Miconia prasina (Sw.) DC. MELASTOMATACEAE

Synonyms: *Melastoma prasina* Sw.

Miconia collina DC.

Acinodendrom prasinum (Sw.) Krasser in Engl. & Prantl.

Melastoma parviflora Aublet *Melastoma pendulifolia* Rich.

Miconia parviflora (Aublet) Cogn. in A. DC.



General Description.—Camasey blanco, also known as sardine, granadillo bobo, cenizoso, mullaca colorado, waraia, santo selele bélétére, jacatirão, and mondururu preto, is a shrub or small tree usually 2 to 6 m in height. It is an evergreen with single or multiple stems arising at or near the ground level. Camasey blanco tends to be branchy. The sapwood is light brown and the heartwood is gravish brown. It is a hard and heavy wood with a specific gravity of 0.7. The bark is smooth, gray, and thin. The plant is supported by a lateral root system with sinkers and a moderate amount of fine roots. The leaves frequently have winged petioles and leaf blades that are elliptic to lanciolate, 10 to 30 cm long, entire or with wavy-toothed edges, three- to five-nerved, and pointed at both ends. The terminal panicles contain many tiny whitish flowers that develop into berries 3 to 8 mm in diameter and blue to black at maturity. The fruits are juicy, slightly sour but mostly tasteless. Each fruit contains many minute brown seeds (Croat 1978, Howard 1989, Liogier 1995, Little and Wadsworth 1964, Stevens and others 2001).

Range.—Camasey blanco is native to the Greater and Lesser Antilles, Trinidad, Mexico, Central America, South America to Bolivia, Brazil, and Paraguay (Howard 1989, Killeen and others 1993, Liogier 1995, Little and Wadsworth 1964). The species is not known to have been planted or naturalized elsewhere.

Ecology.—Camasey blanco grows in secondary and remnant forests, brushy pastures, fencerows, creek-bottom galleries, coastal thickets, and disturbed areas. The sites where it grows are moist or wet and sometimes swampy, receiving from 1600 to 3500 mm of annual precipitation. The species occupies elevations from near sea level to 650 m in Costa Rica (Missouri Botanical Garden 2002) and up to 1,500 m in Bolivia (Killeen and others 1993). Camasey blanco grows in loamy and clayey soils derived from both sedimentary and igneous rocks. Most of these soils have anaerobic subsoils. Leaves collected under a Pinus caribaea Morelet plantation had 2.34 percent N, 0.13 percent P, 0.90 percent K, and 10.29 percent ash; were higher in N, P, and K, but lower in ash than these leaves of plants from nearby natural forest of similar age (Lugo 1992). Camasey blanco is a shade intolerant pioneer species. It was the second most abundant species 7 years following destruction of forests in Nicaragua by Hurricane Juana (Granzow-de la Cerdal and others 2002). In Puerto Rico, the species appears to invade active pastures, taking advantage of disturbance by cattle and persists as small individuals until the pastures are abandoned, after which they grow rapidly and dominate for 10 to 20 years (Pascarella 2002). It usually grows as dispersed individual shrubs or small clumps. Camasey blanco disappears in a few seasons after being overtopped by a forest canopy.

Reproduction.—Camasey blanco flowers from February to June and fruits from April to September in Nicaragua (Stevens and others 2001). The species is reported to flower and fruit twice each year in Panama (Croat 1978). In Puerto Rico, it is reported to flower and fruit almost throughout the year (Little and Wadsworth 1964). Fruits collected in Puerto Rico averaged 0.137 ± 0.003 g/fruit. Seeds separated from them averaged 10.6 million seeds/kg. Sown on wet peat, 57 percent of the seeds germinated between 20 and 63 days after sowing. The seedlings are tiny and difficult to manage. In nature, birds are the principal dispersers of seeds. Camasey blanco sprouts readily when disturbed.

Growth and Management.—The largest camasey blanco recorded in Puerto Rico had a diameter at breast height of 16.3 cm and a height of 11 m (Puerto Rico Champion Tree List on file at the International Institute of Tropical Forestry, Río Piedras, PR). The species has a moderate growth rate and is relatively short lived. None of a group of 24 camasey blanco stems in a survey in Puerto Rico were present 24 years later at a second visit (Weaver 1979). However, by suckering and ground layering, plants can perpetuate themselves somewhat longer than individual stems. Nursery propagation of the species has not been reported.

Benefits.—Camasey blanco wood is not durable in the ground and therefore not suitable as fence posts (Little and Wadsworth 1964), unless treated. Penetration of preservative was about average for 52 Puerto Rican species tested (Englerth and Goytía-Olmedo 1960). The wood is used for fuel and occasionally as tool handles. Wood specific gravity of 30 plants sampled in Puerto Rico was measured at 0.630 ± 0.021 . A weighted average of carbon content for above-ground parts was 50.0 percent. Total above-ground biomass in grams may be predicted by multiplying the stem diameter in cm squared at 30 cm above the soil times stem length in meters by $38.344 (R^2 = 0.981)$ (Francis 2000). The fruits are edible but seldom eaten by people. Camasev blanco is browsed sparingly by cattle and more heavily by goats. The fruits are eaten by the Puerto Rican birds, Mimocichla ardosiaceae portoricensis Bryant, Vircosylva calidris calidris L., Spindalis portoricensis Bryant (Whetmore 1916) and certainly many other species across the range. Camasey blanco serves as a

transitional (successional) species between pasture, farmland, or disturbed forest and secondary forest.

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