# Ice Cream Bean - Guama
# Inga edulis


Origin/Distribution

Inga edulis is native to South America – Amazonian Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, Surinam and French Guiana.

The species has been introduced across most of tropical South America, Central America – Panama, Mexico and Costa Rica, northern Australia and Tanzania.

**Description**

The genus *Inga*, Leguminosae (Mimosoideae), is represented by approximately 180 species in the Brazilian Amazon, and of this number, there are but a handful of 4 to 5 species having any appreciable quality as edible, fresh fruit. Without question, first place goes to "ingá cipó" (*Inga edulis*), significantly improved through cultivation.

*Inga edulis* mature trees reach 30-40 m high and 60 cm diameter at breast height, usually branching from below 3 m. The branches form a broad, flat, moderately dense canopy. The bark is pale grey and smooth with pale elongated lenticels. The young twigs are angular in cross-section and covered with fine short hairs.

The edible fruit is very popular in South America, where it is commonly gathered from the wild and also often cultivated. The fruits are often sold in local markets.

Trees extensively used in Central and South America for shade for cacao, coffee, tea and vanilla, especially at lower altitudes, and for parks, avenues, and watershed preservation. The species is reported to have nitrogen fixing nodules.

It also has mycorrhizae in its roots which play an important role in enabling the tree to take up phosphorus even though phosphorus is in very short supply in acid soils.

**Leaves**

Leaves, once-pinnate, up to 24 cm long, with 4-6 pairs of opposite leaflets, minutely pubescent on both surfaces . The terminal pair of leaflets is larger than the basal pair and can be up to 18 cm long and 11 cm wide. Between each leaflet there is a nectary gland on the winged rachis. The seedlings have a characteristic greyish sheen on the upper leaf surface.

It is known that *Inga* species are in symbiosis with ants (eg. *Pheidoles* spp.), which get the nectar of the extrafloral nectaries. In exchange the ants will patrol over the Inga plant to protect it against herbivores. There are certain insects such as Riodinid caterpillars which excrete sugary honeydew from their tentacle nectaries. The ants will form a symbiosis with the caterpillars by letting them feed on the tree and in favour of getting sugary honeydew from them.

**Fruit**

The fruit is a cylindrical pod, with many furrows along its length, olive green, from 19-60 in. (50-100 cm) long, exceptionally to 3-5 ft (a meter and a half). The exocarp is woody, and does not open spontaneously, with oblong seeds up to 1.4 in. (3.5 cm) long, and made up of two thick, shiny black cotyledons, the membranous testa dressed in white pulp (aril) which is soft, slightly fibrous and sweet tasting.

The pulp surrounding the seeds in the seedpod is white, translucent and moist with a sweet, perfumed flavour. Much esteemed in Ecuador, some forms have a slight cinnamon flavour.

Fruit set requires that more than one genetically different tree be in the same vicinity. This is why solitary ornamental trees normally fail to set fruit.

**Food Uses**

Plants cultivated for the edible white pulp of the fruits, are eaten out of hand or used in flavoring various desserts. Ice Cream beans complement all the flavors typically paired with vanilla. The pulp may be combined with chocolate, coffee, cream, custard, almonds, allspice, cardamom, caramel, cinnamon, clove, ginger and fruits, especially pear. Colombian Indians prepare an alcoholic beverage from the aril. The beverage, called cachiri, is consumed at a festival of the same name.

The seeds can be boiled and ground into an edible flour.

In Mexico, inga seeds are roasted and sold to moviegoers much like popcorn.