



THE GARDEN SPADE



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

For the Love of Poppies

By Donna Aufdenberg, MU Horticulture Specialist

Poppies are dearly loved by most gardeners and that includes ME! Every year when I see my neighbors red poppies blooming, I find myself regretting once more that I did not start that poppy bed that I so dearly yearn for. I decided to write about it in hopes that it will instill in me the drive to finally get out this fall and try them!

I think the love of poppies was started when I was a child. I watched my grandfather and uncle have the most beautiful flower gardens with poppies in them. I would sit for hours intrigued with the beauty and all the colors. Today, I am a plant collector. My yard has no rhyme or reason—just a bit of everything that I have fallen in love with over the years. It just so happens that poppies, even though it is one of my great loves, have not made it into my collection yet.

There are several species of poppies that can be planted in Missouri. They all bloom in late spring through midsummer.

- Corn poppies or Shirley poppies (*Papaver rhoeas*) are annuals which grow 2 to 3 feet tall and comes in

red, purple, white, salmon, pink or orange.

- California poppy (*Eschscholzia californica*) is an annual species for our area. It reaches 12 to 18 inches tall. It blooms orange to orange-yellow.



Beautiful double poppies

- Iceland poppy (*P. nudicaule*) is a perennial species. It produces shade of orange, red, yellow, pink, or white flowers. It grows 1 to 2 feet tall.

- Oriental poppy (*P. orientale*) is a perennial species. It is clump forming and blooms in shade of red, pink or orange. It grows 2 to 4 feet tall.
- Poppies such as double or peony poppies (*P. paeoniflorum* and *P. laviniata*) are also available but are controversial due to their opium content.

Regardless of annual or perennial, poppies grow easily from seed. Plant them in an area that gets more than 6 hours of sunlight and where the soil is well drained. Make sure to sow them where you want them because they are very well-known for self-sowing. If seedlings come up in unwanted places, they are easily pulled.

June 2014

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For the Love of Poppies

By Donna Aufdenberg, Extension MU Horticulture Specialist

Poppies germinate best in cool weather and in cool soil. In Southeast Missouri, poppies can be planted in fall (no later than October) or in the early spring.

Sow thinly in lightly scratched soil. Do not bury them very deep because some light is needed for germination. If you are worried about planting thickness, try mixing the seed with sand for better seed spacing. Keep the soil moist but not soggy until they start to germinate. When seedlings are about 1 inch tall, thin them to 6 to 10 inches apart.



Oriental Poppy, Courtesy of Missouri Botanical Garden

I know some gardeners have tried to start poppies indoors. They start well but the challenge comes when they try to transplant them outdoors. Poppies do not like their roots disturbed. Many gardeners start them in paper or bio-degradable pots due to this so transplanting is less stressful for the plants.

Poppies are drought tolerant and do not need additional fertilizers. They grow well and reseed well.

This year, I am committed to sowing poppy seed in the fall—I already have my calendar marked and a bed all ready to go!

Hot Topic! Rose Slugs

by Katie Kammler, MU Extension Horticulture Specialist

We have been receiving lots of calls on roses with holes in the leaves and areas that you can see through the leaf. This damage is caused by rose slugs. Despite the name, rose slugs are not really slugs. They are small green caterpillars that are the larva stage of a sawfly. They secrete a slime substance over their body surface that makes them resemble small slugs. They are yellow-green in color and only get about $\frac{3}{4}$ of an inch in length. They specifically feed on the leaves of rose shrubs.

While rose slugs can leave complete holes in the leaves, they also can feed in such a way that they remove the soft tissue and leave behind the paper, translucent surface and veins. This is called window-paning. Heavy feeding can cause the plants to have a brown, scorched appearance. Most infestations that we see are just cosmetic but a heavy attack can weaken a plant if there is a lot of leaf loss.



The adult sawflies emerge in early spring and lay their eggs on the underside of the host plant leaves. The larva emerge several weeks later and begin feeding for about a month before dropping to the soil to pupate.

Control: First inspect the plants for the larva, looking on both the upper and underside of the leaves. If caught early, the larva can be removed by hand. Second, there are beneficials that will feed on the larva. Parasitic wasps, birds, small mammals, beetles, and some fungal diseases will help keep populations lower.

Then there are chemical controls available but only use them when necessary. Horticulture oil, insecticidal soaps, neem oil, bifenthrin, carbaryl, malathion, permethrin, cyfluthrin, imidacloprid, and acephate can all be used to control sawflies. Remember to read the label and apply as directed. Bt is NOT effective on sawfly larva.

June Gardening Calendar

By Donna Aufdenberg, MU Extension Horticulture Specialist

Outdoor Flowering Plants and Ornamentals

- Watch for bagworms feeding on many garden plants, especially juniper, arborvitae and other evergreens.
- Keep applying organic mulches to planting areas to conserve moisture, discourage weeds, and enrich the soil as they decay.
- Apply a balanced rose fertilizer to roses after the first show of blooms is past.
- Trees and Shrubs may still be fertilized before July.
- Remove old flower heads from bedding plants to prolong the period of bloom.
- Remove foliage from spring bulbs after it turns yellow and begins to dry. Set out bedding plants to cover the bare spots using care not to damage bulbs.



Vegetable Gardening

- Early detection is essential for good control of vegetable pests. Learn to identify and distinguish between pests and beneficial predators.
- As soon as cucumber and squash vines start to run, begin spray treatments to control cucumber beetles and squash vine borers.
- To keep your cauliflower heads pure white, layer several of the long, outside leaves onto the flat, open head. Secure the leaves together with clothespin or two toothpicks in the form of an X until the head is ready for harvesting.
- Broken branches and suckers of tomato plants will often root if stuck into loose, moist soil.
- Corn needs water at two crucial times: when the tassels at the top are beginning to show, and when the silk is beginning to show on the ear. If weather is dry at these times, water!
- Consider planting successive crops of green beans, cucumbers, and zucchini.

Fruits and Nuts

- Thinning overloaded fruit trees will result in larger and healthier fruits at harvest time. Thinned fruits should be a hands-width apart.
- Want a few home-grown fruits, but have no or little garden area to work with? Grow dwarf fruit trees, figs, strawberries, blueberries and even grapes in containers.
- Time to renovate strawberry beds after they quit producing fruit.

Turfgrass

- Water turf as needed to prevent drought stress.
- Gradually increase the mowing height of zoysia lawns throughout the summer. By September, the mowing height should be 2 to 2.5 inches.

Creating Shade in Full Sun Gardens

Those gardeners who have all-sun gardens desire at least a few shade plants! Here are some ideas for creating shade so you can have those shade plants.

Plant Trees

Plant fast growing dense shrubs

Add a pergola

Add an arbor

Build a trellis

Plant climbing vines such as climbing hydrangea, English ivy, grape vines, wisteria, etc.

Plant banana trees

Create a shade house

Use shade cloth or screen material



Pest of the Month: Asiatic Dayflower

By Katie Kammler, MU Horticulture Specialist

Asiatic dayflower can be a problematic weed in lawns and gardens. It is also becoming an agronomic problem in no-till corn and soybean. I am listing this as a pest but many gardeners enjoy the flowers in their gardens. It is one of those that can be very invasive, depends on which side you are looking at. Many people liken it to the Wandering Jew house plant, only it survives very well outside. It is actually a member of the spiderwort family. As the name suggests, it was introduced to the US from Asia. It is a monocot annual that reseeds itself. It has alternate, fleshy, wide leaves and the base of each leaf clasps the stem. It has distinctive blue flowers with 3 petals. It blooms from June to October. Hand weeding is effective if you can get the whole plant. It can root from the nodes though so make sure to discard pulled plants. Also if you can get to it before it blooms, you are reducing the amount of seeds in the soil seed bank. It can't tolerate mowing so it isn't usually found in lawns. It likes moist, rich soil and shade. Cultivation is also an option. There are

few herbicides that effectively control Asiatic dayflower because of the waxy coating on the leaves. It is edible so that is an option for revenge if you find it growing in your garden!



A Must Have! Garden Journals

Donna Aufdenberg, MU Extension Horticulture Specialist

The *From Seed to Harvest and Beyond: Garden Journal and Calendar* is a garden journal for Missouri gardeners, as well as a how-to guide and information resource. It provides a place to keep all gardening information, plans and notes together.

Keeping a garden journal is a great way to organize and keep track of the how, when, where and what of the gardening season. Writing down your thoughts, successes, failures, needed improvements and new ideas as the gardening season progresses is easier than struggling to remember them several months

after the season has ended. Many gardeners believe the keys to successful gardening are to get your plans on paper first and to keep records. This journal allows a gardener to do this.



If you are interested in purchasing a garden journal for yourself or for a gift, we are selling them as a fundraiser for \$20 each. Each journal comes in a binder with a zipper pouch, note pad, etc.

Contact the *Bollinger County Extension Center* at 573-238-2420, *Butler County Center* at 573-686-8064 or the *Ste. Genevieve Center* at 573-883-3548 for ordering information.

Pecan Meat

by Sarah Denkler, MU Extension Horticulture Specialist

Southeast Missouri is fortunate in being home to many commercial pecan growers. It is also the case that many homeowners have a few native or grafted trees on their property.

While the pecan tree itself is good at surviving it may do so by sacrificing its seasonal nut production. Several issues arise as the season progresses and in many cases it has to do with the amount of nut production the previous year and the current weather patterns.

A mature tree requires 2000 gallons of water per week. If the soil is dry then there will be nut drop to compensate. If there was a large crop in the previous year the nut drop may be larger as the tree has already used up much of its stored energy.

Weather plays a huge role in well developed pecan nuts. It is important that the nuts receive plenty of water late in summer as the meat starts to develop.



Poorly filled nuts can occur because of poor soil, lack of irrigation or a heavy crop taxing the tree resources. Pecans that stick and will not come out of the shell are caused from lack of late season irrigation. Kernels that have fuzz inside are caused from lack of rain or irrigation as well. The meat

does not fill the kernel tightly enough to push against the shell and the fuzz forms on the meat. This may also occur when the season is not long enough to produce enough meat to fill out the kernel.

Another issue is shuck drop in May. If the shells are whole when they drop then this occurs because the nuts were not pollinated. In this case a percentage of nuts drop but others remain. This can be beneficial for the tree as the crop will not be as large and stress the tree as heavily.

In each of these cases it is a lack of irrigation or rain that causes the damage.

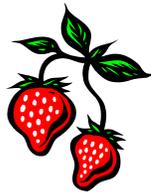
Junebearing Strawberry Bed Renovation

by Donna Aufdenberg, MU Extension Horticulture Specialist

After harvest of Junebearing Strawberries, you need to renovate if you plan to produce good quality fruit for the next season.

Renovation includes:

- Removing weeds and raking out dead leaves (you may mow leaves off and remove them from the planting to control leaf spots if you are careful not to injure the crowns by setting the lawn mower high enough).
- Narrowing the row to 6 to 12 inches wide by using a rototiller or spade.



- Rake about 1 inch of soil over the plants.
- Apply 5 pounds of 5-10-5 fertilizer per 100 feet of row.
- Use a pre-emergent herbicide if desired.
- Apply 1 1/2 to 2 inches of water a week to the newly forming bed during June, July and August.
- Replant beds after harvesting berries for three to four years.

For more information on growing strawberries, see MU Guide G6135 Home Fruit Production: Strawberry Cultivars and Their Culture.

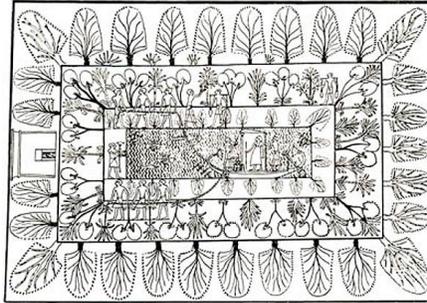
Origins of Horticulture

Robert Unterreiner, Master Gardener Intern

Few of us know that most wild almonds are poisonous. They contain a distasteful chemical called amygdalin that breaks down into cyanide. Some almonds have a mutation where this chemical is not present. Early people eventually discovered this and gradually developed it into the nut we are familiar with today. I came across this information a few years ago in the book *Guns, Germs, and Steel* written by Jared Diamond. His book describes the domestication of plants for food and details their significance in the development of human societies. All of my life I have been enjoying and benefitting from fruits and vegetables with little thought about how these foods came to be, let alone their role in civilization. All of the foods that we grow and enjoy now came from plants that were once wild. Humans have been intentionally and unintentionally selecting plants having desirable traits for thousands of years. The first archeological evidence of this goes back at least 3500 years. Paintings of gardens were found in the tombs of Egyptian kings. Among the many treasures found in the tomb of King Tutankhamen were foods that were to sustain the king in the afterworld.

Much of our knowledge of ancient Egyptian horticulture comes from excavations of tombs

where drawings and artifacts were found as well as temple complexes where elaborate gardens were built. The formal gardens that early Egyptians built were usually rectangular and symmetrical in design.



A formal Egyptian garden. From the tomb of Rekhmire at Thebes. ca. 1450 BC. Source: Singer et al. 1954. *A History of Technology* Fig. 361.

Some findings indicate they incorporated terraces for multi-level gardens and utilized irrigation for watering. Gardens were divided into sections, for their various purposes, by walls, pergolas, or rows of trees. These areas contained orchards, groves of olives and almonds, vineyards, garden vegetables, as well as herbs and flower gardens.

Ancient Egyptians had a broad understanding of gardening and grew a variety of plants, many of which are common to us today. They cultivated beans, lettuce, onions, watermelons, cucumbers and chickpeas to name a few. Apples, grapes, plums, pomegranates, peaches and pears are examples of some of the fruits that they cultivated in their orchards. Their extensive knowledge of horticulture predates the historical findings in archaeology. The people of the Nile were beneficiaries of those countless others who picked, planted and cultivated before them. Fortunately for all of us, they built on this knowledge of gardening and memorialized it in the paintings and hieroglyphs of their monuments.

Garden Quote...

A garden requires patient labor and attention. Plants do not grow merely to satisfy ambitions or to fulfill good intentions. They thrive because someone expended effort on them.

~ Liberty Hyde Bailey



Group News - What's Happening

June 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
	Parkland MG, 6:30pm @ Memorial United Methodist	Poplar Bluff MG Meeting MO Botanical Gardens				
8	9	10	11	12	13	14
				Ste. Genevieve MG, 6:30pm @ Ste. Gen. Co. Ext. Center		
15	16	17	18	19	20	21
				Cape Girardeau MG; 7:00pm @ Cape Co. Ext. Center		Arcadia Valley Garden Tour, 8-5pm; Ironton, MO. Fee \$7.00
22	23	24	25	26	27	28
	Perry Co. MG 6:30 pm, Perry Co. Ext. Center					
29	30					
<p>Contact your local Extension Center if you have questions about any event on the calendar.</p>						

July

- 1 - Poplar Bluff MG 1st Tuesday at 6:00pm at Holy Cross Episcopal Church
- 7 - Parkland MGs 1st Monday at 6:30pm, Memorial United Methodist, Fmgtn, MO
- 10 - Ste. Genevieve MG 2nd Thursday, at 6:30pm, Ste. Gen. County Ext. Center
- 17 - Cape Girardeau County MGs 3rd Thursday at 7:00pm, Cape County Ext. Center
- 28 - Perry County MGs 4th Monday at 6:30pm, Perry County Ext. Center

Upcoming Events

If you have a horticultural related event for the calendar call 573-686-8064 or email it to Denklers@missouri.edu.

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 to share experiences and write 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, denklers@missouri.edu, or aufdenbergd@missouri.edu

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