***Eugenia pseudopsidium* Jacq.** wild guava
MYRTACEAE

Synonyms: *Eugenia megalocarpa* Urban
Eugenia portoricensis DC.
Eugenia thomasiana Berg
Myrtus willdenovii Spreng.
Stenocalyx portoricensis Berg

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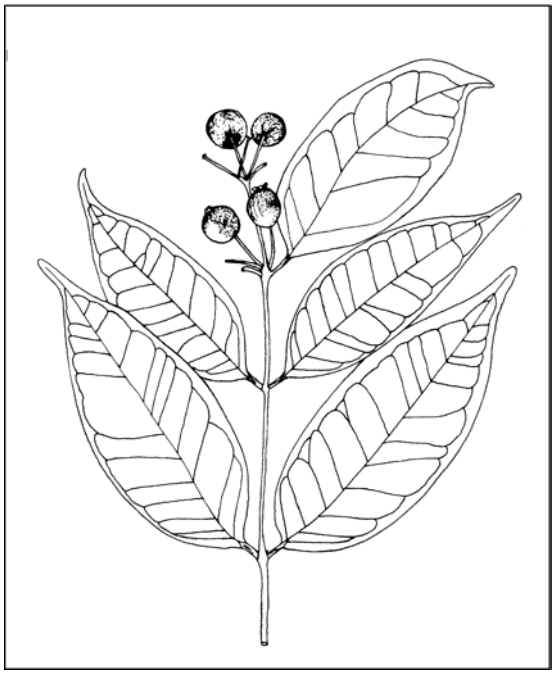

General Description.—Wild guava, which is also known as bastard guava, Christmas cherry, guayaba silvestre, quiebrahacha, goyavier de montague, bois plié, and goyavier bâtard, is a shrub or a small tree reaching a maximum of 20 m in height and 30 cm in trunk diameter (Howard 1989, Liogier 1994, Little and others 1974). Mature plants are usually 3 to 5 m in height and 4 to 8 cm in stem diameter. Wild guava has a tough, woody root system with tap and lateral roots. The stems are light gray, slightly fissured, and scaly. The wood is light to reddish brown, hard and very heavy (specific gravity = 1.3). Twigs are green, turning to brown (Little and others 1974). The crowns branch to the third order and branches tend to be slender. The opposite leaves have short petioles, are generally elliptic, rounded or short pointed at the base and long pointed at the apex. They are dark green above and light green beneath. Small white flowers arise in the leaf axils, one to three per axil. The globose fruits retain the calyx of the flower. They are orange, turning to bright red, and astringent with little flavor. Each fruit contains one rounded seed.

Range.—The native range of wild guava includes Hispaniola, Puerto Rico, the Virgin Islands, Guadalupe, Dominica, Martinique, and St. Lucia. The same plant or a very similar one also occurs in Venezuela, the Guyanas, and Amapá, Brazil (Howard 1989). That it is wild guava is supported by its listing in the Smithsonian (2001) checklist of plants for Guyana.

Ecology.—Wild guava grows inland a few meters above sea level to elevations of 670 m in Puerto Rico (Little and others 1974). It occurs in areas that receive from about 1400 to 2200 mm of annual precipitation. Medium- to heavy-textured soils derived from sedimentary, igneous, and metamorphic (including ultramafic) rocks are colonized. It does not appear sensitive to topographic position but rarely if ever grows on excessively or very poorly drained soils. Wild guava is shade tolerant and normally is confined to the understories of remnant old growth and advanced secondary forests.

Reproduction.—Wild guava flowers and fruits irregularly throughout the year (Little and others 1974). Understory plants produce fruits in small numbers; plants receiving increased sunlight in gaps or thinned canopies produce several times more fruits. Wild guava fruits collected in Puerto Rico weighed an average of 1.284 $\pm$ 0.043 g. Seeds extracted from these fruits weighed an average of 0.565 $\pm$ 0.010 g (air dry) or 1,800 seeds/kg. Eighty-one percent of the seeds from this collection germinated between 59 and 143 days after sowing in commercial potting mix. When the new seedlings are damaged above ground by fungi or insects, they sprout from the ground level,

usually with more than one shoot (author's observation). Birds disperse the seeds. Seedlings and saplings are well-scattered and relatively common. Wild guava sprouts readily after cutting or damage.

Growth and Management.—The growth rate of wild guava appears to be relatively good for an understory shrub. A 2.5-m tall sapling, 2.5 cm d.b.h., under partial shade in Puerto Rico, had five growth rings in its trunk near the ground. Wild guava germinates, survives, and transplants well in the nursery, but growth is somewhat slower than most commercial nursery plants. Unfortunately, no plantation or ornamental use has been reported.

Benefits.—Wild guava is used to a limited extent for firewood and fence posts. With its dark green leaves, bright red fruits, and clean form, the species has a pleasing appearance and probably would make a fine ornamental, especially in shady locations. It provides food and cover for wildlife and contributes to the scenic beauty and biodiversity of the forests where it grows.

References

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