

***Lindera melissifolia* (Walt.) Blume**
LAURACEAE

pondberry

Synonyms: *Lindera melissaefolium* (Walt.) Blume
Benzoin melissaefolium (Walt.) Nees
Laurus melissaefolia Walt.



General Description.—Pondberry, also known as southern spicebush (Morgan 1983), a member of the Lauraceae, is a stoloniferous, deciduous, aromatic shrub up to 2 m tall. Pondberry usually occurs in clones of numerous stems with erect or ascending shoots and few branches. The alternate drooping leaves are subcordate with prominent venation and pubescence on the lower surface (Klomps 1980). *Lindera benzoin* var. *pubescens* also is pubescent beneath. The species is dioecious, with small yellow flowers that bloom in spring before leaf-out. The fruit is a red drupe about 1 cm long that matures in late summer or fall. Female clones are often smaller than male clones and are sometimes absent from stands (Wright 1989, 1990). As in many clonal species, seedlings are rarely observed (Wright 1990, Devall and others 2001).

Range.—Pondberry occurs in the Southeastern United States. At present there are populations in Arkansas, Georgia, Mississippi, Missouri, North Carolina and South Carolina; it has apparently been extirpated from

Alabama and Louisiana and possibly Florida.

Ecology.—Pondberry has probably always been a rare species (Radford and others 1968, Kral 1983), and knowledge of its ecology is limited. The species occurs in lowland habitats with hydric soils (Morgan 1983), in areas that are usually flooded in winter. In Mississippi pondberry occurs in bottomland hardwood forests. In northeastern Arkansas and southeastern Missouri pondberry is found on the bottoms and edges of shallow seasonal ponds in old dune fields, but in southeastern Arkansas it occurs in low habitat along a river. In South Carolina the species occurs in areas with karst topography, around the edges of sinkholes, and in Georgia it occurs along the borders of sphagnum bogs. Ambient light at the different sites ranges from deep shade to almost full sun. It appears that pondberry can occupy different habitats as long as its requirements for water are met (Devall and others 2001). The distribution and abundance of pondberry have been affected by habitat destruction and alteration, such as timber cutting and clearing of land. The species was listed as endangered by the U.S. Fish and Wildlife Service in 1986 (U.S. Fish and Wildlife Service 1986). Many of the existing colonies are small, and occupy only a portion of the apparently suitable habitat. Although the pondberry recovery plan states that there are 36 extant populations (U.S. Fish and Wildlife Service 1993), new colonies have been discovered since 1993, some in new locations and some near known populations. Some populations that were thought to be separated by enough distance to preclude interbreeding (as on the Delta National Forest, MS) may be linked by recently discovered colonies.

Reproduction.—Stems flower in the second to fourth year of growth (U.S. Fish and Wildlife Service 1993). The flowers are pollinated by several species of small bees and are visited by numerous insect species. Flower and fruit production are highly variable (Morgan 1983, Tucker 1984). Some years the flowers are damaged by late frosts, while other years flower and fruit production may be heavy, with up to 100 fruits per plant.

Growth and Management.—Seedlings are rarely

observed (Devall and others 2001). Stems usually live 6 or 7 years, and when a stem dies it is almost always replaced by a new stem that grows from the base of the plant. Clones expand vegetatively, and a mature colony often includes numerous leafy stems along with some dead stems (U.S. Fish and Wildlife Service 1993). Most pondberry colonies occur in light shade, but a few grow in almost full sun. In unshaded conditions, competition may be a problem. More knowledge is needed about management, and studies are currently being conducted on the Delta National Forest in Mississippi and at other locations. The U.S. Fish and Wildlife Service (1993) states that pondberry should be protected from forestry and agricultural management actions and protected from grazing and browsing animals.

Benefits.—The fruits are eaten by hermit thrushes (*Catharus guttatus*), cardinals (*Cardinalis cardinalis*) and other birds (Smith and others 2003). Steyermark (1949) reported that the fruits are used as ammunition in pop guns, tubular contrivances constructed from elderberry [*Sambucus nigra* L. ssp. *canadensis* (L.) R. Bolli] twigs.

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