

Fam. 80. **MALPIGHIACEAE** Juss. Malpighia Family

Shrubs or trees, sometimes scandent, commonly invested with simple hairs that are medifixed and sometimes stinging. Leaves opposite, stipulate, entire to dentate or rarely lobate, often with petiolar glands and jointed petioles. Flowers usually perfect and showy, variously arranged, cleistogamous flowers often present. Sepals 5, usually glanduliferous in the normal flowers. Petals 5; conspicuously clawed. Stamens 5 or 10, some often sterile, the anthers diverse. Styles usually 3, distinct or united. Fruit drupaceous, nutlike, capsular or of 1 to 3 samaralike mericarps.

About 850 species in perhaps 60 genera, mostly in the American tropics and subtropics.

- 1 Erect shrubs or trees; fruit drupaceous or capsular, never winged. 2
- 1 Woody climbers; fruit samaralike, never drupaceous, dry, sometimes setose 5
- 2(1) Fruit capsular, dry; calyx without glands. *Galphimia*
- 2 Fruit drupaceous, fleshy; calyx with glands. 3

- 3(2) Filaments hairy at base; styles free, subulate at apex; petals white to red. *Byrsonima*
- 3 Filaments glabrous; styles thickened at apex; petals mostly pink or yellow. . . 4
- 4(3) Styles distinct; leaves mostly without glands; inflorescence cymose or somewhat umbelliform; petals pink to lilac or white; pyrenes crested. . . . *Malpighia*
- 4 Styles united; leaves usually with 1 or 2 glands near base of lower surface of blade; inflorescence racemose; petals yellow; pyrenes smooth or reticulate-sculptured. *Bunchosia*
- 5(1) Mature fruit winged only dorsally, the wings entire, the body crested; petals yellow; petiole with a prominent gland on each side just below the leaf blade. *Stigmaphyllon*
- 5 Mature fruit winged all around, the wings lobed, the body crestless; petals violet-colored; petiole without glands. *Triopteris*

Bunchosia L. C. Rich. ex Juss. 1811

About 50 species that are native to tropical and subtropical America. [Thought to be derived from an Arabic name for coffee.]

Bunchosia glandulosa (Cav.) DC. [glandular].

Fig. 316

Bunchosia glandulosa (Cav.) DC., Prodr. 1: 581. 1824.

Shrub or sometimes a tree to 8 m tall; bark dark-brown, slightly furrowed. Leaves opposite; petioles 5-12 mm long; blades oblong-elliptic to oblanceolate or elliptic-obovate, 3-11 cm long, obtuse to acute or shortly acuminate at apex, narrowed or acute at base, bright-green, glabrous, somewhat paler on lower surface than on upper. Panicles often many, as long as the leaves or shorter. Pedicels finely pubescent when young, glabrous with age. Calyx with 8 to 10 glands; sepals 5, oblong to ovate-oblong, persistent, about 3 mm long. Petals 5, yellow, the larger 6-7.5 mm long, their suborbicular blades erose or denticulate. Stamens 10, all antheriferous; filaments partly united, glabrous; anthers short. Ovary 2- or 3-lobed; styles united, glabrous; stigma somewhat 3-lobed. Drupes ovoid, red or orange-color, 2-lobed, 9-15 mm in diameter.

In open coppices, limestone ridges, old fields, and along fencerows; mostly March to July.

Distribution: 4-9; Mexico, Greater and Lesser Antilles.

Byrsonima L. C. Rich. ex Juss. 1811

About 100 species that are native to tropical and subtropical America. [Greek for "tanning."]

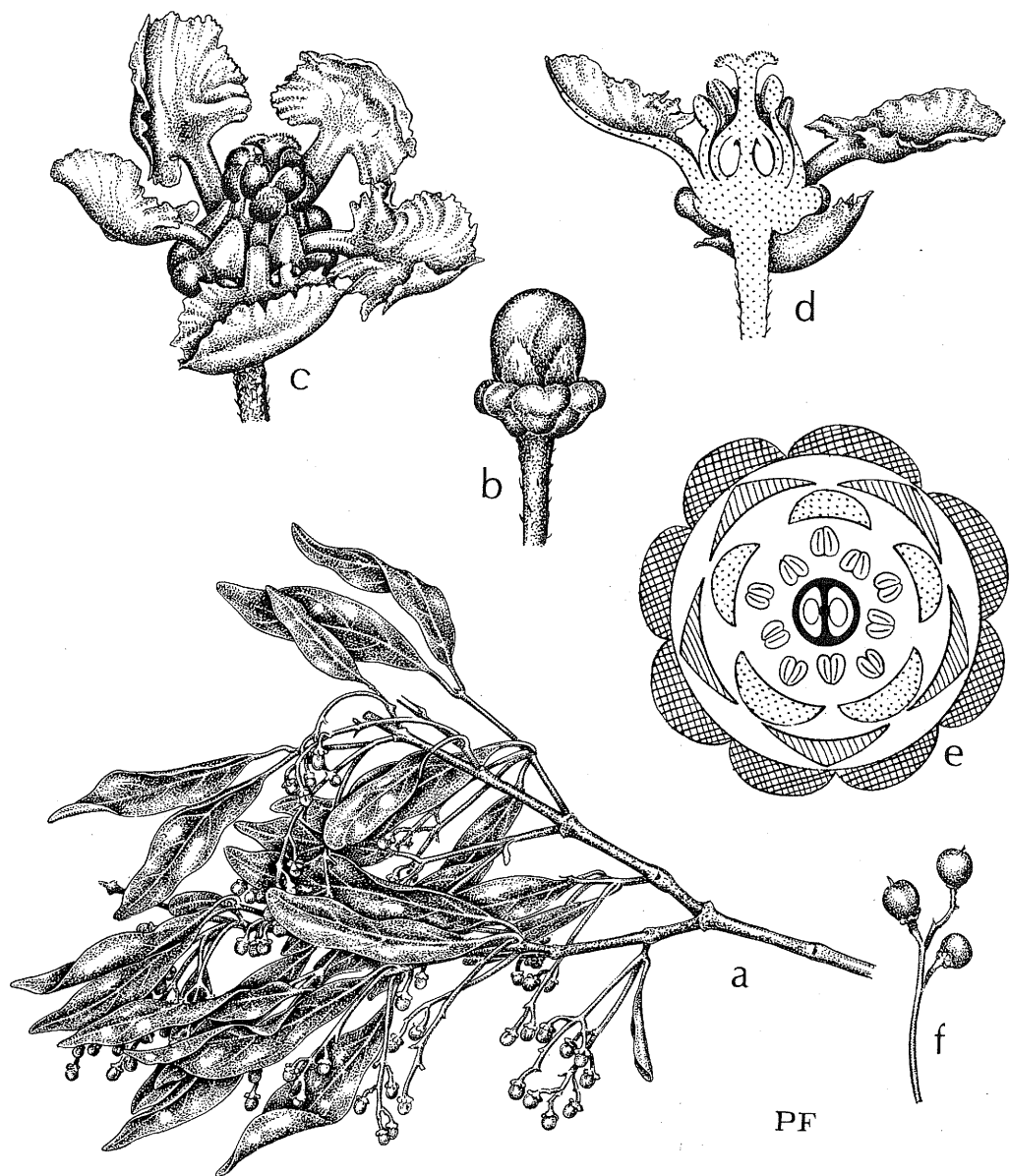


Fig. 316. *Bunchosia glandulosa*. a, fertile branchlet, $\times 2/3$; b, flower bud, $\times 4$; c, flower, front-side view, $\times 4$; d, flower longitudinally dissected, $\times 4$; e, floral diagram; f, fruits, $\times 2/3$.

***Byrsonima lucida* (Mill.) DC. [shining].** Locust-berry, Guanaberry, Candle-berry.
Fig. 317

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

Byrsonima cuneata (Turcz.) P. Wils., Bull. New York Bot. Gard. 8: 394. 1917.

Shrub or small bushy tree to about 8 m tall, usually much smaller, the slender twigs mostly short. Leaves opposite; petioles 2-5 mm long; blades obovate to spatulate,

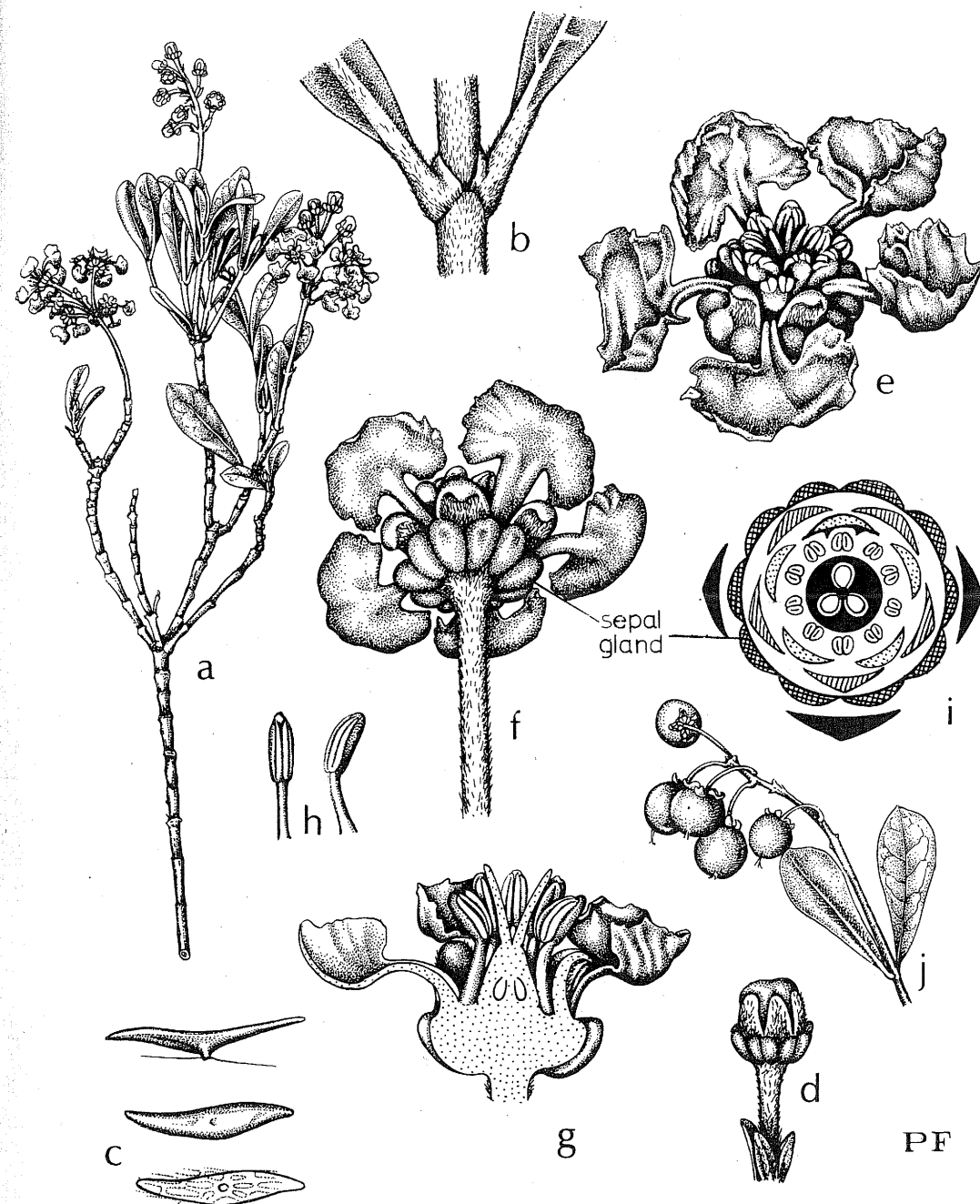


Fig. 317. *Byrsonima lucida*. a, flowering branchlet, $\times 2/3$; b, node to show clasping leaf bases, $\times 4$; c, T-shaped hairs from leaf surface, from side and above, greatly magnified; d, flower bud with basal bract and pair of bracteoles and glands on sepals, $\times 4$; e, flower, from above, $\times 4$; f, flower, from below, $\times 4$; g, flower longitudinally dissected, $\times 4$; h, stamens, $\times 4$; i, floral diagram; j, twig with fruits, $\times 2/3$.

Malpighia polytricha A. Juss. [many hairs]. Touch-me-not, Wild-cherry. Fig. 319

Malpighia polytricha A. Juss., Ann. Sci. Nat. Bot. 2(13): 336. 1840.

Shrub to about 3 m tall, usually much-branched with the branches often pubescent. Leaves opposite; petioles to about 2.5 mm long; blades oblong to oval or obovate, subcoriaceous, to about 4 cm long and 2.5 cm wide, usually smaller, cuneate to subcordate at base, rounded to truncate or retuse and mucronulate at the apex, sinuate-dentate or entire, reticulate-veined, often glabrous above, glabrous or pubescent with stinging anvil or "balanced" hairs on the lower surface and margins. Cymes axillary, sessile or nearly so, several-flowered. Calyx 10-glandular; sepals ovate to oblong, about 3 mm long, persistent. Corolla pink to scarlet; petals 5, the larger 8-10 mm long, undulate, fimbriate. Stamens 10; filaments united to the middle or below; anthers often didymous. Ovary 3-lobed; styles unequal, distinct, hooked at the apex; stigma small. Drupe fleshy, red, glabrous, subglobose to globose-ovoid, 7-10 mm in diameter.

In rocky open coppices, scrublands, coastal coppices, and about and on open rocky flats; throughout the year.

Two subspecies are recognized in our area. They may be distinguished by the following key.

- 1 Leaf blades glabrous, the margin entire, usually unarmed; lateral styles somewhat straight and obtuse at apex; distribution: 1, 2, 4, 5, 10, la Tortue Island. ssp. *polytricha*
- 1 Leaf blades strigose on lower surface, the margin sinuate-dentate to crenate-dentate and profusely armed; lateral styles obviously curved and uncinate at apex; distribution: 4, 6-9, Cuba. ssp. *confusa* Vivaldi

Stigmaphyllon A. Juss. 1832

About 65 species native to tropical and subtropical America. [Greek for "leafy stigma."]

Stigmaphyllon sagraeanum A. Juss. [for Ramón de la Sagra, 1798-1871, Spanish-Cuban botanist]. Fig. 320

Stigmaphyllon sagraeanum A. Juss., Ann. Sci. Nat. Bot. 2(13): 290. 1840.

A rather stout almost shrubby vine to about 12 m long, usually much shorter. Leaves various, opposite, with 2 prominent glands on the short petiole just below the blade; blades oblong to linear or ovate to obovate, 2-10 cm long, usually mucronate at the rounded apex, rounded to cordate at base, coriaceous, glabrous or nearly so with age, strongly reticulate-veined on lower surface. Flowers in axillary peduncled umbel-like corymbs; peduncles and pedicels sparingly pubescent or glabrous; pedicels jointed at the base. Calyx with 8 glands; sepals 5, ovate, about 4 mm long. Petals 5, yellow, the larger ones 1-1.3 cm long, erose or fimbriate. Stamens 10, with only 6 antheriferous; filaments unequal, united below; anthers

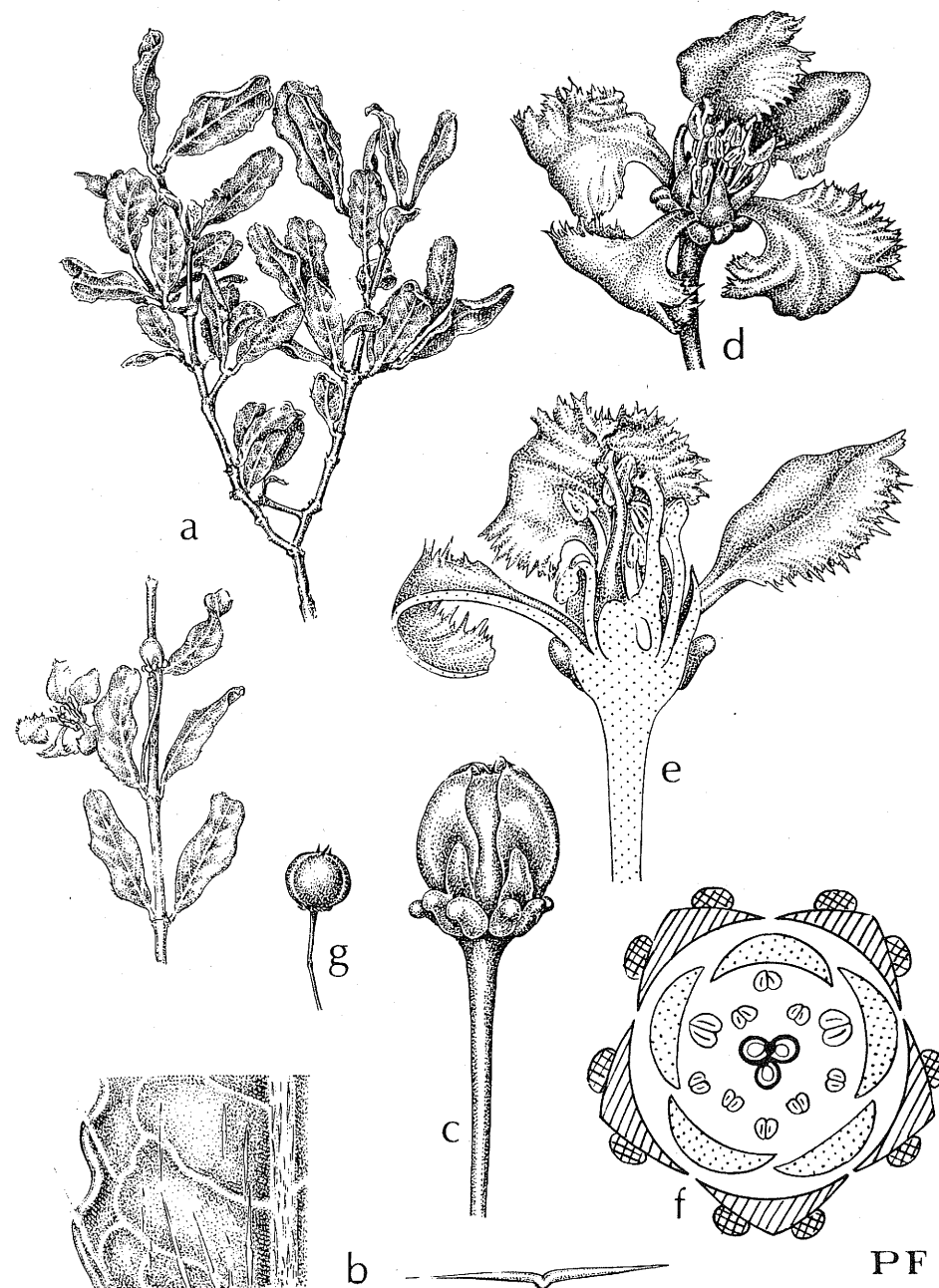


Fig. 319. *Malpighia polytricha*. a, above, leafy branchlet, below, flowering section of twig, $\times 2/3$; b, left, section of lower leaf surface to show T-shaped hairs, $\times 4$, on right, hair, $\times 8$; c, flower bud, $\times 4$; d, flower, front-side view, $\times 2$; e, flower longitudinally dissected, $\times 4$; f, floral diagram; g, fruit, $\times 2/3$.

short. Ovary 3-lobed; styles 3, distinct, unequal, sometimes foliaceous above. Samaras 1.5-2.2 cm long, the ventral edge of the wing auricled at the base, the body one third to one half as long as the wing.

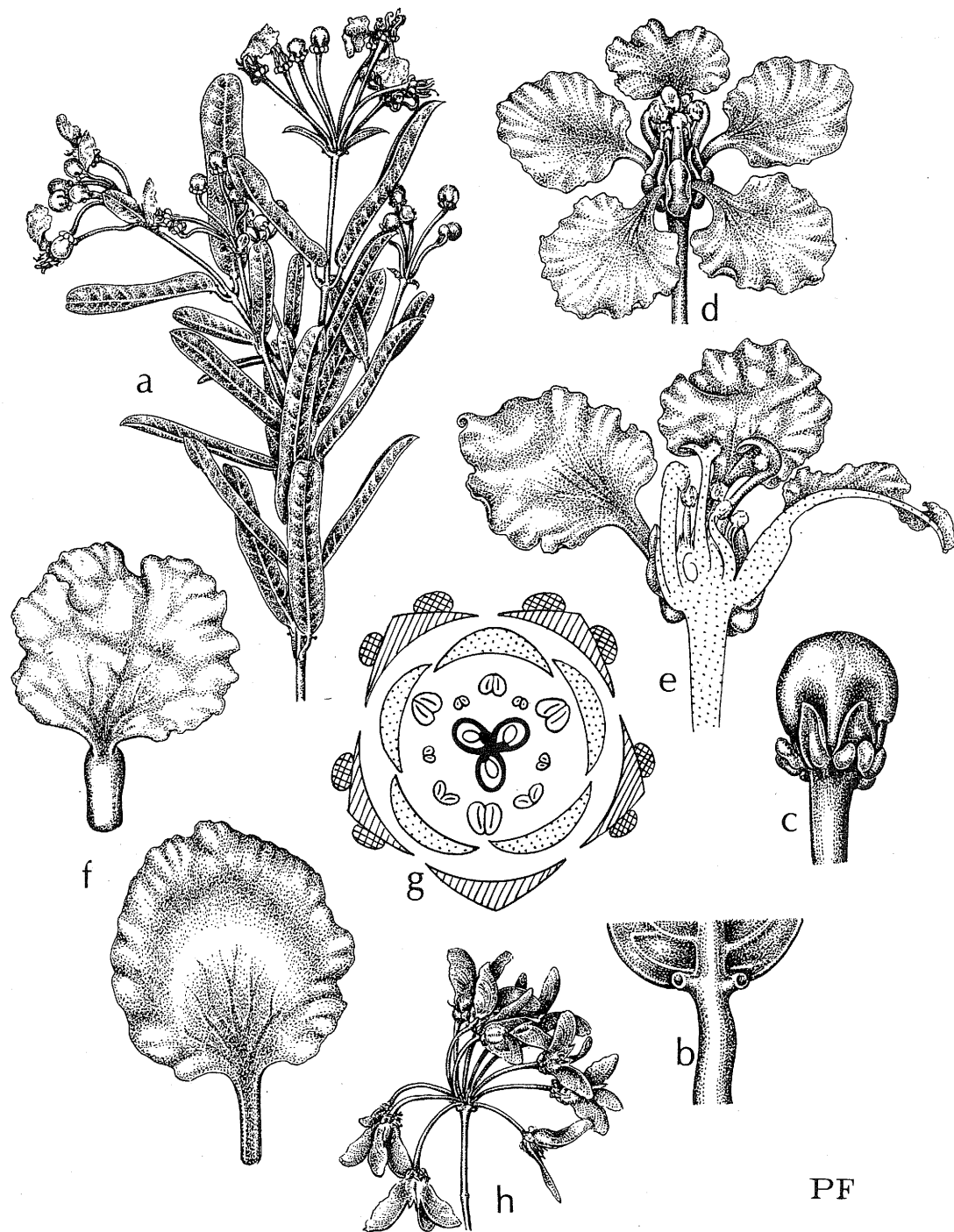


Fig. 320. *Stigmaphyllon sagraeanum*. a, flowering section of vine, $\times 2/3$; b, petiole and lower part of leaf to show glands, $\times 4$; c, flower bud, $\times 4$; d, flower, front-side view, $\times 2$; e, flower longitudinally dissected, $\times 4$; f, above, dorsal view of petal, below, ventral view of petal, $\times 4$; g, floral diagram; h, cluster of fruits, $\times 2/3$.

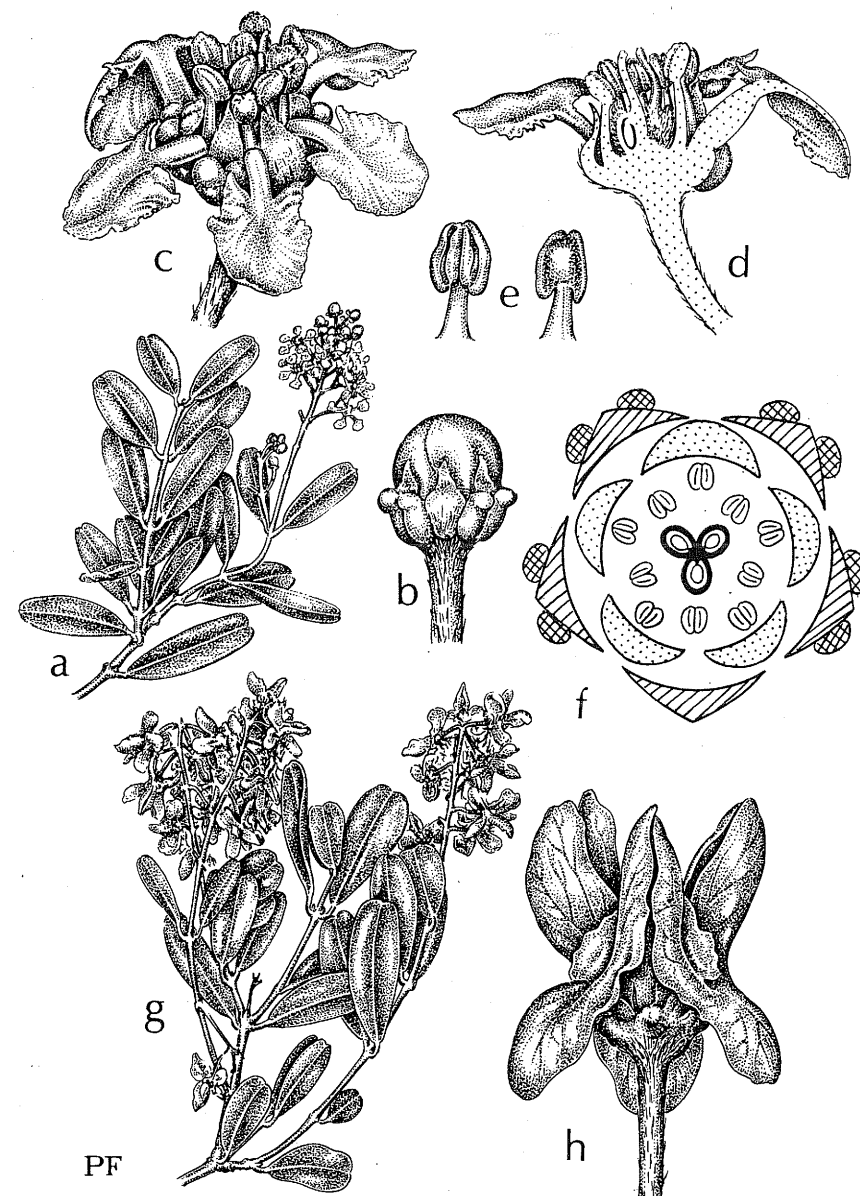


Fig. 321. *Triopteris jamaicensis*. a, flowering branch, $\times 2/3$; b, flower bud, $\times 6$; c, flower, front-side view, $\times 6$; d, flower longitudinally dissected, $\times 6$; e, ventral and dorsal views of anther, $\times 8$; f, floral diagram; g, fruiting branch, $\times 2/3$; h, individual fruit, $\times 2$.

In scrublands, pinelands, coppices, cut-over areas, and on rocky hills and open rock flats; sporadically throughout the year.

Distribution: 4, 8, 9; Cuba.

Triopteris L. 1753

Apparently 3 species that are native to the West Indies. [Greek for “three wings.”]

Triopteris jamaicensis L. [of Jamaica].

Fig. 321

Triopteris jamaicensis L., Sp. Pl. 1: 428. 1753.

Slender glabrous twining vine, rarely to 10 m long. Leaves opposite, various; petioles about 3 mm long; blades linear to obovate or sometimes cuneate to almost orbicular, 1-2.5 cm long, emarginate to mucronate at apex, mostly obtuse to tapered at base, striate-veined. Flowers clustered in racemes or panicles. Calyx with 8 glands; sepals ovate, 2-2.5 mm long. Petals 5, violet-color, the larger ones 4-5 mm long, the suborbicular to ovate-orbicular blades undulate. Stamens 10, all antheriferous; filaments subulate; anthers very short. Ovary 3-lobed; styles 3, distinct, nearly equal. Samaras 3 together, each 3-winged, 1.2-2.6 cm long, the upper longer wings oblong, the lower one ovate.

Climbing on shrubs and small trees in and on edge of coppices; in open areas, and rocky flats; throughout the year.

Distribution: 3-10; Cuba and Hispaniola.

Fam. 81. **POLYGALACEAE R. Br.**

Represented in our region only by the genus *Polygala* that differs from other genera in the family by its 2-celled dehiscent capsule that very rarely has one of the cells aborted.

About 800 species in 12 genera of worldwide distribution.