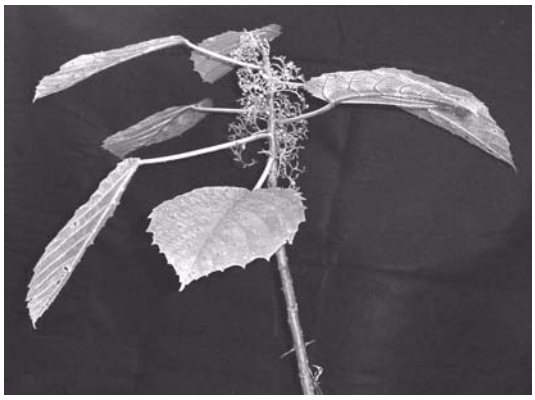
***Urera baccifera* (L.) Gaud.** ortiga brava
URTICACEAE

No synonyms



General Description.—Ortiga brava means "bad nettle" in Spanish. The species is known by a host of other common names, among which are: stinging nettle, ortiga, pringamoza, mala mujer, chichicaste, nigua, guaritoto, ishanga, manman guêpes, and urtiga bronca (Little and others 1974). Ortiga brava is a weak-stemmed woody shrub that sometimes becomes a small tree. Individual plants may have one or several stems, branching near the ground. Probably the most recognizable feature of the plant is the presence of many sharp, stinging spines on the leaves, branches, and stem. The alternate leaves are 12.5 to 25 cm in length and 7.5 to 12.5 cm in width, coarse-toothed with thin blades and stout petioles. The stem bark is smooth, light gray with green-over-white inner bark, and thick greenish pith. There are raised leaf scars and lenticels on the stems and branches.

Range.—Ortiga brava ranges throughout the Greater and Lesser Antilles, Trinidad, and Tobago and on the mainland from Mexico to Brazil, Argentina, Bolivia, and Peru (Little and others 1974). The species is not known to have naturalized outside its native range.

Ecology.—Ortiga brava grows in the higher rainfall portion of the moist forest (>1600 mm precipitation), especially along drainages, and throughout the wet and rain forests (2000 to 4000 mm of precipitation). Alluvial, coluvial, and residual soils from acidic and calcareous rocks make suitable habitat. Well-drained and somewhat poorly drained soils of all textures are colonized. Being moderately shade intolerant, disturbance is generally required for the species to get started, and it disappears after the forest understory becomes dark. A high importance value of ortiga brava in a Brazilian forest and an unbalanced diameter distribution was used to infer past disturbance (Bertoni and others 1988).

Reproduction.—Minute male and female flowers are borne in pink or purple, branched clusters on the stem on different plants (dioecious). The fruits are white or pinkish, spongy and watery, with one greenish-black seed per fruit (Little and others 1974). A Puerto Rican collection of seeds averaged 4.36 $\pm$ 1.17 g each (Francis and Rodríguez 1993) or 500,000 seeds/kg. They began germinating in 26 days with a final germination of 49 percent (Francis and Rodríguez 1993). Ortiga brava built up to high populations in a fire-disturbed forest in the Atlantic forest in southern Brazil through a high recruitment rate and low mortality (Nascimento and others 1999). The seeds are disbursed by birds.

Growth and Management.—Individual stems of ortiga brava may grow for 5 years or more and reach 5 m in height. Heights of 1.5 to 2 m are more typical. Ortiga brava stems cut during site management activities quickly sprout and regain their former height. Whether sprouting from the rootstalk occurs after senescence and death of individual stems is not known.

Benefits and Detriments.—In Central America, ortiga brava has been planted in hedges and fences to make an almost impenetrable barrier (Little and others 1974). Although not generally sought after for food under normal conditions, ortiga brava is one of the first plants to fruit after hurricanes, and, as such, is an important factor in the survival of frugiverous birds (personal communication with Joseph Wunderle, IITF, Río Piedras, PR). The stems of ortiga brava were used by Aztec and Otomi Indians in Mexico for making paper (Hagen 1943). The plant is considered a weed in shaded coffee plantations. (Francis and Rodríguiz 1993). All parts of the plant are covered with the spine-like hairs that cause considerable pain when they penetrate the skin. Normal clothing does not protect against the stinging effect. However, the

pain is usually short-lived, lasting from a few seconds to a few minutes. Although no permanent injury results, some people may experience rash or blisters; swelling, fever, and ulcers can occur in extreme cases (Allen 1943). The plant has long been used in folk medicine. Recent laboratory tests using rats have shown anti-inflamatory and analgesic activity of aqueous extracts of ortiga brava (Badilla and others 1999). Amerindians in Costa Rica chastised themselves with branches of ortiga brava in a toughening ritual (Badilla and others 1999).

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