Agriculture and Horticulture Newsletter

Agriculture and Horticulture is part of the Texas A&M AgriLife Extension Service. AgriLife Extension offers practical information in the areas of agriculture, environmental stewardship, youth and adult life skills and community economic development to educate Texans for self-improvement, individual action and community problem solving.

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Maintaining Your Lawn in Periods of Drought

The dog days of summer are upon us. We all like to keep our lawns fresh and green in appearance but know water conservation is also important. The cost of city water, as well as concerns over potential future water restrictions, remind us of the need to irrigate wisely. Even those of us who have well water need to use caution. Ask any farmer dependent on irrigation wells- they are not a bottomless pit. So what are we to do? Fortunately we do have options. I have compiled a list of things that will help us maintain a healthy lawn without depleting our water resources.

1. Don't overwater. Studies and experience have shown that home owners tend to put a lot more water on their lawns than necessary.
2. Water according to the weather rather than a weekly schedule. It is better to water deeply and less frequently. Water just enough to wet the top 6 inches of soil then wait for the lawn to show signs of slight drought stress. These signs include a change in color of leaf blade from green to a dull blue, slight leaf blade curling, and foot prints remaining after walking across the lawn. When you notice any of these symptoms water deeply again. Ideally you can go at least a week and maybe a little longer using this method. Obviously, if its 105 degrees with a 30 mph wind you will be watering more frequently. Also, remember that you are managing for health and color not forage production.
3. Make it a point to only take the top 1/3 of the leaf blade when mowing. You may have to mow more often but the result will be a thicker lawn with reduced evaporation rates.
4. Reduce fertilization if possible. Applying too much fertilizer increases water requirements so avoid excessive amounts of nitrogen during periods of drought.
5. Water during the coolest part of the day. In many areas it is discouraged to water at night. However, in our area during the hottest part of the summer, it might not be a bad idea to have the irrigation system come on in the wee hours of the morning. Disease is the biggest concern for night watering but if you are only watering deeply once per week this should not be a problem.

With proper planning and a few changes in our methods, we can still enjoy a beautiful lawn while being good stewards of our most precious natural resource- water. Remember, we at the Texas Agrilife Extension Service are here for you. If you have any questions please don't hesitate to contact me here at the office at 940-459-2651.

How To Properly (And Organically) Attack Powdery Mildew

Now that it was warming up and the bugs were starting to drift off, I thought my garden would be drama free for the rest of the summer. Unfortunately, I was in for a surprise: powdery mildew! I have a few squash plants growing in my garden: zucchini, pumpkin and butternut squash but a few weeks ago I started to notice white powdery spots on the leaves of my zucchini which quickly started to multiply and spread to my pumpkin and butternut plants. Oh no! Luckily, it wasn't as serious as I thought it was and I found an incredibly simple solution.

A close up of the powdery mildew on my zucchini leaves.

Here is a recipe for an organic mildew killer. The recipe is as follows: For every cup of water add less than 1/8th of a teaspoon of baking soda and one to two drops of dish liquid (for adhesive purposes). Test the mixture out on one of your leaves before you spray your entire plant. The mixture doesn't remove the mildew it just stops it from spreading, so if there is a little bit of burn on your leaves don't fret too much. Eventually, the mildew leaves will die off but hopefully you can keep any new leaves healthy. Spray the tops and bottoms of each leaf and spray about every day during the morning or evening when it isn't too hot or too cool. It is recommended that you give your plants a boost of organic liquid feed or compost tea once a week to make sure that they are still growing healthy new leaves.

Powdery mildew affects almost everyone. It occurs when it is hot and sunny outside which means it will most likely affect your plants. But don't worry, it won't affect the fruit! It is mostly just a nuisance.

Gardening tips

Now is the time to evaluate those spring vegetable crops like squash and green beans. If they are going downhill fast, it is best to remove them from the garden and plant heat-tolerant crops like okra or southern peas. If you decide not to replant, be sure to cover the ground with a thick layer of mulch to keep weeds from taking over.

Gardening tips

Consider growing a vine on a trellis covering a west oriented window or patio. Once the vine covers the arbor, it will provide shade from the scorching summer sun and help reduce your energy bill.

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Gardening tips

It is the time of year when webworms can become a problem in your pecan and other shade trees. The can be easily kept in check with a little help from Mother Nature. First of all, don't kill wasp nests around your home. Those wasps feed on the webworms. You can give the wasps a hand by poking a hole in the webs with a long bamboo pole. This will make it easier for the wasps to get to the worms. If you can't reach the webs with a pole, try breaking them up with a stream of water from a pressure washer.

Did You Know...

There is a genetic difference between varieties of crape myrtles that causes some to bloom several weeks earlier than others. To get the longest bloom period, check with a local nursery of garden center that specializes in crape myrtles.

Did you know...

Regular gasoline contains up to 5 percent ethanol and should not be used in lawnmowers, string trimmers, chainsaws and other small engines that may sit for weeks or months without being used. That is because the ethanol in the gasoline attracts moisture and the moisture will damage the carburetor and fuel lines. Instead, use the higher grades of gasoline like super unleaded since they do not contain any ethanol. The problem should not occur in those lawnmowers and other small gasoline-powered equipment if they are used on a regular basis such as in commercial use.

TEXAS PECANS

The pecan is the Texas state tree, being native to about 150 counties and capable of growing and producing in all Texas counties. The tree is popular for landscaping and as a source of nuts. Proper attention to cultural requirements and pest control will help to assure a long and productive life for home pecan trees.

Pecans do not come true from seed, and every native or seedling pecan tree is distinctly different from the seed parent. Over the years, more than 1,000 pecan seedlings have been named and grafted as varieties. Only a very few of these have become established as outstanding varieties.

Seedlings

These ungrafted trees make good landscape trees because they characteristically have strong, fast growth and a natural central leader without training. Nut quality is variable but at least acceptable. Seedlings usually are better in structure and appearance than improved variety trees. Seedling trees rarely bear nuts as early as improved varieties.

Over the years, varieties have been identified which performed well in various areas of Texas. These are listed in Figure 1, with the most recommended varieties listed first.

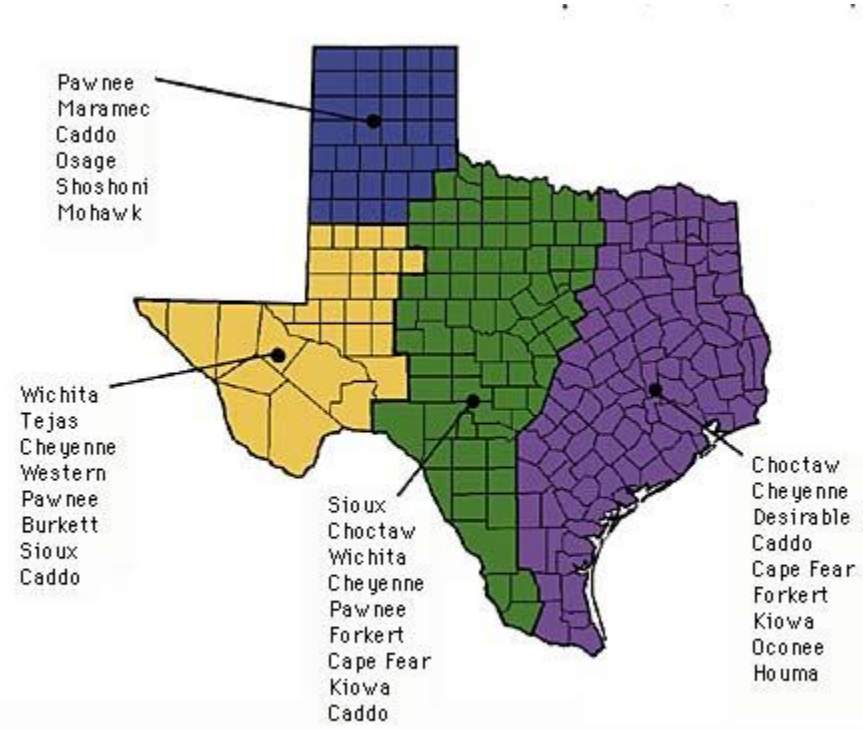

Figure 1. Pecan varieties recommended for home planting in Texas.

Pollination

Commercial pecan growers must pay special attention to cross pollination; however, neighborhood trees can supply the needed pollen unless landscape trees are very isolated. Pecan varieties do only a fair job of self-pollination because some varieties shed pollen early (before female flowers are receptive) while others shed late (after female flowers are receptive). Fortunately, there are good early- and late-pollen-shedding varieties available to ensure effective cross-pollination. Pecans are wind-pollinated and can cross-pollinate with trees up to 1/4 mile away.

Ideally, pecans should be within 300 feet of another variety or a native tree. If inadequate pollination is probable, plant at least one early- and one late-pollen shedding variety in your landscape.

Early-pollen-shedding Varieties

Desirable is an outstanding variety for the humid areas of east and south Texas and also produces well in central Texas. The tree grows fast but requires at least 8 to 10 years to bear 15 pounds of pecans. It has weak "V" limb angles which require training and its foliage is light green rather than a more attractive dark color. Scab resistance is moderate and can be controlled with fungicide sprays. **Desirable** is not an exceptionally heavy bearer, but as an older tree, it is the most regular producer of crops of high quality pecans. Nuts/lb - 39; percent kernel - 54.

Western can grow and bear nuts with less management than any other variety in the far west. The tree is strong, easy to train and productive, coming into production in 7 to 8 years. **Western** is highly susceptible to scab disease and should be grown only in west Texas. Nuts/lb -52; percent kernel - 59.

Pawnee is a new, extremely early-ripening variety recommended especially for the Texas Panhandle. It is a medium-size pecan with good kernel quality. Additional years of evaluation are needed before recommending it for all of Texas. It appears to have a natural resistance to aphids, which are a leading pecan pest. Nuts/lb - 50; percent kernel - 58.

Caddo is an excellent yard tree in all of Texas because of strong limbs, scab resistance, early ripening and attractive foliage. Its nuts are very small but have high-quality kernels. The trees begin to bear in 5 to 6 years and tend to bear well annually. Nuts/lb - 63; percent kernel - 57.

Cheyenne is a very productive, smaller tree which begins to bear a high quality nut in only 5 to 7 years. **Cheyenne** is particularly susceptible to aphids. It can be grown in all but the northern panhandle area of Texas. Nuts/lb - 51; percent kernel - 57.

Late-pollen-shedding Varieties

Sioux is an outstanding yard tree because of its strong, easy-to-train limb structure and extremely high-quality, small nut. It has moderate scab susceptibility and will require fungicide sprays during periods of high humidity. Nuts/lb - 62; percent kernel - 59.

Wichita is the most productive pecan grown in Texas and is ideally adapted to central and west Texas. Although it has serious scab problems in the humid areas and freeze problems in the far north, the tree is very vigorous, productive and begins to bear in only 5 to 7 years. **Wichita** develops "V" limb angles that split and require careful training. It tends to be a poor-bearing, unattractive tree if it is not well managed.

Choctaw is a good yard tree because of its beautiful foliage, scab resistance and high yields of large, high-quality pecans. Unfortunately, **Choctaw** requires the very best soil and management; otherwise, it will fail. Nuts/lb - 38; percent kernel - 59.

Tejas is a good yard tree for west Texas. The tree is extremely vigorous and large, producing small leaves and good-quality pecans. It is highly susceptible to scab disease and should be grown only in the drier areas of the state. Nuts/lb - 59; percent kernel - 53.

Kiowa is a newer variety that has good limb structure, attractive foliage and large nuts. It begins to bear at about 6 years of age and bears good crops, but nut quality has been inconsistent. Nuts/lb 39; percent kernel - 57.

Maramec is a fair-quality, large pecan which has produced strong trees and consistent production in Oklahoma. It is recommended as a yard tree for north Texas. Nuts/lb - 42; percent kernels - 58.

Mohawk is a fair yard tree for north Texas. It matures early - ahead of fall frosts - and has strong limb structure and beautiful foliage. It bears heavily, but like other varieties with very large nuts, the nuts are poorly filled as the tree ages. Nuts/lb - 33; percent kernel -59.

Shoshoni is an early ripening variety for the Panhandle and north Texas. The tree is very productive and begins to bear in only 5 to 6 years. It begins alternate bearing at an early age, which limits its usefulness as a yard tree except in the colder north where later maturing varieties are vulnerable to fall freeze injury before the nuts mature. Nuts/lb - 43; percent kernel - 54.

Burkett is an old variety that is common across Texas, but is recommended only as a yard tree in west Texas. Do not plant **Burkett** in the rest of Texas because of disease and insect problems. Nuts/lb - 42; percent kernel - 59.