

LOCAL NAMES

English (Brazil eugenia, Brazil cherry); French (jambosier du Bresil, cerisier du Brésil, bois de nèfle); Portuguese (grumixameira, grumixama); Spanish (grumichama)

BOTANIC DESCRIPTION

Eugenia dombeyi is a small, evergreen tree, 7-10(-20) m tall; crown narrow, compact; trunk short with grey bark, branches suberect.

Leaves opposite, ovate to obovate-elliptic, 10-12 cm x 5-6 cm, leathery, glossy, minutely pitted on both surfaces, margin recurved; petiole 3-4 mm long; leaves persist for 2 years, buds large with velvety scales, young shoots rosy.

Flowers solitary, axillary, 2.5 cm wide, white, slightly fragrant; pedicle 3 cm; sepals 4, 8 mm long, green; petals 4, 15 mm long, white; stamens about 100, white.

Fruit a globose to oblate berry, up to 3-5 cm in diameter, with persistent sepals at apex, hanging on long, slender pedicel, bright-red, dark purple to nearly black, or white, juicy, soft, sweet.

Seeds one to several, globose to angular, about 1 cm in diameter, hard, light brown to grey-green.

Three varieties have been distinguished, based on little more than fruit colour: var. *iocarpus* Berg (= var. *dombeyi*), fruits deep violet; var. *erythrocarpus* Berg, fruit red; var. *leucocarpus* Berg, fruits white, tallest trees, less common.

BIOLOGY

In the subtropics the trees flower synchronously in spring. The fruit ripens within one month and the harvest is over in a matter of days. In the tropics flowering and fruiting extend over several months; in Rio de Janeiro the trees flower from October to February.



Habit at Enchanting Floral Gardens, Maui, Hawaii. (Forest & Kim Starr (USGS))

ECOLOGY

E. dombeyi requires a humid, tropical to subtropical climate. Mature trees tolerate frost to -3 deg. C for short periods, but young shoots are affected.

BIOPHYSICAL LIMITS

Altitude: 0-90 m

Soil types: Deep sandy loams with good fertility, but acid rather than calcareous, are preferred.

DOCUMENTED SPECIES DISTRIBUTION

Native: Brazil

Exotic: Cuba, Honduras, Mauritius, Paraguay, Puerto Rico, United States of America



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS

Food: The fruit of *E. dombeyi* is appreciated more than that of several other, more widely grown *Eugenia* species. The fruit has a thin and delicate skin, soft and melting pulp and a mild subacid taste. The taste largely resides in the skin. It is eaten fresh when ripe, or made into jams, pies or preserves when half ripe. However, the persistent sepals ('rabbit ears') and the modest flesh to seed ratio limit the appeal of the fruit. Per 100 g edible portion, the fruit contains: water 85 g, protein 0.6 g, fat 0.3 g, carbohydrates 13.4 g, fibre 0.6 g and ash 0.4 g.

Tannin or dyestuff: The bark and leaves contain large amounts of tannins, reportedly among highest found in plants (34% in the bark).

Essential oil: The bark and leaves contain 1.5% of essential oil.

Medicine: An infusion of 10 g of leaves or bark in 300 ml water is used as an aromatic, astringent diuretic and as a treatment for rheumatism in Brazil.

SERVICES

Ornamental: Its dark, glossy leaves, reddish young shoots and shapely canopy make the tree an attractive ornamental.

TREE MANAGEMENT

Little or no pruning is required until the tree ages, as the canopy remains compact. On light soils applications of organic matter as manure or mulch are recommended. Light shade and protection from strong winds are preferred.

GERMPLASM MANAGEMENT

Seeds lose viability in about 6 weeks.

PESTS AND DISEASES

Diseases: Limb dieback caused by an unknown pathogen has been reported from Florida.

Pests: The Mediterranean fruit fly can be a serious pest in Hawaii.

FURTHER READNG

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SUGGESTED CITATION

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