

Pause for Plants, February A Bloomin' Tree

Elms (Winged, American, and Slippery) generally get a headstart on spring and bloom in February. Well, so do some others like Red maples, but this is about winged elm, *Ulmus alata*, South Carolina's most widely distributed native elm. Along the sides of young branches lateral growths of corky wood form the "wings" that give this species one of its common names. The extent of wings is variable, but they are usually prominent on young tree branches or younger branches on older trees. (Wings of this sort are also a feature of our sweetgums.).

Winged elm wood is particularly hard and difficult to split. Years ago when early settlers were clearing land, they hated to come upon a stand of winged elm and would exclaim: Phew, elms! "Phew" soon became corrupted to "piss," and winged elms became piss elms! The very hard split-resistant wood makes it great for hockey sticks and chair rockers and arms.

Blooming winged elms seem to be true harbingers of spring. You can pick them out easily in February, along roadsides sandwiched in between Redcedar and various oaks at the margins of woods. What were bare somewhat drooping branches have become dusted with a delicate rosy beige color that permits them to stand out against the green Redcedars and the bare winter branches of other hardwoods. They are also spectacular viewed with a clear cold blue sky backdrop.



Mature Winged Elm in full bloom.

Elm flowers are able to lend color to their trees in spite of being very small and lacking petals. They do have a light brown calyx or group of five united sepals, male stamen with anthers that are red when immature and a central female pistil covered with silvery hairs. So, botanically, these flowers are incomplete (lacking petals) but nonetheless perfect, because both male and female parts are present! Elm flowers are not structured to attract pollinators with scent or nectar. Their pollen, like that of oaks, ash, sycamore, and redcedar, is very light and easily transported by wind. The downside of wind-pollinated species is that their pollen is usually allergenic.....achoo!



Elm flowers in clusters along branches.

After pollination, ovaries of elm's pistil develop into small reddish winged fruits called "samaras." Mature fruits have a single seed, are nutritious, and are eaten by birds. After leaf buds open, young leaves and twigs are a favored food for deer. Leaves are simple, toothed, and grow alternately, one leaf per node, on the stems.

Winged elms mature to a medium sized tree of about 50 feet in height. Only occasionally do they reach 80 feet or more. They grow more rapidly in open space, and are not very tolerant of shade or close neighboring trees.

Like other native elms, winged elms are susceptible to Dutch Elm disease caused by a fungus that is transmitted by beetles. It was introduced on lumber imported from Europe just after World War I and has been responsible for near total devastation of our American elms in many regions. Elms are also susceptible to a bacterial disease, which infects and destroys its food conducting tissue, aptly called elm phloem necrosis. Usually more common in the northern parts of elm's range (Indiana, Illinois, and Missouri) these diseases are reportedly also affecting trees of the southeast.

Mucilage from inner bark of winged elm, American elm, *Ulmus americana* and Slippery elm, *Ulmus rubra*, is listed as a useful herbal remedy to treat cough, sore throat, and digestive problems. Of the three species, Slippery elm is considered best for medicinal use.

And how about a Winged elm Bonsai? Apparently this species grows attractively and well as a miniature.