

EBONY FAMILY (EBENACEAE)

Trees, sometimes shrubs, known by: (1) leaves alternate simple, entire, thickened, without stipules; (2) flowers small, unisexual (generally dioecious), lateral, solitary or few, regular, with persistent 3-7-lobed calyx, tubular corolla urn- or bell-shaped and 3-7-lobed, sta-

mens generally double or triple the lobes and inserted in tube, and pistil with superior ovary of 2-16 cells each with 2 ovules and 2-8 styles and stigmas; and (3) fruit a berry (sometimes edible) with few large seeds.

Key to species

- A. Leaves narrowly elliptic, broadest at middle, leathery, forming fine network on drying; flowers 3-parted; fruit with enlarged 3-pointed calyx at base—649. *Diospyros sintensis*.
AA. Leaves elliptic to obovate, broadest beyond middle, slightly thickened, blackening in drying; flowers 4-parted; fruit with enlarged 4-lobed calyx at base—648. *Diospyros revoluta*.

648. *Guayabota*

Diospyros revoluta Poir.

Characteristics of this rare tree are: (1) blackish bark, finely fissured and peeling off, exposing gray beneath; (2) elliptic to obovate leaves, slightly thickened, blackening in drying; (3) small white fragrant flowers with 4-lobed corolla at leaf bases, male and female on different trees; and (4) round fruits $1\frac{1}{4}$ inches in diameter, with enlarged 4-lobed calyx at base.

Evergreen large tree to 80 feet high and 2 feet in trunk diameter, with slight enlargements or buttresses at base. Beneath the blackish bark, the inner bark has a thin blackish layer and is light yellow and bitter. Young twigs are finely hairy, slightly angled, ending in a narrow bud formed by a minute hairy young leaf, without stipules.

The alternate leaves have stout leafstalks $\frac{1}{4}$ – $\frac{1}{2}$ inch long. Blades are $2\frac{1}{2}$ –7 inches long and $1\frac{3}{8}$ –3 inches wide, rounded, blunt, or notched at apex, broadest beyond middle and tapering to short-pointed base, slightly thickened, slightly turned under at edges, hairless, upper surface shiny green with many fine nearly parallel straight side veins, and lower surface dull green.

Flowers are male and female at leaf bases on different trees (dioecious). Male flowers are clustered on slender stalks, about $\frac{1}{2}$ inch long, consisting of 4-lobed calyx, tubular 4-lobed white corolla, and many stamens; female flowers not seen. The fruit is a large pulpy berry with large flat almost square 4-lobed calyx $\frac{5}{8}$ inch across at base, and with minute point at apex. There are several flat hard seeds. Flowering in spring and fruiting in summer.

The poisonous fruits and chipped pieces of

bark have been used elsewhere as a fish poison.

The heartwood is blackish and hard.

Rare in moist coastal, limestone, and lower Cordillera forests from sea level to 2,000 feet altitude in Puerto Rico. In the northeastern part near Dorado and Toa Alta.

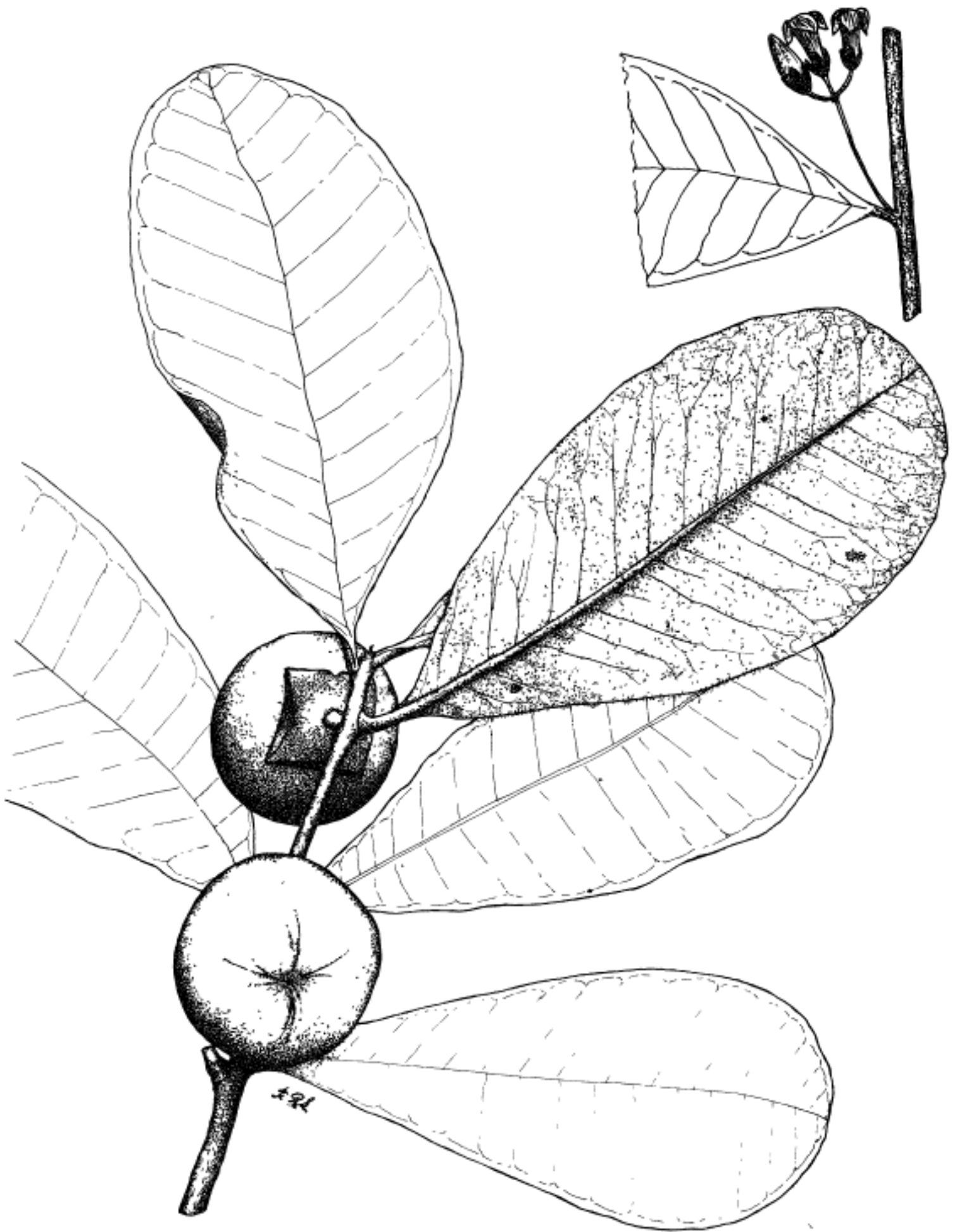
PUBLIC FORESTS.—Maricao, Río Abajo.

RANGE.—Puerto Rico and Lesser Antilles, including St. Kitts, Montserrat, Marie Galante, Guadeloupe, and Dominica.

OTHER COMMON NAMES.—zapote negro (Puerto Rico); ébano (Dominican Republic); black-apple (Montserrat); babará bambarat, black-apple (Dominica); barbaquois, bois noire, plaqueminier, bois négresse ébène (Guadeloupe).

This Puerto Rican tree and a related species of sapote negro or black-apple native in Mexico and Central America both have been known as *Diospyros ebenaster* Retz. The latter, now bearing the name *Diospyros digyna* Jacq., differs in having oblong-lanceolate leaves evenly tapered at both ends or rounded at base and short-pointed at apex, also larger edible fruits about 2 inches in diameter. It has been planted for its fruits and introduced into Cuba, Hispaniola, Brazil, the Philippines, and elsewhere in the Pacific area.

The true ebonies of commerce, Old World timbers with black heartwood, belong to the mostly tropical genus *Diospyros*. Other examples are the persimmons with edible fruits, among them common persimmon (*Diospyros virginiana* L.) of eastern United States south to southern Florida.



648. Guayabota

Fruiting twig and male flowers (upper right), natural size.

Diospyros revoluta Poir.