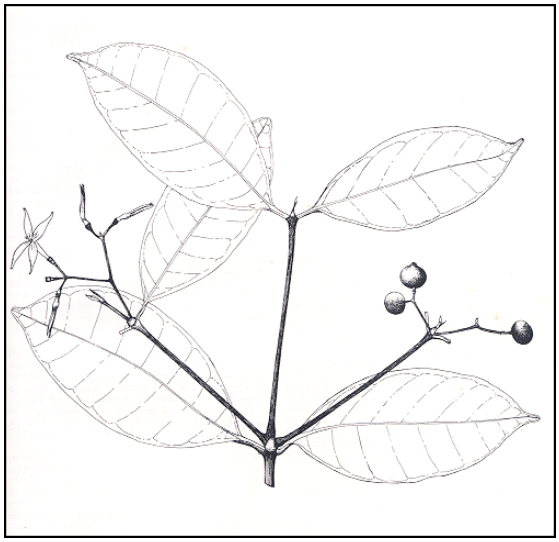
***Faramea occidentalis* (L.) A. Rich.** cafeíllo
RUBIACEAE

Synonyms: *Coffea occidentalis* Jacq.
Faramea odoratissima DC.
Pavetta coffeoides Ham.
Tetramerium odoratissimum (Gaertn. f.) DC.
Ixora occidentalis L.



General Description.—Cafeíllo, also known as false coffee, café cimarrón, palo de toro, hueso, jasmín de estrella, and bois flèche, is a tall shrub in the Caribbean islands and a small understory tree in continental tropical America. It has dark-green, opposite lanciolate leaves and straight, usually single, gray or dark-brown stems. The twigs are slender and green with rings at the nodes (Little and Wadsworth 1964). The stems are straight and often without branches for a meter or more.

Range.—The native range extends from Cuba through Trinidad and from central Mexico through Central America to Ecuador, Peru, Brazil, and the Guyanas (Little and Wadsworth 1964). The species is not known to have naturalized elsewhere.

Ecology.—Cafeíllo is tolerant and grows and reproduces in the understories and mid-stories of secondary forests. The species is most common in mid- to late-secondary forests. Cafeíllo is found in two of the Life Zones in Puerto Rico: moist subtropical forest and much of the wet subtropical forest from about 900 to 2800 mm of precipitation (Holdridge 1967). Alluvial soils and residual soils derived from sedimentary and volcanic rocks are suitable habitat. Excessively drained and very poorly drained soils are usually not colonized. Although not forming pure or dense stands, cafeíllo is common, at least in Puerto Rico and Panama.

Reproduction.—Small, white, fragrant flowers have a short tube tipped by four pointed lobes. Cafeíllo flowers generally occur in threes. The fruits are blue-black or dark-purple drupes borne singly or in pairs from the leaf axils near the twig ends. The fruits measure 8 to 10 mm in diameter (Howard 1989). Each fruit contains a single seed. A Puerto Rican collection averaged 0.825 $\pm$ 0.123 g/fruit. The seeds from the same collection numbered 3,980 seeds/kg. Ninety-six percent germinated beginning 57 days after sowing (Francis and Rodríguez 1993). In Central America, the seeds are disbursed by birds and monkeys. Rodents and a number of other animal species eat and destroy the seeds after fruit-fall (Schupp 1990). A rust, *Aecidium farameae* Arthur, which attacks the ovaries and pedicels of the flowers, results, in some years, in the destruction of 32 to 83 percent of the fruits of individual plants (Travers 1998). A high recruitment of seedlings (compared to other species) results in high population densities in the forest understorey in Panama (Schupp 1990).

Growth and Management.—Cafeíllo occasionally exceeds 20 m in height and 20 cm in diameter at breast height in Panama (O'Brien and others 1995). However, in Puerto Rico, mature shrubs usually reach 4 m in height and sometimes attain as much as 10 m in height (Liogier 1997). Total above-ground, ovendried weight of cafeíllo plants in Puerto Rico that ranged between 1.37 m in height (with diameter greater than 0) and 5 cm in d.b.h. may be predicted by the model:

$TDW = 30.045D^2L$ (adjusted R-squared = 0.962),

where TDW is total dry weight in grams, D is diameter in cm at 30 cm above the ground, and L is stem length in meters. Lower stem density of Puerto Rican shrubs averaged 0.62 $\pm$ 0.04 g/cm^3 (Francis 2000). Stem density of saplings from Panama was 0.57 g/cm^3 (King 1990). Allometric relationships for cafeíllo in Panama may be found in O'Brien and others (1995) and King (1990). As an understory tree, cafeíllo is slow-growing and long lived. Based on recent growth rates, the largest individuals in a Panamanian stand were estimated to exceed 200 years in age.

There is no record of plantations or planted ornamental cafeíllo. The species is able to reproduce by sprouting after injury. Thirty-six percent of the individuals in a Panamanian stand were of sprout origin (Putz and Brokaw 1989).

Benefits.—Cafeíllo wood is heavy, hard, and tough. However, uses are mainly limited to fence posts, vegetable stakes, tool handles, and fuelwood. In herbal medicine, cafeíllo is reportedly used as an antiseptic, astringent, and for diarrhea and anemia (Liogier 1990). Birds consume the fruits. The use of cafeíllo as an ornamental or in forest restoration efforts has not been reported. Cafeíllo is a fine looking plant and could probably be used as a back-ground plant or screen under shade in yards, estates, and parks.

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