

Brosimum alicastrum

Sw.

Moraceae

LOCAL NAMES

English (ramon tree, bread nut); Italian (capomo); Spanish (ramon, masico, capomo)

BOTANIC DESCRIPTION

Brosimum alicastrum trees grow to heights of 20-40 m; trunk may attain a diameter of 1-1.5 m; bark is thin and contains a white, sticky latex.

Leaves are simple, alternate, with pointed stipules, 4-15 cm long and 2-8 cm wide, ovate-lanceolate to ovate-elliptic, with a pointed apex, lustrous green above and glaucous beneath; petioles 2-10 mm long.

Flowers in heads with many male flowers; male flowers have a rudimentary perianth and 1 stamen; female flowers surrounded by male flowers.

Fruit a berry, 2-2.5 cm in diameter, with a thick, greenish-orange pericarp and an agreeable sweet flavour; seeds 1.5-2 cm in diameter, surrounded by a shiny seed coat.

BIOLOGY

It is monoecious. Its pollination mechanism is not precisely known but it is probably wind pollinated. Seed-eating birds disperse the seed.



Mature trees: Small back-yard (home-garden) stand near Valladolid, Yucatan, Mexico. Trees of *Brosimum*, known locally as 'Ramon', are protected and cultivated throughout the Yucatan Peninsula for its edible fruit and livestock fodder. (Colin Hughes)



Mature trees: Small back-yard (home-garden) stand near Valladolid, Yucatan, Mexico. The trees pictures are pollarded for fodder production. (Colin Hughes)



Fruit and foliage (Trade winds fruit)

ECOLOGY

Found in tropical rainforest, deciduous tropical forest, thorn scrub and hillside forests. Although indigenous to moist forest, it is extremely tolerant of drought.

BIOPHYSICAL LIMITS

Altitude: 0-1000 m, Mean annual temperature: 18-25 deg. C, Mean annual rainfall: 600-4000 mm

Soil type: Grows best on Lithosols.

DOCUMENTED SPECIES DISTRIBUTION

Native: Belize, Cuba, Dominican Republic, El Salvador, Guatemala, Jamaica, Mexico, Nicaragua, Puerto Rico

Exotic:



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: Humans eat the fruit's sweet pericarp and its chestnutlike seeds. The seeds taste somewhat like potato and are eaten raw, boiled or roasted. They are also reduced to a meal that is mixed with maize meal to make tortillas, or are baked with green plantain. The seeds are gathered by the Mayans of Central America for making bread when stocks of maize run low. The trees can be tapped and the free-flowing, milky latex mixed with chicle or drunk like cow's milk.

Fodder: *B. alicastrum* provides tender, agreeable forage for cattle; they consume it readily, appearing to enjoy the leaves and branch tips. It is eaten especially when grass is scarce during the dry season. Groves of large *B. alicastrum* trees are considered a source of livestock feed equal to that of the best pastures. The abundant fruit serves as pig feed.

Timber: *B. alicastrum* wood is white, dense, hard and fine grained. It is used in general construction, for staves, parquet flooring, crafts, tool handles and railway sleepers.

SERVICES

Shade or shelter: *B. alicastrum* provides good shade and reduces the impact of strong winds.

TREE MANAGEMENT

When the tree is grown for forage, the strata of branches should be formed when the saplings reach 3 m in height. Pruning is important to obtain forage, because large numbers of branchlets sprout and increase the quantity of fresh forage. If the tree is grown for wood there is little need for pruning to shape the stem, as it grows straight.

GERMPLASM MANAGEMENT

Seed storage behaviour is recalcitrant. The seeds can be stored in open air for 3 months. Seed weight is 300-350 seeds/kg.

PESTS AND DISEASES

In *B. alicastrum*'s native range mammals such as deer browse the seedlings.

FURTHER READNG

Burns RM, Mosquera MS and Whitmone JL (eds.). 1998. Useful trees of the tropical region of North America. North American Forestry Commission Publication Number 3. North American Forestry Commission.

National Academy of Sciences. 1975. Underexploited tropical plants with promising economic value. National Academy of Sciences, Washington, D.C.; USA

SUGGESTED CITATION

Orwa C, A Mutua, Kindt R , Jamnadass R, S Anthony. 2009 Agroforestry Database:a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>)