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Find Out Characteristics of Trees Before Planting By Annette Meyer Heisdorffer, PhD

Although many beautiful trees are available for planting in the landscape, take the time to learn about them before planting to avoid regretting your decision. Make sure the tree prefers the planting site conditions, and that there is enough room. The trees listed in this article may seem appealing but think two or three times before planting them in certain locations due to their characteristics.

Hybrid poplar or cottonwood, *Populus deltoides*, and all hybrids are fast-growing and soft wooded trees. They are brittle, short-lived, prone to decay, and are poor choices for the managed landscape. Additionally, the roots are on the surface. Furthermore, the leaves drop at the first hint of a drought. These trees have no fall color and are messy.

The paulownia or princess tree, *Paulownia tomentosa*, has pretty pale violet flowers in April but produces a lot of litter. The large leaves can reach 5 to 10 inches long and wide. The seed stalks can be 8 to 12 inches long. Often this tree is seen for sale in ads in the Sunday newspaper. It is a large tree reaching 30 to 40 feet and is not recommended for the maintained landscape around the home. It also has soft wood due to fast growth.

Mimosa, *Albizia julibrissin*, has pretty flowers in the summer but is plagued with disease and insect problems. The fast-growing tree has weak wood and is not reliably winter hardy. The leaves do not provide a fall color. The tree will come up from the roots and produce suckers.

Willows, *Salix* species, also grow fast and therefore are brittle and short-lived. They are prone to internal decay and produce surface roots. Leaves drop at the first hint of drought. Also, they have little fall color. Under a load of ice, the branches of the weeping willow (*Salix babylonica*) will bend, but lack the strength to hold the excessive weight. Although popular, willows have shallow, extensive root systems.

The water maple, *Acer saccharinum*, which is also known as the silver maple, is overplanted in the landscape. If a disease or insect affects this species, then many trees in the landscape will be lost. Therefore, it is not a good selection. It grows quickly, but the wood is soft. In addition, when the water maple tree is pruned, it does not compartmentalize well. If not pruned properly, extensive columns of decay develop.

Another disappointing characteristic of the water maple is the poor fall color.

Furthermore, it has surface roots that need to be protected from the lawn mower. Remember this is a large tree reaching 40 to 50 feet tall.

White pine, *Pinus strobus*, although very common, is not performing well in the urban environment. It must have deep, well-drained soil to prevent white pine decline, which is a physiological problem due to undesirable growing conditions for the tree. White pine root decline, which is caused by a fungus, is another problem.

The white pine grows fast, so like many other fast-growing species, the wood is relatively soft. The side branches form a spiral around the trunk and are somewhat horizontal. This leads to high rates of branch failure or breakage. Once a tree begins to fail, it will continue to drop branches. Most pines have two needles per bundle; white pines have five. These additional needles hold more ice resulting in additional damage.

Bradford Pear, *Pyrus calleryana* 'Bradford', will grow under almost any cultural environment essentially disease and insect free, but it is extremely brittle. Once they begin to break apart, usually at about 8 to 12 years, they should be removed. If you plant these trees, do not put them in parking lots or other sites where they will damage property when they break apart and do not use them in large numbers. Also, this tree has become invasive.

Other cultivars of ornamental pears are available with wider branch angles than the 'Bradford' but they are still brittle. Attention needs to be paid to competing branches for the central leader as well as a large number of branches forming in a similar location on the tree. Proper and judicious pruning will help these trees last longer, but 20 to 25 years may be the life span for most ornamental pears in this area.

Pin oak, *Quercus palustris*, is described by its scientific name "palustris" which means "swamp loving." This helps to explain the stress we are seeing on pin oaks in the urban landscape. In addition, they have been greatly over-planted. Disease and insect problems have become significant as well.

The female ginkgo, *Ginkgo biloba*, tree should be avoided due to the smelly fruit. Make sure you are purchasing a male cultivar that does not fruit. It would be heartbreaking to watch

the ginkgo tree grow for 20 years and then have to cut it down due to the objectionable odor of the fruit.

For more information about selecting trees for your landscape, contact the Daviess County Cooperative Extension Service at 270-685-8480 or annette.heisdorffer@uky.edu.

Questions and Answers:

One way to encourage the Christmas cactus to bloom is to leave the plant outdoors from September to October 15. Cold temperatures of 50 to 59 degrees F stimulate flowering. Be sure to protect the plant from frost during this time. When brought indoors in early October, the plant flowers around Thanksgiving.

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