Lauraceae—Laurel family

Persea borbonia (L.) Spreng.

redbay

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Other common names. shorebay, swampbay, swampbay persea.

Growth habit, occurrence, and uses. There are about 150 species of *Persea*, almost all of which are tropical. The best-known is avocado—*P. americana* P. Mill. Only 1 species, redbay—*P. borbonia* (L.) Spreng.—is native to the continental United States (Little 1979). A variety of redbay, swampbay—*P. borbonia* var. *pubescens* (Pursh) Little—is considered by some to be a separate species (Brown and Kirkman 1990; Little 1979). Redbay is found mainly along streams and swampy sites, and occasionally dry woodlands, in the coastal plain from southern Delaware south to the Florida Keys and west to southern Texas and southwest Arkansas (Little 1979; Sargent 1965). It is a small to medium-sized tree that occasionally reaches heights of 18 to 21 m (Brown and Kirkman 1990). The wood is used locally for cabinets and boatbuilding. The fruits are eaten by birds, and the leaves are widely used to flavor soups and meat dishes (Brendemuehl 1990; Brown and Kirkman 1990). The tree is also planted as an ornamental because of its fruit and evergreen foliage.

Flowering and fruiting. Redbay's small (6 mm long), yellow, perfect flowers are borne in axillary panicles that appear from May to June. The fruits are oblong, dark blue, single-seeded drupes that are covered with a thin, fleshy tissue; the endocarp is firm, but pliant (figure 1). Average fruit size is 7 to 10 mm in diameter and 10 mm in length. Seed size is 0.5 to 1 mm less than fruits. The fruits, which are borne on yellow-orange peduncles 12 to 25 mm long, mature in September to October (Brown and Kirkman 1990; Radford and others 1968; Vines 1960).

Collection, extraction, and storage. Redbay fruits can be easily collected by hand from the branches when the exteriors of the fruits turn dark blue or purple. Even though the fruits persist for a short while on the trees, early collection may be necessary to prevent predation by birds. Removal of the fleshy exocarp should not be necessary if seeds are to be planted immediately. If they are to be stored temporarily, removal of this tissue may help avoid damage from pathogens. There are about 3,680 seeds/kg (1,670/lb) (the sample came from Mississippi). Storage data are not available for redbay, so viability retention under typical storage conditions is unknown. Avocado, however, is considered to be recalcitrant in nature and difficult to store (King and Roberts 1980), and redbay may be the same. Some research is clearly needed on this subject.

Germination tests and nursery practice. Redbay apparently has some type of seedcoat dormancy. Tests with 1 sample from Mississippi yielded 44% germination after 56 days for seeds that had part of their seedcoats removed with a longitudinal cut. Untreated seeds and seeds stratified for 28 days at 3 EC had zero germination in the same test. All seeds were germinated on moist blotter paper at alternating temperatures of 20 EC at night for 16 hours and

30 EC for 16 hours in the light. There are no recommended test procedures from official seed testing organizations for redbay. Germination is hypogeal (Brendemuehl 1990).

There are no specific directions for nursery production of redbay. Avocado is commonly propagated from seeds or cuttings (Vines 1960), and redbay may respond to similar practices.

References

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