

***Colubrina arborescens* (P. Mill.) Sarg.**
RHAMNACEAE

coffee colubrina

Synonyms: *Colubrina colubrina* (Jacq.) Millsp.
Colubrina ferruginosa Brongn.
Rhamnus colubrinus Jacq.
Ceanothus arborescens Mill.
Ceanothus colubrina (Jacq.) Lam.



General Description.—Coffee colubrina, also known as greenheart, wild coffee, snakebark, blackbead tree, abeyelo, corazón de paloma, bijáguara, cascalata, sonzonate, and bois de fer, is an evergreen or semideciduous shrub or small tree. It grows as a shrub with multiple stems 3 to 6 m in height in dry areas on beach fronts, deep sands, and porous limestone with little soil, and as a tree to 25 m in height on moist sites and fertile soils. Bark on trunks is gray or brown, smoothish, fissured, or platy. Inner bark is pink, brown, or reddish-brown. The roots are dark brown with reddish inner bark and are somewhat brittle. The twigs, flower clusters, young leaves, petioles, and underside of older leaves are covered with a rusty pubescence. Leaves, which grow alternately in two rows on twigs, are papery to leathery, ovate to elliptic, 5 to 18 cm long, pointed at the tip and rounded at the base, and have prominent, curved veins. The tiny yellow or yellow-green flowers grow in short-stalked cymes in the leaf axils. Fruits are globose capsules 6 to 10 mm in diameter that split into three parts and release globose, 3- to 3.5-mm, hard, black seeds (Liogier 1990, Little and Wadsworth 1964, Sargent 1923).

Range.—Coffee colubrina is native to southern Florida, the Bahamas, the West Indies, and from southern Mexico to Panama (Liogier 1994, Little

and Wadsworth 1964, Stevens and others 2001). Although the species is planted as an ornamental, it is not known to have become naturalized outside its native range.

Ecology.—Coffee colubrina grows in a wide variety of well-drained soils in its native range, including soils of all textures, pHs ranging from about 5.0 to 8.0, and soils derived from sedimentary (including limestone), igneous, and metamorphic (including ultramaphic) rocks. The species grows in areas of Puerto Rico that receive from about 750 to 2500 mm of mean annual precipitation at altitudes from near sea level to about 600 m. Although the species is evergreen in moist sites, in dry areas, especially in excessively drained sites, it defoliates in response to prolonged drought. Coffee colubrina grows on hammocks in Florida (Nelson 1996) that have sandy soils (Gilman 1999), and in beach strand vegetation, coastal sands, dry to moist foothills and mountains in remnant and secondary forests in the West Indies (author's observation). The species tolerates salt spray and moderate amounts of salt in the soil (Gilman 1999). Coffee colubrina is moderately intolerant; it grows in full sun and partial shade of low forest or broken high forest.

Reproduction.—Coffee colubrina is reported to bloom from spring to fall in Puerto Rico (Little and Wadsworth 1964) and throughout the year in Florida (Long and Lakela 1976). The flowers are insect pollinated. Seeds collected by the author in Puerto Rico averaged 70,400 seeds/kg (air-dried). Besides minor movement by gravity, wind, and water, the fruits pop open when dry and fling the seeds a short distance (Gilman 1999).

Growth and Management.—Growth is slow in dry forest areas and generally moderate in moist, fertile soils. Four experimental plantings of coffee colubrina were made in Puerto Rico. Complete mortality occurred in the two drier, poorer sites, but the trees grew 1 m/year in height for the first

few years on the better sites (Francis 1998). Mortality probably occurred on the drier sites because they were overcome by faster-growing competition. To ensure quick establishment, planting of containerized stock for ornamental and wildland plantings is recommended. Protection from weeds, vines, and faster-growing trees for 2 or more years is imperative. Ornamental plants can be forced into tree shape by continual pruning of the lower branches (Gillman 1999).

Benefits.—Coffee colubrina helps protect the soil, contributes to the aesthetics of the forest, and furnishes food and cover for wildlife. The plant attracts abundant insects including bees, wasps, butterflies, and diurnal moths, which in turn provide food for warblers (*Dendroica* spp.), gnatcatchers (*Polioptila* spp.), kingbirds (*Tyrannus* spp.), and vireos (*Vireo* spp.) (Florida Fish and Wildlife Conservation Commission 2003). The species is considered a honey plant, furnishing both nectar and pollen to honeybees (*Apis mellifera* L.) May through September in the Dominican Republic (Rivas-Laureano 2003). Coffee colubrina is planted as a shade tree and ornamental in Florida, Guatemala, Nicaragua, and El Salvador (Little and Wadsworth 1964, Stevens and others 2001). It is recommended for planting in parking lot islands, in large containers, and small lawns, and for borders, screens, and hedges, as well as for reclamation plantings (Gillman 1999). A tea made from the leaves and the wood is used as a remedy for rheumatism. Extracts are also used for antiseptic baths (Liogier 1990). The shiny black seeds are used in necklaces in Jamaica. The wood is hard and heavy with a specific gravity of 0.7. The sapwood is ivory or light brown, and the heartwood is yellowish brown. Because it is resistant to decay, it is used for fence posts and was formerly used for marine pilings (Little and Wadsworth 1964).

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