

OSU Extension - Auglaize County Weekly Horticulture Newsletter – 8-7-20

What is the White Substance on my Cucurbits?



Squash, pumpkins, gourds, and muskmelon are most susceptible to powdery mildew, but watermelons and cucumbers may get the disease as well. Powdery mildew is here. I found it first in my neighbor's garden, but then found it in mine.

Powdery mildew starts first as pale yellow leaf spots on the oldest leaves of a plant. White powdery spots then form on the upper and lower sides of the leaves. These spots quickly expand encompassing large areas of the leaf, ultimately infecting the entire leaf, petiole, and stem followed by additional leaves. The youngest leaves of a plant are resistant to infection. Powdery mildew can colonize nearly all of the leaves on a plant and reduce fruit size and yield.

The pathogen, *Podosphaera xanthii*, is believed to be airborne dispersed over long distances from southern states. The pathogen will infect plants under low (50%) to high (95%) relative humidity and mean temperatures of 68 to 80 °F, although the pathogen can infect at temperatures into the 90's. Dryness is favorable for colonization, sporulation, and dispersal. Symptoms may appear within three to seven days after infection, usually attacking the densest and lowest light intensity areas of the canopy first. Leaves become susceptible 16 to 23 days after unfolding.

The most effective way to manage powdery mildew is to plant disease resistant varieties. There are some biological fungicides that are antagonistic fungi that can provide some control. Excessive nitrogen makes powdery mildew worse.

Fungicides are only protectant sprays, so fungicides need to be applied at the first sign of the disease! The fungicides need to be applied every 7 to 10 days. Thorough coverage of the leaves (including underside) and stems are critical to maximizing control. Ways to maximize coverage is to apply high volumes of the spray mixture, apply at higher pressure, and use a smaller spray droplet. Chlorothalonil is likely the only fungicide providing control that can be purchased at local garden centers. However, this product only provides fair control. Having only one fungicide is not good since the fungus can become resistant to fungicides. It is best to switch fungicides every other application to reduce the risk of resistance. Other products available to control powdery mildew include Inspire Super, Procure, Quintec, Rally, and Aprovia Top, but they will need to be purchased at a local agricultural retailer. Another option to get ahold of the products is to purchase them from ebay or Amazon. Inspire Super, Procure, Quintec and Rally can be purchased from ebay, likely in smaller quantities than at an agricultural retailer and Rally can be purchased from Amazon.

The most effective organically approved fungicide is sulfur. Thorough coverage is important. Sulfur can be phytotoxic when temperatures are hot. Other effective organic fungicides include Actinovate SP, Eco E-rase, MildewCure, JMS stylet-oil, Kaligreen, MilStop, Organocide, Regalia, SeaCide, Serenade, Sonata, Sporatec and Sporan, and Trilogy. I am not sure of the availability of these products at local garden centers. Another organic option is to apply a 30 to 40% solution of milk to the plants. Results have been variable, but it is worth a try if you start when you see the first lesion.

Magnolia Scale



It is time to scout your magnolia trees for magnolia scales. Infestations can become large enough to begin killing the branches and retarding growth.

Magnolia scales are tan in color, about ½ inch in diameter looking like half sea shells and having a white waxy coating covering the shell. Young scales (crawlers) will be hatching very soon if they have not already begun hatching. Scales are sap feeders and if the population is large enough the excrement can cause leaves to turn black with sooty mold.

The most effective way to manage the scales, which needs to be done right away, is to apply an imidacloprid drench treatment. Next spring before the trees leaf out, apply a dormant oil. Hopefully this will knock the population down enough that an annual spring application of dormant oil will be enough. If the population is not controlled by next summer, then another application of imidacloprid will need to be made. If the density of scales is low you could pick them off the branches.

Local Observations



Tomatoes



Starry Night acorn squash



Watermelon



Carrots



Swiss chard



Basil



Magic lily



Castor bean



Zinnias



Verbena

Good afternoon! I pray you are well!

More rain this past week! We received rainfall **4** days this past week somewhere in the county! Rainfall for Saturday, August 1st ranged from 0.11" near Wapakoneta-Fisher and Townline-Lima roads. Rainfall for Sunday ranged from 0" near St. Rt. 66 and C.R. 66A roads to 0.13" near Tri-Township and Lock Two roads. Rainfall for Monday ranged from 0" at 5 locations to 0.57" near Valley and Idle roads. Rainfall for Tuesday ranged from 0.0" at 7 locations to 0.30" near Fiekert and St. Rt. 385 roads. Rainfall for the week ranged from 0.3" near Santa Fe-New Knoxville and Shelby-Fryburg roads to 1.16" near Fiekert and St. Rt. 385 roads. The average rainfall for the week was 0.67", 1.72" less than the last newsletter. There is at least a 41% chance of rain Sunday, Monday, Tuesday, and Wednesday, with Wednesday the greatest chance and very low chance of rain for the remainder of next week.

Much cooler this week! The average high temperature now is 83 degrees F, one degree F lower than last week. Oh no, we are now headed in the downward direction for temperature! Temperatures were above normal for **0** days and below normal for **7** days this past week. Temperatures ranged from 72 degrees F to 79 degrees F for the week. The average high temperature for the week was 76 degrees F which is a whopping 9 degrees F cooler than last week and 7 degree F cooler than the historical average high. Temperatures will be in the eighties for the next week with Monday being a high of 89 degrees F!

The southeastern side of the county received more rain this past week, but the northeast corner is still the driest. I did not water the garden this week. The Moon and Stars watermelon really grew this past week. I have harvested cucumbers, peppers, green beans, and tomatoes since the last newsletter. Early blight continues to spread in the tomato plants and powdery mildew of cucurbits has started this week.

Magic Lilies are blooming now.

I looked at a paper birch this week and answered how to control crabgrass in the lawn.

Weekly Weed Photos



Prickly sida



Ivyleaf morningglory



Waterhemp



Smooth groundcherry

Special OSU Horticulture Meetings

Horticulture Lunch and Learn and Horticulture Happy Hour

During this period of COVID-19 OSU Extension is offering a Horticulture Lunch and Learn Program and a Horticulture Happy Hour Program. If you are interested, visit the following web address: <http://go.osu.edu/MGVlearn> The Lunch and Learn occurs every Tuesday and Thursday from noon to 1:00 PM and the Happy Hour is Wednesdays from 4:00 to 5:00 PM.

VegNet

Wayne County IPM Notes for July 26 – August 1

August 6, 2020

Vegetable Pests



Heavy foliar feeding by flea beetles on a young cole crop transplant. F. Becker photo.

Flea beetles continue to be a problem in both young, recently transplanted crucifer crops, as well as cabbage and kale either in harvest or near harvest. Feeding damage from flea beetles on the younger crops can cause stunting and reduced yield. This damage can be especially impactful on heat stressed transplants. The foliar feeding being done on maturing crops can affect the visual appearance of the crop and may result in a less desirable product.

In sweetcorn, the European corn borer trap counts have shown some moth activity. A trap in Wayne County had a catch of 22 ECB moths this week. Corn earworm traps have shown little moth activity over the last few weeks. Regarding damage being done to the plants, I have started to notice increasing damage being done by armyworms. The damage I am finding is typically being done in the whorls on the young tender leaves. Another sign of armyworm feeding is large areas along the leaf edges that have a ragged appearance.

Squash bug eggs are starting to hatch, and I am starting to find various stages of larva out in pumpkin fields and squash plantings. Currently most feeding is being done on the leaves; however, the focus of the feeding can shift to the fruit and cause scarring to the skin resulting in decreased marketability. The squash bug has also been found to be the vector of a bacterium that causes the disease Yellow Vine Decline.

Vegetable Diseases

Downy Mildew is in Wayne and Medina counties and likely in surrounding counties as well. Cucumber growers need to be spraying for downy mildew.



The aborted pumpkin on this plant resting on top of the first pumpkin set shows that environmental stress is limiting the amount of pumpkins the plant is capable of sustaining. F. Becker photo.

[Powdery mildew](#) can be just as destructive on squash as downy mildew is on cucumbers. I have been finding powdery mildew consistently in younger squash plantings. Unfortunately, the earlier the plant is infected with powdery mildew, the shorter the life span of the plant. With an infected plant having a short life span, the yield for the plant can also be expected to decrease.

Although not a disease by definition, “fruit drop” is something that I am seeing in a lot of crops. Non-irrigated open field crops seem to be the most affected right now. Specifically looking at pumpkins, the first fruit set seems okay. The newer fruit sets are what is being impacted the most. The young fruit are being aborted by the plant, as well as the blossoms that have come on after the most recent fruit set. High temperatures and drought conditions have brought about the poor fruit set on pumpkin plants. With high temperatures affecting the viability of the pollen and the flower combined with low nutrient uptake due to limited soil moisture, the plant simply can’t sustain a heavy fruit set, at least not until we get some more consistent rain.

Fruit Pests

Japanese beetles are still feeding in nearly every crop that I am scouting. They are doing damage to apple leaves, peach leaves, grape leaves, blueberry leaves and blueberry fruit. It is important to watch the

populations of Japanese beetles because they can transition from only feeding on the leaves to doing significant damage to the fruit.

After a few weeks of high numbers in both oriental fruit moth and codling moth traps, the trap counts have started to back down a bit.



Woolly apple aphid clusters on apple trees. F. Becker photo.

On apple trees, I am starting to find some [woolly apple aphids](#). Mature trees do not often face major damage from these infestations; however, young trees typically suffer from the damage that the woolly apple aphids cause to the roots. Continued feeding can damage or kill roots, resulting in reduced yield, growth, and tree vigor, and even death of some trees.

Fruit Diseases

Overall, disease pressure has been fairly limited this year. Hot and dry conditions have prevented favorable conditions needed for disease development. As fruit continues to ripen and be harvested, we continue to move forward through the growing season without many disease issues in our area.



Grape clusters beginning to ripen. F. Becker photo.

Grapes should be starting to get some color to them as the clusters are starting to increase in size. At this point, most varieties of grapes should be resistant to black rot. Although symptoms of black rot may be showing up on untreated grapes, it is too late to do anything.

Growers with varieties of grapes that are not resistant to downy mildew should consider a spray program. Grape growers should also keep an eye out for powdery mildew, as this is the time of year when powdery mildew is typically found on grapes.

Apple and peach growers should continue their spray programs to [manage fruit rots and diseases](#) such as flyspeck and sooty blotch in apples and brown rot in peaches. Alternaria leaf blotch can be found on some apple trees right now. This can be made worse by red mite infestations. With high populations of mites and the leaf blotch, severe defoliation can occur.

Optimizing Soil Moisture in Drip-irrigated Soils

August 1, 2020

When a lot must get done and crop needs for water are high, fine-tuning irrigation is usually an afterthought. Still, consider a few issues when working to get the most from drip-irrigated crops. This is one thought that came to mind when I returned to an article published by Drs. Michael Dukes, Lincoln Zotarelli, and Kelly Morgan of the University of Florida. The article is available at <https://journals.ashs.org/horttech/view/journals/horttech/20/1/article-p133.xml?rskey=f046lk>. Do not be thrown by the title, there is something for Ohioans and others to gain from the summary. Sections on verifying and optimizing soil moisture distribution in drip-irrigated soils (especially within plastic-covered raised beds) are one example.

Of course, distribution is influenced by soil type, irrigation frequency and duration, loss (ET, drainage), and other factors. Sampling using a soil probe or other approach can reveal unexpected and, possibly, damaging surpluses and deficiencies which is a first step in correcting them. My team and I have experienced this firsthand many times over the years, including this season. Taking 10-15 minutes to pull soil samples has told us we can or cannot afford to delay an irrigation and where it is least or most important relative to crop need, weather, other tasks, etc. Also, the article from the Univ of FL includes pictures depicting desirable and undesirable distributions of soil moisture and effects of under-and over-watering. For example, the team used dye to track the movement of water and fertilizer through and outside the rooting zone. Seeing the pictures helps illustrate what is rarely seen (so must be imagined) but can be seen with a spade or shovel and a little time and care.

The Dukes, Zotarelli, and Morgan article (Use of irrigation technologies for vegetable crops in Florida; HortTechnology 20(1):133-142) is highlighted here. However, there are many other similarly excellent irrigation guides and resources. All contain bits of information we can act on. I am also glad to help resolve irrigation-related questions; just let me know if I can help (kleinhenz.1@osu.edu; 330.263.3810). Regardless of how you proceed, recall that in addition to the sunlight, air, nutrients, and protection crops require, the right amount, timing, location, and quality of water is also very important. As far as nutrients are concerned, recall that fertility experts often say root zone moisture strongly influences whether their levels, etc are optimal.

BYGL

I did not include all of this week's articles in this newsletter. To see all of them go here:
<https://bygl.osu.edu/>

Mimosa Webworm on Honeylocusts

Authors

Joe Boggs

Published on

August 7, 2020



Damage by non-native Mimosa Webworms (*Homadaula anisocentra*, family Galacticidae) was a topic of discussion during this week's BYGLive! Zoom Inservice. Despite their common name, mimosa webworms are most often found in Ohio on honeylocusts (*Gleditsia triacanthos*).



Dave Shetlar (Professor Emeritus, OSU Entomology) reported that he is picking up a third flight of adult moths in his light trap in central Ohio. These moths will initiate the third generation. He also noted that moths made sudden appearances on two separate occasions earlier this season which clearly defined the first two generations. Curtis Young (OSU Extension, Van Wert County) reported high localized populations in northwest Ohio. Brad Bonham (The Garden Fairy, Wyoming, OH) noted that browned clusters of leaves can be seen on honeylocusts in the city of Wyoming in the southwest part of the state.

This non-native nest-maker was accidentally introduced into the U.S. from China in the early 1940s. The first infestations were found on honeylocust in Washington, D.C. landscapes that had been planted to replace American elms killed by Dutch elm disease. Since that time, the webworm has spread across much of the eastern and Midwestern U.S.

There are three generations per season in Ohio as indicated by Dave's light trap catches and other observations. The generations may slightly overlap meaning that it's common to find relatively large caterpillars in nests containing small caterpillars. This is particularly true between the second and third generations. First and second-generation larvae pupate in the nests with moth emerging from the nests.



The caterpillars vacate nests in the fall to construct cocoons in protected locations where they spend the winter. Pupation occurs in the spring with adults appearing in late spring. This is considered a "summer pest" with first-generation caterpillars appearing sometime in June.

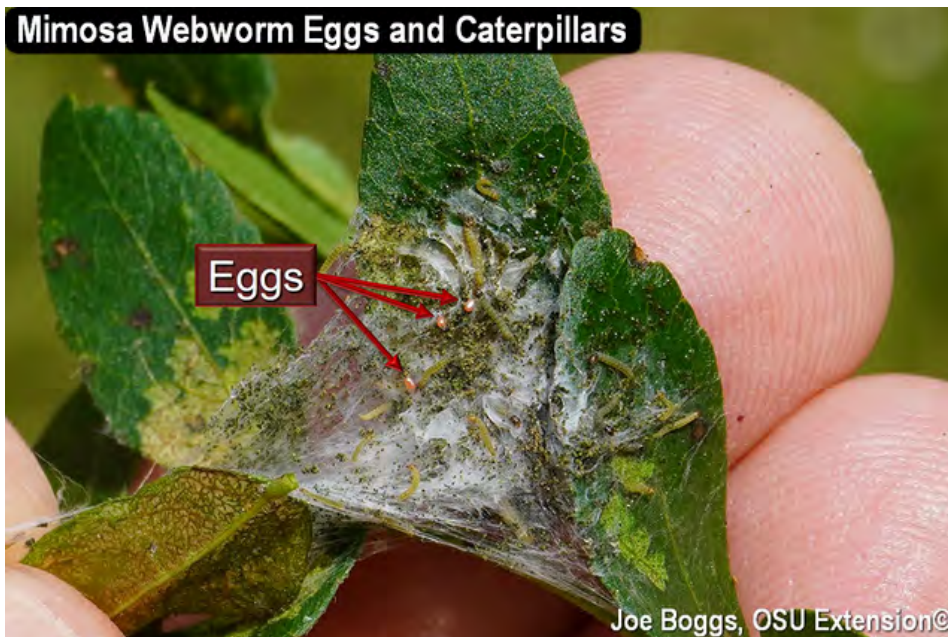
The caterpillars feed gregariously as skeletonizers within webs spun over the foliage; they only feed on leaflets enveloped by their silk nests. Attention is usually drawn to an infestation by clusters of orangish-brown "torched" leaves and leaflets that are tightly encased in webbing.





Female moths lay silverish-white eggs that turn coral-pink. The eggs are often laid on or near the nests from which the females developed. Consequently, first-generation nests are expanded by second and third-generation caterpillars. This partially explains why the moths may fly below our radar until leaves damaged by the first generation caterpillars turn brown and large nests produced by the second and third generation become evident.





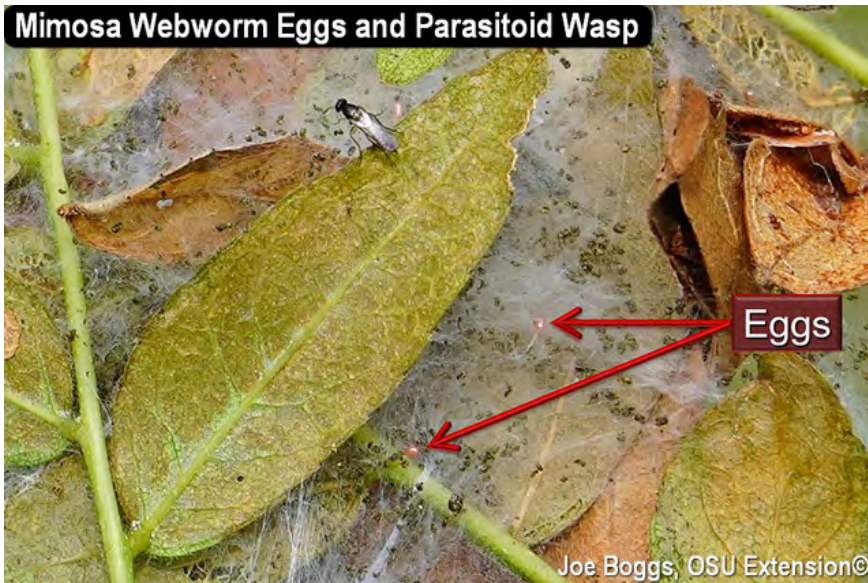
Management

It's common for localized population trajectories to slowly rise year-after-year until peaking in an "outbreak" and then collapsing. Infestations may not return for several years. For this reason, the depredations of mimosa webworms alone is not considered sufficient to kill established trees. On healthy honeylocust trees, mimosa webworms are generally considered an aesthetic as well as a nuisance pest problem. The nests make trees unsightly and caterpillars will occasionally drop from infested trees onto unsuspecting backyard gardeners, grill masters, dog walkers, etc.



Although the mimosa webworm moth is a non-native, it appears that this exotic pest has been with us long enough to be discovered by a number of predators and parasites. A paper published in the *Great Lake Entomologist* in 1987 reported nine parasitoids including both flies and wasps were recovered from overwintering pupae. A study conducted in Ames, IA, and published in 1990 found parasitism rates by the wasp, *Elasmus albizziae*, on first-generation mimosa webworm pre-pupae to range from 44% to 47% over three consecutive years.

Indeed, the pictures below shows a parasitoid wasp I found cavorting among early instar mimosa webworms in Wyoming, OH. Its antlered antennae indicate this wasp belongs to the Family Eulophidae. Wasps in this family are *ectoparasitoids* meaning they lay their eggs on the surface of their victims. The resulting wasp larvae bore a hole through the integument to zip in and out as they consume the victim's innards.



While healthy honeylocust trees can recover from occasional mimosa webworm outbreaks, the impact may be different for newly planted trees as well as older trees planted in confined spaces such as in "tree wells" or between streets and sidewalks; the so-called "devil's strip." The added stress may push the trees over the edge

or make them susceptible to opportunistic borers such as the honeylocust borer (*Agilus difficilis*). This is particularly true if webworm outbreaks occur during a drought year.



Insecticide applications may be required to protect vulnerable trees. However, topical applications are not generally recommended for two reasons. First, they will kill the bio-allies such as the aforementioned parasitoid wasps that provide natural control of mimosa webworm. Second, dense webworm nests present a significant barrier to insecticide penetration. This is particularly true for second and third-generation nests.



If insecticides are required, systemic insecticides are the best option because there is a reduced chance they will kill the beneficial insects. Of course, if the goal is to prevent leaf loss on vulnerable trees, the application timing should target first-generation caterpillars. Also, preventing first-generation nests from fully developing will reduce the attraction of trees to second and third-generation female moths.

Dave Shetlar noted that the systemic neonicotinoids clothianidin (e.g. Arena 50WDG), dinotefuran (e.g. Safari, Transect, etc.), and acetamiprid (e.g. TriStar) are effective against these caterpillars. Applications should follow label directions relative to soil drench or trunk sprays. Acephate products applied as soil drenches or trunk injections (e.g. Lepitect or Lepitect Infusible) are also effective.

Third-generation mimosa webworms are well underway in southern Ohio. As Dave's light trap indicated, the third generation will soon be underway in the central part of the state. This means if the overarching goal is to protect vulnerable trees by preventing leaf loss, the battle is largely lost. Arguably, using an insecticide this late in the game would mostly be a "feel good" application. Tree care professionals should note the infestations in records kept on their clients so trees can be closely monitored next year to target first-generation webworms. After all, a localized outbreak this season does not mean a repeat next season.

References

Miller, F. D.; Cheetham, T.; Bastian, R. A.; and Hart, E. R. 1987. "Parasites Recovered From Overwintering Mimosa Webworm, *Homadaula Anisocentra* (Lepidoptera: Plutellidae)," *The Great Lakes Entomologist*, vol 20 (3) Available at <https://scholar.valpo.edu/tgle/vol20/iss3/7>

Rex A. Bastian, Elwood R. Hart, First-Generation Parasitism of the Mimosa Webworm (Lepidoptera: Plutellidae) by *Elasmus albizziae* (Hymenoptera: Eulophidae) in an Urban Forest, *Environmental Entomology*, Volume 19, Issue 2, 1 April 1990, Pages 409–414, available at <https://doi.org/10.1093/ee/19.2.409>

Passion Flower in Bloom

Authors

Amy Stone

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Passion flower (*Passiflora incarnata*) is an annual vine that climbs by axillary tendrils. In warmer climates it can become somewhat woody and be perennial-like in its habit, typically dying back to the ground each winter. In Ohio, it will die-back to the ground in the fall, but will need to be replaced with a *new* plant in the spring. It is native to the Southeastern U.S. and is easily grown in average, medium, well-drained soils in full sun to part shade.



Photo Credit: Amy Stone, OSU Extension - Lucas County

In its natural habitat it is found along stream banks, roadsides, woodland edges, meadows and pastures. In Florida it is host plant for the Gulf Fritillary butterfly and thus a must-have for butterfly gardens in the Sunshine State. In Ohio, it is placed in more prized locations and often given support to grow up on things such as a trellis, pergola, arbor or fence. Although it is tolerant of drought, a loose mulch layer at the plant's base helps to keep the roots cool.

The beautiful, three to four inch flowers come in shades of lavender or purple, with a wavy fringe over five petals. The middle of the bloom looks helipad-like, with a tiny yellow bean-like pollen sac suspended overhead. Each flower lasts about a day during the summer and early fall, but quickly replaced by another. The leaves are deeply lobed.



Photo Credit: Amy Stone, OSU Extension - Lucas County

Maypop is another common name for this vine, relating to the loud popping sound made when the fruits are stepped on. It is also called passion vine and apricot vine. This plant is moderately resistant to damage from deer.



Photo Credit: Amy Stone, OSU Extension - Lucas County

There are two vines planted near the entrance to the new Inclusion Garden at the Toledo Botanical Garden. Earlier today, a young visitor stopped in the office with his mom. I was explaining to them about Extension and my job and talked about people bringing in plants and pests to the office for identification. At that point in the conversation this boy said, "I have a plant that I want to know what it is" and I asked him to tell me more about the plant. He described it, pointed, and said "it is right there." He described perfectly the flower and directed me to the actual plant. I was explaining to him about the plant and he excitedly said, "I know what I want for Christmas. I am going to ask for a passion plant." His excitement was awesome and he is the reason I am posting this BYGL Alert today. I hope this post about this plant brings everyone a little excitement in their life tonight!



Photo Credit: Amy Stone, OSU Extension - Lucas County

Cornelian Cherry Dogwood Putting On a Fruity Show

Authors

Amy Stone

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I have recently come to enjoy the cornelian cherry dogwood (*Cornus mas*). It was its early spring blooming yellow flowers that drew me to this plant, but I have to say, the fruit and the bark are added features that keep me coming back for more. I am lucky enough to have a hedge row of this plant near my office, so not a day goes by that I don't get to enjoy these plants. I wanted to share some photos of its fruit, both in the canopy and some that have fallen off. The squirrels are having a great time gorging themselves on the ripening fruit, at least here at the Toledo Botanical Garden.



Photo Credit - Amy Stone, OSU Extension - Lucas County

The cornelian cherry dogwood can be a small tree, or shrub-like in its appearance. The plant tops out at about 20 to 25 feet. Its width ranges from 15 to 20 feet wide. There are some cultivars that are smaller in size. The yellow flowers appear in the early spring before the leaves appear. The plant prefers full sun to part-shade. It is relatively tolerant to different soil conditions, including occasionally flooding and dry conditions, but tends not to transplant well.



Photo Credit: Amy Stone, OSU Extension - Lucas County

Most fruit starts out yellow and ripens to a bright red, although there are some cultivars that the fruit remains yellow.

I have observed over the last few years that some fruit drop has occurred. It is a very small percentage of the fruit and even then is grazed by the squirrels. It guess the fruit is a taste treat whether on the ground or still in the tree. It is also important to note that the fruit is edible by humans too. It can be a little tart for my liking, many enjoy it as is, or made into jelly or jam.



Photo Credit: Amy Stone, OSU Extension - Lucas County

Seasonal Fruits and Veggies Shine - Three Cheers for Locally Grown Produce

Authors

[Amy Stone](#)

Published on

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This time of the year, there is a flurry of gardening activity, especially in those gardens producing fruits and vegetables. The warm season crops continue to produce, while gardeners begin planning for the fall garden - one of the quick to mature warm season crops, or the traditional cool season crops.

While we always want to highlight and encourage locally growing food, the first week in August is a great time to take it to the next level. Visit a local farmers market to support your local producers, swing into a road-side food stand, or celebrate the harvest in your own garden, and share any excess produce with friends, family, neighbors and others in need. Flood social media with these positive photos and use the hashtags #ohiolocalfoods #localfoodsOH

Are you interested in learning more about the fall garden? Check out this blog post with additional links and a table of fall producing fruits and vegetables: <https://u.osu.edu/powers-barker.1/2019/07/24/planting-a-fall-vegetable-garden/>

To continue to get you into the gardening spirit, here is a virtual-walk through the Heirloom Garden, just outside the OSU Extension Horticulture Office in Lucas County at the Toledo Botanical Garden.

Vining crops like pole beans benefit from structures to support the plant's growth. A bean tee-pee provides that structure for these yard long beans, along with a small place for young gardens to enjoy and explore.



Photo Credit: Amy Stone, OSU Extension - Lucas County

The photo below is another structure that can provide plant support taken earlier this season.



Photo Credit: Amy Stone, OSU Extension - Lucas County

This trellis was hand-made from trunks and branches and supports the cucuzzi gourd. The fruit is an eye-catcher with its mature length, exceeding a yard in length. It produces multiple fruits per vine and the plant has filled in the trellis nicely.

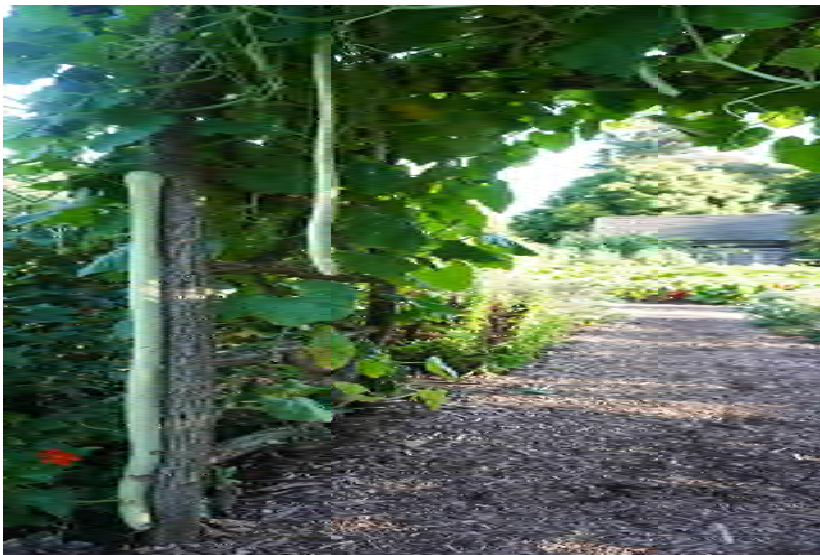


Photo Credit: Amy Stone, OSU Extension - Lucas County

Tomatoes in this garden are staked individually, as shown below. Stakes provide support for the plants to grow upright, rather than left to spread on the ground. This can help with air circulation, and hopefully the reduction of pathogen on plants.

At home where we have lots of tomatoes, we have gone to using staggered stakes with twine weaved back and forth, and have trained the tomatoes to grow between the twine. This practice is called the Florida weaves.



Photo Credit: Amy Stone, OSU Extension - Lucas County

Photo Credit: Amy Stone, OSU Extension - Lucas County

Included in the collection of tomatoes is Amy Szabo's, TBG Horticulturist favorite, the 'Blue Gold Berries.' This cherry tomato is purple and green now, but will turn to an amazing blue to black and yellow combination when ripe.



Photo Credit: Amy Stone, OSU Extension - Lucas County

On the edge of the garden is a trellis for the grapes to grow. This year the hubbard squash began also taking advantage of the support system. This unusual plant combination, when vines collide as I like to say.



Photo Credit: Amy Stone, OSU Extension - Lucas County

And what would a garden be without sunflowers!



Photo Credit: Amy Stone, OSU Extension, Lucas County

So take time to celebrate local foods and enjoy the fruits of your labors, or the labor of our local producers. Happy Local Foods Week!

Other Articles

Five Steps to Reduce Weeds in the Garden

SALLY FERGUSON

AUG 4, 2020

Source: <https://www.hortmag.com/smart-gardening/reduce-weeds>

"Use your head first to rid your vegetable garden of weeds, not your hoe," said long-time garden-to-table expert Kath LaLiberte. "First you need to know how weeds are getting into your garden. Then you can build defenses to keep them out. To reduce weeds and weeding, out-think weeds at their own game."



LaLiberte is a nationally respected gardening professional and an avid gardener who has fed her own family with homegrown produce from a 30-by-40-foot vegetable garden for

decades. In both her professional and personal lives, she has spent much time learning about weeds.

"Weeds eat up time and space," she said. "That's why it's important to fend off these uninvited bullies before they crowd out the plants you love."

Following is LaLiberte's "short list" of practical steps to reduce weeds and weeding in gardens this year and for years to come.

1. Plant in blocks and cover bare soil. Weeds are opportunists. When they "see" a batch of unclaimed garden, they waste no time in moving in. When possible, plant in blocks rather than in rows to minimize the amount of exposed soil. Mulch around plants to keep the soil surface covered. Cover pathways with a combination of cardboard, newspaper or landscape fabric covered by mulch, straw or shredded leaves. As crops are harvested, either plant a second crop to cover the fallow area with four to six inches of mulch.

2. Focus on the seeds of weeds. Think twice before following the old gardening advice to dig deeply or till beds each season. It's better to use a fork to aerate soil and mix in compost. Unless the soil is severely compacted, digging may do more harm than good. Tilling, by definition, churns up the soil. It also churns up thousands of dormant weed seeds, bringing them to the surface to germinate. Putting down a layer of mulch will stop many seeds from sprouting. Adding a pre-emergent herbicide, such as [Preen Natural Weed Preventer](#), on top of the soil or mulch will stop many more. Made of 100-percent corn gluten, it comes in granular form, making it easy to apply around established plants.

If you're direct-sowing plants, wait until the seedlings are three inches tall and have grown true leaves before putting down a pre-emergent herbicide.

3. Edge the garden. Every day, grass is working its way into the garden from every side. A day dedicated to installing permanent edging around the garden is time well spent. Make sure it extends four or five inches into the soil. Use two-by-six lumber, flexible plastic edging or commercial-grade metal edging. It's a one-time job providing years of benefits.

4. Watch for outside attacks. Controlling weeds beyond the bounds of the vegetable garden is as important as controlling the weeds inside. A single ragweed plant, perhaps hiding in a lilac hedge, can spread 15,000 seeds across your garden; one pigweed plant produces 117,000 seeds. When mowing the lawn, be on the lookout for weedy areas that can be knocked down before the plants mature and set seed.

5. Don't ignore late-season weeds. Not all weeds sprout in the spring. In fact, as many as half the typical weeds in a vegetable garden germinate in summer or fall. These are either fast-growing annuals that can mature and disburse their seeds in a matter of weeks, or they're biennials and perennials that will overwinter and cause more problems next year. In late summer and again in early fall, make a sweep through the garden to pull any weeds that have appeared. That's also a good time to top off beds with added mulch and weed preventer, if needed.

"Think like a weed detective," LaLiberte summed it up. "In the vegetable garden, practical preventative maintenance efforts are often your best gardening tool."

Recommended related reading:

Find more strategies for reducing weeds and going tiller-free in Patricia Lanza's classic and beloved [Lasagna Gardening](#).

Learn to use raised rows to create a vegetable garden that requires very little maintenance in [Raised Row Gardening](#) by Jim and Mary Competti. Less labor-intensive and costly to create than raised beds, raised rows require just soil and mulch yet provide many of the same benefits, including reduced weeding.

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