Bauhinia multinervia (Kunth) DC.

K.F. CONNOR and J.K. FRANCIS
Southern Research Station
and International Institute of Tropical Forestry
USDA Forest Service

FABACEAE (BEAN FAMILY)

Bauhinia megalandra Griseb., *Bauhinia multinervia* (H.B.K.) D.C., *Pauletia multinervia* Kunth

bauhinia, mountain ebony, pata de cabra, pata de vaca, petit flamboyant, urape

About 600 species of *Bauhinia* grow in the tropical regions of the world (Larson 1974). The genus includes trees, vines, and shrubs that are frequently planted for their showy flowers and ornamental foliage (Bailey 1941, Neal 1965). In Puerto Rico, *B. multinervia* is a naturalized, commonly occurring tree.

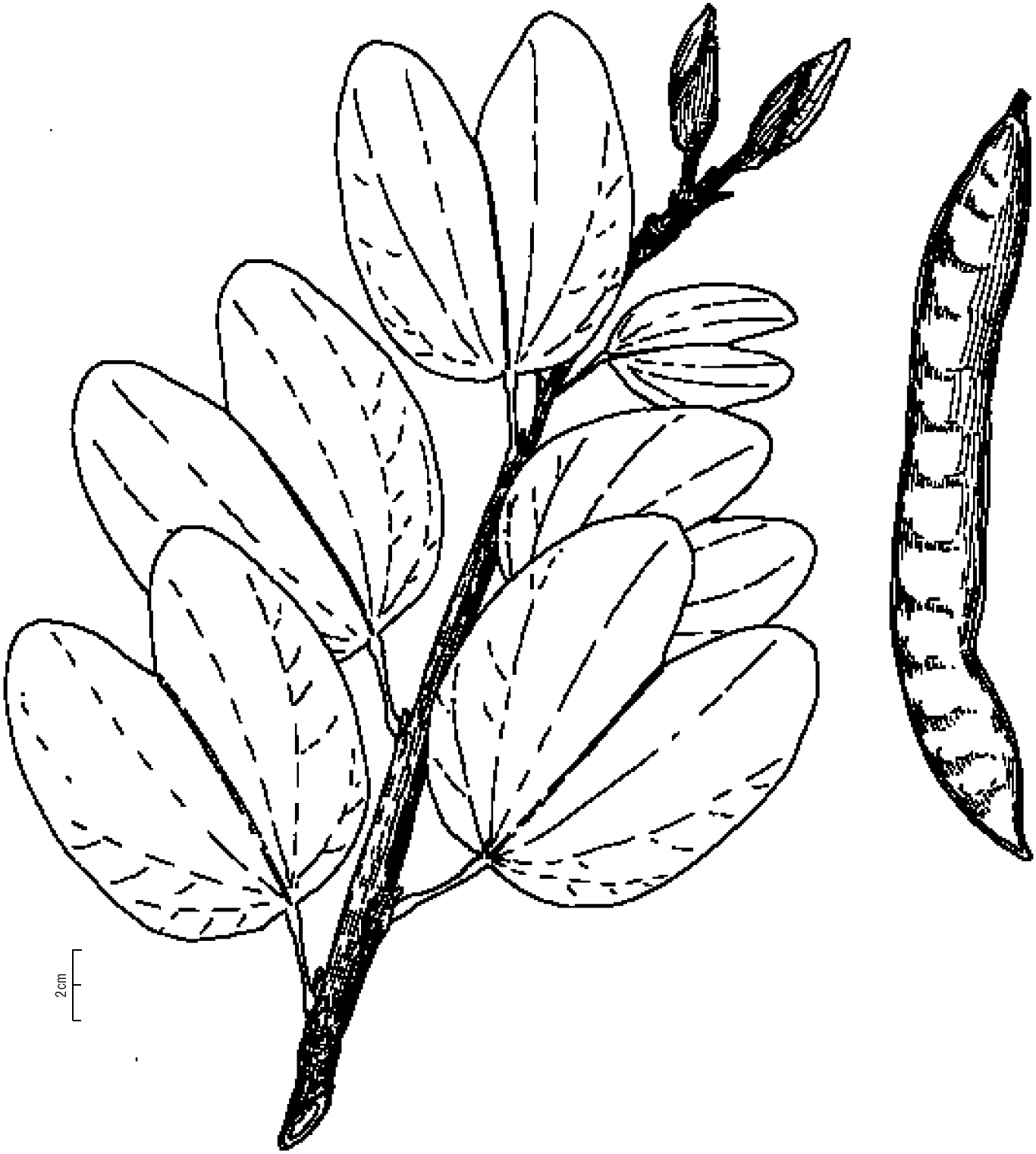
Bauhinia multinervia is a small tree that can reach 6 to 12 m in height and at least 30 cm in diameter (Pittier 1926, Howard 1988). The trees are not long-lived but can annually grow 1 m or more. Stems are primarily straight, and the crown of the tree is of medium density. The bark is gray-brown and fibrous. *Bauhinia multinervia* leaves are elliptical in shape, rounded at the base, and split one-third to one-half their length. Each leaf has 11 prominent veins (Pittier 1926). Leaf petioles are 1.2 to 4.5 cm long. Leaves, petioles, stipules, and young branches are all pubescent. Found in areas receiving between 1500 and 2500 mm annual rainfall (Francis and Liogier 1991), *B. multinervia* is an aggressive reproducer that is probably, like some of its relatives, moderately intolerant. It prefers medium-fertility soils ranging from 5.0 to 7.0 in pH. It does not tolerate poor sites, and trees usually require disturbance to become established.

The wood is reddish in color, finely grained, and easy to finish; however, the tree rarely reaches commercial size (Pittier 1926).

Bauhinia spp. bloom within 3 or 4 years (Bailey 1941). *Bauhinia multinervia* flowers grow in terminal racemes or panicles and have 10 stamens (Pittier 1926, Howard 1988). The five linear, clawed, somewhat elongated petals are white and 8 to 12 cm long by 0.5 to 1.0 cm wide. The 8- to 12-cm-long calyx is roughly pubescence and splits into five lobes. The fruits are flat, dark pods that tend to split and curl upon drying. Pods range in length from 22 to 31 cm long and are 2.3 to 2.8 cm wide. *Bauhinia multinervia* can produce seeds within 4 years of establishment. Seeds average 4,240 per kg (Francis and Rodriguez 1993).

Although published reports on the handling of *B. multinervia* pods and seeds are not available, in most hard-seeded, temperate Fabaceae, pod ripeness is determined by a color change from green to light or dark brown (U.S. Department of Agriculture 1974). Ripe pods are picked by hand or shaken/flailed from the trees and then spread to air-dry. Seeds are threshed or mascerated from the dry pods and separated from the chaff by screening, fanning, or water flotation. Once dried (moisture content less than 12 percent; Roberts 1973), seeds are placed in sealed containers and stored between 2 and 4 ^{o}C. *Bauhinia multinervia* seeds can begin germinating without scarification 6 days after placement on moist filter paper, and then final germination can be 90 percent.

The following information about related species of *Bauhinia* may be useful when preparing *B. multinervia* seeds for germination. Satisfactory germination can occur after 52 weeks when *B. rufescens* seeds are scarified using 97 percent H_2SO_4, washed, dried, sealed into containers, and stored at 4 ^{o}C (Some and others 1990). However, excellent germination of *Bauhinia spp*. can be achieved without scarification (Francis and Rodríguez 1993). Orientation of the seed in the soil may be an important germination factor (Prasad and Nautiyal 1995); *B. retusa* seeds sowed with the micropylar end up had the earliest onset of germination and the highest seedling survival rate after 2 months. Those with horizontal orientation or micropylar-end-down in the soil had lower survival rates. Some species can be propagated from suckers but rarely from cuttings.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