UPCOMING EVENTS

RetailWorks
February 4, 2016
Manhattan, KS

Grow Your Garden Center Business in 2016!
We hope you'll join us for this companion conference to the biennial NurseryWorks conference--RetailWorks on Thursday, February 4, 2016 in Manhattan. While NurseryWorks focuses on providing resources for wholesale nursery crop growers, RetailWorks is designed with the independent garden center's needs in mind. We continue to bring in outstanding national and local speakers on a variety of topics. You'll find great content and networking at RetailWorks 2016--get it on your calendar and register today! For more information, go to: http://retailworks.weebly.com/ or register online at https://2016retailworks.eventbrite.com

FRUIT

Late Blooming and Frost Resistant Peach Trees

Late spring frosts often eliminate potential peach crops in Kansas. Since hardiness of fruit buds drops dramatically as flower buds open, even a delay in bloom time of a few days can dramatically affect the size of fruit crop. A study done in southwestern Idaho investigated the average bloom times of a number of peach cultivars from 2003 - 2007.

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Date of full bloom</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Snow Giant’</td>
<td>April 5</td>
</tr>
<tr>
<td>‘Jupiter’</td>
<td>April 7</td>
</tr>
<tr>
<td>‘Yukon King’</td>
<td>April 7</td>
</tr>
<tr>
<td>‘Burpeach Six’</td>
<td>April 7</td>
</tr>
<tr>
<td>‘Fairtime’</td>
<td>April 7</td>
</tr>
<tr>
<td>‘Coral Star’</td>
<td>April 7</td>
</tr>
<tr>
<td>‘July Sun’</td>
<td>April 7</td>
</tr>
</tbody>
</table>
`Zee Lady’ April 7
‘May Sun’ April 8
‘Crimson Lady’ April 8
‘Summer Flame’ April 8
‘Elegant Lady’ April 8
‘Sugar Giant’ April 8
‘July Flame’ April 8
‘Sweet Dream’ April 8
‘August Flame’ April 8
‘September Snow’ April 8
‘Snow King’ April 8
‘Star Fire’ April 8
‘Saturn’ April 8
‘August Lady’ April 9
‘Ryan Sun’ April 9
‘Brenda Sun’ April 9
‘All Star’ April 9
‘Autumn Red’ April 9
‘O’Henry’ April 9
‘Opal Moncav’ April 9
‘Rich Lady’ April 9
‘Vista’ April 9
‘Glow Star’ April 9
‘Summer Lady’ April 10
‘Red Star’ April 11
‘Fancy Lady’ April 12
‘Sierra Gem’ April 12

Intrepid, though not included in the above study, is a cultivar not only known for its late bloom time but also its frost-resistant blooms. A study done in North Carolina noted that exposure to 6 consecutive subfreezing nights at 50% bloom did not eliminate the fruit crop. All flower buds on all check cultivars were killed. (WU)

**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 be as good as the apples we are used to eating. Apple trees grown from seed usually have 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 actually quite easy to graft, even for novices. Don't be afraid to try even if you haven't grafted before. The step that needs to be done at this time of year is the choosing and cutting of scion wood or small branches that will be grafted on top of a rootstock.

See the accompanying article in this newsletter on how this is done. However, if you don’t have an existing tree to graft onto, you will need to plant a rootstock this year for grafting onto next. Fruit trees are normally grafted (or budded) onto specially selected rootstocks. These rootstocks usually reduce tree size. For example, a tree that normally would reach 25 feet tall will only reach 10 feet if it is grown on a certain rootstock. Dwarfing rootstocks also allow apples to bear fruit a year or more 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, not all dwarfing rootstocks are well adapted to Kansas. Semi-dwarf trees usually are a better choice for us. Note that rootstock reduces tree size, not fruit size. Therefore, 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 does sell rootstocks is Raintree Nursery, Morton, WA, (360) 496-6400, http://www.raintreenursery.com/Rootstocks/
Another is Cummins Nursery, 865-233-3539, http://www.cumminsnursery.com/rootstocks.htm though there is a minimum shipping and handling fee of $20.

It is also possible to buy a tree from a local nursery and graft your clone into it. This will give you one tree that produces two different apples. One disadvantage of this method is that it is possible to prune off the special clone by mistake in later years. This information does not include the details of grafting or budding or subsequent care. The Missouri Extension Service has an excellent publication on grafting at http://extension.missouri.edu/explorepdf/agguides/hort/g06971.pdf as well as a second publication on budding at http://extension.missouri.edu/explorepdf/agguides/hort/g06972.pdf

Be sure to practice your cuts on wood you prune off in March. After you do about 100 cuts, you will start to get the hang of it. (Ward Upham)

VEGETABLES

Use a Planting Calendar

If you start vegetable plants indoors, it is often helpful to list seeding dates on a calendar so that plants are ready for transplanting at the proper time. To do this, choose your transplant date and count back the number of weeks necessary to grow your own transplants. For example, cabbage, broccoli, and cauliflower are usually transplanted in late March to early April. It takes 8 weeks from seeding to
Plants should be seeded in early February. Information on how many weeks it takes to grow transplants is available in our January 6 newsletter at http://www.hfrr.ksu.edu/doc4036.ashx

Below are examples of some common vegetables grown for transplants and a recommended date for seeding. Dates are Saturdays as this is when many homeowners have the most free time. The dates are not set in stone, and a week earlier or later will not ruin the plants. Also, you may want to seed a week or two earlier if you are in southern Kansas and possibly a week later if you are in northern Kansas. Keep notes on how well the transplants did so you can tweak the planting schedule. Your conditions may result in plants that need a bit more or a bit less time. (Ward Upham)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Seeding Date</th>
<th>Transplant Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbage, broccoli, cauliflower</td>
<td>February 6</td>
<td>April 2</td>
</tr>
<tr>
<td>Lettuce</td>
<td>February 6</td>
<td>April 2</td>
</tr>
<tr>
<td>(if you grow transplants)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peppers</td>
<td>March 19</td>
<td>May 14</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>March 26</td>
<td>May 7</td>
</tr>
</tbody>
</table>

**FLOWERS**

**Miniature Roses**

Miniature roses are dwarf versions of roses including the classic hybrid teas. Though they are much smaller (12 to 15 inches tall or less), they are surprisingly tough and can be planted outside where they will survive our Kansas winters if mulched. However, many gardeners like to grow the miniatures indoors where they can enjoy them during the drab winter months.

Miniature roses grown as houseplants have specific requirements. For long lasting flowers, air should be moist with a relative humidity of 50 to 60 percent preferred though 40 percent is adequate. Placing the pots on a tray that holds moist pebbles will help provide the humidity needed.

Like most plants, roses need a lot of light in order to flower. Though miniature roses will survive in a south window, many people will supplement available light with fluorescent lamps. Timers can be used to automatically turn the lights on and off. Providing 14 hours of light per day will be plenty for roses to grow and flower. Lights are normally spaced 3 to 4 inches above the tops of the plants.

Probably the most serious pest of these plants indoors is spider mites. These mites are very small but can devastate miniature roses. They like dry, warm conditions. Maintaining adequate relative
humidity levels and washing the plants once a week in tepid water will help prevent problems. If mites do develop, try using an insecticidal soap or horticultural oil (2 percent rate) for control. The horticultural oil will probably be more effective than the soap. Be sure to spray or wash the entire plant including the underside of the leaves so that all mites are contacted.

Miniature roses can be placed outdoors during the summer to take advantage of higher light levels. Do not place the plant in full sun immediately but gradually grant more light over a period of several weeks. Pots sunk in the ground will not need to be watered as often as those exposed. Turn the pot 180 degrees every couple of weeks to break off any roots that escape the pot and move into the underlying soil.

Miniature roses are not the easiest plants to grow as houseplants but can be well worth the effort required. (Ward Upham)

**MISCELLANEOUS**

**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](http://www.hfrr.ksu.edu/p.aspx?tabid=731)

We also have images of hundreds of the following:


**Contributors:** Ward Upham, Extension Associate

To view Upcoming Events: [http://tinyurl.com/fswqe](http://tinyurl.com/fswqe)
The web version includes color images that illustrate subjects discussed. To subscribe to this
newsletter electronically, send an e-mail message to cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

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

*Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.*

_Knowledge for Life_

K-State Research and Extension is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision or hearing disability, or a dietary restriction please contact Extension Horticulture at (785) 532-6173.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, and United States Department of Agriculture Cooperating, John Floros, Dean.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, and United States Department of Agriculture Cooperating, John Floros, Dean.