

Triplaris melaenodendron (Bertol.) Standl. & Steyerm.

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POLYGONACEAE (BUCKWHEAT FAMILY)

Triplaris americana L., *Triplaris auriculata*, *Triplaris macombii*, *Triplaris macombii* var. *rufescens*,
Velasquezia melaenodendron

Canilla de mula, flor de arco, flor de garrobo, formigueira, gallito, guayabito, guayabo, holy tree, hormigo, hormiguero, long John, Marv's tree, mierenhout, mulato, palo mulato, pálo santo, santa Rosa, tabaco, tabaco de monte, tabacon, tangarana, vara santa, volador (Chudnoff 1984, Standley and others 1975, Witsberger and others 1982)

Most of the 25 species in this genus grow in South America. *Triplaris melaenodendron* ranges from southern Mexico, through Guatemala, El Salvador, Nicaragua, and Costa Rica, to Panama (Chudnoff 1984, Standley and others 1946). It grows abundantly on the Pacific Coast, sometimes lining the roads, and in the Department of Santa Rosa, Guatemala.

Triplaris melaenodendron is a small to medium-sized tree of about 6 to 12 m in height (sometimes reaching 16 m) with a rounded crown. The branches, which are primarily hollow and septate, are inhabited by savage ants (Gentry 1993). *Triplaris melaenodendron* has large alternate leaves, deciduous ocrea, and short petioles. The limb is elliptic to oval-elliptic, about 17 to 35 cm long and 8 to 16 cm wide, pubescent to short-pilose on the underside and glabrous on the upperside. Because the pale gray bark is coarsely mottled, one common name is mulato. The tree grows in thickets or forests at low elevations. It grows well between sea level and 250 m.

The yellowish wood is moderately light and soft but firm, with a straight grain and medium texture. The sapwood is not distinct from the heartwood, which is pale gray brown to pinkish brown and without distinctive odor or taste. The moisture content is about 12 percent. The wood is easy to work and takes a good polish, but it is not resistant to attack by decay fungi and is vulnerable to dry-wood termites. Tests in Venezuela show this wood is difficult to treat with preservatives. The wood is used for furniture components, boxes, crates, fiberboard, particleboard, and interior construction (Aguilar 1966, Chudnoff 1984, Morales 1986, Witsberger and others 1982).

The dioecious flowers appear December through January. Male flowers form lateral and terminal spikes, 2 to 14 cm long, with numerous small greenish flowers, consisting of a pilose calyx 4 mm long with six lobes and nine stamens. Female flowers form lateral and terminal racemes in large panicles. The red or rose-colored flowers consist of a calyx tube about 1.5 cm long; three outer lobulated segments, up to 3 cm long; three free, small, and narrow inner segments; and a tri-angled superior ovary that contains only one ovule. Flowers lack petals (Heywood 1993). Fruits appear from February through July (Witsberger and others 1982). The fruit is a tri-angled nut surrounded by a persistent calyx about 4 cm long (Maas and others 1988). The color of the fruit is reddish brown; the calyx tube is enlarged, and the three lobes act as wings for dispersion by wind.

Triplaris melaenodendron fruits [nuts, achenes (Laurence 1951), or samaras (Gentry 1993)] are very light, and 50 seeds (nuts) weigh about 3.2 g. Because one raceme holds about 50 fruits, one tree may bear several hundred.

Because statistics on germination are limited, researchers at the Instituto de Investigaciones, Universidad del Valle de Guatemala initiated a preliminary study. This study investigates possible methods of inducing germination and subsequent germination rates. A summary of the methods and initial results follows. In three experiments that used no germination pretreatments, temperatures were maintained at 20 to 21 °C. In the first experiment, seeds (nuts) were planted 1 cm deep in rotted, organic material. One seed germinated in 10 days, and cotyledons appeared 3 days later. In the second experiment, 10

seeds were placed on humid filter paper in a petri dish. Nine seeds germinated within 17 days, which represents a 90 percent germination rate. In the third experiment, 10 seeds were planted in compact soil; 5 seeds germinated and cotyledons appeared within 18 days.

