



TREE SPECIES (SCIENTIFIC NAME)

Guazuma ulmifolia

PERU COMMON NAME

Bolaina negra

TREE FAMILY

MALVACEAE

AVERAGE LEAF SIZE (CM)

7.76cm × 3.86cm

Length Width

ELEVATIONAL RANGE (M)

350–1000m

TREE HEIGHT

MEDIUM (20–35M)

DISTRIBUTION

**NATIVE TO PERU**

NATIVE TO

Region: Americas**Latin America:** Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Venezuela

COFFEE AGROFORESTRY INFORMATION

COFFEE SYSTEM

**ARABICA**

COFFEE IMPACT

**BENEFICIAL TO COFFEE**

CULTIVATION

**PLANTED****NATURAL**

PREVALENCE

**COMMON IN COFFEE AGROFORESTRY**

TREE MANAGEMENT

Seed dispersed by birds, mammals, and bats including cattle and possibly horses. The plant can also be established with cuttings and by seeds. Seeds require scarification with boiling water before planting. Trees of this species partially drop their leaves during the dry season. Each tree produces many fruits and each has at least 20 seeds. Once ripe they should be collected soon because the small seeds (more than 220 thousand per kg) are attacked by insects. The fruits must be broken and the seeds separated. Soak the seeds in hot water for 2 minutes and then wash off under running water. Germination occurs in 7 - 14 days at a rate of 60 - 80%. Seedlings are ready for planting outside when they reach a height of 30-40 cm (about 15 weeks). Seeds stored at 20°C remain viable for up to 18 months. Growth in nursery is very fast. Seedlings can reach 25-30 cm in height in a time of 3 months. They require full light during their initial development. It has a low incidence of pests.

TREE BENEFITS AND USES

FARMER USES

**Food, Livestock Forage, Firewood, Lumber, Medicinal, Ornamental, Product**

It is light and soft and used to make boxes and packaging, manufacture particleboard, interiors of houses, in rural construction, and for fence posts. It is recommended for the manufacture of sheet metal and carpentry in general, poles, furniture, parts of mills, fine cabinetry, barrels, floors, doors and windows. It is used to manufacture soaps. The plant has a long history of herbal use, and is widely used in modern herbal medicine in South America and is often collected from the wild for this purpose. The plant is antibacterial, anti-inflammatory, antifungal, antiviral, and is used as an astringent and blood purifier and to treat heart and digestive problems. The bark is a rich source of tannins and antioxidant chemicals and helps promote hair growth and relieve baldness, has antitumor and anticancer effects (including against melanoma), lowers blood pressure, and protects the kidneys. The seeds are edible, fresh or cooked, and the fruits are eaten raw or cooked. Raw fruits can be crushed in water to make a drink or used to flavor other foods. The leaves and fruits are eaten by livestock.

FARM SERVICES

**Coffee Shade, Soil Improvement, Reforestation**

Coffee Shade: provides medium to dense shade

Reforestation: used for productive reforestation in degraded areas of forest and in dry and arid areas

BIODIVERSITY BENEFITS

**YES**

It retains insects in leaves, flowers and bark that are food for groups of insectivorous birds. It is an important source of honey.

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