

Bouyeria virgata (Sw.) G. Don
BORAGINACEAE

roble de guayo

Synonyms: *Ehretia virgata* Sw.



General Description.—Roble de guayo, also known as palo de vaca, hoja menuda, guazumilla, raspalengua, and cafecillo, is an evergreen shrub or small tree sometimes reaching 9 m in height and 15 cm in stem diameter at breast height. It is somewhat branchy and may have single or multiple stems emerging from the ground. The stem bark is gray and smoothish to slightly fissured. The wood is light brown, hard, heavy, and relatively brittle. Roble de guayo is deeply and solidly rooted with a tap and lateral root system of brown, somewhat stiff roots. Twigs are slender, hairless to densely hairy, green when young, becoming gray. The coriaceous, shiny, green leaves are alternate but may be crowded near twig ends. Blades are elliptic, oblong, or obovate, 1.5 to 7 cm long by 0.7 to 2.5 cm broad, rounded to slightly notched at the apex, and have a short petiole. The terminal inflorescence is a corymb or a cyme with two to 15 tubular, white flowers with five corolla lobes. Fruits are orange or red-orange, subglobose, 5 to 8 mm in diameter, often three-lobed, drupes with persistent calyx and style. Each fruit contains four or fewer light brown, hard nutlets. The nutlets are a quarter sphere with the outer surface deeply grooved (author's

observations, Liogier 1995, Little and others 1974).

Range.—Roble de guayo is native to Cuba, Hispaniola, and Puerto Rico, including the Island of Vieques (Little and others 1974). It is not known to have been planted or naturalized elsewhere.

Ecology.—Roble de guayo grows in areas that receive about 700 to 2000 mm of mean annual precipitation. Elevations of habitat in Puerto Rico range from 30 to 300 m (Little and others 1974). It colonizes well- to excessively well-drained soils with a wide range of textures and pH's from about 5.5 to 8.0. Most of the hillside, ridge, and hilltop soils are shallow and rocky. In Puerto Rico, roble de guayo is locally common in the moist and dry limestone hills and in dry foot hills of igneous and metamorphic (including ultramafic) rocks (Breckon and García 2001, Little and others 1974). The species is an important component of the cactus scrub vegetation type in Cuba (World Wildlife Fund 2001). It is moderately intolerant of shade, growing in the understory of low basal area forests but needs overhead sun to produce good fruit and seed crops. The species survives best in harsh environments where competition is minimal.

Reproduction.—Roble de guayo flowers and fruits throughout the year (Little and others 1974). Production of fruits and seeds is moderate. Two collections of fresh fruits from Puerto Rico weighed an average of 0.453 ± 0.093 g/fruit (Francis and Rodríguez 1993) and 0.423 ± 0.012 g/fruit. Air-dried seeds separated from the respective groups of fruits averaged 43,500 seeds/kg and 51,500 seeds/kg. Sown without pretreatment, the first sample of seed failed to germinate and the second gave only 2 percent germination (author's observation). Germination is epigeal. The seeds are undoubtedly dispersed by birds that eat the fruits of this as well as other species of the genus. Seedlings are relatively common.

Growth and Management.—Both seedlings and adult plants grow slowly. Apparently, roble de guayo lives for several decades. No management experience has been published. The species is not

weedy in agricultural land or forest plantations and will rarely need control.

Benefits.—Roble de guayo helps protect the soil and furnishes food and cover for wildlife. The stems are too small for use as lumber but should make excellent fuel. The species would probably be a good ornamental for landscaping xeric gardens.

References

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