

There are many different user groups or target audiences that need information about trees. The needs and interests of different user groups will vary greatly. But even if the perfect package were developed, it does not guarantee that the users will rush out to accept it. This is similar to the old proverb about building a better mousetrap and having the world beat a path to your door. This is extreme naivety, based on the half-truth

that the person indeed wants a better mousetrap.

Getting useful new knowledge put to use is a common concern for both the researcher and the arboriculturist. Both of us have to work on it.

*Northeastern Forest Experiment Station
Forest Service, U.S. Dep. Agriculture
6816 Market Street, Upper Darby, Pa.*

A LOOK AT FAST-GROWING SHADE TREES

by Ray Rothenberger

One of the first conditions that the home owner specifies when selecting shade trees is "something that grows fast". Fast growth of trees, however, often sacrifices some other qualities. A look at some of the fastest growing trees uncovers faults or future problems. If we are willing to accept the faults, or take care of the problems, perhaps we can use some of these trees.

One of the fastest growing large shade trees is the silver maple, sometimes called soft maple. Both names are very descriptive. The leaves have a silvery-grey underside, which is attractive when the wind blows. The wood is quite soft, and when the limbs become large they are quite easily broken by strong winds or ice storms. Since it becomes an extremely large tree, it may be dangerous if planted close to structures. Since this tree grows rapidly, it needs much water, and as a result it is notorious for plugging sewer lines. Its large roots also lift sidewalks if trees are planted too close to them. Nevertheless, it is an attractive, large, fast-growing tree for an area where these problems cannot develop.

Another fast-growing tree is the Siberian elm, also often called Chinese elm. It is a smaller tree than the silver maple and, therefore, more suitable for limited space. However, since it grows extremely rapidly, its wood is also weak and easily damaged by high winds or ice. Probably the most serious fault of this tree in our area is the damage by an insect known as the elm leaf beetle, which skeletonizes the leaves, turning them brown in mid-summer. The pest can be controlled by frequent spraying, however.

The green ash is a vigorous tree while young, eventually slowing growth to develop a broad

crown. It tolerates a wide range of conditions, but its wood is also fairly weak. Ash produce both male and female trees. In the landscape the male "seedless" tree should be preferred since it is less messy and not subject to an insect which attacks the flowers. The green ash is susceptible to a borer, which may be considerable damage unless the bark and limbs are sprayed occasionally to keep the pest under control. Normally the ash is vigorous and fast growing, so it is able to recover from borer damage.

Sycamore is another fast-growing tree that becomes too large for planting on small lots. In the lawn it is considered a rather dirty tree since it is constantly dropping bark, leaves, or seed balls. It is also susceptible to a disease that may kill twigs or disfigure leaves each spring. The London Plane tree and the Oriental Plane tree are more resistant to this disease than the American species.

The red maple is another fast-growing choice. It has few problems, although like so many fast-growing trees the wood is somewhat weak.

Where speed is important, excellent care can do much to speed growth of any tree. Keep the tree well watered, but not overwatered, during the entire summer. Fill around the roots with good soil when planting. Do not fertilize at planting, but once the tree is well established, fertilize it yearly in the fall. Keep pests under control. With this care even a slow growing tree can produce shade faster than we might have expected.

*Extension Horticulture
University of Missouri
Columbia, Missouri*