

Trichanthera gigantea (Bonpl.) Nees

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ACANTHACEAE (ACANTHUS FAMILY)

Ruella gigantea

Aro, cajeto, nacedero, quiebra barriga

Trichanthera gigantea is a very-fast-growing tree that reaches 8 m in height and 30 cm d.b.h. The trunk has a yellowish-gray bark; branching starts at 2 m. The crown has a pyramidal shape, and the foliage is dark green. The leaves are 14 cm, opposite, and villous, with serrated margins. The tree grows in low-fertility soils with a pH greater than 4.5; loose, loose clayey, or loose sandy textures; and good to slow drainage. It grows at elevations from 600 to 1700 m, with temperatures ranging from 19 to 24 °C and an average annual precipitation of 1400 to 2800 mm. *Trichanthera gigantea* grows in vegetal formations of the Tropical dry forest (bs-T), Tropical wet forest (bh-T), Pre-Mountainous wet forest (bh-PM), and Pre-Mountainous very wet forest (Gomez 1992, Rodriguez 1988).

The yellowish-white wood is not durable in contact with the ground and has a specific weight of 0.7. Parts of the tree are used as medicine and forage for cattle, horses, and pigs. In agroforestry, the trees are used as hedges, protectors of water springs, and shade for coffee. The wood is not used because the tree is too small (Escobar and Rodriguez 1993).

The red flowers are 3 cm, similar to bells, and grouped; fruits are round brown capsules with several seeds. Seeds average 4,000,000 per kg. Purity is 75 to 80 percent, germination is 1 to 2 percent, and seeds germinate in 25 to 35 days (Rodriguez 1988).

Trichanthera gigantea is propagated through seeds or stem cuttings. Seeds are planted in large bags with a capacity of more than 5 kg. The plantules remain in the nursery for 6 months. They are outplanted when they are large enough to compete with the underbrush. The most common method of propagation is stem cutting. Stem cuttings from trees are at least 40 to 50 cm in length and 3 to 5 cm in diameter. Taking the stem cuttings from the lowest part of the branch will reduce dehydration. Stems cut obliquely will more readily grow roots. The point of the stem cutting exposed to the sun should be covered with paraffin or other material that will prevent dehydration. The stem cutting must be planted 15 cm deep immediately after cutting. Stem cuttings, tools, and soil should be disinfected.

The planting site must be totally cleaned, and poor soils should be fertilized with an organic fertilizer. The stem cuttings must be planted during the rainy season. If the species is used as a hedge, large stem cuttings more than 1 m long and more than 2 cm in diameter can be planted 1.5 to 3 m apart. If the plantation is a protein bank, distances of 0.5 by 0.5 m or 1 by 1 m can be used; for shade, a sowing distance of 5 to 10 m is advisable (Corporacion de Defensa de la Meseta de Bucaramanga 1989).

