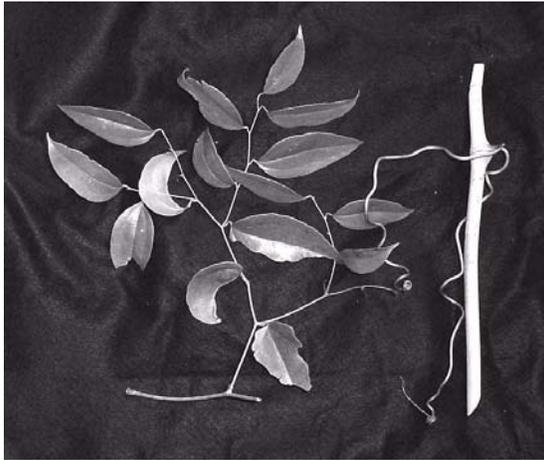


***Smilax domingensis* Willd.**  
SMILACACEAE

bejuco de membrillo

Synonyms: *Smilax caudata* Lundell  
*Smilax microscola* (B.L. Rob.) Killip & C.V. Morton



**General Description.**—Bejuco de membrillo, also called bejuco de sarzaparilla and zarzaparilla, is an evergreen woody vine or scrambling shrub that reaches 5 to 20 m of extension and 5 cm of basal diameter and supports itself by means of tendrils. The roots produce rhizomes with occasional tuber-like structures. The plant has a round, smooth stem, gray in older parts and greenish-yellow in younger portions. The stem wood does not have annual rings. Some specimens have small spines or prickles in their lower stems. Bejuco de membrillo has few branches until it reaches increased sunlight and forms a crown. The alternate leaves are oval to lanceolate, glabrous, and leathery. Leaves have short petioles and entire blades 8 to 12 cm long. The inflorescences are axillary cymes of minute, greenish, fragrant flowers. The fruits are 7 mm in diameter, globose, juicy, maturing to dark purple or black, and contain one seed each (Acevedo-Rodríguez 1985, Stevens and others 2001). The fruits taste slightly sour and slightly sweet, somewhat like apples. The seeds are shiny tan or light brown and flattened on one side (author's observation).

**Range.**—Bejuco de membrillo is native to the Greater Antilles, and Mexico to Panama (Acevedo-Rodríguez 1985, Stevens and others 2001). Many herbarium specimens also exist from Colombia, Ecuador, and Peru (Missouri Botanical Garden 2003). At least one major authority

(Natural Resources Conservation Service 2003) has bejuco de membrillo as conspecific under *S. smallii* Morong that ranges across the Southern United States. Time will tell whether this union is reliable or whether further taxonomic adjustments are necessary. It is not known to have been planted or naturalized elsewhere.

**Ecology.**—Bejuco de membrillo has been collected from near sea level to over 2,000 m elevation in Costa Rica (Missouri Botanical Garden 2002). It grows on most soils over nearly all types of parent material in areas that receive from about 1400 to over 3200 mm of precipitation. Bejuco de membrillo is moderately intolerant of shade and cannot sustain itself indefinitely under a closed forest canopy. It is most often found in natural openings of secondary and remnant forests. It may also grow in brushy pastures, fencerows, and roadsides.

**Reproduction.**—In Puerto Rico, bejuco de membrillo blooms during July and August and fruits in January and February (Acevedo-Rodríguez 1985). It is reported to flower and fruit throughout the year in Nicaragua (Stevens and others 2001). A collection of fresh fruits in Puerto Rico weighed an average of  $0.486 \pm 0.018$  g/fruit. Seeds cleaned from these fruits averaged  $0.105 \pm 0.002$  g/seed or 9,500 seeds/kg. Planted on commercial potting mix, 50 percent of the seeds germinated between 65 and 94 days after sowing (author's observation). The seeds are dispersed by vine extension and presumably by birds and animals. The plant suckers from rhizomes and sprouts heavily when cut.

**Growth and Management.**—The growth of established bejuco de membrillo sprouts is rapid, more than 3 m/year. Individual stems live several years, and plants, by suckering, live almost indefinitely. New plants can probably be established by planting the thickened rhizomes in tree-fall gaps and other forest openings. Creating the essential gaps could also promote the natural establishment of the species. The seeds must be collected by hand and can be cleaned by

maceration and wet sieving.

**Benefits.**—Bjuco de membrillo adds to biodiversity, helps to protect the soil, and furnishes food and cover for wildlife. Extracts of the plant are used as a tonic, a sudorific, and a purifier, and to treat skin conditions, rheumatism, and venereal disease (Liogier 1990)

## References

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