

CADDO SUGAR MAPLES

Sugar maples often have significant problems with our Kansas weather. Our hot, often dry summers and windy conditions can shorten the life of these trees. However, some sugar maples are better adapted to Kansas conditions than others. Our John C. Pair Horticulture Center has evaluated sugar maples for well more than 20 years and has identified selections that are much better adapted to Kansas. Of particular interest are the Caddo sugar maples which originated from an isolated population in Caddo, County, Oklahoma. These are true sugar maples and are considered an ecotype and are more drought tolerant, better adapted to high pH soils and more resistant to leaf scorch and tatter than the norm. Just how resistant to scorch is impressive. The last three weeks of August in 2003 saw temperatures at our research station over 100 degrees each day with no rain for the month prior. All other sugar maples in the trial had severely scorched leaves. Not a single leaf of any of the caddo maples was scorched. Leaf water potential readings taken pre-dawn showed all other trees in the trial past the wilting point while the Caddo maples were barely stressed. Another interesting characteristic of caddo maples is that they tend to retain their leaves in the winter and therefore have been suggested as screens or for use in windbreaks. Dr. John Pair, the late director of the Horticulture Center, selected and released two Caddo maples over 10 years ago. Both these selections color early and have consistent good red fall color. Drought tolerance and resistance to leaf scorch and leaf tatter are exceptional. However, neither will do well in a heavy clay soil that is frequently saturated. These trees can be damaged or killed if planted in wet sites. The first selection, *'Autumn Splendor'*, has the traditional sugar maple growth pattern and needs plenty of room to mature. *'John Pair'* is smaller and more compact and more likely to fit a residential landscape. This tree is also noted for a dense, uniform crown. If you are in the market for a sugar maple, consider these before making a final decision.

Conservation Trees from the Kansas Forest Service

The Kansas Forest Service offers low-cost tree and shrub seedlings for use in conservation plantings. Plants are one to two years old and sizes vary from 5 to 18 inches, depending on species. Orders are accepted from now through the first full week in May each year, but order early to insure receiving the items you want. Orders are shipped from the second week of March through May 5. Approved uses for these plants include windbreaks, wood lots, riparian plantings, wildlife habitat and Christmas trees. They may not be used for landscape (ornamental) plantings or grown for resale. All items are sold in units. Each single species unit consists of 25 plants. For example, a unit of Eastern red cedar has 25 trees per unit. Though a single species unit is most commonly purchased, three special bundles are also available including a songbird bundle, quail bundle, and pheasant bundle. Tree planting accessories are also available including marking flags, root protective slurry, rabbit protective tubes, weed barrier fabric and tree tubes. If there have been problems with deer browsing on young trees, the tree tubes are a must. Order forms are available from local K-State Research and Extension offices and the Kansas Forestry website.

African Violet Troubles

If you grow African violets, take note of the causes of these potential troubles:

- 1) **Spotted leaves** - this occurs if you allow cool water to contact the leaves. Use only room temperature water.
- 2) **Small plants with pale yellow leaves** - often caused by too much light and inadequate fertilization.
- 3) **Leaves curled downward** - may be a result of too low temperatures (below 60 degrees).
- 4) **Long leaf stalks and a few or small blooms** - often results when plants don't get enough light.
- 5) **Buds dry up** - this might happen if there is not enough moisture in the air or soil and if temperatures are too high.

6) Plants wilt quickly and crown rots - likely they are getting watered too frequently and/or the drainage may be poor (due to potting mix or lack of container holes) or the plants were set too deep into the soil.

7) Leaf stalks rot where they rub against pot edge - high salt concentrations on the sides of the pot and near the soil surface damage the leaf stalks allowing the Botrytis disease organism to enter. You can protect the stalks by putting a strip of aluminum foil, paraffin, or a cardboard cover around the rim of the container.

8) No flowers - may be due to one or more of the following: temperature too low, soil is overfertilized, too much light or too much shade, too much or not enough water, or air contains stove gas.

Newer Lights Available for Indoor Gardeners

Many gardeners use fluorescent lights to start young vegetable and flower plants during the spring or to grow certain houseplants all year long. Traditionally, we have used fixtures with T-12 lamps suspended a few inches above the tops of the plants. However, T-12 lamps are fading away due to newer lamps that are a better choice for indoor gardens. These are known as T-8 and T-5 lamps. The number after the "T" refers to the diameter of the lamp in eighths of an inch. Therefore, a T-12 lamp is 12/8 or 1.5 inches in diameter and are what most people are familiar with. A T-8 is 8/8 or 1 inch in diameter, and a T-5 is 5/8 of an inch in diameter. So, does a smaller diameter mean less light? Not at all. In fact, the T-5 can be the brightest of the three. Another advantage for these newer lamps is they use less electricity per lumen. The traditional 48-inch T-12 is rated at 40 watts. However, there are newer styles of T-12's that are 34 watts. The T-8 is rated at 32 watts and the T-5 at 28 watts. This sounds too good to be true. Are there drawbacks? Maybe so or maybe not. First is cost if you have to replace T-12 fixtures to convert to a T-8 system. However, newer fixtures may be able to handle either T-12's or T-8's. Therefore, if you purchased fluorescent fixtures in the last few years, check to see if they are rated for T-8's before replacing them. Note that lamp costs are comparable between T-12's and T-8's. The T-5 lamps may be more expensive so check prices before converting. The question becomes, is it worth it? If you have a T-12 fixture that is rated for T-12's only and are satisfied with your results, then maybe not. However, if you are investing in new fixtures or have fixtures that can use either T-12's or T-8's, then go with the T-8's. They will use less energy, last longer and provide more light. Prices for T-5's have been dropping so you may want to consider them as well. The newest technology is LED lighting. LED's have several advantages over other types of lighting including durability, long life, a cool running temperature and more latitude in choosing specific wavelengths of light. Traditionally, they have been very expensive but costs are dropping rapidly. We are starting to use LED's as supplemental lighting in the University greenhouses but would suggest only using them on a trial basis at home until you see how they perform for you.