Horticulture 2013 Newsletter
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Video of the Week:  Paperwhite for Winter Fragrance

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 be as good as the apples we are used to eating. 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 actually quite easy to graft, even for novices. Don't be afraid to try this even if you haven't done it 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 get 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, dwarfing rootstocks are not 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/ Another is Cummins Nursery, (865) 233-3539, http://www.cumminsnursery.com/rootstocks.htm though there is a surcharge on any tree that you order less than four rootstocks. If anyone knows 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.

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. (Ward Upham)

Collect Scion Wood Now

If you are planning on doing any grafting this spring, now would be a good time to collect scion wood. Following are tips on how to choose good scion wood.

- Scions should be cut from one-year-old wood.
- Buds should be prominent and widely spaced. Water sprouts work well for this. Water sprouts are twigs that grow straight up from a major branch.
- Inner bark should be light green and the wood creamy white.
- Best scions have more wood than pith; small diameter wood often has wide pith.
- Older bearing trees produce poor scions unless pruned heavily. The best scions are toward the top of the tree. You may need a pole pruner even for small trees.
- Cut shoot into 6-8 inch pieces having at least 3 buds per stick.
- The best scion is often the basal piece.
- Always discard the terminal (the end piece).
- Store in the refrigerator in a plastic bag with moist paper towels.

If you are unfamiliar with grafting but would like to learn, the University of Missouri has an excellent publication at http://extension.missouri.edu/explorepdf/agguides/hort/g06971.pdf. (Ward Upham)

VEGETABLES
Sources for Tomato Seed

Gardeners who start tomatoes from seed often have difficulty locating a source for specific varieties. We have put together a table identifying sources for all of the tomatoes we recommend at [http://www.ksre.ksu.edu/bookstore/pubs/L41.pdf](http://www.ksre.ksu.edu/bookstore/pubs/L41.pdf) *. We have also included a number of other newer varieties that have done well in tomato trials as well as a few heirlooms. We could not include all possible sources of seed but tried to include the more common companies used by home gardeners. Let us know if there is a source you feel needs to be added. The document can be found at [http://www.hfrr.ksu.edu/doc3643.ashx](http://www.hfrr.ksu.edu/doc3643.ashx). Note the first page identifies varieties and sources and the second page gives the web address and phone number for each company.

* No sources were found for Sun Leaper or Sunmaster (Ward Upham)

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 transplant size. Plants should be seeded in early February. Information on how many weeks it takes to grow transplants is available in our January 8 newsletter at [http://www.hfrr.ksu.edu/doc3587.ashx](http://www.hfrr.ksu.edu/doc3587.ashx). Below are 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)

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<tr>
<th>Crop</th>
<th>Seeding Date</th>
<th>Transplant Date</th>
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<tbody>
<tr>
<td>Cabbage, Broccoli &amp; Cauliflower</td>
<td>February 9</td>
<td>April 6</td>
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<tr>
<td>Lettuce (if you grow transplants)</td>
<td>February 9</td>
<td>April 6</td>
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<tr>
<td>Peppers</td>
<td>March 23</td>
<td>May 18</td>
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<tr>
<td>Tomatoes</td>
<td>March 30</td>
<td>May 11</td>
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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 artemesia, 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/y8sfg02 (WU)

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

We also have images of hundreds of varieties of iris and daylilies found in the University Gardens Collection Gardens at http://www.ksre.ksu.edu/ksugardens/p.aspx?tabid=38 (Ward Upham)

Contributors:  Ward Upham, Extension Associate

To view Upcoming Events: 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

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