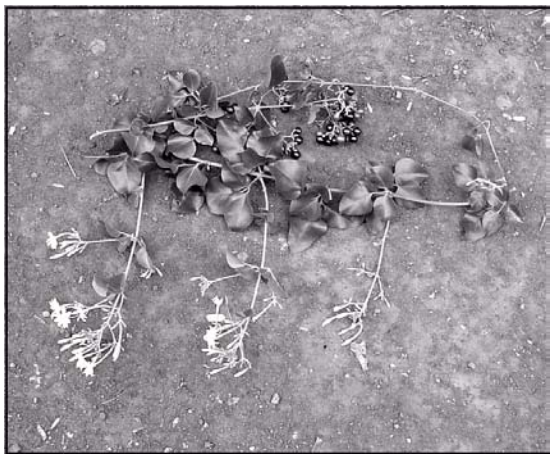
***Jasminum fluminense* Vell.** Brazilian jasmine
OLEACEAE

Synonyms: *Jasminum azoricum* auct., not L.
Jasminum bahiense DC.



General Description.—This plant became known as Brazilian jasmine because it was first described from Brazil. It is of African origin, having been introduced earlier by Portuguese settlers (Florida Exotic Plant Council 2001). The species is also known as jasmine, Gold Coast jasmine, jasmín oloroso, jasmín de canario, jasmín de trapo, jasmin à bouguet, and jasmin blanc (Acevedo-Rodríguez 1985, Howard 1989, Pacific Islands Ecosystems at Risk 2001). Brazilian jasmine is a woody evergreen scrambling and climbing shrub (vine) that may extend as much as 12 m along the ground or into the crowns of trees. The cylindrical stems, which are commonly about 1 cm in diameter but may grow to 5 cm, have gray, fine-furrowed bark and are flexible and strong. There are often multiple stems from a root crown. Foliage is borne only on the current year's growth. The opposite, compound leaves have three leaflets, the central one being larger than the lateral two. The inflorescences are cymes that arise from leaf axils. The tubular white flowers are fragrant, especially at night. The fruits, which form in groups of two, are globose, 8 mm in diameter, and dark purple or dark blue to almost black when ripe (Acevedo-Rodríguez 1985, Howard 1989, Liogier 1995). The fruits have a bitter, disagreeable flavor. Each fruit contains one spherical gray seed.

Range.—The African and Middle Eastern native range of Brazilian jasmine includes Mauritius, the Seychelles, Arabia, Ethiopia, southern Zimbabwe, Malawi, Mozambique, Angola, Nigeria, South Africa (Miami-Dade County 2001), the Azores, and the Canary Islands (Acevedo-Rodríguez 1985). The species has naturalized and escaped throughout much of the tropics and subtropics including southern Florida (Florida Exotic Plant Council 2001), Puerto Rico (Liogier 1995), Hawaii, and Guam (Pacific Island Ecosystems at Risk 2001).

Ecology.—Brazilian jasmine occurs in Puerto Rico in areas that receive from about 750 to 1800 mm of annual rainfall. It grows from near sea level to more than 600 m in elevation. Soils of all textures and parent material are colonized. However, it does not tolerate poorly drained soils. The species is restricted to areas with minimum temperatures above 1.7 °C (Florida Exotic Plant Council 2001). It will grow on the coast in areas that do not receive salt spray (Florida Exotic Plant Council 2001). Brazilian jasmine will grow in partial shade and climb upward to better light. It can survive but is not aggressive in the denser shade of unbroken forest canopies. Most plants grow in natural and artificial openings in the forest such as fencerows, river banks, roadsides, brushy pastures, and logged or burnt-over forest.

Reproduction.—Brazilian jasmine blooms throughout the year (Miami-Dade County 2001). Under favorable conditions, fruits are produced in abundance by open-grown plants. Shaded plants produce few or no fruits. A collection of fruits of Brazilian jasmine from Puerto Rico weighed an average of 0.413 $\pm$ 0.066 g each. Air-dried seeds from those fruits averaged 0.164 $\pm$ 0.002 g/seed or 6,000 seeds/kg. Sown on commercial potting mix, 100 percent of the seeds collected from this sample germinated between 18 and 52 days after sowing. Brazilian jasmine roots (layers) whenever stems come in contact with the ground. The seeds are dispersed by birds and mammals (Miami-Dade County 2001) and by the lateral extension of the stems. Seedlings are common in suitable habitat in Puerto Rico. Ornamental plants are propagated by means of cuttings (Florida Exotic Plant Council

2001).

Growth and Management.—The stems of established plants may extend as much as 2 or 3 m in 1 year. Seedlings grow much more slowly. Brazilian jasmine can engulf shrubs, small trees, and fences and can ascend power poles. Control of thickets and mats is often needed. Young plants can be pulled up by hand. Older plants should be cut at the ground level and the stumps treated with herbicide. Follow-up treatments will probably be required (Pacific Island Ecosystems at Risk 2001).

Benefits.—Brazilian jasmine has been widely planted as an ornamental, both in greenhouses and outdoors (Bailey 1941, Liogier 1995). Because of its invasive nature, the species should not be planted where it might escape to the wild (Nelson 1996). It is a food source for birds and mammals. The fruits are heavily consumed by raccoons in Florida (Miami-Dade County 2001). Goats browse the foliage.

References

Acevedo-Rodríguez, P. 1985. Los bejucos de Puerto Rico. Vol. 1. General Technical Report SO-58. U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, New Orleans, LA. 331 p.

Bailey, L.H. 1941. The standard cyclopedia of horticulture. The MacMillan Company, New York, NY. 3,639 p.

Florida Exotic Plant Council. 2001. *Jasminum fluminense* Vell. www.fleppc. org/pdf/Jasminum%20fluminense.pdf. 2 p.

Howard, R.A. 1989. Flora of the Lesser Antilles, Leeward and Windward Islands. Dicotyledoneae. Vol. 6. Arnold Arboretum, Harvard University, Jamaica Plain, MA. 658 p.

Liogier, H.A. 1995. Descriptive flora of Puerto Rico and adjacent islands. Vol. 4. Editorial de la Universidad de Puerto Rico, San Juan, PR. 617 p.

Miami-Dade County. 2001. Brazilian jasmine-*Jasminum fluminense*. www.co.miami-dade.fl.us/derm/environment/badplants/plant%20…/brazilian_jasmine.ht. 1 p.

Nelson, Gil. 1996. The shrubs and woody vines of Florida. Pineapple Press, Inc. Sarasota, FL. 391 p.

Pacific Island Ecosystems at Rick. 2001. Invasive plant species: *Jasminum fluminense* Vell., Oleaceae. www.hear.org/pier/jaflu.htm. 2 p.

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