower surface, upper surface nearly smooth, lower surface strigillose, with T-shaped hairs 1–1.5 mm long, the apex acute and mucronate, the base tapering, the margins entire, revolute; petioles 2–4 mm long; stipules minute, strigillose. Flowers few, in short axillary racemes; bracteoles minute; pedicels 11–18 mm long, slender; calyx green, bearing 6(–10) fleshy glands; petals bright pink, 5.5–9 mm long, the claw white; fila-

ments glabrous, white, the anthers yellow; styles green, the anterior shorter. Drupe 1–1.3 cm diam., depressed-globose, red when mature.

**DISTRIBUTION:** An uncommon species of coastal scrub and dry deciduous forests. Lameshur (A3229). Also on Aneгада, St. Thomas, and Water Island; Culebra Island (Puerto Rico) and the Lesser Antilles.

### 4. *Malpighia woodburyana* Vivaldi in Acev.-Rodr., Brittonia 45: 130. 1993.

Erect shrub 1–2.5(–5) m tall, many-branched from base; bark light brown, fissured; branches green, strigillose, with V-shaped hairs. Leaf blades 6–8(–14) × 4–6(–9) cm, ovate or elliptic, chartaceous, upper surface scabrous from V-shaped, stiff hairs, lower surface sparsely covered with T-shaped hairs, 2.5–5 mm long, the apex obtuse or emarginate, the base nearly cordate or obtuse, the margins entire, revolute, armed with T-shaped bristles 2.5–5 mm long; petioles 1–3 mm long, strigillose; stipules minute. Flowers 2–4, in short, axillary, umbel-like racemes; bracteoles minute; pedicels 12–20 mm long, slender; calyx green, strigillose, bearing 6–8(–10) fleshy glands; petals white to yellow-tinged, clawed, 7–11 mm long; filaments glabrous; styles with uncinately apical, the anterior style slightly smaller. Drupe 1.5–2 cm diam., with ovoid outline and 6–9 longitudinal ridges, green.

**DISTRIBUTION:** An uncommon species of coastal scrub and dry deciduous forests. Bethany (B179), Hawksnest Bay (A2311). Also on Aneгада, Buck Island, St. Thomas, and Water Island; Puerto Rico including Maguayes, Culebra, and Vieques.

**CULTIVATED SPECIES:** *Malpighia emarginata* DC., commonly known as the Barbados cherry, is cultivated for its red, edible, tasty fruits, exceptionally rich in vitamin C.

## 5. STIGMAPHYLLON Juss.

Twining woody vines, usually covered with simple or T-shaped hairs. Leaves entire, pinnately veined, usually with a pair of glands at base or below the base at petiole; stipules minute, eglandular, deciduous. Flowers pedicellate, in axillary umbels, corymbs, or pseudoracemes; calyx of 5 free, ovate sepals, 4 bearing 2 fleshy glands externally and the posterior sepal glandless; petals 5, yellow, sometimes reddish-tinged, clawed, the posterior petals with a longer claw; stamens 10, in 1 whorl, subequal or unequal, the filaments connate at base; ovary 3-locular, of 3 connate carpels, the styles free to base, erect or slightly recurved, the anterior and posterior styles heterogeneous. Fruit a samaroid schizocarp, of 3 winged mericarps, the wing dorsally thickened along frontal margin.

A genus of about 100 species, in the neotropics from eastern Mexico to northern Argentina, including the West Indies.

**REFERENCE:** Anderson, C. 1987. *Stigmaphyllon* (Malpighiaceae) in Mexico, Central America and the West Indies. Contr. Univ. Michigan Herb. 16: 1–48.

### Key to the Species of *Stigmaphyllon*

1. Young branches tomentose; leaves densely covered with appressed hairs on lower surface (tomentose to sericeous); blades with conspicuous reticulate venation; samaras tomentose, greenish when young ..... 2. *S. floribundum*
1. Young branches strigillose; leaves glabrescent on both surfaces (strigillose when young); blades with pin-nate venation (3° veins not conspicuous); samaras becoming glabrous with age, usually reddish when young ..... 1. *S. emarginatum*

1. *Stigmaphyllon emarginatum* (Cav.) A. Juss., Ann. Sci. Nat. Bot., ser. 2, 13: 290. 1840. *Banisteria emarginata* Cav., Diss. 9: 425. 1790.

Fig. 135G–N.

*Banisteria periplocifolia* Desf. ex DC., Prodr. 1: 589. 1824. *Stigmaphyllon periplocifolium* (Desf. ex DC.) A. Juss., Ann. Sci. Nat. Bot., ser. 2, 13: 290. 1840. *Stigmaphyllon lingulatum* (Poir.) Small, N. Amer. Fl. 25(2): 140. 1910.

Twining liana to 15 m long; bark reddish brown, rough; stems usually numerous from base, twining together, forming a ropelike structure, nearly cylindrical, copper-colored, with numerous lenticels, strigillose when young. Leaf blades (1.1–)2.5–10(–13) × (0.5–)1–5.5(–10.5) cm, lanceolate, ovate, oblong, linear, or seldom rounded, coriaceous, with a few appressed hairs, especially on lower surface, becoming glabrous, the apex acute or obtuse, emarginate-mucronate, the base truncate to cordate, the margins entire; petioles 0.2–2 cm long, with a pair of disk-shaped glands below the blade. Flowers long-pedicellate, 15–25 in congested, axillary umbels or pseudoracemes; bracts minute, eglandular; pedi-

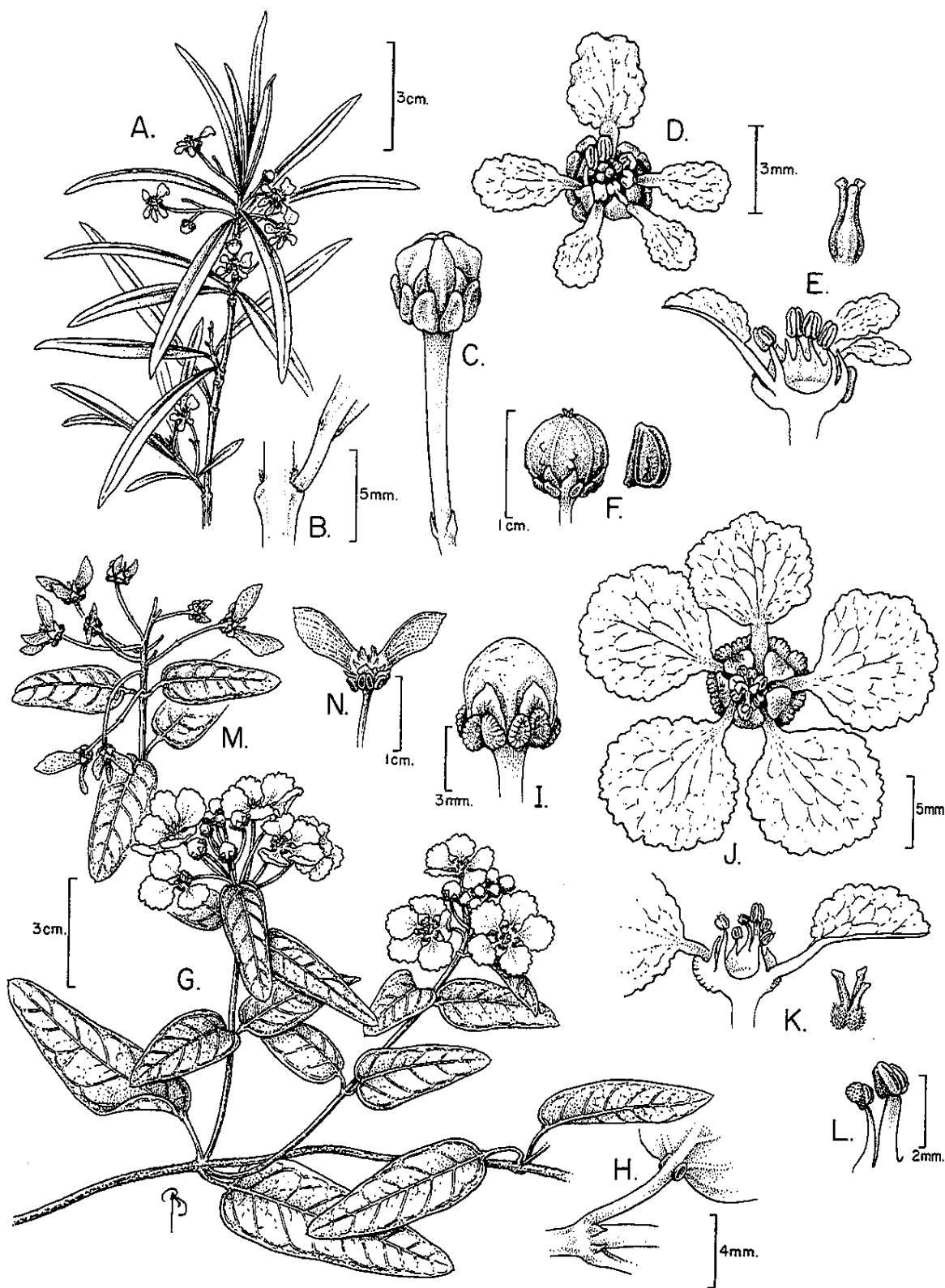


FIG. 135. A-F. *Malpighia linearis*. A. Flowering branch. B. Detail of stem node showing leaf petiole and glands on base of leaf blade. C. Flowerbud. D. Flower. E. Pistil and l.s. flower. F. Drupe and pyrene. G-N. *Stigmaphyllon emarginatum*. G. Flowering branch. H. Detail of stem showing leaf petiole with disk-shaped glands at base of leaf blade. I. Flowerbud showing calyx glands. J. Flower. K. L.s. flower and detail of pistil. L. Detail of sterile and fertile stamens. M. Fruiting branch. N. Winged mericarps.

cels 3–23 mm long, slender; calyx bearing 8–10 fleshy, elongate, green glands; petals bright yellow, rounded, 11–15 mm long, long-clawed; stamens unequal, the anthers glabrous or puberulent; anterior style shorter, the stigmas green. Samara wing 1.5–2.2 cm long, reddish-tinged when young, strigillose, becoming glabrous with age.

DISTRIBUTION: Common in dry open areas and coastal scrub. Dittliff Point (A3965), Salt Pond (A4042). Also on Anegada, St. Croix, St. Thomas, Tortola, and Virgin Gorda; Jamaica, Hispaniola, Puerto Rico (including Culebra Island), and the Lesser Antilles, south to St. Lucia.

2. *Stigmaphyllon floribundum* (DC.) C.E. Anderson, Syst. Bot. 11: 128. 1986. *Banisteria floribunda* DC., Prodr. 1: 589. 1824.

*Banisteria tomentosa* Desf. ex DC., Prodr. 1: 589. 1824. *Stigmaphyllon tomentosum* (DC.) Nied., Stigmatoph. 5. 1899, non Juss., 1824.

Twining liana to 15 m long; bark reddish brown, rough; stems usually numerous from base, twining together, forming a ropelike

structure, nearly cylindrical, with numerous lenticels, tomentose when young. Leaf blades 3.6–18 × (1–)2.5–15.5 cm, elliptic, broadly elliptic, oblong, or sometimes lanceolate or rounded, coriaceous, glabrous or sparsely pubescent above, tomentose to sericeous below, venation conspicuously reticulate, the apex obtuse, truncate, emarginate-mucronate, the base obtuse, truncate, or nearly cordate, the margins entire; petioles 1–2.5 cm long, pubescent, with a pair of disk-shaped glands below the blade. Flowers long-pedicellate, 20–25 in congested axillary umbels or pseudoracemes; bracts minute, eglandular; pedicels 10–22 mm long, slender; calyx bearing 8 fleshy, elongate, green glands; petals bright yellow, rounded, 11–15 mm long, long-clawed; stamens unequal, the anthers glabrous or puberulent; anterior style shorter, the stigmas green. Samara wing 1.8–3.2 cm long, turning from green to brown when dry, tomentose.

DISTRIBUTION: Common in moist to deciduous, coastal forests. Bordeaux area (A2854). Also on Virgin Gorda; Puerto Rico (including Mona Island).

COMMON NAME: bull wiss.

CULTIVATED SPECIES: *Galphimia gracilis* Bartl., with yellow flowers, although not very common, is cultivated in gardens.