Texas Cooperative EXTENSION
The Texas A&M University System
420 North 6th Street, Waco, TX 76701

McLennan County Master Gardeners

Horticulture Newsletter

Summer, 2006
www..mclennanmastergardeners.org

Calendar of events:
Call 757-5180 for information on upcoming extension events.

From McLennan County Master Gardeners:

New website - www.mclennanmastergardeners.org

Master Gardener Class - A new class of Master Gardener interns began in June. Educational training is one afternoon a week until mid-September with 54 hours of classroom attendance required. Upon completion of classroom hours, the interns will be required to give at least 54 hours of volunteer service in horticulture projects before receiving McLennan County Master Gardener certification.

Horticulture Newsletter Award Winner - This quarterly horticulture newsletter published by the McLennan County Master Gardeners through the local Extension Office received a *first place award* at the annual Texas Master Gardener Conference in College Station in May.

Rose Trials at TSTC – McLennan County Master Gardeners planted 45 rose bushes, 3 each of 15 cultivars, in January 2005 in a test garden near the Horticulture Department. They have grown from very small plants to gorgeous bushes full of new growth and beautiful blossoms. The show stopper varieties in May were: The Fairy, New Dawn, Knockout, Blushing Pink Knockout, Carefree Beauty, Summer Wind, Country Dancer and Belinda's Dream. Drive out to 202 Greenway Drive on the TSTC campus to view the test garden. Master Gardeners regularly monitor and document traits as a trial for EarthKind rose status.

Texas Superstar Bed Has Improvements and Challenges - The Texas Superstar Bed, built by local Master Gardeners at the Carleen Bright Arboretum, is thriving in its second summer. Several perennials returned with vigor, including New Gold Lantana, Blue Princess Verbena, Dwarf Mexican Petunia, and Gold Star Esperanza.

New plants include Plumbago, John Fanick and Victoria Phlox, and Texas Lilac Vitex. New Wonder Scaevola, Laura Bush Petunia, and Burgundy Sun Coleus were replanted for the showy color they provide.

Located just to the right of Whitehall Center at the Arboretum, the bed is intended as a demonstration area for how these plants perform with little regular care. Master Gardeners, in maintaining this bed, face many of the same challenges of local homeowners. In addition to hot, dry summers, occasional freezing winters and strong winds, deer have been a big problem. They especially love the roses. More lantana has been planted near the perimeter, hoping it will be less attractive. No insecticide or fungicide has been used in the bed, but recently a deer repellent was applied. As a last resort, a temporary "sculpture" of steel fence posts has been installed at the point where their trail leads into the bed. The deer will give up and try grazing in a new spot, or the Master Gardeners will give up and plant only deer resistant Texas Superstar plants.

There is a lovely new structure in this area, thanks to Master Gardener James Bays. He built a very impressive wooden foot bridge, now installed at the entrance and arching over an area which stays damp. A dry creek bed of river rock completes the picture, providing a beautiful and functional way to begin a tour of the Superstar Bed.

Master Gardeners enjoy this cooperative venture with the Carleen Bright Arboretum and encourage the public to visit the Texas Superstar Bed, as well as the rest of the beautiful Arboretum grounds.

THANKS TO ALL WHO SHOPPED AT OUR PLANT SALE ON MAY 20!!

Easy Vegetable Gardening – Okra & Peppers

Okra is a warm season vegetable which grows well in most Texas soils. For good yields, okra must grow in full sunlight in a well drained, fertile soil. The spring planting should be growing well by now, and a fall crop should be planted at least three months before the first fall frost. Before planting, spade the soil as deeply as possible and add 2-3 pounds of 10-20-10 fertilizer for each 100 sq.ft. of soil, mixing it well into the top few inches of soil. Plant okra seed about 1 inch deep and 2 inches apart in row. Space rows at least 3 ft. apart and thin plants so that they are about 1 foot apart.

Okra does fairly well in dry conditions, but watering every week will give higher yields. Keep weeds and grass removed from around the plants. The okra will produce large flowers about 2 months after planting and the pods will be ready to pick in less than a week. Harvest the pods when they are 3-4 inches long and pick every couple of days or yields will decrease.

Okra seed is easily saved for next season by leaving some of the last pods on the plant until they get very large. Remove and let pods dry. Seeds will easily remove from the pod to save.

Another warm season vegetable is the **pepper** - either sweet bell peppers or hot peppers. They should be planted in areas with at least 6 hours of sunlight daily. Before planting, work the soil deeply and add organic matter such as compost. Add 2-3 pounds of balanced fertilizer per 100 sq. ft. of area and work into the soil. If you plant single plants, place 2 tbsp. fertilizer on soil in planting area and mix it well with the soil.

Most families only need a few plants, and it is best to buy individual plants rather than grow from seed. Buy healthy plants 4-6 inches tall. Peppers grow best in warm weather; therefore do not plant until all danger of cold weather has passed. Plant fall peppers 12-16 weeks before first expected frost.

Space the transplants about 2 feet apart. Fill the holes (3-4 inches deep) with water and let it soak in before setting the plants in the prepared holes. Loosely pack soil around the roots of transplant, placing it at same depth as the original soil ball. Try to transplant in evening or on a cloudy day to keep them from wilting and getting too dry.

Water deeply and don't let the peppers wilt as this affects yield and quality of fruit. Keep weeds pulled and fertilize after the first fruit begins to enlarge. Use about 2 tbsp. of fertilizer placed about 6 inches from stem and water in well.

First peppers should be ready about 8 weeks after transplanting. If picked as they mature, yields will be greater. Aphids, leaf miners, and flea beetles are often problems to peppers and need treated. Read label and apply insecticide as directed.

Knockout Rose

If you would like to grow a plant that is so easy to grow it will spoil you, try a Knockout Rose. You won't be disappointed, because Knockout is just about fool-proof.

Knockout was bred by Wm. J. Radler who used Carefree Beauty for the mother seedling and Razzle-Dazzle for the father. It was introduced by Conard-Pyle in the year 2000, and it has been collecting awards and delighting gardeners ever since.

The original Knockout is a single petal bloom form, with seven petals of cherry red. It has a characteristic tea rose fragrance and has truly excellent resistance to black spot and other diseases. Its bloom cycle is said to be the longest known; from March through November. Knockout needs no deadheading, will develop orange hips, has evergreen foliage, doesn't require much fertilizer, is drought-tolerant once established, and puts up with considerable humidity as well. It's no wonder Knockout has earned so many rewards. It was an AARS winner in 2000, has received Earth-Kind Rose designation by Texas A&M, and in 2004 was named a Texas Superstar. As we in McLennan County know all too well, if a plant can succeed here, it can succeed *anywhere!*

There is an ever-growing number of variations of Knockout. Besides the original Red, there is the Double Knockout, the Blushing Pink (a pale pink) and Pink Knockout (a bright pink) and an offspring called Home Run. These are all compact roses, from 2' to 3 l/2' tall and about 3' wide. They will grow well in full sun (though some are somewhat shade tolerant) and they'll need adequate drainage, a regular amount of supplemental water until they're established, and that's about it.

So go ahead and try your hand at growing a Knockout or two. You too can become a spoiled darling!

'Tis Summer…

…Keep a regular check for diseases and insects both in the flower beds and vegetable garden. Destroy badly infected plants. If spider mites are troublesome, select a chemical or organic control or use insecticidal soap. Follow label instructions for chemical usage.

…Soil moisture is essential for good plant production in summer. To conserve the moisture around plants, apply a mulch from 2-6 inches deep. A coarse mulch material should be applied deeper than a finer material. Constant watering can be costly and time consuming. Consider installing a drip irrigation system to control the amount of water applied.

…Removing faded flowers will encourage most annuals and perennials to flower more abundantly. A light application of fertilizer every four to six weeks will be beneficial.

…Prune out diseased or dead wood from shrubs and trees, but save major pruning until midwinter.

…Re-blooming salvias should be pruned back periodically during the summer. Use hedge shears to remove spent flowers and a few inches of stem. Fall-blooming perennials such as chrysanthemums and Mexican marigold mint should be pruned in the same manner to keep them compact. They begin setting fall flower buds around September 1 and should not be trimmed after then.

…There is still time to plant heat-tolerant summer annuals. Zinnias can be planted from seed and many annuals such as zinnia, portulaca, salvia, marigold, gomphrena, purslane and celosia can be purchased as bedding plants and transplanted into the yard for color. Water the plants adequately as needed until their roots are established.

…Seeds of cool-season flowers such as dianthus, pansies, snapdragons, flowering kale and cabbage, and calendulas can be planted in flats or pots in the summer to be ready as fall transplants. The plants can be started outside where they get plenty of sunlight, but be careful that they do not get too much sun. Afternoon shade along with morning sun would be ideal.

…Container grown plants need extra watering in summer months. Terra cotta pots and containers in the sun dry out quickly. Morning sun and afternoon shade is ideal for most container plants in our Texas heat.

…Many varieties of vegetables can be planted in mid-to late-summer for fall harvest. Warm-season crops such as tomatoes, peppers, cucumbers, squash, corn and beans can be harvested until the first killing frost. Cool-season crops, such as kale, turnips, mustard, broccoli and cabbage grow well during cool fall days and frosty weather. The local extension office can supply a guideline for fall planting times.

Drip Irrigation

One of the best ways to water a garden is with a drip irrigation system, which is controlled application of water at a very low flow over a prolonged period. It differs from conventional watering systems in that the soil is not supersaturated with water. When the rate of drip irrigation is adjusted correctly, there are no puddles of water and no run-off.

Many types of drip systems are available. Some use small water-releasing mechanisms called emitters, which drip a certain volume of water when a specific water pressure is supplied. Many of these systems are prepackaged and allow little versatility or adaptation to the various sizes and shapes of gardens. Other systems currently available can be adapted easily to almost any garden size and situation.

The most common has small holes pre-punched in plastic tubing at 12-inch intervals which allow the water to come out in small amounts. The tubes are placed along plant rows so root zones are moistened by the dripping water. To insure adequate moisture when the garden is planted, apply at least 2 inches of water to the planting zone before seeding or transplanting. This is referred to as pre-irrigation. Be sure rows are well firmed at the time of pre-irrigation so the water moves laterally as well as downward. In the home landscape, drip systems are practical around shrubs, trees and in flower beds.

Once the drip irrigation system is in place and operating, usage for optimum plant growth varies with the plants and the season. One suggestion is to operate the system for 3 hours a day on alternating days. When rainfall is adequate, it is not necessary to water for several days. The best absorptive roots for most plants are in the top 6 to 12 inches of the soil, since this upper soil area contains a lot of oxygen. In order for water to be absorbed by the plant, oxygen must be present. If oxygen is not present, plants cannot take up water, and the roots will drown if saturated conditions continue. An ideal situation is to maintain uniform moisture and oxygen in the soil. It may take some experimentation with scheduling to find when and how long to water with the drip system.

If you have more veggies than you can eat or freeze, consider donating the fresh produce to the local food banks. "HELPINGS", the McLennan Co. Hunger Coalition at 753-3545 or Caritas at 753-4593 would welcome any amount - whether large or small quantities. They can provide information on local organizations that assist the needy with food.

Growing Peaches In Central Texas

For the homeowner in Central Texas growing peaches successfully can be a real challenge without some basic knowledge of where to plant, what to plant, and how to care for the tree.

Site selection for planting is very important. A peach tree likes soils that drain well. In the clay soils of Central Texas you can improve drainage by planting your tree on an elevated bed of at least six inches. The elevated bed should have a diameter of four to six feet. This will help ensure good drainage. The site for planting should have high elevation in relation to the surrounding area. This is the single most important factor in reducing risk of crop loss due to spring frost. Easy movement of cold air away from a tree is essential to minimize the serious damage from frost during bloom or early fruit development. On frosty mornings temperatures will fluctuate as much as ten degrees from hilltop to low lying areas and can mean the difference in a full crop as compared to a complete crop loss.

Peaches have a chilling requirement of a certain number of hours of winter temperatures between 32 to 45 degrees F to break dormancy and induce normal bloom and vegetative growth. If varieties are chosen that have a chilling requirement that is too low, there is a greater probability that they will bloom early and be more subject to frost. If the chilling requirement is too high, they may be very slow to break dormancy and abort fruit. The chilling zone for our area of Central Texas is generally on average 750 to 800 hours.

Due to the alkalinity of the Central Texas soils it is important that your selected variety of peach for this chilling zone be grafted on the proper root stock. For this reason it may be necessary to purchase your trees from a commercial nursery vs. a local retail nursery. The commercial nursery will know the rootstock you need for the heavier clay soils.

For optimal success in the planting operation, use the following steps:
1) Purchase healthy vigorous nursery stock on appropriate rootstocks from a reputable nursery. Nursery stock 24 to 36 inches tall is considered ideal.
2) Plant trees while dormant from December through early March. Early planting gives good root establishment before bud break.
3) Make planting holes only large enough to accommodate the root system. Prune damaged roots and cut back long ones.
4) Plant tree at the same depth as in the nursery.
5) Firm soil around the newly planted tree and water well to help settle the soil and eliminate air pockets around roots.
6) Cut back nursery tree to a height of 24 to 36 inches. Remove lateral branches flush with the trunk.
7) Place a growth tube or aluminum foil on the lower 18 inches of the trunk leaving six inches of the trunk exposed.

After planting, nursery stock is pruned to a single trunk and headed back to a height of about 24 inches. All branches are removed. Within a few weeks after growth begins in the spring select the strongest three to five shoots arising from the top 6 inches of the main stem. They should be evenly spaced along the trunk with at least one directed into the prevailing wind. Remove all other shoots along the trunk or limbs. These branches will grow vigorously for about four weeks then begin to harden and turn brown near the trunk. At this time select the major scaffold limbs. It is recommended that only three, evenly spaced scaffold limbs be retained. Allow the major limbs and non-competing shoots to grow.

The following dormant season, remove all branches except for the three scaffold limbs. The scaffolds should be pruned back to approximately 24 inches to encourage lateral bud break needed to develop sub-scaffold limbs. With good care, the growth that is produced in the second growing season should produce a first crop the following year.

One of the most critical phases of the first year peach tree is weed and grass control. Most grasses and weeds are more aggressive than newly set peach trees in removing water and nutrients from the soil. Weed and grass control will greatly increase tree growth during the first year.

The main goals of pruning are to maintain tree form to an open center which facilitates light penetration and air circulation, and to partially control crop size by selectively thinning out fruiting wood. Peach trees bear fruit only on one year old wood. Dormant pruning is an invigorating action which results in a healthy canopy to produce the current season's crop and allow for ample production potential for the following year. Another pruning objective is to lower the fruiting zone to a height which can be hand-harvested from the ground. Topping the tree at 7 to 8 feet usually accomplishes this objective because the weight of the crop will bring the limbs down to where the fruit can be easily reached. Additional objectives of pruning are to remove dead or diseased shoots, rootstocks suckers, and vegetative water sprouts from the center of the tree. When thinning out fruiting wood, remove old gray-colored, slow growing shoots which are not fruitful and leave one-year-old, red, 18 to 24 inch bearing shoots.

Late-spring frost is the single greatest factor in Texas peach production, and pruning early in the year removes much of the flower bud crop that constitutes “insurance” against crop loss. The peach tree will bloom soon after pruning when chilling is satisfied and warm weather follows. Homeowners can wait until “pink bud” to prune.

To keep trees healthy and productive nutrient levels should be maintained at the optimal level. Soil test should be run every 3 to 5 years. In the absence of a soil test, fertilization of fruit trees should be dictated by the pH of the soil.

Maximum growth of young trees is obtained with small, frequent fertilizations. Newly planted trees can be fertilized in the first year if they make 8 to 10 inches of growth by May. Spread one cup of nitrogen fertilizer at least 18 inches away from the tree.

The second year trees should be fertilized four times: March, April, May and June. If your soil pH is below 7.8, the first application can be a 3-1-2 ratio fertilizer; if above 7.8, use only nitrogen. Apply one cup of fertilizer at the first of each month. If the trees fail to make growth from month to month, do not continue to fertilize. The third year, the trees should be fertilized four times again, using 2 cups of a fertilizer at the first of each prescribed month. Mature trees should be fertilized with nitrogen in the spring and again in the fall.

A drip irrigation system is recommended.

Peaches will begin bearing in the third or fourth year. Most peach varieties set far more fruit than can be grown to large size with good quality. Thinning is used to control the number of fruit per tree in order to increase fruit size and quality.

The earlier fruit is thinned from a tree, the greater the size response of the remaining fruit. As a general rule of thumb, fruit should be thinned within 4 to 6 weeks after bloom. Fruit should be thinned to six to eight inches apart along the fruiting branches.

Numerous insects and diseases damage peach trees in Texas. Major pest include San Jose scale, greater and lesser peach tree borers, plum curculio, peach twig borer, and catfacing insects. Serious diseases are scab, brown rot, bacterial spot, post-oak rot, and cotton root rot. Homeowner spray schedules are available at local County Extension Offices.

Information source: Jim Kamas, Texas Extension Horticulturist, Fruit Specialist from Fredericksburg speaking at Peach Field Day, May 16, at Diamond M. Orchards..

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“*Take-All Root Rot of Turfgrass*” Bulletin L-5170 from Texas Cooperative Extension is included with this newsletter.

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Take-All Patch Research

Dr. Phil Colbaugh of the Dallas Agricultural Research & Extension Center has been working on Take-All Patch in St. Augustine grass. His research evaluated the positive effects of Canadian sphagnum peat moss application in aiding turf recovery and improving health in areas where there is a history of Take-All Patch. Dr. Colbaugh has found that an annual program of sphagnum peat moss application benefits turf health and reduces the need for applied fungicides for control of this disease. The recommended annual program is as follows:

Apply Canadian sphagnum peat moss 1 to 2 times per year. It can be applied in spring and fall or begun at any time the disease appears during the growing season. His research has shown enhanced vigor of the St. Augustine grass in treated areas. If Take-All Patch is severe the applications could be applied for two years before backing off to not applying at all, as the disease activity diminishes, to only then applying to areas that again exhibit the symptoms.

The rate of application is 1 to 2 bales of Canadian sphagnum peat moss per 1000 square feet of lawn area. Each bale size is based upon a 3.8 cubic feet bale.

The areas should be irrigated following application. Continue on a reasonable schedule to encourage turf recovery and activate the peat moss (the low pH of the peat moss is thought to have a negative impact on the disease activity which favors grass recovery).