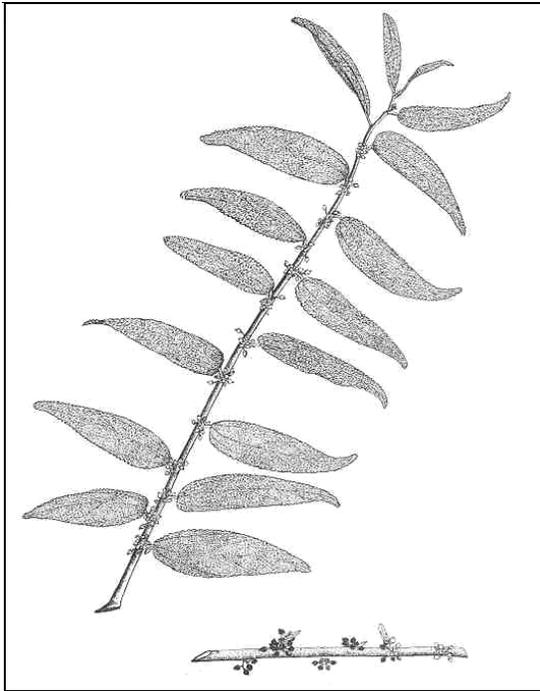


***Trema lamarckianum* (J.A. Schultes) Blume**
ULMACEAE

West Indian trema

Synonyms: *Celtis lamarckiana* Roem. & Schult.
Sponia lamarckiana (Roem. & Schult.) Decne.
Celtis lima Lam.
Trema lima authors, not Blume



General Description.—West Indian trema, also known as Lamarck trema, pain-in-back, cabrilla, memizo de majagua, capulí cimarrón, and orme petites feuilles, is an evergreen shrub or small tree to 8 m in height and 20 cm in diameter at breast height. The plant is supported by a system of tan-colored, stiff, but flexible, tap, lateral, and fine roots. There is usually a single main stem. It is covered by smoothish, light brown to gray bark with many tiny warty lenticels over a light brown to pinkish, fibrous inner bark. The species has a monopodial branching pattern, in which the main stem produces a continuous progression of fine lateral branches (Massey and Murphy 1996) some of which may thicken and become major branches in older plants. The alternate leaves, which are attached to twigs by petioles 8 to 10 mm long, have ovate-lanceolate, green to gray-green blades that are rough on both surfaces and have fine-toothed edges. The 2-mm diameter, greenish flowers are clustered at the leaf axils. The fruits

are rounded, fleshy, 1- to 3-mm pink drupes. The fruits have little flavor and each contain one brown seed (Howard 1988, Liogier 1985, Little and Wadsworth 1964).

Range.—West Indian trema is native to Florida, Bermuda, the Bahamas, Grand Cayman, and the Greater and Lesser Antilles south to St. Vincent (Liogier 1985, Little and Wadsworth 1964).

Ecology.—West Indian trema is a pioneer species. It colonizes disturbed sites on a wide variety of soil types over both sedimentary and igneous rocks. It is especially common in ultramafic (serpentine) areas. Areas in Puerto Rico with West Indian trema populations receive annual rainfall ranging from about 1200 to about 3000 mm at elevations ranging from a few meters above sea level to about 900 m. The species is intolerant of shade and usually grows in areas with a sparse to moderate cover of herbs, shrubs and trees. It does not grow under a closed forest canopy. Common sites are road cuts and fill, abandoned roads, unstable slopes, landslides, mechanically disturbed sites, and hammocks (author's observation, Long and Lakela 1976).

Reproduction.— After West Indian trema reaches about 1 m, it flowers and fruits continuously throughout its life. During periods of favorable moisture, plants produce fruits and seeds in large numbers. A collection of fruits from Puerto Rico weighed an average of 0.0077 ± 0.0001 g/fruit. Air-dried seeds cleaned from them averaged 0.0024 ± 0.0000 g/seed or 416,000 seeds/kg. Placed in commercial potting mix, 38 percent of the seeds germinated between 60 and 120 days after sowing. Birds disperse the seeds. Seedlings are common on disturbed ground near seed-bearing plants. Young plants sprout when cut.

Growth and Management.—Early seedling growth is slow. Later, growth reaches about 1 m/year, slowing as the plants get old. West Indian trema lives about 10 to 20 years. The species has

not been reported as weedy. Reproduction probably can be promoted by scarifying the soil near seed-bearing plants before the start of seasonal rains.

Benefits.—West Indian trema is an important colonizer of disturbed areas and helps protect the soil from erosion. It has not been used for, but might be useful for, site stabilization plantings. West Indian trema is listed as a nitrogen-fixing species (Winrock International 2002). The wood is soft and seldom used. The fruits are one of the most important foods of the endangered Puerto Rican plain pigeon, *Columba inornata wetmorei* (Division of Endangered Species 2002).

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