

KEY TO GENERA OF MALPIGHIACEAE FOUND IN THE CARIBBEAN
(SOUTHERN FLORIDA, BAHAMAS, AND OTHER WEST INDIAN ISLANDS
EXCEPT TRINIDAD AND TOBAGO)

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KEY FOR SPECIMENS BEARING FLOWERS

1. Petals pink and/or white, white except 1 petal mostly yellow, pink turning reddish in age, lilac, or lilac fading to white.
 2. Style 1; petals strongly reflexed in anthesis so as to hide sepals, abaxially densely sericeous, long-fimbriate on the margin; 1 stamen much longer than the other 9; exotic from Asia escaped from cultivation in Florida *Hiptage benghalensis*
 2. Styles 2 or 3; petals spreading to reflexed but not hiding sepals, abaxially glabrous or sparsely sericeous on abaxial midrib, entire, erose, or dentate on the margin; stamens without 1 much longer than all the others; native species.
 3. Stipules borne on inner face of base of petiole, partially to completely connate in our species; shrubs or trees.
 4. Leaves and bracteoles completely eglandular; styles slender and subulate, tapering to minute stigmas *Byrsonima*
 4. Leaves bearing glands on petiole or abaxial surface of lamina near base, and sometimes on adaxial surface near apex; some bracteoles often terminating in a large gland; styles of uniform thickness or widened at apex, the stigmas truncate or peltate; native in Cuba, probably introduced in the Lesser Antilles *Spachea*
 3. Stipules borne on stem between petioles or on edges of petiole near base, or absent; shrubs, trees, or vines.
 5. Shrubs or trees; flowers borne in unbranched axillary umbels or corymbs or short, condensed pseudoracemes; fruit fleshy, mostly indehiscent but in *M. verruculosa* the red pyrenes separating at maturity *Malpighia*
 5. Vines; flowers borne in umbels of 4 or congested to elongated pseudoracemes, often branched or terminating leafy stems or both; fruits dry, breaking apart into samaras at maturity.
 6. Flowers borne in umbels of 4; Cuba *Banisteriopsis pauciflora*
 6. Flowers borne in congested to elongated pseudoracemes of 5 or more flowers.
 7. Petals pink; petioles often bearing 2 prominent glands near middle; stipules if present borne on outer edges of base of petiole *Heteropterys purpurea*
 7. Petals usually described as lilac (or blue or purple), sometimes as pink, rarely as white; petioles eglandular or biglandular near apex, the glands usually not prominent; stipules if present borne on stem between petioles, distinct or connate in interpetiolar pairs *Mascagnia*
 1. Petals yellow or yellow with a red central blotch, or yellow turning red or orange, or yellow and red.
 8. Petals abaxially densely sericeous or appressed-tomentose.
 9. Calyx glands peltate, raised on stout stalks that elongate to 1–2 mm during anthesis; Cuba *Henleophytum echinatum*
 9. Calyx glands sessile or absent; Lesser Antilles *Carolus sinemariensis*
 8. Petals abaxially glabrous or at most sparsely sericeous on midrib.
 10. Styles slender and subulate, tapering to minute stigmas; shrubs or trees.
 11. Leaves eglandular; pedicels sessile or subsessile; native species *Byrsonima*
 11. Leaves usually bearing small marginal glands near base of lamina; pedicels raised on well-developed peduncles; exotic, widely cultivated as an ornamental shrub but apparently not becoming naturalized *Galphimia gracilis*

10. Styles slender to stout, of uniform thickness or widened at apex, the stigmas large; shrubs, trees, or vines.
12. Styles 2 or 3, distinct or partly to completely connate; apex of styles with stigmas terminal and without any sort of dorsal extension; carpels 2 or 3, developing into an indehiscent fleshy fruit; shrubs or trees *Bunchosia*
12. Styles 3, distinct; apex of styles with stigmas internal and dorsally rounded, truncate, acute, or extended into a hook or foliole-bearing appendage; carpels 3, developing into a schizocarp dividing into dry samaras; mostly vines, some shrubby.
13. Lamina abaxially densely and persistently metallic-sericeous.
 14. Pedicels sessile; stipules elongated, subulate, borne on petiole between middle and apex; Lesser Antilles *Hiraea faginea*
 14. Pedicels pedunculate; stipules absent or minute triangular structures borne on stem at base of petiole; Puerto Rico *Heteropterys wydleriana*
13. Lamina abaxially glabrous or variously hairy but not densely sericeous.
 15. Sepals revolute in anthesis *Heteropterys*
 15. Sepals appressed in anthesis.
 16. Posterior petal red and deeply fimbriate, very different from lateral petals, which are yellow and erose; 1 bracteole of each pair bearing 1 large abaxial gland; Jamaica *Adelphia hiraia*
 16. Posterior petal usually different from lateral petals but not so dramatically different as in previous choice; both bracteoles eglandular.
 17. Flowers borne in umbels of (3) 4.
 18. Styles truncate at apex, without any sort of dorsal extension; stipules connate in interpetiolar pairs, the resulting triangular structure persistent or deciduous *Tetrapteryx*
 18. Styles with a prominent dorsal extension at apex, the extension hooklike or bearing lateral folioles; stipules distinct, persistent or deciduous *Stigmaphyllon*
 17. Flowers borne in umbels or \pm congested pseudoracemes of (5–) 8–20 or more *Stigmaphyllon*

KEY FOR SPECIMENS BEARING FRUITS

1. Fruits with a soft, fleshy, edible exocarp, indehiscent or, in *Malpighia verruculosa*, the red pyrenes separating at maturity; shrubs or trees.
 2. Leaves and bracteoles eglandular; styles slender and subulate, the stigmas minute; inflorescence an elongated pseudoraceme terminating a leafy shoot. *Byrsonima*
 2. Leaves bearing glands impressed in abaxial surface of lamina; bracteoles eglandular or some bracteoles bearing large abaxial glands; styles slender to stout, of uniform thickness or widened at apex, the stigmas large; inflorescence axillary, without leaves, elongated or condensed and corymbiform or umbellate.
 3. Flowers borne in elongated pseudoracemes; bracteoles (one or both) often bearing 1 large abaxial gland, sometimes 2; styles 2 or 3, distinct or partly to completely connate and then apparently only 1; stipules borne on base of petiole. *Bunchosia*
 3. Flowers borne in umbels or corymbs or short, condensed pseudoracemes; bracteoles all eglandular; styles 3, distinct; stipules borne on stem between petioles. *Malpighia*
1. Fruits dry, breaking apart into mericarps at maturity; shrubs, trees, or slender to woody vines.
 4. Mericarps bearing many slender elongated vascularized setae; Cuba *Henleophytum echinatum*

4. Mericarps without slender elongated setae.
5. Mericarps smooth-walled cocci.
 6. Styles cylindrical, not tapered distally, the stigma truncate or broadened, sometimes becoming subpeltate or bilobed in anthesis; lamina with glands immersed in abaxial surface, at least at base; native in Cuba; probably introduced in the Lesser Antilles *Spachea*
 6. Styles slender and subulate, tapered to a minute stigma; lamina without glands in surface, usually with a pair of tiny marginal glands near base; exotic, widely cultivated as an ornamental shrub but apparently not becoming naturalized *Galphimia gracilis*
5. Mericarps winged, the wings rudimentary in some species.
 7. Mericarp wing reduced to a \pm triangular dorsal winglet very short relative to size of nut, the mericarp probably adapted for dispersal by water, not wind *Stigmaphyllon bannisterioides*
 7. Mericarp samaroid, with either dorsal or lateral wing(s) well developed.
 8. Samaras with dorsal wing dominant, the nut bearing on its sides only short winglets or crests or quite smooth.
 9. Wing of samara with the abaxial edge thickened, the veins diverging and branching from it toward the thinner adaxial edge *Heteropterys*
 9. Wing of samara with the adaxial edge thickened, the veins diverging from it toward the thinner abaxial edge.
 10. Flowers borne in umbels of 4; stigmas terminal, the style without a dorsal extension at apex; Cuba *Banisteriopsis pauciflora*
 10. Flowers borne in congested pseudoracemes, corymbs, or umbels of 4–many; stigmas internal, the style with a dorsal extension at apex or merely apiculate or truncate *Stigmaphyllon*
 8. Samaras with lateral wing(s) dominant, the dorsal wing smaller or reduced to a winglet or crest, or absent.
 11. Samara with 4 lateral wings, 2 on each side *Tetrapteryx*
 11. Samara with 1, 2, or 3 lateral wings.
 12. Samara with 3 lateral wings, 1 larger wing at apex and 2 smaller lateral wings; exotic from Asia escaped from cultivation in Florida *Hiptage benghalensis*
 12. Samara with 1 continuous lateral wing or 2, 1 on each side; native species.
 13. Samara with the lateral wing continuous at least at base, continuous at apex or notched to divided to nut; lamina glands, if present, borne on abaxial surface between midrib and margin *Mascagnia*
 13. Samara with the 2 lateral wings distinct at both base and apex (butterfly-shaped); lamina glands, if present, strictly marginal except often a pair at base against midrib.
 14. Pedicels sessile; stipules elongated, subulate, borne on petiole between middle and apex; Lesser Antilles *Hiraea faginea*
 14. Pedicels raised on a peduncle; stipules very short, triangular, interpetiolar.
 15. One bracteole of each pair bearing 1 large abaxial gland; pedicel shorter than peduncle or about the same length; petiole eglandular or (often) bearing 2 large protuberant glands on distal half; Jamaica *Adelphia hiraea*
 15. Both bracteoles eglandular; pedicel much longer than peduncle; petiole eglandular or bearing 2–4 small glands at various heights; Lesser Antilles *Carolus sinemariensis*