

***Melochia tomentosa* L.**
STERCULIACEAE

pyramid bush

Synonyms: *Melochia frutescens* Jacq.
Moluchia frutescens (Jacq.) Medikus
Melochia turpiniana Kunth
Moluchia tomentosa (L.) Britton



General Description.—Pyramid bush, also known as tea bush, raichie, broom wood, broom weed, black widow, balsam, bretónica afelpada, and bois-champignon, is an erect shrub 0.5 to 4 m in height and up to 10 cm in basal diameter. Pyramid bush is supported by a tap and lateral root system. Usually, a single stem emerges from the ground, but it may branch near the base. The branches farther up the stem are slender. The bark is slate-gray with many lenticels. Stemwood is tan colored, moderately hard, and tough. The leaves are covered with a short woolly hair giving the plant a gray flannel look. Ovate to lanceolate leaves are attached by short petioles and have blades 1.5 to 10.5 cm long and 0.9 to 8.5 cm broad with serrate margins. Its inflorescences are axillary umbelliform cymes of perfect flowers with five pink, purple, or blue petals that are 8 to 13.5 mm long. The fruits that develop are pyramidal

capsules 6 to 9 mm across. The seeds are 2 mm long and reddish brown (Howard 1989, Liogier 1994).

Range.—The native range of pyramid bush extends from southern Florida and southern Texas through the West Indies and Central America into Brazil and Colombia (Howard 1989, Liogier 1994, Instituto Nacional de Biodiversidad 2002, Recursos Hidricos 2002). No planting or escapes have been reported outside its natural range.

Ecology.—Pyramid bush grows in dry areas (areas receiving from 750 to 1000 mm of annual precipitation in Puerto Rico), usually within a few km of the coast. It grows from near sea level to altitudes of about 400 m in Puerto Rico. The species tolerates a wide variety of well-drained soils derived from sedimentary and igneous rocks and grows on coastal sands. Because there is relatively little competition, pyramid bush is most common on sites that are rocky, eroded, or excessively drained. In Texas, the species is found on sandy or rocky soil in mesquite thickets, palm groves, and dry streambeds (San Antonio Botanical Gardens 2002). The species inhabits pinelands in southern Florida (Long and Lakela 1976). In Brazil, it is part of the pioneer community on the sandy soils of the coastal plain (Recursos Hidricos 2002). The species does not tolerate heavy shade, and overtopping by trees will eliminate it. It is not eaten by cattle and tends to be common on overgrazed rangeland--probably because competition from grasses and other plants is reduced.

Reproduction.—Pyramid bush flowers at the end of the wet season (November and December) and ripens fruits about 2 months later. It flowers during the summer and early fall in Texas (Everitt and Drawe 1993). Air-dried capsules of pyramid bush collected in Puerto Rico weighed an average of 0.0135 g. Seeds separated from them weighed an average of 0.00104 g/seed or 963,000 seeds/kg. Sown without pretreatment on moist filter paper,

79 percent germinated within a short period 6 months later. The species can be propagated with cuttings (San Antonio Botanical Gardens 2002). There appear to be no specialized means of seed transport; the small seeds are probably disbursed incidentally by wind, water, machinery, and cattle.

Growth and Management.—Nursery-grown pyramid bush seedlings in Texas reached 60 cm in just 2 months after outplanting (San Antonio Botanical Gardens 2002). However, adult plants in Puerto Rico add only about 30 cm to their height each year. Based on ring counts in Puerto Rico, plants appear to live about 10 years. Overgrazing to reduce competition may be the best way of promoting this species. Pyramid bush is often considered a weed in rangeland (Liogier 1990). Mowing may be sufficient to control it.

Benefits.—Pyramid bush appears to have great potential as a flowering ornamental for xeric landscaping (San Antonio Botanical Gardens 2002). In natural habitat, it contributes to biodiversity, soil stability, and wildlife cover. Although cattle avoid it, sheep and goats in Brazil browse it in mixture with other native species (Charles and others 1983). A tea is made from the foliage to treat colds and as an eye wash (Liogier 1990).

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