

ARISTOLOCHIACEAE

by

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Lianas or sometimes herbs, shrubs or trees. Leaves alternate, simple, often cordate or reniform, entire to deeply lobed. Stipules wanting. Flowers solitary or in axillary fascicles or corymbs, actinomorphic or zygomorphic, hermaphrodite. Perianth simple, coloured, united and variously 3-lobed, rarely with 3 rudimentary petals. Stamens 5, 6, 12 or ∞ , free or connate to the style. Ovary inferior or half-inferior, mostly 4—6-locular, sometimes nearly apocarpous. Ovary numerous, anatropous, on axile placentas. Fruit a septicidal capsule. Seeds with endosperm and small embryo.

About 600 species in 7 genera mostly in the tropics and subtropics, especially in South America; only a few species in the temperate regions.

Aristolochia Linnaeus, Spec. Plant. 960. 1753

Twining perennials or rarely (not in our region) upright herbs, shrubs or trees. Leaves alternate, petiolate; the blade entire or 2- to 7-lobed, often cordate, palmately or pinnately veined, often very variable. Stipules wanting but an axillary bud often producing a clasping, broadly reniform leaf (pseudostipel). Flowers solitary in the leaf-axils, zygomorphic and epigynous. Perianth gamotepalous, variously inflated thence more or less contracted, ultimately expanding into a 1- to 3-lobed limb. Stamens 5 or 6 or multiples of these; anthers sessile and adnate to the style, 4-celled, with longitudinal dehiscence. Ovary inferior, 5—6-locular; styles 3, 5 or 6, marginally connate, fleshy, with coroniform to subcapitate stigmatic lobes. Fruit a capsule with septifragal, acropetal or basipetal dehiscence. Seeds more or less vertically compressed in 5 or 6 rows. Embryo small, in abundant endosperm.

About 450 species, mainly throughout the tropics and subtropics, especially in Brazil and Hispaniola; only a few species in the temperate regions.

Key to the species:

1. Leaves palmately 3-lobed *A. trilobata*
Leaves not palmately lobed 2
2. Leaves broadly to narrowly triangular, deeply cordate-sagittate at the base; perianth-limb fimbriate and provided with purplish hairs or glandular hairs *A. rugosa*
Leaves broadly ovate to cordate-reniform; perianth-limb not fimbriate and without hairs or glandular hairs *A. littoralis*

***Aristolochia trilobata* L.**

LINNAEUS, Spec. Plant. 960. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 299. 1860 [1864]; DUSS, Fl. phan. Ant. franç. 315. 1897; URBAN, Symb. Ant. 4: 210. 1905; BOLDINGH, Fl. D.W. Ind. Isl. 1: 53. 1909; Fl. Ned. W. Ind. Eil. 171. 1913; URBAN, Symb. Ant. 8: 191. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 262. 1924; FAWCETT & RENDLE, Fl. Jamaica 3(1): 105, fig. 31 A, B. 1914; GOODING *et al.*, Fl. Barbados 131. 1965; ADAMS, Flowering plants of Jamaica 245. 1972; FOURNET, Fl. Guadeloupe & Martinique 513. 1978.

Glabrous, ill-smelling, strong vine; branches up to 5 m long. Leaves petiolate; petioles 1.5–7 cm long; blades deeply to barely palmately 3-lobed, cordate or truncate at the base, 3–15 × 6–16 cm, dark green and glabrous above, more or less densely puberulent and paler beneath, middle-lobe acuminate at the apex, the lateral lobes inequilateral rounded. Pseudostipels suborbicular, amplexicaul. Peduncles 4–8.5 cm long, slender, glabrous. Flowers geniculate; perianth greenish-yellow, more or less mottled; the inflated base 4–5 cm long, the upper tubular portion 5–7 cm long, annulus wanting, the limb smooth, heart-shaped, 2–3 cm wide, with a long tail two or three times longer than the entire tubular portion of the perianth. Gynostemium 6-lobed, 7 mm high, 6 mm broad. Anthers 6, equidistant. Fruit cylindrical, 9 cm long, 2.5 cm wide, with acropetal dehiscence, septifragal, hypanthium absent. Seeds numerous, flat, triangular, 7–9 mm long, 7–8 mm wide, and 1 mm thick.

Caribbean side of Central America from British Honduras to Panama, Bermuda, and throughout the Antilles.

In forests and woodlands.

ST. MARTIN: Mount Paradise, 300–400 m (Boldingh 3337, st. Sept.).

***Aristolochia littoralis* Parodi**

PARODI, Anal. Soc. Cient. Argent. 5: 155. 1878; FAWCETT & RENDLE, Fl. Jamaica 3(1): 106. 1914; ARNOLDO, Gekw. en nutt. planten Ned. Ant. 96. 1971; ADAMS, Flowering plants of Jamaica 246. 1972; — *Aristolochia elegans* MASTERS, Gard. Chron. n.s. 34: 301,

t. 61. 1885; URBAN, Symb. Ant. 8: 769. 1921; FOURNET, Fl. Guadeloupe & Martinique 514. 1978; — *Aristolochia odoratissima* auct. non L.; GRISEBACH, Fl. Br. W. Ind. Isl. 299. 1860 [1864]; BOLDINGH, Fl. D.W. Ind. Isl. 1: 53. 1909; Fl. Ned. W. Ind. Eil. 171. 1913; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 22. 1954.

Vigorous glaucous, scrambling or climbing vines; stems slender, up to 2 m or more long. Leaves petiolate; petioles 1.5–6 cm long; blade broadly ovate to cordate-reniform, obtuse or somewhat emarginate at the apex, cordate at the base, 6–10 × 7–9 cm, smooth, green above, greyish-green beneath, glaucous. Pseudostipels auriculate, aplexicaul, pale green. Flowers solitary, axillary, geniculate. Perianth greenish-yellow with reddish-purple and dark red blotches, the inflated part subcylindric, up to 3.5 cm long, the tube bent, c. 3 cm long, limb orbiculate, abruptly spreading from the tube, up to 10 × 10 cm, but usually smaller in our area. Gynostemium 6-lobed, 8 mm high, 5 mm broad; anthers 6, equidistant. Fruit cylindric, 4–5 cm long and 2.5 cm wide, dehiscence acropetal, septifragal, the hypanthium rectilinear from the ovary. Seeds numerous, flat, 6 mm long and 4 mm wide, 0.5 mm thick.

The species has been confused frequently with *Aristolochia odoratissima* L. The latter species, however, is easily recognized by the absence of pseudostipels, the acuminate leaf-apex, and the more or less hastate and often pandurate leaf.

Probably originally from South America; from Florida and Mexico to Guatemala and Nicaragua, Bermudas, Greater Antilles, St. Kitts, Barbuda, St. Martin, Saba, and Guadeloupe.

Vernacular name: duck (Windward Group).

SABA: The Bottom (Stoffers 3302, fl. May; Arnolde 537, fr. Aug.; 3268, fl. & fr. Dec.); road to Mary's Point (Arnolde 848, fr. Aug.); Windwardside (Boldingh 1926, st. July).

ST. MARTIN: St. Peters (Vliegen 10, fl. Nov.).

***Aristolochia rugosa* Lam.**

LAMARCK, Encycl. Meth. 1: 252. 1783; FOURNET, Fl. Guadeloupe & Martinique 514. 1978; — *Aristolochia barbata* JACQUIN, Ic. Plant. Rar. 3: t. 608. 1789; GRISEBACH, Fl. Br. W. Ind. Isl. 299. 1860 [1864].

Glabrescent lianas. Leaves petiolate; petioles slender, 5(–7) cm long; blade broadly to narrowly triangular, medially often slightly constricted, rounded at the apex, deeply cordate-sagittate at the base, 8–13 × 3–7 cm, dark-green and usually shiny above, greyish-green beneath. Pseudostipels wanting. Flowers solitary, axillary, rectilinear, the inflated base subovoid, 1 cm long, light-greenish; the tube trumpet-shaped, straight, 3 cm long, purplish outside, light green and with purplish hairs inside; the limb 1-lobed, broadly spatulate, 1.5–2 cm long and 1 cm wide, pale green, mottled with purple and with

subulate surficial glands or glandular hairs. Gynostemium coroniform, 6-lobed; anthers 6, equidistant. Fruits cylindric, 5 cm long, 1.5 cm wide, dehiscence neither acropetal nor basipetal but appearing median, septifragal. Seeds numerous, subrevolute, 5 mm long, 4 mm wide, 1 mm thick.

Leeward Islands.

ST. MARTIN: hill in Colombier (Arnoldo 1346, fl. March).