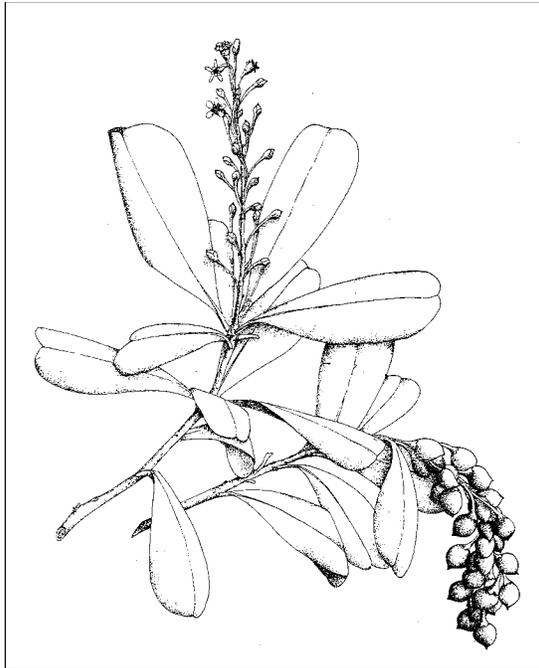


***Jacquinia arborea* Vahl**
THEOPHRASTACEAE

barbasco

Synonyms: *Jacquinia armillaris* Jacq.
Jacquinia barbasco Mez in Engl.
Chrysophyllum barbasco Loefl.



General Description.—Barbasco, also known as torchwood, azúcares, and bizcocho, is an evergreen shrub or small tree to 4.5 m in height and 15 cm in stem diameter. It has a frequently thickened rootstalk and one or a few stems. The bark is dark brown and finely fissured, and the inner bark is light brown and bitter. The wood is light brown or yellowish and hard. The crowns are compact and often wind-hedged in their sea-side habitat. The thick and stiff, dull yellow-green leaves are spatulate or obovate, alternate or in threes, and clustered at the ends of the twigs. Terminal racemes are several to many-flowered. The small, white or yellowish, five-lobbed flowers are fragrant. The fruit (berries) are globose 8 to 12 mm in diameter, orange-red, and contain one to four rounded, brown seeds (Howard 1989, Liogier 1995, Little and others 1974).

Range.—There has been confusion about the botanic identity of barbasco. Stahl (1992) concluded that three species should be recognized

from the *J. armillaris* group: *J. keyensis* Mez from the Northern West Indies (Florida and the Bahamas), *J. arborea* in the Central Caribbean, and *J. armillaris* Jacq. in the Lesser Antilles, northern South America, and eastern Brazil. Stearn (1992) gives the range of barbasco as the Cayman Islands, Jamaica, Hispaniola, Puerto Rico, the Virgin Islands, the Lesser Antilles, Trinidad, and Curaçao. He has *J. arborea* and *J. armillaris* coexisting in the Lesser Antilles. The Missouri Botanical Garden Herbarium lists specimens for Jamaica, Puerto Rico, the Virgin Islands, Quintana Roo, Mexico, and Honduras (Missouri Botanical Garden 2002). Barbasco is reported to have naturalized on Key Largo, Florida (Nelson 1996).

Ecology.—Barbasco is relatively common along undisturbed coasts. Because the species is intolerant of shade and not very competitive, it usually grows on rocks and rocky headlands, exposed ridges and slopes, and dry coastal forests. In Puerto Rico, barbasco grows in areas that receive from 750 to 1700 mm of annual precipitation at elevations from near sea level to 100 m. It is tolerant of heavy salt spray and moderately salty soils. Barbasco grows on well-drained, mildly acid to mildly alkaline soils of all textures derived from both sedimentary and igneous rocks. It is frequently seen growing out of cracks in limestone rocks. The species appears to have no major insect or disease problems.

Reproduction.—Barbasco flowers from winter to summer and matures fruits from spring to fall (Little and others 1974). Fruits collected in Puerto Rico averaged 0.254 ± 0.005 g/fruit. Air-dried seeds cleaned from those fruits averaged 0.0363 ± 0.0007 g/seed or 27,500 seeds/kg. Sown without any pre-treatment in commercial potting mix, 100 percent of the seeds germinated between 40 and 60 days of sowing. Seeds are easily collected by hand and can be cleaned by maceration and wet sieving. The seeds are probably dispersed by birds. Seedlings are not common.

Growth and Management.—Growth of barbasco seedlings in the nursery is very slow. A group of seedlings averaged only 6.2 cm 1 year after pricking into containers. However, survival was relatively good (82 percent). Growth of native-grown plants of all ages is also believed to be very slow. They seem to be long-lived. Probably the best strategy for management of native stands is strict protection from fire, harvesting, and development.

Benefits.—Barbasco helps hold the soil in topography where there is little soil to lose and contributes significantly to the aesthetics of island coastlines. The fruits were once used to poison or stupefy fish and because of that are suspected to be poisonous to humans (Little and others 1974). The sister species *J. keyensis* is used as an ornamental (Nelson 1996), and probably barbasco has been used as well. It is a pretty and well-shaped plant, suited for borders and low backgrounds.

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