

GUIDE TO THE GENERA OF LIANAS AND CLIMBING PLANTS IN THE NEOTROPICS

OLEACEAE

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Jasminum multiflorum, photo by P. Acevedo

A nearly cosmopolitan family with 27 genera and about 764 species of shrubs, trees and lianas. Lianas are represented in the Neotropics by the introduced genus *Jasminum* with several species cultivated as garden plants; at least two species have become naturalized in areas of the Neotropics; in secondary forests and scrubs at low elevations.

Diagnostics: Twining lianas; leaves opposite, simple or compound (trifoliolate in our region), with entire margins and pinnate venation; exstipulate; corolla gamopetalous, white, ca. 2.5 cm long, fragrant.

General Characters

1. **STEMS.** Woody, cylindrical, hard to cut; bark fissured, corky (fig. 1b); cross section with ***regular*** vascular anatomy, xylem with confluent bands of paratracheal parenchyma, inconspicuous rays, and narrow vessels.
2. **EXUDATES.** Watery or not visible.

3. CLIMBING MECHANISMS. Although some climbing species of *Jasminum* are scramblers, the two species that are naturalized in the Neotropics are *twiners*, with short, opposite, lateral hanging branches.
4. LEAVES. Opposite, simple or compound, with pinnate venation and entire margins; petioles short to long, eglandular; stipules absent.
5. INFLORESCENCE. Cymes axillary or terminal on short lateral branches; bracts and bracteoles small, conspicuous.
6. PEDICELS. Commonly elongated.
7. FLOWERS. Fragrant, bisexual, actinomorphic, commonly ca. 2.5 cm long; calyx campanulate or funnel-shaped, with 4-9 short to elongated lobes; corolla gamopetalous, white, salverform, 4-9-lobed; stamens 2, adnate to the corolla tube, inserted; ovary superior, syncarpous, bi-carpellate, with a single, pendulous ovule per carpel.
8. FRUIT. A fleshy, black-purple berry, commonly with an aborted coccus; seed one per coccus.

GENERIC DESCRIPTION

JASMINUM Linnaeus, Sp. Pl. 7. 1753.

Erect or scandent shrubs or twining vines; stems cylindrical with regular anatomy; bark corky. Leaves opposite, simple or trifoliolate (in our species); petioles short to long, adaxially canaliculate; stipules absent. Flowers showy and fragrant, solitary, clustered in axillary or terminal cymes; calyx 4-9-lobed; corolla tube narrow, lobes 4-9, imbricate; stamens 2, filaments very short; ovary superior, bilobed, the style slender and elongate, commonly with 2 elongate stigma. Berry globose, 5-8 mm diam.

Distinctive features: Twining vines with opposite, exstipulate leaves (simple or compound); corolla tubular, fragrant, white.

Distribution: A pantropical genus of about 200 species, two of which are naturalized in the West Indies.

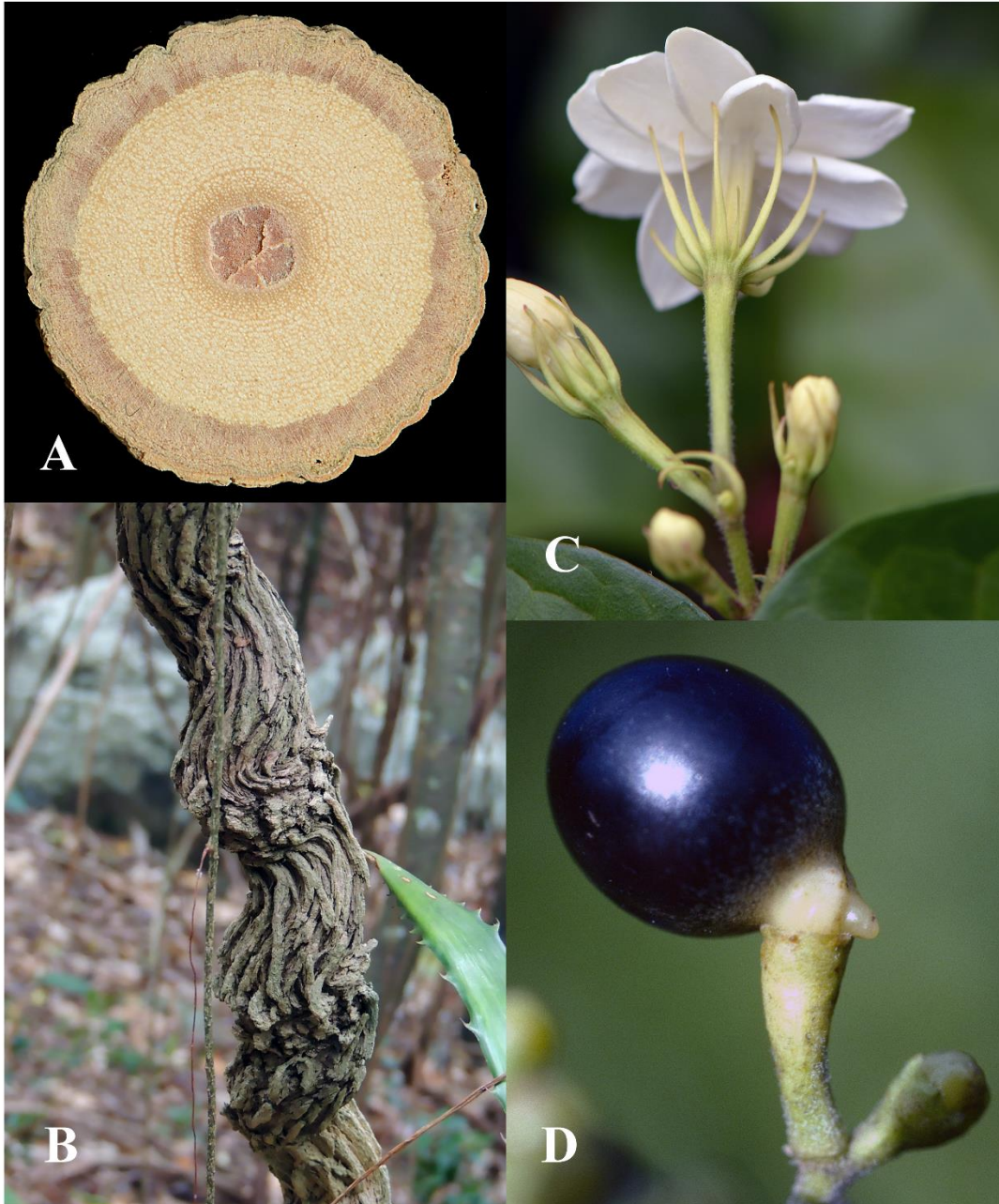


Figure 1. A. Stem cross section of *Jasminum fluminense*. B. Stems with fissured, corky bark of *Jasminum fluminense*. C. Distal portion of cyme, flower with linear sepals, corolla 9-lobed of *Jasminum sambac*. D. Berry with aborted coccus of *Jasminum fluminense*. Photos by P. Acevedo.



Figure 2. **A.** *Jasminum sambac* with scrambling habit. **B.** *Jasminum sp.* with twining stems. Photos by P. Acevedo.

RELEVANT LITERATURE

Acevedo-Rodríguez, P. 2005. Vines and climbing plants of Puerto Rico and the Virgin Islands.

Contrib. United States National Herbarium 51: 1-483.

Green, P and D. Miller. 2009. The genus *Jasminum* in cultivation. Royal Botanic Gardens,

Richmond, UK.

PICTURE VOUCHERS

Figure 1.

A. *Jasminum fluminense* Vell. (Acevedo 3839).

B. *Jasminum fluminense* Vell. (no voucher).

C. *Jasminum sambac* (L.) Soland. (no voucher).

D. *Jasminum fluminense* Vell. (Acevedo 3839).

Figure 2.

A. *Jasminum sambac* (L.) Soland. (no voucher).

B. *Jasminum* sp. (no voucher).