

Match Tree Selection To Use Area

By WILLIAM H. COLLINS

Horticulturist
Cole Nursery Company, Inc.
Circleville, Ohio



Sovereign Pin Oak, a new, improved variety. Growth is vigorous and branching is upright and well-spaced.

THE environment around us is changing. There are changes in the soil in which we place plants—and changes in the air in which we expect them to grow.

Most kinds of plants growing in their native environment may not only be in competition with each other but also with dozens or hundreds of other kinds, each seeking to capture their share of space in the soil and in the air.

When man takes a seedling from the woods or grows one, he usually plants it in a man-altered location. Formerly such plants grew into what we call "specimen plants;" that is, naturally shaped plants, the result of little or no competition. Such plants grew more vigorously than their counterparts in a native environment. However, each year we see more clearly that the formerly favored plant is now growing in a more difficult situation than ever existed in its original native environment.

How have these changes come about?

First, we have blended, covered or removed the so-called original top soil, the result of thousands of years of preparation and a medium of relatively delicate balance. We have created either vast open space areas, or built narrow street channels between long rows of buildings where gusty winds, radiating heat and uneven rainfall patterns are not duplicated anywhere in the natural plant world.

We emit into the atmosphere quantities and kinds of gases and particles that were not formerly present. We add salts and other chemicals to roads and sidewalks, some of which may even damage foliage and trunks before they become incorporated in the soil and damage roots.

How can we find ways or plants that will grow acceptably in this environment? . . . an environment which more than ever needs growing plants!

We know we can usually provide better root growing conditions at the planting site and we can improve maintenance and care, but until we slow down or reverse pollution, one answer is to find or create more tolerant plants.

We can select and perhaps breed new trees, shrubs, evergreens and grasses that are more able to resist these man-made conditions. This means a re-evaluation, a fresh unbiased look at many woody plants that up to now may have been considered not good enough ornamentally.

MOVING?

Changing Your Address?

If so, notify our circulation department right away to be certain the magazine reaches you at your new location. The Post Office won't forward your copies. So when you write us, make it at least three weeks in advance of your moving date, and include your old address, as well as the new one. We'll see you don't miss a single issue.

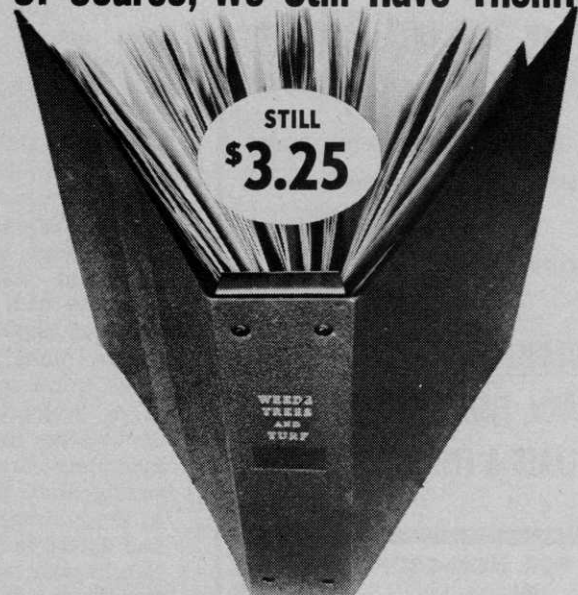
Send old and new address information to:

WEEDS TREES and TURF

Circulation Department
9800 Detroit Ave., Cleveland, Ohio 44102



Of Course, We Still Have Them!



Permanent Magazine Binders

Keep 12 issues of Weeds Trees and Turf in one neat package • Magazine can be easily inserted as it arrives. • Binder protects, gives bookshelf a neat appearance.

Send check or money order to:

WEEDS TREES and TURF

9800 Detroit Ave., Cleveland, Ohio 44102

Some trees have been called "weed" trees because they have the inherent ability to self seed or to grow more easily in the same place where the specified tree struggles.

The real pressure now is to find more plants that can grow in these

raw, overly exposed, overly polluted situations. Perhaps the quickest results can come from discovering or seeking out individual plants that presently are growing tolerably well in these problem areas—or at least much better than similar kinds

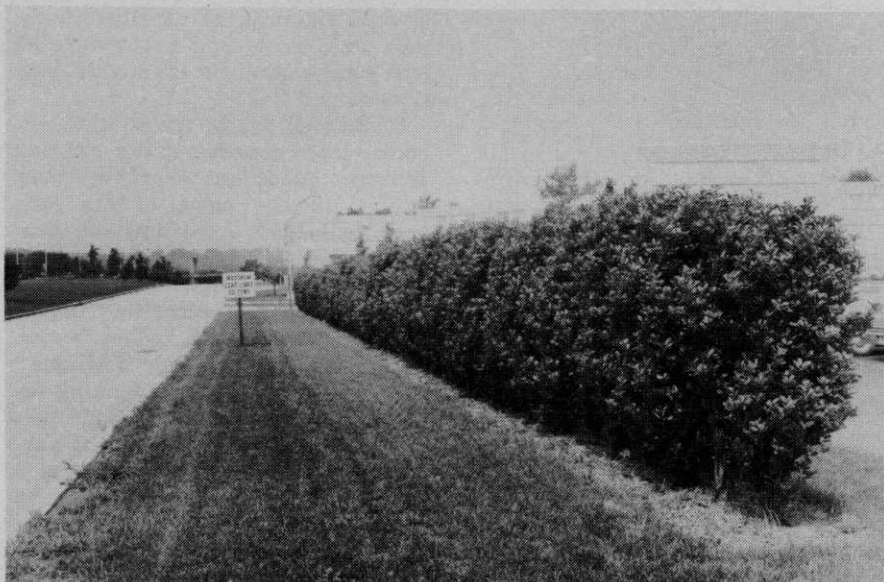
around them. If no unanticipated problems occur during the testing and initial propagation phases for these new kinds, such trees can become available, in modest quantities, within a five- to ten-year period. It may be desirable to test plant the first propagated trees in the very areas where it is proposed they will be used.

In addition, professional plant explorers accompanied by plant ecologists will need to re-explore climatically similar areas of the world to find additional superior types for further evaluation and breeding.

What kinds of plants are available now that we believe give promise of growing tolerably well under our varying man-made conditions?

Many times the leads come from plants set out in ostensibly the wrong place; for example, would you expect the bald cypress, which prefers to have its roots in or near water, to do well in a high and dry situation . . . there are dozens of convincing examples to show that it does.

The honey locust is showing remarkable tolerance to normal (?) roadside salt accumulation but that



Tallhedge is a popular hedging and screening plant. It grows tall and dense. Ideal for noise abatement plantings adjacent to highways.

Don't Just Take Our Word For It

On June 23, 1971,
the Environmental Protection Agency
issued amended registration 8959-1
for CUTRINE algaecide.

CUTRINE is now registered by the
E.P.A. for use in:

POTABLE WATER RESERVOIRS!
FARM, FISH AND FIRE PONDS!
LAKES & FISH HATCHERIES!

FOR NON-CROP USES IN

Water from treated lakes
or ponds may be used to
irrigate turf, fairways,
putting greens and orna-
mental plants.

This sticker is an extension of
CUTRINE's registered label in sev-
eral states and appears on all
CUTRINE containers sold within
those states.

CUTRINE

It's Some Algaecide!

Let's Talk About It
At Booth I-25
43d GCSAA Conference
Cincinnati
Feb. 13 - 18

or

Circle our number for information
APPLIED BIOCHEMISTS, INC.
P.O. Box 25
Mequon, Wisconsin 53092

certainly does not mean if all the trees of the normally rugged Norway maple died alongside a salt-stream highway, you could replant with honey locust and have it flourish.

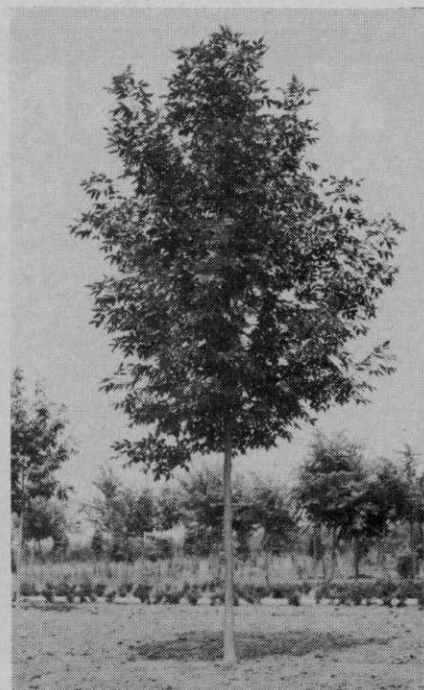
It is really a two-way street. While the professional plantsman strives to find more highway and urban tolerant tree varieties, let us hope that those in a position to exercise judgment in the use of aids which keep traffic moving during inclement winter weather do not wipe out such progress by increased rates of application or the use of newer, more perplexing chemicals.

We think we sense the beginning of a gradually changing attitude about trees in the environment immediately around us. People are saying that the places they want to enjoy trees are where they live and where they work. Each year the family who takes to the road to enjoy the woods, the park or the forest preserve find it necessary to travel farther and faster to get there.

A number of promising new varieties are available and indicate the progress that is being made in the selection of superior trees. Seedling trees of oak, ash, maple and other popular kinds are naturally quite variable. They have different shapes, heights, branching structure; differences in leaf size, leaf color, fall color and texture. But when an obviously superior tree is discovered,



Autumn Purple White Ash has dark green leaves that turn to deep purple or mahogany during the fall. The coloring will last from two to four weeks.



Marshall Seedless Green Ash leaves turn yellow in autumn. This tree thrives almost anywhere.

trees propagated from it are usually identical with the parent tree.

This fact is the basis for the plant patent laws and assures the users of vegetatively propagated trees that such plants will develop into similar progeny.

In the past, many variety selections were made on the basis of just one or two minor distinguishing characteristics. Modern tree selection attempts to include many of the inherent good qualities the species possesses. A tree with excellent form will be passed by if the foliage is disease susceptible or the fruit too large. New selections are nearly always vigorous, of excellent form, pest free, hardy and possessing the best combination possible of foliage, flowers and fruit.

Plantsmen today try to find superior trees growing under existing adverse conditions — along busy streets, in the heart of the city, near industrial areas and the like. The parent tree may be growing in a 3 to 4 foot tree lawn and yet still be in good health when its trunk is as large as 12 to 15 inches across. Or it may be growing downwind from an industrial plant looking remarkably good in spite of air pollution and the deposit of dust particles on its leaves for months at a time. In sites like these, the budded trees grow better than the naturally occurring mixture of seed trees. We recognize that not all situations would call for the budded or grafted tree.