

Spicebush – Our Earliest Blooming Native Shrub

by Edna Greig

Spicebush (*Lindera benzoin*) is the earliest blooming shrub of New Jersey's mixed deciduous woodlands. Its small, greenish-yellow, lightly fragrant flowers usually open by the beginning of April. Spicebush grows in the moister parts of the woods, often along streams. A clump of blooming spicebush gives off a bright yellow glow when it is hit by slivers of sunshine that pass through the still leafless tree canopy. For this reason, it is sometimes called the "forsythia of the woods." But spicebush has a refined beauty and fascinating ecology that the cultivated nonnative forsythia cannot match.

Spicebush is a member of the laurel family (not to be confused with mountain laurel, *Kalmia latifolia*, which is a member of the heath family). It is a deciduous shrub that grows 3 to 15 feet high. Its leaves are alternate, entire, egg-shaped or oval and about 2 to 6 inches long. The leaves are bright green above and paler beneath. The leaves and slender greenish-brown twigs are spicy-fragrant when crushed, hence the common name of the shrub.

The flowers of spicebush bloom before the leaves appear. The flowers are tiny, only about 1/8 inch wide, but they appear in dense clusters along the twigs. The flowers do not have petals but have a 6-parted calyx (the outermost whorl of a flower). Spicebush is dioecious, meaning that each individual shrub bears either male only or female only flowers. Because the flowers are so small, a hand lens may be needed to determine the sex of an individual shrub. The female (pistillate) flower is distinguished by a single globular ovary in its center. The male (staminate) flower has 9 stamens that extend a little bit beyond the calyx lobes. Under similar environmental conditions, male shrubs will bear more flowers than females. This is because it requires a lot more of the shrub's energy to develop the female flowers into fruits and seeds.

Spicebush provides an important early season source of nectar to small flies and bees. In return, the insects transfer pollen from the male flowers to the female flowers.

The spicebush fruit is a bright red, ovoid drupe (a fleshy fruit with a hard inner coat surrounding a single seed). When crushed, the fruits emit a strong peppery-piney fragrance. The fruits usually mature in August and September, hidden among the leaves. The fruits are a favorite food for birds, and by the time spicebush loses its leaves in late October, it has few fruits remaining on its twigs.

Spicebush is an important larval (caterpillar) food plant for our native butterflies and moths. The larvae of the beautiful spicebush swallowtail butterfly (*Papilio troilus*) generally feed on either spicebush or sassafras (*Sassafras albidum*), another member of the laurel family. The spicebush silk moth (*Callosamia promethea*; another common name is *promethea* moth) is a large, showy moth whose larvae often feed on spicebush. The large, voracious larvae of this moth feed in broods and can strip many leaves from a spicebush shrub in a few late summer days. But the shrub suffers little long-term damage, and the show is fascinating to watch.

In the garden, spicebush is adaptable and can be grown successfully in average soil, especially if it is protected from intense midday sun. Unfortunately, there are not many commercial sources for spicebush plants. But spicebush is easy and relatively quick to grow from seed. It is best to collect a few fruits as soon as they mature in August or September, before the birds get to them. The fleshy part of the fruit should be removed. The seeds then need to be exposed to cold, moist conditions for a period of about 3 months. This can be achieved by simply planting the seeds outdoors in the fall. They can be planted directly into the ground or in a pot that is covered with netting (to keep out burrowing animals). The seeds should germinate when the warm weather arrives. Alternatively, the seeds can be placed in the refrigerator, in a plastic bag along with some moist vermiculite, for 3 months. After this cold treatment, plant the seeds in a pot and place it either in a greenhouse, indoors under grow lights or outdoors after the weather warms. The seeds should germinate within a couple of weeks. The seedlings grow quickly and are best planted in their permanent location before late autumn of their first year. Water well until the plants are established. They should flower the third spring after sowing the seeds. Once the plants are mature, they need little attention. As an added bonus, it seems that spicebush is not a favorite browse plant of deer (although a hungry deer will eat anything).

So, enjoy spicebush in its native habitat. And, if you have a garden, consider planting spicebush. You will be rewarded with a fast growing, low maintenance shrub that has both showy flowers and fruits and that will attract butterflies, moths and birds to your yard. ■