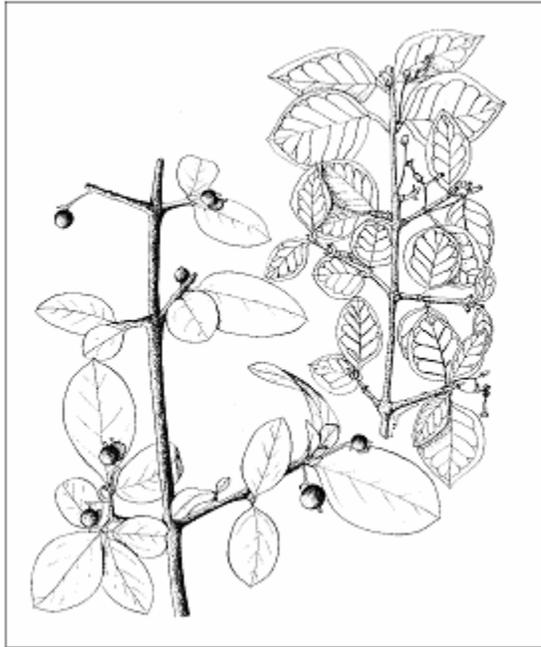


***Guettarda elliptica* Sw.**
RUBIACEAE

velvetseed

Synonyms: *Guettarda bladgettii* Shuttlew. ex Chapm.
Matthiola elliptica (Sw.) Kuntze



General Description.—Velvetseed, also known as Everglade velvetseed, pickle-wood, cucubano liso, cigüillo, cuero de sabana cruciallo, guayabillo prieto, cabrito, guayabillo prieto, and punteral, is a shrub or small tree to 6 m in height and 10 cm in stem diameter. It usually has multiple stems from below or just above the ground level. The stem bark is gray or gray-brown, smooth with light colored dots or lines. The stem wood is light brown, hard, fine-textured, and heavy with a specific gravity of 0.83 (Little and others 1974). The plant is supported by hard, brittle, dark-brown roots. Velvetseed tends to form branchy crowns of opposite, moderately fine branches and twigs. The opposite leaves have short, hairy petioles and oval to elliptic blades 3 by 7.5 cm long. Axillary, few-flowered cymes bear small tubular yellowish-white flowers. Three to 4 months later, globose, 4- to 8-mm drupes with a persistent calyx develop. They turn red to black at maturity and contain two to four seeds enclosed in a bony shell (Liogier 1997, Little and others 1974, Nelson 1996, West and Arnold 1952). The fruits have a slightly sweet, slightly sour, and slightly astringent flavor

(author's observation).

Range.—The native range of velvetseed extends from southern Florida through the West Indies, from Mexico through Central America, and Venezuela and Guyana in South America (Little and others 1974).

Ecology.—Velvetseed grows in pinelands and hammocks in Florida (Nelson 1996). In Puerto Rico, it is most common in limestone areas and occasionally in areas of igneous rock, on rocky ridge sites too difficult for tall vegetation, and in coastal thickets and rocky hills (Liogier 1997, Little and others 1974). Annual rainfall varies from 750 mm to 2200 mm, and elevations range from near sea level to about 400 m. Vegetation sites include relatively pristine to highly disturbed remnant forests and late secondary forests. Velvetseed is moderately intolerant of shade. It competes well with slow-growing vegetation but not with tall grass or overtopping trees. Open-grown plants assume a symmetrical shape, but in thickets, the stems are usually crooked and the crowns asymmetrical.

Reproduction.—Velvetseed blooms in summer in Florida (West and Arnold 1952) and in the spring in Puerto Rico (Little and others 1974). Flowers require pollination to develop seeds and are ordinarily pollinated by insects (Koptur and Richards 1996). A collection of fruits in Puerto Rico averaged 0.350 ± 0.008 g/fruit. Seeds separated from them weighed (air-dried) an average of 0.0626 ± 0.0015 g/seed or 16,000 seeds/kg. Sown on commercial potting mix, 68 percent of the seeds germinated between 3 and 7 months after sowing (author's observation). Although there is usually good fruit and seed production, seedlings are relatively uncommon. Birds disperse the seeds. Velvetseed sprouts readily when cut.

Growth and Management.—The Florida champion velvetseed is 7 m in height and 29 cm in diameter at breast height (Champion Tree Project

2002). The species grows slowly, at least in the difficult habitat where most occur. Individuals probably live from two to several decades. No management experience has been published. However, long-term protection of velvetseed sites is recommended.

Benefits.—Velvetseed contributes to biodiversity and wildland biomass while it helps protect the soil from erosion and provides food and cover for wildlife. The species is listed as the larval food plant for the moths, *Calidota strigosa* Walker in Florida and the West Indies (Barns 2002) and *Hylesia lineata* Druce in Mexico (Pescador 1995). The wood is useful for fuel and stakes. Velvetseed is a pretty shrub and would make a fine foundation plant in seminatural landscaping.

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