## Profile

## Wax Myrtle Morella cerifera

Southern Wax Myrtle, also called Southern Bayberry and Candleberry, is a wispy, six to twelve foot multi-trunked evergreen shrub. But under the right conditions, it can reach 20 feet in height. The light olive-green foliage has a spicy fragrance. Pale blue berries occur on female plants in the winter.

It is native from New Jersey west to eastern Oklahoma and east Texas, south through Mexico to Central America as well as through much of the Caribbean.

It is used ornamentally for screens, hedges, landscaping, wetland gardens, and habitat restoration.

With separate male and female plants, only the female plant has berries. So if berries are desired, there must be male plants close enough to the berry-producing female plants for pollination to occur. The leaves are aromatic, with an appealing fragrance when crushed.

Like legumes, Wax Myrtle utilizes atmospheric nitrogen and so is able to thrive in infertile soils. Specimens growing in drier and sandier areas are shrublike, have rhizomes and smaller leaves than usual. Specimens in wetter areas are more tree-like with bigger leaves. There are many intermediate forms.

The tree's distinctive fragrant scent comes from volatile oils contained in tiny glands on the leaves. These oils cause Wax Myrtle to easily and quickly ignite in a fire, making Wax Myrtle a very flammable plant. Its shoot, cannot handle wildfires well. Because the leaves, stem, and branches contain flammable compounds, it is a fire hazard.

A wildfire will often kill the shoot. Only a very small or quick-moving fire will do less. Usually only the most recent primary growth may be incinerated. In contrast to the weakness of its shoot, Wax Myrtle's root system is fire-resistant; no known fire has killed this plant's roots. However, Wax Myrtle will not survive shoot destruction indefinitely. Three consecutive years of shoot destruction may kill all plants affected. If

this does not happen, this species will regrow a shoot.

This growth is most rapid in the first season after a fire. Wax Myrtle is often one of the first plants to colonize an area.

The scientific epithet *cerifera* means "wax-bearing." Four pounds of berries yield about one pound of wax.

Wax Myrtle's fruits were a traditional source of the wax for those old-fashioned decorations called bayberry candles. The wax was extracted by boiling the berries and skimming off the floating hydrocarbons. The fats were then boiled again and strained, and the liquid was usable in candle making, both by dipping and molding.

Southern Wax Myrtle was not the only plant used for making bayberry candles. Its close relatives were also usable. Bayberry candles were usually made from the larger-fruited, Northern Wax Myrtle (M. pennsylvanica).

Southern Wax Myrtle and its relatives have largely been supplanted in candle making by paraffin substitutes. The substitutes have artificial colors and scents that create candles that look and smell similar to natural ones.

Aromatic compounds present in wax myrtle foliage seem to repel insects, particularly fleas. It was traditionally planted around southern homes to help keep living spaces pest free. A sprig of wax myrtle in a closet or drawer was reputed to keep cockroaches out.

Wax Myrtle fruit is an important high energy food for wildlife, providing fat and fiber in winter diets. Turkey, Bobwhite, various waterfowl, Catbirds, thrashers, Bluebirds, vireos, and warblers are frequent visitors to Wax Myrtle thickets. The berries are the main food for wintering Tree Swallows in Florida.

Wildlife is the primary disperser of Wax Myrtle seeds. Birds digestive systems' remove the wax from the fruit, which a prerequisite for germination.



A Pine Warbler feeds on Wax Myrtle berries during January's cold when insects were hard to find.

One species of bird was originally named for its strong association with Wax Myrtle on its wintering grounds—the Myrtle Warbler. It is now known as the Yellow-rumped Warbler.

Medicinal use of Wax Myrtle has declined since its peak in popularity in the 19th century.

The plant may still be used today in the treatment of fever, diarrhea, and a few other ailments. The chemical myricitrin has anti-fever properties. That chemical, along with the tannins, also has anti-diarrheal properties. The myricitrin works as an antibiotic, while the tannins have astringent properties.

It made a useful body for surgeon's soap plasters, and an aromatic and softening shaving lather. It has also been used for making sealing-wax.

The bark of the stem and root contain starch, lignin, gum, albumen, tannic and gallic acids, acrid and astringent resins, and a red coloring substance. The wax consists of glycerides of stearic, palmitic and myristic acids, and a small quantity of oleaic acid.

Externally, the powdered bark was used as a stimulant to indolent ulcers, though in poultices it had to be combined with elm.

The decoction was good as a gargle and injection in chronic inflammation of the throat and was used as a wash for the gums. Water in which the wax had been boiled to an extract was regarded as a certain cure for dysentery, and the wax itself, being astringent and slightly narcotic, was valuable in severe dysentery and internal ulcerations.