

Selected Eugenia Species¹

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DISTRIBUTION

The species listed in Table 1 are widely distributed throughout the tropics and subtropics. The Surinam cherry is the most extensively grown while the cherry of the Rio Grande is the least commonly grown of this group. They may all be grown in southern Florida and in protected locations in central Florida. The cherry of the Rio Grande is the most cold tolerant of these species, closely followed by the Surinam cherry, and these can be grown further north.

DESCRIPTIONS

Cherry of the Rio Grande. Small evergreen tree or large shrub which commonly grows to about 15 feet. However, it may grow as high as 30 feet under favorable conditions. It has an upright, compact habit of growth and is very attractive, especially when in bloom. The smooth, glossy, dark green leaves are narrow elliptic, 2 1/2 to 3 inches long and are borne on short, grooved petioles. The white flowers are solitary and are borne in the axils of opposite bracts from March to May. The fruit is oblong to obovate, 3/4 to 1 inch long, with a persistent calyx at the apex. The

skin is thin and dark red or purple in color. The juicy flesh has a good, subacid flavor. It contains none or 1 to 2 white, rounded seeds, about 1/4 inch in diameter. The fruit matures in April to June, about 3 weeks after the flowers open. Fruiting may occur in the third year after planting under favorable conditions but it often takes longer.

Grumichama. Large evergreen shrub or small tree which may grow to a maximum height of 20 to 25 feet. It is very attractive in appearance with an upright, compact growth habit. The leathery leaves are oval to obovate, about 3 to 4 inches long by 2 inches wide, reddish when young, becoming glossy, deep green. The showy white flowers, up to 1 inch across, are borne in the leaf axils and are produced in large numbers on flushes of new growth in early spring.

The fruit is globose to oblate, 1/2 to 1 inch in diameter, has persistent green sepals at the apex and is borne on long, slender stems, often in clusters. The thin, delicate skin is scarlet to purplish black. The soft, melting flesh is sweet with an excellent flavor. The seeds are round, hemispherical, or angular,

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depending on the number present. The fruit matures in April to May, about a month after flowering. It takes 2 to 3 years to bear fruit from seed.

Pitomba. Small, spreading evergreen tree or shrub which may attain a height of 25 to 30 feet. The tree has a compact growth habit with dense foliage and is quite attractive, especially when in fruit. The leathery leaves are elliptical lanceolate, about 3 inches long and are a glossy deep green color on the upper surface and light green below. The showy, white flowers, up to 1 inch across, appear from April to June.

The fruit is broadly obovoid, about an inch long, with the apex crowned by 4 or 5 green sepals, about 1/2 inch long. The thin skin is a bright orange yellow. The soft, melting, juicy flesh is orange in color and aromatic, sweet to subacid in flavor. The fruit contains 1 to several seeds attached to one side of the seed cavity. The fruit matures from May to June and sometimes there is a light crop in the fall. The pitomba usually begins fruiting in about the fourth year after planting.

Surinam Cherry. Large evergreen shrub or small tree, usually less than 10 feet in height but it can grow to 20 feet. It has a compact growth habit with thin, wiry branchlets. The leaves are ovate, 1 to 2 inches long, highly aromatic and wine color when young, becoming a glossy, deep green. The small, creamy white flowers, about 1/2 inch across are borne in the leaf axils, in spring and summer.

The fruit is oblate, prominently 8 ribbed, 3/4 to 1 1/2 inches in diameter, and is borne singly or in clusters, pendant on slender stems. The skin is very thin, shiny and varies in color from light red to almost black. The soft, juicy flesh is orangish, varying somewhat with the selection. The flavor is aromatic, sweet and pleasant in the better selections but poor quality fruits have an unpleasant, resinous flavor. The fruits contain one round seed or two hemispherical, comparatively large seeds. The main crop matures in the spring but there are some fruit most of the year. Occasionally, there is a fairly large crop in the late

fall. Only a few weeks elapse between flowering and fruit set. Fruiting of the Surinam cherry usually begins 2 or 3 years after planting.

CULTIVARS

These species are usually propagated as seedlings and there is much variation in fruit quality among them. There are two forms of Surinam cherry--cerise and black. Grafting is seldom done and no named cultivars are readily available.

PROPAGATION

These species are propagated almost entirely by seed which germinates in less than a month. Desirable selections may be reproduced by grafting or by cuttings. Veneer, cleft and side grafts can be used, although this may be difficult with cherry of the Rio Grande.

CLIMATE AND SOILS

These species are well adapted to the growing conditions of the warmer areas of Florida. They all may be safely grown in most locations in southern Florida, particularly near the coasts and in protected locations of central Florida. The cherry of the Rio Grande and the Surinam cherry are more cold tolerant than the other two and may be grown further north. The cherry of the Rio Grande has withstood temperatures of about 20°F for short periods with only twig damage, while the Surinam cherry has withstood temperatures as low as 22°F. Grumichana has fair cold tolerance, mature trees having withstood temperatures of 26°F without injury in Florida. The pitomba is fairly hardy with a cold tolerance comparable to gumichama, freezing at about 27°F. Small trees are less tolerant and should be protected from temperatures below 30°F.

The trees may be successfully grown in most soil types, provided they are well drained. They require a good moisture supply at all times, especially the grumichama and the pitomba which have shallow root systems. All do best in slightly acid soils which are low in salts. The grumichama, especially, and also the pitomba are poorly adapted to alkaline soils,

suffering from mineral deficiencies which result in chlorosis. All have good wind resistance, especially the cherry of the Rio Grande and the Surinam cherry, and do best in sunny locations.

CULTURAL PRACTICES

These species have very similar cultural requirements. They are all easy to grow, requiring relatively little maintenance for the growth of healthy, productive plants. Fruit size and quality depends to a large extent on proper nourishment and an adequate water supply at the time of fruit development. When first planted, they need a complete fertilizer in a 1-1-1 ratio, such as 6-6-6, that also contains magnesium. Start with no more than 1/4 pound at monthly or bi-monthly intervals, increasing the rates commensurate with growth. Iron deficiency in calcareous soils is a problem with grumichama and to a lesser extent with pitomba, and this element should be applied as Sequestrene 138, injected or drenched into the soil when needed. Nutritional sprays to supply other minor elements should also be applied as needed. After the tree has matured, a fertilizer such as 8-3-9 with 5% MgO is more appropriate.

The plants should be supplied with adequate water at all times but especially during bloom and fruit development. The cherry of the Rio Grande and the Surinam cherry have fairly good drought tolerance, but the grumichama and the pitomba require special attention during long dry periods because of their shallow root systems. The cherry of the Rio Grande requires very little pruning to make an attractive tree and it is seldom pruned to make a hedge. The grumichama and pitomba are sometimes used in large hedges. Pruning them for this use should be done only during the summer since fruiting would otherwise be greatly reduced. The Surinam cherry can be severely pruned to maintain it as a hedge and it will still continue to flower and produce some fruit.

PESTS AND DISEASES

There are no serious pest or disease problems with these fruits other than the Caribbean fruit fly.

USES

These fruits may be eaten out of hand or be made into jellies, jams, juices, pies, sherbet, ice cream or wine. They are all attractive ornamentals, especially when in fruit, for use in the home landscape. All can be used for specimen trees or in screening hedges. The Surinam cherry is especially well adapted for training as a smaller hedge and it is widely used for this purpose. The Surinam cherry is readily available at many nurseries while the grumichama is occasionally found and the cherry of the Rio Grande and pitomba are usually not found in nurseries. All of these species make attractive and fruitful additions to the home garden and should be more widely used.

Table 1.

Table 1. Eugenia species.	
Common Name:	Scientific Name:
Cherry of the Rio Grande	<i>Eugenia aggregata</i> Kiaersk
Grumichama	<i>Eugenia dombeyi</i> Skeels
Pitomba	<i>Eugenia luschnathiana</i> Klotzch
Surinam Cherry, Pitanga	<i>Eugenia uniflora</i> L.
Family:	Myrtaceae
Origin:	All of the above species are native to Brazil.