

- The Meristem -

Summer
2019

WHERE WE CULTIVATE GROWTH

NEBRASKA EXTENSION
MASTER GARDENER NEWSLETTER



MG Notes

By Kathleen Cue, Extension Educator

Inside this issue:

MG Notes	
By Kathleen Cue	Page 1
Fort Atkinson Historical Garden	
By Vikki Brandstetter	Page 2
Landscaping Mulches & Tips	
By Betty Hamata	Page 3
Testing Your Knowledge	
By Kathy Meyer	Page 4
Picture of MG's at IMGC	Page 5
Garden Tour - Betty Hamata	Page 5
Answers to Testing Your Knowledge . . .	Page 5
Hort Helpline & Upcoming Events	Page 5

Resources for Master Gardeners:

Websites:

Mastergardener.unl.edu

GroBigRed.com

Facebook:

Nebraska Master Gardeners

Send articles for publishing to:

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Saunders, Stanton, Thurston, Washington and
Wayne Counties.

We are approaching the summer solstice and Mother Nature hasn't really decided what season we are in! Spring's abundant rainfall has ensured lots of horticulture questions about fungal issues on our plants. Weeds are popping up and doing quite well, thanks to flood waters carrying in all sorts of new seeds.

Congratulations to Master Gardener interns Nancy Hoppes and Diane Lee for achieving top scores on the Master Gardener exam. Thanks to all who made it to the Diagnostic Lab on June 5th. It was great opportunity to see and learn about current plant issues.

If you ordered a new Master Gardener name tag, they are in. The t-shirts are on order and I will let you know when I have them.

It would be great to have a Master Gardener host a Master Gardener potluck picnic in their yard. If you'd like to volunteer your garden to host this event, please let me know. You can then choose the date!

Thank you to all who sent cards and extended their condolences after the death of my mom. Your kindness is appreciated.



Fort Atkinson Historical Garden

By Vikki Brandstetter, Master Gardener Intern

The Fort Atkinson Historical Garden is providing valuable education to the Master Gardeners and MG Interns who have spent their Thursday mornings planning, planting, weeding, and problem-solving their small garden plot. We have learned so much and have had the pleasure of connecting and becoming friends with others who enjoy and appreciate the task.

Here is a little background on the Fort and why it is a significant and important place for remembering and learning from our local history.

Fort Atkinson was the first U.S. military post west of the Missouri. It was established in 1820 based on the recommendation of Lewis and Clark. It was important to the early fur trade, river traffic and Indian relations. It was active until 1827. Follow this link for more information and details on the 200 year anniversary celebration: <http://www.fortatkinsononline.org/home>.

The garden contains a sampling of the vegetables and herbs grown by the military back when the fort was active 200 years ago. Tomatoes are not grown in the garden, since they were considered poisonous at the time. Unique herbs and plants, like horehound, borage, lovage and ground nuts are grown too. Ground nuts provided everyone at the fort with a source of vitamin C that was necessary to ward off scurvy. This was vital information because scurvy killed a large number of soldiers and civilians living at the fort during one of the first winters. Native Americans by way of local fur traders taught our soldiers how to find ground nuts. Here is a link that provides a little more info on ground nuts: <https://savvygardening.com/growing-american-groundnuts/>. They are perennial plants of the legume family and have a lovely, fragrant bloom.

We hosted 19 children from Crayon Castle Child Care facility on June 9th for a “We Teach” session. Young ones from 5 to 11 years old learned about herbs, climbing and spreading vegetables, root crops, and the three sisters planting method, among other things. They all got to see Mr. and Mrs. Toad and learned that toads eat about 10,000 bugs per season. MGs who hosted the group were Kathy Meyer, Diane Lee, Melanie Kaeding, Kim Neumann and Vikki Brandstetter.

The garden looks great and the only pests we have seen are cabbage worms and flea beetles on the cabbage and potatoes. Neem oil is working well for both at the moment. We are pretty sure a rabbit made it into the fence while we weren’t looking and feasted on our tiny sweet carrot crop. We have alerted the guards and put a rock on a possible entry point.



Left to right - Vikki, Diane, Kathy and Kim finish up another beautiful Thursday morning at Fort Atkinson Historical Garden.



Ground nuts



Ground nut vine



Ground nut bloom

We invite you to check out the garden and the rest of Fort Atkinson on Living History Weekends, which are the first weekend of every month from May through October.

Organic and Inorganic Mulches and Their Uses in the Garden

By Betty Hamata, Dodge County Master Gardener

This spring I decided to renovate my front porch entryway. This area is on the north side of our house and so we planted yews and hosta 35 years ago. We put down black plastic, planted the plants and then put down lava rock around plants. Big mistake on my part. After so many years, soil got embedded with the rock and it was difficult to remove. I also have large rocks as accents in that area. After removing everything, we still had the lava rock. Pete, my husband, kept at it and finally got most of the rock and plastic out. Rock is an inorganic material and does not decompose, and the black plastic and rock make the soil stay too wet. I now know Extension Educators and most landscapers do not recommend using landscaping fabric or rock mulch. When driving around neighborhoods I still see quite a few yards with rock mulch and rock around trees, but I have learned my lesson and will now use organic mulches.

So what is an organic mulch and what are their uses? Organic mulches serve several important functions in gardens and landscape plantings. They control weeds, conserve soil moisture, reduce soil erosion by reducing the impact of raindrops and water runoff, reduce severity of some diseases such as blight on tomatoes, keep fruits, vegetables, and flowers free of rain-spattered soil, reduce fruit and vegetable spoilage, and provide an attractive background for plantings.

Bark mulch is available shredded, or chips, nuggets or chunks prepackaged or sold in bulk from nurseries or landscape companies. They decompose slowly and are attractive around trees, shrubs, roses and perennial beds.

Cocoa-bean hulls are a by-product of chocolate production and decompose faster and are good mulches for annuals, perennials, and roses.

Grass clippings should dry before applying to gardens and not be used until after three mowing's if a broadleaf herbicide was used on the lawn. Clippings do not last long, so are best used in vegetable gardens and annual flower beds.

Leaves should be shredded or composted before using as mulch, and do not mat down as readily as whole leaves. Shredded leaves are excellent mulch for vegetables, raspberry planting, annual flower beds and around trees and shrubs.

Shredded newspapers or whole sheets are good for vegetable gardens. Pine needles are good mulches for acid-loving plants and last several years. Straw that is free from crop and weed seed is good for vegetable gardens and strawberry beds. Straw may provide a winter habitat for mice and other rodents so should not be used around trees and shrubs.

Wood chips are an excellent mulching material and is available from arborists or municipal or private yard waste sites. The material is obtained by passing tree and shrub trimmings through a mechanical chipper. They are good in landscaping plantings, around trees, shrubs and roses and perennial beds.

I do not use mulches in my annual flower beds as I have a lot of annuals that self-seed and I do not mind pulling weeds. Also if it rains too much as it is this year, I feel the mulch leaves the soil too wet and lead to root rot.

This year I planted annual flowers in the newly renovated north entryway while I plan my landscaping for next year, but I will not use any rock mulch! Rock mulches probably do have uses in the Southwest where they get very little moisture and have desert landscapes.

Testing Your Knowledge of Squash Vine Borer

By Kathy Meyer, Washington County Master Gardener

Source of Information - <https://extension.unl.edu/statewide/dodge/squash-vine-borer/>

Additional Information can be found at <https://extension.umn.edu/yard-and-garden-insects/squash-vine-borers>
and <https://extension.umn.edu/yard-and-garden-insects/squash-bugs>



Squash vine borer larva with frass on the stem. Photo: UMN Extension



Newly emerged squash bugs
Photo: UMN Extension

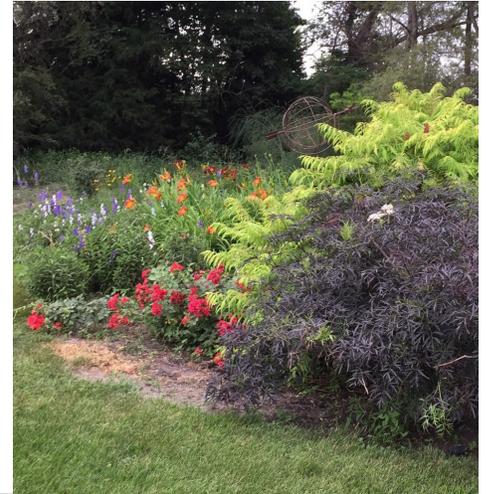
1. T or F. The time to check your vegetable garden for squash pests such as squash bugs and squash vine borer is from mid-June through mid-July.
2. Both pests, squash bugs and squash vine borers have distinguishing characteristics and habits. Label each statement either SB or SVB
 - a. Adults are 5/8" long and 1/3" wide, winged, have a flat back, and are light brownish black or gray in color.
 - b. Adults are 1/2" long, clear winged, orange abdomen with black dots.
 - c. Flat, brown eggs, only 1/25" are laid at the base of the plant.
 - d. Brick red colored eggs are deposited on underside of leaves.
 - e. Numerous young nymphs have a light green body, red head and legs, then change color as they grow.
 - f. White or cream-colored larva feeds inside stem, causing plant to wilt.
 - g. Adults overwinter in debris in and around the garden.
 - h. Larvae overwinter burrowed underground.
3. T or F. Squash bugs prefer winter squash such as Hubbard and pumpkins, but will damage cucumbers and summer squash also.
4. Squash bugs damage plants several different ways, select all that apply.
 - a. Sucking sap from plant tissue
 - b. Burrowing into the stem of the plant
 - c. Injecting a toxic substance into the plant
 - d. Both adults and nymphs feed on leaves and stems
5. Integrated pest management (IPM) practices for squash bugs include the following methods, select all that apply.
 - a. Select squash and pumpkin varieties that are resistant, like Butternut, Royal Acorn and Sweet Cheese.
 - b. Till garden to reduce numbers of overwintering larvae.
 - c. Begin scouting for adults and egg masses as soon as plants emerge in the spring.
 - d. Hand pick adults and destroy egg masses to reduce numbers.
 - e. Spray Sevin (carbaryl) or Eight (permethrin), especially on underside of leaves to control nymphs.
6. IPM practices for squash vine borer include the following methods, select all that apply.
 - a. Trap the adult moth in mid-June, by placing water filled yellow-colored containers in the garden.
 - b. Floating row covers can be used as a physical barrier to egg laying until pollinators are needed.
 - c. Hand pick eggs masses from plant.
 - d. Use a knife to cut with the grain of the stalk to find and remove the borers.
 - e. Apply insecticides like carbaryl or permethrin around the base of the stems.
 - f. Rotate new plantings of squash to a different area of the garden every year.

Answers can be found on page 5

Right: Master Gardeners Linda Wardell and Dee Drew at the 2019 International Master Gardener Conference in Valley Forge, Pennsylvania held June 17 –2, 2019.



Below: Master Gardener Betty Hamata hosted a garden tour on July 2. Beautiful flowers and accents decorated her landscape on her acreage near North Bend.



Betty Hamata (right) gives fellow Master Gardener Martha Sturtevant a tour of her flower garden. So many beautiful varieties of plants to see and enjoy.

The horticulture helpline: Anyone with a gardening question is encouraged to call or stop by these counties on their respective day:

- Mondays, 9-noon, Washington County, 402.426.9455;
- Tuesdays, 1-3 pm, Cuming County, 402.372.6006;
- Wednesdays and Fridays, 9 am to noon, Dodge County, 402.727.2775.

MG Ray McTee will be project leader of the Washington County Office, coordinating staffing of the helpline. MG Sue Martin will oversee staffing at Cuming County and I will be project lead for Dodge County.

If you haven't already, please sign up for 6 hours on the horticulture helpline. This is a part of the requirement for becoming a Master Gardener. This is important experience for everyone to have, informing MGs of the range of questions we are asked and how to research answers.

Upcoming events

July 10-12, Fremont Expo. 4-H youth from throughout the area may submit fair entries with feedback from judges on how to polish their entry to enhance ribbon placement for their local fair.

July 31 - August 4, Dodge County Fair, Scribner, NE

August 23 - September 2, Nebraska State Fair, Grand Island, NE

Answers for questions on page 4

1. F
2. a. SB
b. SVB
c. SVB
d. SB
e. SB
f. SVB
g. SB
h. SVB
3. T
4. a, c & d
5. a, c, d, & e
6. a, b, d, e & f