



THE GARDEN SPADE



A monthly Gardening Publication of the University of Missouri Extension -- Southeast and East Central Regions

Saving and Storing Vegetable Seed

by Katie Kammler

With increasing costs factoring into many of our everyday decisions, saving and storing your own seed might be an option for you to explore. Buying seeds can be expensive but fortunately many kinds can be saved for next year's garden with very little time and effort. Plants that self-pollinate are good choices for seed saving. Plants that have separate male and female flowers may cross-pollinate so it is difficult to keep the seed strain pure.

Tomatoes, pepper, beans, and peas work well for seed saving.

They are self-pollinating and have seeds that require little or no special treatment before storage. The important thing is to pick open-pollinated varieties rather than hybrids. If open-pollinated plants self-pollinate or happen to cross-pollinate with another plant of the same variety, they will set seed that will remain true to the parent plant, setting similar fruit and seeds that will produce more similar plants. Heirloom varieties are the most common open-pollinated plants, ones that are passed down from generation to generation because they remain true to the parent plants.

Hybrid plants are not desirable for



saving seed because they are a cross between two different varieties, combining traits of the parent plants. Examples of hybrid plants are tomatoes such as 'Big Boy', 'Early Girl', and 'Beefmaster'. If you were to save the seed from any of these hybrid varieties, you would still get viable seed that would produce plants and tomatoes but they will not be like the parent plant. They will be a completely new combination of the good and bad traits that were initially crossed. There is no way to predict what the outcome of the seed that is saved will be from hybrid plants.

Vegetable plants that have male and female flowers, like corn and vine crops, can cross-pollinate so it is difficult to save seed and get a plant just like the parent. A stand of sweet corn can be pollinated by field corn on a windy day. The flavor of the current sweet corn crop will be affected, which is why it is important to plant sweet corn at least 250 feet away from other types of corn or vary the planting dates by two to three weeks.

Vine crops such as cucumbers,

October 2011

In this issue:

Saving and Storing Vegetable Seed	1, 2
A Book Review	2
October Gardening Calendar	3
Disease Control: Garden Clean-Up	3
Plant of Merit—Sedum Variety	4
Making a Terrarium	4
The Heart of a Gardener	5
Identification of Apples	6
Group News - What's Happening!	7
Editor's Corner	8

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Saving and Storing Vegetable Seed

by Katie Kammler

melons, squash, pumpkins, and gourds are all cross-pollinated by insects. The current crop will be true to form but if seed is saved, no telling what you might get. I think this is fun with pumpkins and squash because the cross can produce different colors and shapes but would not be good if you are interested in edible qualities. If you want to save seed from a vine crop that will be true to the parent crop, the flowers can be bagged and you would have to do the work of the bees and pollinate them by hand.

Once you have decided to save seeds from open-pollinated varieties, select only the most vigorous plants with the best-tasting fruit as parents for the next year's crop. To save tomato seed, allow the fruit to ripen and then scoop out the seeds, along with the gel surrounding them. Put this in a glass jar with some water. Swirl the mixture twice a day and it will ferment, allowing the seeds to sink to the bottom in about five days. Pour off the liquid, rinse the seeds, and spread them out to dry on paper towels. Pepper seeds are easier; just

allow the fruits to stay on the plants until they start to wrinkle. Remove the seeds and spread them out to dry. Pea and bean seeds are allowed to ripen on the vine until they dry and turn brown with the seeds rattling inside. This can take up to a month after you would normally pick them to eat. Strip the pods from the plant and allow them to dry for 2 weeks before shelling.

Storage is important. The seeds need to be in tightly-sealed glass containers. They require a cool and dry environment so your refrigerator is an excellent place to store seeds. A small amount of silica-gel desiccant added to each container will absorb moisture and help keep the seeds dry. Silica-gel is readily available for drying flowers at craft supply stores. Powdered milk can also be used. Label all seed with a variety and date so you can remember next spring what you have. This can also be a fun project for kids to help with and learn more about how plants grow.

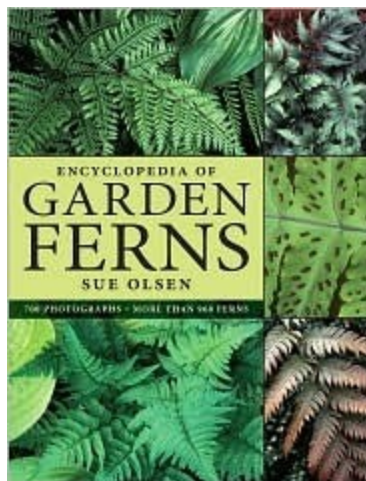
A Book Review

by Jamie Koehler, Master Gardener

The Book: Encyclopedia of Garden Ferns by Sue Olsen

Everything you need to know about ferns in one book!!

This author covers the amazing history of ferns from when dinosaurs roamed (200 million years ago) to today. The Victorians had real love affair with ferns. They created Wardian cases for their care, featured stumperies in their woodland gardens, and had parties to search for new ferns.



Olsen covers over 960 different ferns. She shows them in woodlands, wetlands, rock gardens, bogs, deserts, and containers. The variety is truly amazing. The colors are endless. She thoroughly covers cultivation and the life cycle of ferns then covers each genus in details. Each page has stunning photographs to illustrate and inspire.

You really should check this book out from the Master Gardener library and explore the incredible world of ferns. You will be amazed.

October Gardening Calendar

By Donna Aufdenberg

Ornamentals

- Plant spring bulbs among hostas, ferns, daylilies or ground covers. As these plants grow in the spring they will hide the dying bulb foliage.
- Cannas and dahlias need to be dug after frost nips their foliage. Allow to dry before storage.
- Transplant deciduous trees once they have dropped their leaves.
- Be sure to clean up from around your perennial flowers, such as rose and peony. If left on the ground, leaves and stems can harbor diseases and provide convenient places for pests to spend the winter.
- As you clean out the flower beds, mark the spots where late starting perennials will come up next spring to avoid damaging them while working in the beds.
- While you can still identify them easily, prune dead and diseased branches from trees and shrubs.

Lawns

- Seeding should be finished by October 15.
- Keep leaves raked off lawns to prevent smothering grass.
- Now is a good time to apply lime if soil tests indicate the need.
- Leaves from lawns and heavily wooded areas can be beneficial to the garden and should not be burned or discarded. COMPOST THEM or till them into your garden for organic matter.
- Fall is the time to control certain broadleaf weeds in the lawn including chickweed, white clover, dandelion, wild onion and plantain.

Vegetables

- Clean up garden debris after frost such as tomato plants, squash vines, or pepper plants that might have had diseased foliage.
- Plant radishes, sets for greens, lettuce and spinach for late harvest if winter is mild enough.
- Harvest crops such as tomatoes, peppers, eggplant, melon, and sweet potatoes before frost or cover with blankets to protect them from light frost.
- Harvest mature, green tomatoes before frost and ripen indoors. Individually wrap fruits in newspaper to keep them for several weeks.

Miscellaneous

- Look for ripened persimmons after the first frost has occurred.
- Place wire guards around trunks of young fruit trees for protection against mice and rabbits.
- Autumn is a good time to add manure, compost or leaf mold to garden soils for increasing organic matter content.
- Fall color season begins. By the third week of October, we should be in peak fall color.

Disease Control: Garden Clean-up

Remove diseased plants and unproductive plants that could harbor insect and disease pests.

Continue controlling weeds that might harbor pests.

Remove all tomato debris including spoiled fruit. They harbor blight spores.

Continue control of cucumber beetles. Overwintering adults = overwintering bacterial wilt!

Spade or Rototill soil to bury any remaining crop debris.

Rake leaves off grass and compost them.

Fall application of lime sulfur can reduce the number of overwintering fungal spores on plants like apples, brambles, roses and lilacs.

Resist pruning until late winter when disease pathogens are less.

Plant of Merit - *Sedum kamtschaticum* var *floriferum* 'Weihanstephaner Gold' by Sarah Denkler

For those lucky enough to have planted this perennial sedum in the yard, fall and winter will bring a purple tinged leaf to the landscape. In summer this ground cover is glowing with a bright yellow 'starburst' of flower clusters that attract bees and butterflies to the yard. This sun loving plant will spread rapidly in a well-drained soil and tolerates drought. This beautiful 5 inch stonecrop is hardy from zone 3 to 8. Plants can be placed 1 foot apart or tip cuttings may be placed directly in the soil to induce a quick cover.



Pictures courtesy of Green Gate Farms of Augusta, MO and the Missouri Botanical Gardens.



Making a Terrarium

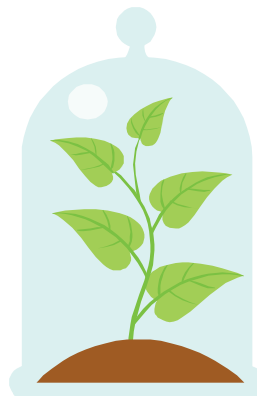
by Donna Aufdenberg

A terrarium is a collection of small plants grown in a closed or partially closed, clear container. Containers can be anything: an old fish bowl, old glass jar, jug or large bottle.

The growing medium should be a clean, peat moss based potting soil. No fertilizers are needed. Before selecting plants, decide whether you want a woodland, tropical or desert theme. Do not mix desert with moisture loving plants. Regardless, the plants need to be compact and slow growing.

In preparing to plant, make sure the container, rocks, and any hardscapes are washed thoroughly. Make sure the inside of the container is dry. Add drainage material and then growing medium. Pebbles, crushed pots or

gravel should be placed in the bottom for drainage. Then a layer of activated charcoal should be added to eliminate toxins that might occur in a closed environment. Next, add the slightly damp growing medium about 1-2 inches thick.



Now it is time to add the plants. Select only healthy, disease-free plants. Remove excess soil from the root ball and then plant into the terrarium and try to pay attention to design and arrangement. Try to keep foliage from touching the glass. After the plants have been placed, add gravel, sand, moss or other materials to give a finished appearance. Accessories can be added. For more information, see the University of Missouri Extension Guide G6520 Terrariums or contact your local Extension Center.

The Heart Of A Gardener

by Linda Klossner, Jefferson County Master Gardener

It is the Labor Day weekend as I write this. September first and second brought temperatures past the 100 degree mark but we are finally enjoying a few cool days. It hasn't rained in weeks.

As I water trying to keep precious specimens alive, I find myself thinking about next years flower beds and vegetable garden. The awful growing season of 2011 is winding down fast and like a fool I am coming back for more. Gardeners are a determined lot.

Spring brought too much rain and cold temps far too late in the season. There was no way to plant what needed to be in the ground when it should have been put there.

Not all was lost though. Our yard is what could be best described as open woodland. Because of shade issues it is full of hostas, ferns, and early blooming spring flowers. These and the perennials that follow close behind were glorious this spring. Lush leaves and prolific blooms were a sight to behold.

On a personal note, I found myself dealing with health issues that shot me out of the water for April and May. Prime gardening time and I am in the hospital and later dealing with medication adjustment. In some respects the awful weather was a comfort since I couldn't get out but those few beautiful days taunted me. I was behind with no way to catch up.

Along with my returning strength June brought record heat with no let up for the rest of the summer. I resigned myself to doing what I could and tried not to stress about what was impossible to achieve. The lush growth brought on by the spring rains withered. Root systems too shallow from almost daily rains did not find enough moisture to support those beautiful leaves and flowers. Watering the potted plants on our deck

became a daily chore. At least I was able to provide proper care for them.

I tried not to think about the vegetables that never got planted or the lack of care given to what little did. It was just a lost summer. A sane person would forget about the gardens altogether next year.

Why do all that work and often have little to show for it? How easy it would be to join a book club or

spend dark cool afternoons in the local theater seeing the latest movies. Do people really spend their summers doing those things? Very few of my friends do. But then my friends are out working in their gardens..

There are things I have found to be universal among gardeners. We all have a vision of the perfect garden. The excitement of nurturing a seed

to become a beautiful flower or food on our table makes our heart slip a beat. It is just something we have to do.

No matter how disappointing this year may be the next will be better. The seed catalogs come and even though we promised ourselves "no more" the order goes out. The new "Plant of Merit" list is a must have. There is no question that we will be turning ground over come spring. After all that vision of the perfect garden is just a heart beat away.



Identification of Apples

by Sarah Denkler

Right now is either the middle of apple harvest or just the beginning. Many may have inherited these trees and may not be 100% sure what varieties are there. What is the best way to identify apples?

The best way is to ask a neighbor with a friendly disposition who may have been around when the trees were planted. These wells of knowledge sometimes pinpoint the information you desire.

Another option is to take four or five of the best apples from a tree to a local grower. They often know more about varieties than anyone else.

If these tips don't 'bare fruit' then it is time to go online or to a book. Sources that can lead you in the correct direction include:

<http://plantsci.missouri.edu/apple> - list of varieties that do well in Missouri with descriptions

<http://www.bighorsecreekfarm.com> - list of apple variety descriptions

<http://www.orangeippin.com/apples> - list of varieties by alphabet with description

<http://www.applesearch.org/> - list of heritage apples on east coast

Try looking in books that describe apple varieties. One found in libraries is written by Morgan, J., Richards, A. and Dowle, E. *The New Book of Apples: The Definitive Guide to Over 2000 Varieties* (2003).

Below is a short list with descriptions of some varieties grown in Missouri. When identifying a tree it helps to know the color, time of ripening, flavor and any other odd characteristics of the fruit that may help to pinpoint and provide accurate ID.

Arkansas Black - Stores for 6 months. Late to mature. Deep purple skin. Tart flavor mellows with time. Yellow flesh.

Jonathon - Cherry red skin with yellow-white flesh. Somewhat tart flavor on a medium sized

crisp apple.

Missouri Pippin - Also known as Missouri Keeper. The fruit ripens in November and keeps well. Medium fruit with green/yellow skin with some red streaking. Flesh is firm and yellow.

Ozark Gold - Yellow skin with mild, juicy flavor. Ripens early in late August. Can be stored 2 months. Larger fruit with soft flesh.

Granny Smith - Green skin with white dots. Very tart flavor. Medium sized ripens in September.

Golden Delicious - Yellow/gold skin with white flesh. Medium size. Ripens late in season.

McIntosh - Red skin varies in color with white flesh. Sweet crunchy flavor. Flavor fades with storage. Ripens early.



Photo courtesy of orangeippin.com.

Want to know more about apples, check out these University of Missouri Extension Guides:

G6021 Home Fruit Production: Apples

G6022 Apple Cultivars and their Uses

G6026 Disease Resistant Apple Cultivars

G6010 Fruit Spray Schedules for the Homeowner



Group News - What's Happening

October 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 Parkland MG, 6:30pm @ Courthouse Annex (FL-3)	4 MG training - MAC, Parkhills, MO Poplar Bluff MG, 6:30 pm @ PB Ext. Center	5	6	7	8 Wetlands - MG Adv. Train., Lake Meade, Dudley, MO. 9 am to noon
9	10	11 MG training - MAC, Parkhills, MO	12	13 Delta Area MG, 6 pm, Sikeston Library	14	15
16	17 Ste. Gen. MG Meeting, 6:30pm, at the Ste. Gen. Co. Ext. Center	18 MG training - Ste. Gen. Ext. Office	19	20 Disease - MG Adv. training, 6 - 9 p.m. at Mineral Area College Cape Girardeau Co. MG, 7 pm, Cape Co. Ext. Center	21	22
23	24 Perry Co. MG meeting, 6:30 pm, Perry Co. Ext. Center	25 MG training - Ste. Gen. Ext. Office	26	27 - 28 - 29 Master Gardener Hours are DUE to your local MG coordinator by November 1st! Please turn them in AS SOON AS POSSIBLE!		
30	31	Contact your local Extension Center if you have questions about any event on the calendar.				

Upcoming Events..... November

- 1 - Poplar Bluff MGs 1st Tuesday at 6:30pm, Butler County Ext. Center
- 1 - MG Training continues @ Ste. Gen Ext Office
- 8 - MG Training continues @ Ste. Gen Ext Office
- 7 - Parkland MGs 1st Monday at 6:30pm, Farmington Courthouse Annex (3rd Floor)
- 10 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO
- 15 - MG Training continues @ Ste. Gen Ext Office
- 17 - Cape Girardeau County MGs 3rd Thursday at Cape County Ext. Center at 7pm.
- 21 - Ste. Genevieve MGs 3rd Monday, at Ste. Gen. County Ext. Center at 6:30pm.
- 28 - Perry County MGs 4th Monday at the Perry County Ext. Center at 6:30pm.

December

- 5 - Parkland MGs 1st Monday at 6:30pm, Farmington Courthouse Annex (3rd Floor)
- 6 - Poplar Bluff MGs 1st Tuesday at 6:30pm, Butler County Ext. Center
- 8 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO
- 15 - Cape Girardeau County MGs 3rd Thursday at Cape County Ext. Center at 7pm.
- 19 - Ste. Genevieve MGs 3rd Monday, at Ste. Gen. County Ext. Center at 6:30pm.
- 26 - Perry County MGs 4th Monday at the Perry County Ext. Center at 6:30pm.

if you have a horticultural related event for the calendar call 573-686-8064 to add it.

Editor's Corner

The Garden Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu,
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Disclaimer: No special endorsement of mentioned products is intended, nor is criticism implied of similar products not mentioned.

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October 2011 Garden Spade

Time To Turn In Your Volunteer Hours For 2011!!

The Master Gardener Hour Reporting form can be found at <http://mg.missouri.edu/mgforms.htm>