Horticulture 2012 Newsletter
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Video of the Week:  Native Plants Thrive on Less Water

UPCOMING EVENTS

RetailWorks: Spring Training for Garden Centers
Friday, February 17, 2012
Capitol Plaza Hotel, Topeka
For more information, go to
http://www.hfrr.ksu.edu/RetailWorks2012

VEGETABLES

What's New in Sweet Peppers?

There are many new varieties of sweet bell and longhorn sweet peppers available. Colored bells have become very popular with consumers who are willing to pay 2-3 times the price for a red, yellow, or orange bell pepper as opposed to a green one. The long sweet peppers also come in a range of colors. For several years we have been conducting statewide Master Gardener observational and limited yield trials on peppers and tomatoes. Several outstanding varieties have been identified. Bell pepper cultivars that have performed well include Flavorburst, Revolution, Declaration, Karisma, and Alliance. Bells that have done poorly for 2 or more years are SummerSweet 8620 and Polaris.

The only true bell pepper we have found that yields well and colors early and consistently is Flavorburst. It starts out a light, pale green color and then becomes bright yellow well before other bells. It has also been one of the highest yielding cultivars we have grown. One caution,
however, is that Flavorburst has no reported disease resistance so if disease has been a problem for you, try it sparingly.

The longhorn sweet peppers have yielded very well, especially all of the hybrid sweet banana types (Pageant, Boris, Ringo and Banana Bill). Also outstanding have been Carmen, Marcato, and TI-100 (Yellow Crest). As a rule, the long peppers color up earlier than the bells and can be substituted for most bell pepper uses except for baking and stuffing. They work especially well for grilling as the long slices do not fall through the grill as easily as the "C" shaped slices of the bell pepper. (CJB)

FRUIT

Cloning Apple Trees

We occasionally receive calls from gardeners who want to know how to treat an apple seed so it will germinate. Usually, the gardener is trying to reproduce an old apple tree that was special for some reason (good quality fruit, planted by grandparents, etc.). Unfortunately, apples grown from seed will not be like the parent. About 1 in every 80,000 apple trees grown from seed will produce apples that taste the same as the original. Usually you end up with a tree that has small and inferior quality fruit. If you want a tree exactly like the parent, you must propagate that tree vegetatively. In the case of apples, this usually means grafting. Apple trees are easy to graft, even for novices. Don't be afraid to try this even if you haven’t done it before. Now is the time for choosing and cutting scion wood or small branches that will be grafted on top of a rootstock. If you don’t have an existing tree, plant a rootstock this year for grafting onto next year.

Apple trees are normally grafted onto specially selected rootstocks. These rootstocks normally reduce tree size. For example, a tree that normally would grow to 25 feet tall will only reach 10 feet if it is grown on a certain rootstock. Dwarfing rootstocks also allow apples to fruit earlier.

A tree on its own roots normally takes 5 to 7 years before it will bear. Semi-dwarf trees bear in 4 to 5 years, and dwarf trees bear in 3 to 4 years. Unfortunately, dwarfing rootstocks are not well adapted to Kansas. Semi-dwarf trees usually are a better choice. Note that rootstock reduces tree size, not fruit size. A golden delicious tree that only reaches 8 feet tall due to a dwarfing rootstock will bear the same size fruit as a golden delicious tree that is 25 feet tall.

Most nurseries only sell trees that are already grafted. A company that sells rootstocks is Raintree Nursery, Morton, WA, (360) 496-6400, http://www.raintreenursery.com/

A surcharge will be added for any tree for which you order less than four rootstocks. If you know of other nurseries that sell rootstocks, let me know, and I will post them in upcoming newsletters. It is also possible to buy a tree from a local nursery and graft your clone into it. One disadvantage of this method is that it is possible to prune off the special clone instead of the cultivar branches by mistake.

Following is the procedure for collecting scion wood.

The ideal branches for scion wood will be from about 1/4 to 1/2 inch in diameter. Good propagation wood can be made of water sprouts that grew from limbs in the tree or suckers that grew from the trunk. Water sprouts are those small branches that grow straight up from larger, more horizontal branches. If you use suckers, be sure the suckers are growing from above the graft at the base of the tree. This propagation wood is normally taken during February. These can be cut in lengths up to about a foot long. They can be stored in your refrigerator at about 40 to 45 degrees F. Do not freeze. The next step is to decide what rootstock or existing tree you will graft them onto.

This information does not include the grafting or budding details or subsequent care. The Missouri Extension Service has an excellent publication, titled "Grafting," which can be found at http://muextension.missouri.edu/xplor/agguides/hort/g06971.htm (WU)

**TURFGRASS**

**It's Not Too Late for Dormant Overseeding of Turfgrass**

Dormant overseeding is done during the winter (December through February) when it is too cold for germination to take place. Spring seedings done in March can be just as successful as dormant seeding, but spring rains may delay plantings. As with any seeding program, it is vital that good seed-soil contact is achieved. There are several methods that are commonly used in dormant seeding.

One method is to seed when there has been a light snowfall of up to an inch over unfrozen soil. This is shallow enough that bare spots can still be seen. Spread seed by hand on areas that need...
thickening up. As the snow melts it brings the seed into good contact with the soil where it will germinate in the spring.

Another method depends on the surface of the soil being moist followed by some freezing weather. As moist soil freezes and thaws, small pockets are formed on the wet, bare soil that are perfect for catching and holding seed. As the soil dries, the pockets collapse and cover the seed. Slit seeding also can be used as long as the soil is unfrozen.

With any of the above methods, seed germinates in the spring as early as possible. However, there will be some limitations on what herbicides can be used to prevent weeds such as crabgrass. Tupersan (siduron) can be used as a crabgrass preventer on new seedings but is relatively short-lived. A better choice would be Hi-Yield Turf and Ornamental Weed and Grass Stopper with Dimension. This product can be applied to tall fescue and Kentucky bluegrass lawns two weeks after germination. Though other products contain Dimension, this is the only label I have found that permits this use. Other preemergence herbicides require that the turf be well established before application. Turf that has been mowed a couple of times is usually considered mature enough for herbicide application. (WU)

**ORNAMENTALS**

**Forcing Stems of Woody Plants for Indoor Bloom**

Stems of a number of woody plants can be forced into bloom for indoor display. Of course, some are easier to force than others. Three of the easiest are forsythia, pussywillow, and flowering quince. These plants have now gone through enough cold weather to satisfy their chilling requirement and should bloom if given the right conditions. Remember that the flower buds on forsythia are killed as temperatures reach –10 degrees F. If your area has had temperatures this far below zero, use one of the other woody plants.

Choose a day that is above freezing for collecting branches for blooming. Keep the stem length to 3 feet or less. As you cut, place the stems in a bucket of water. Once you have the number of branches you want, bring them into the house and soak them in warm water for several hours -- a bathtub works well for this. This ensures that the stems and buds are fully hydrated. Next, place them in a container that has a warm, preservative solution and place them in an environment with high humidity and plenty of light.

Make your preservative solution by dissolving packets of floral preservative in water. These packets can often be obtained from your local florist. You can also make your own preservative by adding a tablespoon of Listerine per gallon of water, but commercial preservatives are preferred. Floral preservatives accomplish two functions; they prevent bacterial growth in your
water and provide nutrients and energy for the life processes of the plants.

Many times our houses have a very low relative humidity during the winter. These low humidities can lead to dehydration of flower buds and blossoms. To raise the humidity around your plants, mist the plants or drape a dry cleaner's bag over your stems. If a cleaner's bag is too small, use a painter’s clear plastic drop cloth. Humidifiers can also help raise humidity levels.

Normally, forsythia will take about nine days to flower, quince will require between 12 to 20, and pussywillow needs from five to 15 days. The time required will vary depending on indoor conditions and how late in the winter the branches were collected. Most woody plants should be in flower within three weeks of collection and will remain in flower for about a week before blooms start to fade. (WU)

FLOWERS

Rabbit Resistant Flowers

Rabbits can cause a great deal of damage to plants in Kansas. Though fencing is a very effective control, it may be too unattractive for some uses. In such cases, using plants that are less likely to be attractive to rabbits can be helpful. Note that these plants are resistant; not immune to attack. Young plants or those that are succulent due to overfertilization are more likely to be damaged. Also, the unavailability of other food sources can result in rabbits feeding on plants that are normally rejected. A list of flowers considered resistant to feeding damage by rabbits include artemisia, aster, bee balm, begonia, blanket flower, bleeding heart, candytuft, columbine coreopsis, crocus, daffodil, dahlia, daylily, ferns, gloriosa daisy, herbs (except basil), iris, lamb’s ears, pincushion flower, red hot poker, surprise lily, sweet violet, verbena and yarrow.

This information came from a University of Arizona publication titled “Deer and Rabbit Resistant Plants.” Other resistant plants including trees, shrubs, groundcovers and vines are also listed in this publication. You may access this publication at http://tinyurl.com/y8sfgo2 (WU)

Plants Recommended for Kansas

If you have had trouble finding a listing of plants recommended for Kansas, visit our web page devoted to this topic. We have links to a wide variety of plants including annual flowers, perennial flowers (including breakouts for iris and daylilies), fruit, vegetables, turfgrass, low-maintenance roses and tree recommendations that are broken out by
areas of the state. We also list recommended low water use plants. You can find this page at: http://www.hfrr.ksu.edu/p.aspx?tabid=731

We also have images of hundreds of varieties of iris found in the University Gardens Iris Collection at http://www.ksre.ksu.edu/ksugardens/IrisCollection2005.pdf (WU)

**MISCELLANEOUS**

**USDA Plant Hardiness Zone Map Updated**

The USDA Plant Hardiness Zone Map has been updated for the first time since 1990. The map represents the average annual extreme minimum temperature for a certain location and a particular time period; not the coldest temperature ever recorded. This is useful in identifying plants that would likely be cold hardy in a specific location. The map is divided into 13 zones with each zone representing a 10 degree band. Each band is further divided into an A and B designation representing a 5 degree change. Kansas is primarily in Zone 6A (-10 to -5 degrees F) and Zone 6B (-5 to 0 degrees F). However, the northern tier of counties is primarily in Zone 5B (-15 to -10 degrees F).

A large section of Kansas, including Manhattan, has been moved from 5B to 6A.

You can see an image of the map at http://planthardiness.ars.usda.gov/PHZMWeb/#. (WU)

**Gypsum and Clay Soils**

A popular misconception is that gypsum (calcium sulfate) will improve clay soils by making them more friable and increasing water infiltration. Research has shown that gypsum will not have an effect on either of these qualities unless the soil contains excess amounts of exchangeable sodium (a sodic soil). In most areas, sodic soils are rare. They have extremely high pH readings; above 8.5 to as high as 10.

The sodium in a sodic soil has caused the internal structure of the soil to collapse, reducing water infiltration rates and friability. In such a case, the application of gypsum can be beneficial. The calcium in gypsum
will replace some of the sodium and allow structure to reform. The soil should be kept moist to allow the gypsum to work and then leached with irrigation water (unless you have plenty of rainfall), to wash out the sodium.

A better way to increase tilth and the water infiltration rate is through the addition of organic matter. Apply a 2-inch layer of organic matter (peat moss, leaf mold, compost, etc.) and till as deeply as possible.

Though gypsum does not help the friability of most clay soils, it is a good source of calcium and sulfur in soils that are deficient in either. It is especially valuable in situations where you need to add one or both nutrients but do not want to change the pH. (WU)

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To view Upcoming Events: http://tinyurl.com/fswqe

Horticulture 2012 E-mail Subscription

For questions or further information contact: wupham@ksu.edu

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