

The University of Maryland Extension Agriculture and Food Systems and Environment and Natural Resources Focus Teams proudly present this publication for commercial vegetable and fruit industries.

Volume 8 Issue 2

May 18, 2017

Strawberry Notes from WyeREC

By Michael Newell
WREC Horticultural Crops Program Manager
University of Maryland
mnewell@umd.edu

May 24th

How quickly this season has come and gone! Growing only the variety Chandler this year was a quick reminder of the need to extend the strawberry harvest season. Adding earlier blooming selections such as Sweet Charlie and some aggressive row cover management can help start the season a week or two earlier. Of course this strategy can add to an already stressful frost/freezing protection scenario that we had just two months ago. Later blooming varieties are another option. Although Flavorfest does bloom a few days later than Chandler in observations at WyeREC, the final harvest date has been the same as Chandler. Adding some of the day-neutrals to the mix (such as Albion) has shown promise to extend the season later. I have not ventured into the realm of day-neutrals yet. Maybe it's time.

2017 Chandler yields at WyeREC were below our historic average yields of 1.2 lbs. per plant of marketable yield. Fruit size was very good though. A few reasons why the lowered yield. As reported last newsletter, we did sustain some freeze injury from the cold events in March. We averaged about 5 damaged flowers per plant. We also noted some late season bud clipper weevil damage as well. This may have contributed to the large berry size! I have not completed the yield analysis (we have one more small harvest to go) to learn if our timed fall applications of row covers had any effect on Spring yield.

Make plans to attend the 2017 Annual Strawberry Research Twilight Meeting on Wednesday, May 24th from 6-8:00PM. See the announcement elsewhere in this newsletter. Good Luck with the Growing Season!

Garlic Virus Problems Found Early This Year

By Jerry Brust
Extension IPM Vegetable Specialist
University of Maryland
jbrust@umd.edu

Last year I had an article in July about what I called "garlic viruses" of which I had not seen in our area before, but I know must have been around before this. Some garlic growers are noticing this virus complex already in their garlic, not sure if that is because they are more aware of it or because it is just expressing itself earlier. Symptoms of virus infection are plants that display yellowing tips on many leaves with some that are completely yellow (fig 1).

Fig. 1 Garlic plants showing symptoms of garlic virus infection



If you look closely at the yellow leaves you'll see mottling or striping on the leaves (fig 2). Symptoms are usually more pronounced on young leaves. Infected plants are stunted and bulb size can be reduced. Garlic crops infected with certain of these viruses are more susceptible to weather conditions like extreme heat, and do not keep well post-harvest.

Fig. 2 Streaking, striping on leaves of garlic infected with virus



What I am calling garlic virus is caused by several different viruses that can be grouped under the name "Potyvirus"; all symptomatic garlic that was tested this year was positive for Potyvirus. Some people lump these viruses under the name "garlic mosaic". In this case garlic mosaic is thought of as a disease caused by one or more viruses belonging to the Potyvirus group which includes onion yellow dwarf virus, leek yellow stripe virus, and others. These viruses can be transmitted through the planting stock or by aphids and it is thought because garlic is clonally propagated probably most of the planting stock is infected with some type of virus. These viruses are usually mild and do not seriously affect yield. The problem comes in when the plants are infected with several different Potyviruses, and then there can be moderate to severe yield reductions. We may have had more aphid movement earlier in the year because of the mild winter and early spring, which may have increased additional virus infections in garlic plantings. You cannot reduce virus transmission by spraying pesticides. Any garlic with symptoms should be watched and possibly harvested early or rouged out if yellowing and decline increase in the coming weeks.

Spinach Crown Mites in Maryland Spinach

By Jerry Brust
Extension IPM Vegetable Specialist
University of Maryland
jbrust@umd.edu

We have had onion and garlic bulb mites and now this same mite group is being found in spinach crowns where they are called--wait for it--spinach crown mites *Rhizoglyphus sp.* County educator Ben Beale in southern Maryland found crown mites after he inspected damaged spinach plants and mites also were found in northern Maryland spinach fields. These mites feed within the folds of new leaves in the crown of spinach plants. This feeding causes the new leaves to become deformed as they grow (figs. 1 and 2).



Figs. 1 and 2. Crown leaves fed on by spinach crown mites are misshapen and ragged with necrotic margins as they expand and in the field the crown leaves are distorted and wrinkled in appearance.

Crown mite adults are extremely small bulbous nearly transparent mites that also may have a yellow-beige body color with reddish-brown legs (fig 3). A good characteristic to look for to identify these mites is the sparse long hairs mostly found on the back end of the mite (fig. 3). Crown mite eggs are spherical and clear and laid on the creased leaf surfaces in the crown area.



Fig. 3. Spinach crown mite adult with sparse long hairs over its body

I have talked about this genus of mite several times over the years, but always in regards to bulbs of garlic or onion where they feed on and open the bulbs up to infection from soil diseases. Some reports state that crown mites can act as vectors for plant pathogens such as *Pythium* and *Rhizoctonia*, but this is not definitive. Although crown mites are in the same genus as bulb mites they may or may not be the same species. As you can see there is still much that is not understood about these pests.

The spinach crown mite is most damaging when there are soils high in organic matter and cool moist conditions - plants grow a little more slowly and the mites proliferate in this type of environment. Because these mites can consume organic matter they can survive in soils after the crop has been removed. This is one reason they are difficult to control as they can survive for fairly long periods of time with no crop being present. The other reason they are difficult to 'control' is we do not realize they are causing the problem until it is too late.

Most control recommendations include sanitation and crop rotations as being important as are fallow periods. Pyrethroids are a possible chemical control as is Neem; any chemical control has to get down into the crown of the plant to have any chance of working. There has been little research conducted on the most efficacious material for these mites. Mostly what are needed are warm sunny days where spinach can grow well and the environment is not so conducive to the mites, which reduces their ability to injure the crop.



Specialty Crop Focus: Figs

By Neith Little

Urban Agriculture Extension Educator
nlittle@umd.edu

Most modern commercial fig production in the US is located in California (USDA NASS 2016). Historically small plantings of figs were grown in the Southeast for local fresh markets, but the extremely brief shelf life of fresh figs made retail stores a poor market for fresh figs (USDA-ARS 1961).

However, recently the rise of direct-to-consumer markets and consumer interest in farm-to-restaurant and seasonal eating have in some ways turned brief shelf life from a drawback to an asset. Fresh tomatoes and raspberries are good examples of this paradox. Tomatoes and raspberries sold directly to consumers and chefs can be picked closer to ripeness than tomatoes and raspberries sold to retail markets. This makes direct-to-consumer markets--farmers markets, CSAs, pick-your-own farms, and farm-to-table restaurants—a kind of exclusive market, the only place consumers can find the ripest tomatoes and raspberries. Figs have the potential to fill a similar market niche, because truly delicious, fresh figs just are not available in grocery stores.

As with other specialty crops, relatively little information is available on production methods. The most extensive guide I've found was published by the USDA-ARS in 1961. Alabama and Louisiana have briefer, more recent production guides, and University of Maryland Extension has an article on home-garden fig production that lists relatively winter-hardy varieties for Maryland: Celeste, Brown Turkey, Hardy Chicago, Brunswick, Marseille, and Osborne.

Winter-hardiness is a key issue in Maryland, because we are at the northern edge of the range where figs can overwinter outdoors. Hardy varieties should be able to tolerate temperatures down to 20 degrees F when dormant, but fluctuating temperatures can break dormancy as with other perennial crops. In sheltered areas home gardeners have been successfully keeping figs for generations in Baltimore City.

Harvest timing is also key. Fig trees produce a milky sap that "burns" the skin, not to mention the tongue.

UNIVERSITY OF
MARYLAND
EXTENSION
Solutions in your community

Announcing the
New
University of
Maryland Extension

Climate Science for Farmers

The University of Maryland Extension is proud to announce the formation of the new Climate Science for Farmers Extension team. The team will be headed by Dr. Sara Via, Professor, Department of Entomology, University of Maryland College of Computer, Mathematical and Natural Sciences. Be sure to visit the UME Climate Science website at:

<https://extension.umd.edu/anmp/climate-change>

For this reason gloves and long sleeves should be worn whenever pruning or harvesting figs. Figs that are harvested when too green can have too much of this sap left, resulting in an inedible product. However, figs that are allowed to ripen too can quickly become over-ripe. For this reason, the tendency of the variety Celeste to stand up to handling is a large point in its favor for fresh-market production.

Image credit: David Karp, Bugwood.org

To learn more about fig production in the Southeast US, see the resources listed below:

References

- Himelrick DG (1999) [Fig production guide](#). Alabama Cooperative Extension System. ANR-1145
- Pyzner J, Whitam K, Pollet D, and Johnson C (2007) [Figs for commercial and home production in Louisiana](#). Louisiana State University Ag Center Research and Extension. Pub 1529.
- University of Maryland Extension. [Figs](#).
- USDA-ARS (1961) [Fig growing in the south](#).
- USDA-NASS (2016) [Non-citrus fruits and nuts 2015 summary](#). ISSN 1948-2698

FARMER SAVED SEED: WHAT IS LEGAL? WHAT IS NOT!

Dale Morris¹, Bob Kratochvil² and Paul Goeringer²
¹Maryland Department of Agriculture and ²University of Maryland Extension

PATENT LAW AND THE PLANT VARIETY PROTECTION ACT (PVPA)

Most varieties of wheat and soybean sold in Maryland are protected by either the U.S. Patent Law or the Plant Variety Protection Act (www.ams.usda.gov/rules-regulations/pvpa). These protections provide intellectual property rights to the developer (i.e. seed company and/or breeder) of the variety. In addition, they either severely limit the age-old practice of “farmer saved seed” or prohibit it entirely, depending upon the type protection secured by the variety’s owner. Violation of either protection may result in financial penalties and costly litigation. The following discusses the implications of Patent Law and PVPA on farmer saved seed.

U.S. PATENT LAW

Most soybean varieties and an increasing number of wheat varieties sold in Maryland are protected under U. S. Patent Law that provides 20 years protection to the developer. **PATENT LAW PROHIBITS SAVING HARVESTED SEED FOR PLANTING PURPOSES, NO EXCEPTIONS, INCLUDING A FARMER SAVING AND PLANTING BACK SEED ON HIS/HER FARM FOR EITHER COMMODITY OR COVER CROP PRODUCTION!** Review the seed tag and container to determine if it is patent protected. Look for the “Patent Number” or the statement “Patent Pending”

U.S. PLANT VARIETY PROTECTION ACT

PVPA gives patent like protection to owners or breeders of a variety, with one major exception; **PVPA ALLOWS FARMERS WHO PURCHASED PVPA PROTECTED SEED TO SAVE HARVESTED SEED FOR PLANTING PURPOSES ON THEIR OWN HOLDINGS. NO SALE, TRANSFER, TRADING ETC. OF PVPA SEED FOR PLANTING A CROP IS ALLOWED.** Review the seed tag and container to determine if it is protected. Look for the statement “U.S. Plant Protected Variety – Unauthorized Propagation Prohibited” It is estimated that less than 25% of the wheat varieties (or brands) sold in Maryland are protected under PVPA.

SALE OF SEED FOR PLANTING PURPOSES BY GRAIN DEALERS

As the demand for “cover crop seed” has grown, some grain dealers have been selling wheat out of the bin for cover crop planting purposes. Since most wheat varieties (or brands) are either “Patent Protected” or “PVPA”, selling wheat for planting purposes is in violation of one or both of the laws. Neither citing the principle of “patent exhaustion” nor the reasoning that “it’s only cover crop, it will be killed in the spring” can be used as a defense to avoid the law. Both laws are clear in defining that no propagation is allowed.

VARIETY NOT STATED

It is illegal to label Patent or PVPA protected seed as “VARIETY NOT STATED”, regardless of its intended use.

NEW TECHNOLOGY

Companies have significant investment to bring new technology to the marketplace. Without patent law and plant variety protection, they would not be able to recoup these investments. Without investment in new technology, the access to new, better-yielding varieties would stop.

Dickeya dianthicola Update

By Kate Everts,
Vegetable Pathologist
University of Delaware and University of Maryland
keverts@umd.edu

Several plants with **suspected** *Dickeya dianthicola* symptoms have been reported in the mid-Atlantic region in spring 2017 and sent for diagnosis. The results of the tests are still pending. Growers should be vigilant in scouting their fields. If you see any suspect symptoms of blackleg, or your potatoes had poor emergence, or you believe that you have *Dickeya* in your field, it is important to submit the plants for diagnosis. Suspect samples should be sent for testing to your county extension educator or to Dr. K. Everts keverts@umd.edu or Dr. N. Kleczewski (nkleczew@udel.edu) for submission to a diagnostic lab. Remember that this disease results from infected seed pieces. We have **no** evidence that the bacterium can overwinter in

soils here in the region, which means it is introduced to field through infected seed pieces.

Figure 1. Potato plant exhibiting symptoms of *Dickeya dianthicola* infection. Note darkened aerial stem lesions



Figure 2. Potato plant exhibiting symptoms of *Dickeya dianthicola* infection. Note lesions emanating from the soil line

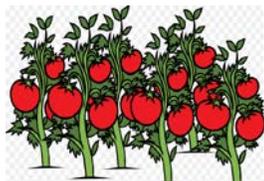


In addition to testing, it is important that you have your seed health certificate. This certificate will indicate the source of your potatoes and the lot of origin. Information on best management practices for buying seed can be found at:

<http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Potato%20Dickeya%20recommendations-Northeast-2017.pdf>

Causes of Poor Transplant Growth

By Gordon Johnson,
DE Extension Vegetable & Fruit
Specialist;
gcjohn@udel.edu



Poor growth, yellow plants, or stunted plants are often due to issues with the greenhouse media. Greenhouse media manufacturers have good quality control measures in place but things can go wrong on occasion – inadequate mixing, critical components missing or in the wrong proportions (i.e. wetting agents, fertilizers, lime), or defective, poor quality components. Media can

also be affected by poor storage and handling. Most commonly this occurs when it is stored outside and bales or bags get wet. In addition, media has a certain shelf life – old media often dries out and is hard to get rewetted.

When growers start filling trays, any media that does not handle well should be viewed as suspect and should not be used. Contact your supplier and have them inspect and run tests on the suspect media. Avoid using overly dry or caked media, media that is hard to loosen, media with a bad smell, water logged media or media that is hard to wet.

Most media (but not all) will come with a starter lime and fertilizer charge. The fertilizer is designed to give about 4 week of nutrients. If the fertilizer is missing or improperly mixed or in the wrong proportion, seeds will germinate but seedlings will not grow much and will remain stunted. In this case, liquid fertilizer applications will need to start early.

Peat based media are acidic in nature and we generally can grow at lower pHs than soil. Plants will perform well from 5.4 to 6.4. Lime is added to peat based media and reacts over time after first wetting so pH will rise over time. Above 6.4 we often see iron deficiencies in transplants. This also occurs if irrigation water is alkaline (has high carbonates) causing pH to rise too high over time.

In high pH situations, to get transplant growth back to normal, use an acidifying fertilizer (high ammonium content) for liquid feeds. Use of iron products, such as chelated iron, as a foliar application on transplants can help them to green up prior to the pH drop with the acid fertilizer. In severe cases with very high media pH, use of iron sulfate solutions may be needed to more rapidly drop the pH. Acid additions to greenhouse irrigation water may also be considered for where water is alkaline.

If lime is missing or inadequate, and pH is below 5.2, plants may have magnesium deficiencies or may have iron or manganese toxicities. This also occurs in media that has been saturated for long periods of time. To correct this situation apply a liquid lime solution to the media and water it in well.

Media that does not wet properly may not have enough wetting agent or the wetting agent may have deteriorated. They will be difficult to water and will not hold water well thus stressing plants. Application of additional greenhouse grade wetting agent may be needed.

If the fertilizer charge is too high, or if too high of concentration of liquid fertilizer feed is used, or if incorporated slow release fertilizer “dumps” nutrients, high salt concentrations can build up and stunt or damage plants. Leaf edge burn, “plant burn”, or plant desiccation will be the symptoms. Test the media for electrical conductivity (EC) to see if salt levels are high. The acceptable EC will depend on the type of test used

(saturated paste, pour through, 1:1, 1:2) so the interpretation from the lab will be important. If salts are high, then leaching the media with water will be required.

Poor transplant growth or transplant injury can also be caused by:

- Heater exhaust in the house caused by cracked heat exchanger, inadequate venting, use of non-vented heaters
- Phytotoxicity from applied pesticides
- Use of paints, solvents, wood treatments, or other volatiles inside the greenhouse
- Use of herbicides in the greenhouse or near greenhouse vents
- Low temperatures due to inadequate heater capacity or heater malfunction or excessively high temperatures due to inadequate exhaust fan capacity or fan malfunction



By USDA-ARS - Uploaded by User: Sheep Not Goats, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=42625939>

On Top of the World of Ag Information: The National Agricultural Library

By Mariette Largess, USDA National Agricultural Library and Nevin Dawson UMD Extension

It feels like you're standing on top of the world, with sweeping 360 degree views taking in the Beltsville Agricultural Research Center, Patuxent Wildlife Research Center, NASA Goddard Space Flight Center, the University of Maryland College Park campus, and even glimpses of some of the taller DC monuments and memorials. It's an impressive view, but what's even more impressive is the resource right under your feet. You're standing on the glassed-in top floor of the National Agricultural Library (NAL), situated in the center of one of the nation's capitals of research and learning. The building is the tallest around and is situated on a hill to boot, so there's a good chance you've noticed it from

the Beltway or US-1 without realizing the wealth of relevant information that it represents.

NAL has a collection of more than 3.5 million titles on agriculture and related sciences, all searchable through the online catalog, AGRICOLA. This article is the first in a series that will highlight the vast scope of information and materials available to farmers, agriculture service providers, policy makers, and the public through this important resource.

NAL is one of four national libraries in the United States. Under the umbrella of the US Department of Agriculture, NAL collects and maintains work of scientific value to the agricultural community and items that pertain to rural life. The Department of Agriculture was established in 1862 when President Abraham Lincoln signed the Organic Act, at the same time the department was given the mission "...to acquire and preserve in his Department all information concerning agriculture which he can obtain by means of books and correspondence..." and so created a library.

The collection started at only 1,000 volumes from the U.S. Patent Office's Agricultural Division. Originally, the library's collection of materials was scattered throughout the U.S. in smaller divisional libraries; it was on the 100th anniversary of the establishment of the library that it was declared the National Agricultural Library and therefore a national library. Over time, the collection grew, was modernized, and was consolidated into a single facility. Eventually, a new facility was built to house the library in Beltsville, MD in the 1960s.

In order to make the best information easily accessible to the public, the library has created information centers focused on specific aspects of the collection. The following topics each have an online Information Center: Animal Welfare, Ag Law Partnership, Food and Nutrition, Food Safety, Invasive Species, Rural, Water and Agriculture, and Alternative Farming Systems. Each center works to help the professional community, the general public and legislative groups to provide answers for general reference, perform in-depth research, training, and, at times, direct some inquiries to the appropriate USDA office. The library also has a Special Collections branch working on the preservation and access of important agricultural history.

The library is open to the public during regular business hours, though the library has a closed stack system. This means that visitors must request materials to be brought from the stacks for use on site. Materials generally may not be removed from the building, publically accessible at regular office hours and items can be requested and used on site; for Special Collections access is through appointment. NAL also makes its extensive collection available to the public through interlibrary loan, exhibits, digitization and a digital repository, and our website. As a national library, NAL can lend portions of its collection through the

interlibrary loan process; a process that requires a patron to do their best to find an alternative copy at other more local libraries before NAL's copy would be lent. If the item is not available, the request can be sent to NAL and the requested item will be sent for use at the local library. NAL shares much of its unique collections and items through digitization, digital repositories, and online search tools while following all copyright law. By working with the Internet Archive, 125,792 unique texts have been made converted to PDF and are now freely available online. The work of making the collection available is an ongoing process.

Physical exhibits showcase rare books, manuscript collections, nursery and seed trade catalogs, photographs, and posters from the 1500s to the present. Current pieces on display include gorgeous paintings from the Pomological Watercolor Collection, documentation of fruit and nut varieties introduced around the turn of the 20th century, all items being digitized are reviewed for completeness before the process and afterwards to ensure the highest quality. The digital exhibits, collections of items NAL houses, provide unique insight to the collections and tell interesting stories of U.S. agricultural history. One example is the exhibit, 'Frost on Chickens' detailing the work that poet Robert Frost did on chickens when he was a farmer, providing access to these articles and other articles and items from the time to provide context to the collection. NAL is open to the public, and has meeting space available to those interested, displaying parts of the collection throughout the lobby, reading room and meeting spaces.

Look for upcoming articles that will dive into details on each of the Information Centers, Special Collections, best practices for finding the information you need, and the ongoing work to make scientific datasets publicly available through the Knowledge Services Division.
NAL History: <https://www.nal.usda.gov/nal-history>
NAL Collections: <https://www.nal.usda.gov/collections>
Frost on Chickens Exhibit: <https://www.nal.usda.gov/exhibits/ipd/frostonchickens/>
Background information: https://en.wikipedia.org/wiki/United_States_National_Agricultural_Library



Annual Report to the Nation: Cancer Death Rates Continue to Decline
<https://www.nih.gov/news-events/news-releases/annual-report-nation-cancer-death-rates-continue-decline>

By Stanton A. Gill
Extension Specialist in IPM and Entomology
University of Maryland Extension
Central Maryland Research and Education Center
And Professor in Landscape Technology
Montgomery College, Germantown Campus
www.Extension.umd.edu/ipm - IPM Alerts
Sgill@umd.edu

Periodical Cicada – Stanton Gill

This week I got several e-mails and calls reporting citing of the periodical cicadas. These bugs get more than their share of popular press when they come out. Fortunately, this is not the brood emergence from Brood X this year. Paula Shrewsbury did a nice job of explaining what is going on with the cicadas in last week's report. You may want to print copies to hand out to your customers so they understand what is going on with cicadas this year in May and early June.

University of MD's Mike Raupp has done interviews lately on the emergence of cicadas. The office is getting a multitude of calls about being asked to report "sightings" of cicadas as well information on what to do about them.



Photo by Mary Kay Malinoski

To report sightings, please go to: magicicada.com

For cicada information go to: bugoftheweek.com



Canopy Management-Shoot Thinning and Positioning

The *reader* friendly (**HTML**) format is available at:

HTML Page: <http://extension.umd.edu/learn/canopy-management-shoot-thinning-and-positioning>

The *print* friendly (**PDF**) format is available at:

<http://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/viticulture/TVCanopyMgmtShootThinPos.pdf>

Welcome! To the Grapes and Fruit website. Statewide Extension and [research programs \(link is external\)](#) for viticulture (grape growing), tree & small fruits, and enology (winemaking), are being created and implemented at [Western Maryland Research and Education Center](#) by [Dr. Joseph A. Fiola \(link is external\)](#), Extension Specialist in Viticulture and Small Fruit. Dr. Fiola works with existing vineyard and winery owners to increase production and improve quality. He is working to expand the industry in Maryland by educating new vineyard owners. This site is designed for the commercial grower or someone who would like to start a vineyard. If you are a homeowner you can go to [The Home and Garden Information Center](#) for information or contact your [University of Maryland Extension County Office](#).

Bloom (May)

- [Disease Management - Botrytis \(pdf\)](#)
- [Tissue Sampling \(html\) \(pdf\)](#)

Annual Multi-State Twilight Meeting

When: Wednesday

June 7, 2017, 6:00 PM - 8:00 PM

Where:

[Barr Orchards, 21946 Durberry Rd, Smithsburg, MD 21783](#)

Cost:

There is no fee to attend this event. However, pre-registration is requested.

Registration:

Please register for the June 7th meeting [here](#).

Mid-Atlantic fruit growers who attend this twilight meeting will have an opportunity to tour a commercial tree fruit operation, learn from Extension Specialists who are experts in their program areas, and discuss current tree and small fruit issues with other growers at a critical time of the growing season.

Pesticide credits will be available for Maryland growers.

Articles:

Tissue Sampling:

The *reader* friendly (**HTML**) format is available at: <http://extension.umd.edu/learn/tissue-sampling>

The *print* friendly (**PDF**) format is available at: <http://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/viticulture/TVTissueSampling.pdf>



NEWS RELEASE

Office of the Secretary 50 Harry S Truman Parkway

www.mda.maryland.gov
Annapolis, Maryland 21401

Maryland Agriculture Secretary Urges Farmers to Participate in USDA National Agricultural Statistics Surveys

ANNAPOLIS, MD (May 17, 2017) – Maryland Agriculture Secretary Joe Bartenfelder is urging farmers across the state to participate in upcoming agricultural surveys by the USDA's National Agricultural Statistics Service (NASS). NASS will be conducting two major mid-year surveys: the June Agricultural Survey and the June Area Survey. The agency will survey nearly 1,000 operations across Maryland to determine crop production and supplies levels in 2017.

"NASS surveys produce the most credible agricultural data available," said Secretary Bartenfelder. "The information obtained by these upcoming surveys help to inform everyone from farmers to lawmakers and will surely have an impact on the agriculture industry in our state. I urge all Maryland farmers to participate in the surveys so we can make sure that everyone is working with the most accurate data possible."

NASS gathers the data for the June Agriculture Survey online, by mail, phone and in-person interview. For the June Area Survey, agency representatives visit randomly selected tracts of land and interview the operators of any farm or ranch on that land. Growers provide information on crop acreage—including biotech crops—as well as grain stocks, livestock inventory, cash rents, land values, and value of sales.

"Due to the widespread and significant impact of its results, the June Agricultural Survey—also known as the Crops/Stocks Survey—and the June Area Survey are two of the most important and well-known surveys NASS conducts," said Dale P. Hawks, State Statistician of the

NASS Maryland Office. "When growers respond to these surveys, they provide essential information that helps us determine the prospective production and supply of major commodities in the United States for the 2017 crop year. Everyone who relies on agriculture for their livelihoods is interested in the results."

NASS will compile and analyze the survey information and publish the results in a series of USDA reports, including the annual *Acreage* report and quarterly *Grain Stocks* report, both to be released June 30. Survey data contribute to NASS's monthly and annual *Crop Production* reports, as well as the annual *Small Grains Summary* and USDA's monthly *World Agricultural Supply and Demand Estimates*.

All reports are available on the [NASS website](#). For more information on NASS surveys and reports, call the NASS Maryland Field Office at [1-800-675-0295](tel:1-800-675-0295).



Environmental Topics

Laws & Regulations

About EPA

News Releases from Headquarters

UPDATED: EPA Requests Comment on Extending the Timeline for Pesticide Applicators Rule

05/12/2017

WASHINGTON – U.S. Environmental Protection Agency Administrator Scott Pruitt today proposed a 12-month extension for implementation of the revised final. Certification and Training of Pesticide Applicators (C&T) rule. EPA received feedback from states and stakeholders that more time and resources are needed to prepare for compliance with the rule. The extended timeline would enable EPA to work with states and provide adequate compliance and training resources.

"In order to achieve both environmental protection and economic prosperity, we must give the regulated community, which includes farmers and ranchers, adequate time to come into compliance with regulations. Extending the timeline for implementation of this rule would enable EPA to consult with states, assist with education, training and guidance, and prevent unnecessary burdens from overshadowing the rule's intended benefits," **said Administrator Pruitt**.

Last month, Administrator Pruitt met with Missouri Governor Eric Greitens to discuss the C&T rule, among other issues. "Administrator Pruitt proved today that the old way of doing business at the EPA is over and done with. We presented them with a problem, and they took

quick action to begin fixing it. Missouri farmers have waited a long time for common sense government, and now it's on its way. I'm grateful for this new leadership, and look forward to continuing to work with this administration to curb regulations that are killing jobs and hurting our farmers. It's time for government to get out of the way and let our farmers farm," said Governor Greitens.

"We would greatly appreciate EPA extending the effective date of this rule. While we are supportive of the improved final rule released in January, States are facing a range of on-going logistical, resource, and capacity challenges. These challenges are amplified as they also implement other recent EPA requirements, such as the Worker Protection Standard. Extending the certification timeline will help alleviate some of those challenges by allowing states to work with our EPA partners to ensure adequate training resources and compliance assistance activities," **said Dr. Barbara P. Glenn, CEO of the National Association of State Departments of Agriculture**.

Comments on this rule can be submitted to docket #EPA-HQ-OPP-2011-0183 via: <https://www.regulations.gov/> on or before May 19, 2017 after the Federal Register notice publishes.

Administrator Pruitt recently launched his [Back-to-Basics agenda](#) for returning EPA to its core mission: protecting the environment by engaging with state, local, and tribal partners to create sensible regulations that enhance economic growth. Today's action is the latest evidence of Administrator Pruitt's commitment to cooperative federalism and getting the EPA back to basics.

Read the Federal Register

notice: <https://www.federalregister.gov/documents/2017/05/15/2017-09386/pesticides-certification-of-pesticide-applicators-rule-extension-of-effective-date>

Read more about the C&T rule:

<https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators>

Carcinogenic Potential of Glyphosate (Round-Up)

– **Document Available*** Consideration & findings on the potential carcinogenicity of glyphosate (Round-Up) have been made available on-line from the US Environmental Protection Agency (EPA).

Glyphosate Issue Paper: Evaluation of Carcinogenic Potential from EPA's Office of Pesticide Programs (OPP); issued Sep. 12, 2016. This document is

available at:

https://www.epa.gov/sites/production/files/2016-09/documents/glyphosate_issue_paper_evaluation_of_carcinogenic_potential.pdf



AG MARKETING ALERT!

Good Morning Ag Marketing Subscriber,

Mastering Marketing – May 2017: *“How Much Should I Spend on Marketing”* has been posted on the web. To access the article click on the link:

<http://extension.umd.edu/learn/how-much-should-i-spend-marketing>

If you have any questions or comments about this article or have clients or colleagues that would value receiving it as well, please contact Ginger Myers at: gsmyers@umd.edu or sbarnes6@umd.edu

Ginger S. Myers
Marketing Specialist, University of Maryland Extension
Director, Maryland Rural Enterprise Development Center
gsmyers@umd.edu



The General Forestry Course

The University of Maryland Extension will offer the General Forestry Course for the fall 2017 semester. Both the paper and online version will be offered. The course begins September 1 and runs until December 15, 2017. Registration opens June 1. To register, go to our website at: <http://extension.umd.edu/forestry-course>

This is a non-credit course. As there are no formal classes, you work from the comfort of your home using your own woodlot, a friend's or a public forest. You will learn how to protect your trees from insects, diseases and fire; step-by-step procedures will walk you through a forest inventory and stand analysis; and the details of the forestry business are presented, including tax nuances and the sale and harvest of forest products. Ultimately, the course exercises help you develop the framework for a stewardship plan for your forest.

The cost for this forestry course is \$150. Included in the cost are copies of the supplemental readings (*A Sand County Almanac*, *The Woodland Steward*, *American Forests: A History of Resiliency and Recovery*, a small pamphlet entitled *What Tree Is That?* and *Common Native Trees of Virginia Tree Identification Guide*). The paper version text and appendices are in binder form. Online users receive a flash drive of the paper version of the text and appendices. A certificate of completion is awarded when all assignments are completed.

For more information, contact Nancy Stewart at the University of Maryland Extension, Wye Research and Education Center; phone 410/827-8056, ext. 107; or email nstewar1@umd.edu

2016 - 2017 Mid-Atlantic Commercial Vegetable Production Recommendations

On-Line at:

http://extension.umd.edu/sites/extension.umd.edu/files/_docs/2016-2017%20Mid-Atlantic%20Commercial%20Vegetable%20Production%20Recommendations.pdf

2017 Annual Strawberry
Research Twilight
Meeting
Wye Research and
Education Center
Wednesday, May 24, 2017
6:00-8:00 PM



Please join us on this date as we view and discuss research plots:

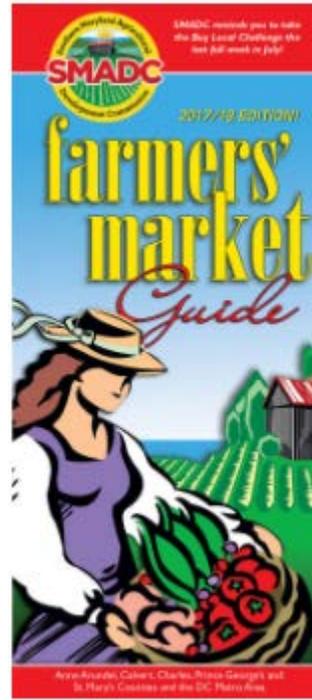
- Timed Fall row cover deployment for increased Spring yields Michael Newell, Wye Research and Education Center.
- Deficit irrigation study Bruk E. Belayneh, UMD Department of Plant Sciences and Landscape Architecture.
- Additional topics and speakers to be announced.

Registration required.

Strawberry dessert will be served after the program.

Contact Debby Dant @410-827-8056 x115, ddant@umd.edu for registration; contact Mike Newell @410-827-7388, mnewell@umd.edu for program information.

**If you need special assistance to attend this program, please contact Debby Dant.



The Southern Maryland Agricultural Development Commission (SMADC) has released the 2017 Southern Maryland Farmers' Market Guide, available now at public venues around the region while stocks last.

The full color guide features over 40 farmers' markets in Southern Maryland and the surrounding Metro DC area that offer genuine Southern Maryland farm products such as meats, poultry and seafood, produce, farm-made pickles, jams, honey, cheese and even local wine and beer.

SMADC's Farmers' Market Guide makes it easy to find your favorite locally harvested foods year-round. Market contact information is organized by county and the guide includes a handy regional market locator map, plus a harvesting chart unique to the area's growing seasons. Also find out what's coming to market and discover helpful tips and recipes at the listed market websites and Facebook pages.

Did you know that credit cards are now being accepted at many farmers markets? Increasingly, markets and their individual vendors now host Electronic Benefit Transfer (EBT/SNAP) machines that help to increase access of farm-grown foods to families on the Supplemental Nutrition Assistance Program (SNAP). The general public can also use EBT machines to pay for their market purchases with credit cards. See the guide listings for EBT/SNAP locations.

The SMADC Farmers' Market Guide can be viewed or downloaded on the 'Get the Guides' page at www.smadc.com or pick up a free copy at participating Southern Maryland farmers' markets, regional public libraries and welcome centers. For a list of pick-up sites visit the 'News and Announcements' page on the SMADC website.

The Farmer's Market Guide is one of the many resources created by the Southern Maryland Agricultural Development Commission (SMADC) in support of regional agriculture. Coming soon, look for information about Maryland's Buy Local Challenge Week (July 22 - 30). Marylanders are asked to pledge to eat local farm foods for one week. For details visit the Buy Local Challenge website at: www.buylocalchallenge.com

ANNOUNCEMENT

Buy Local Challenge 10th Anniversary Celebration Event – Southern Maryland Style!

SMADC is hosting an evening of farms, food and fun to celebrate the [10th Anniversary of the Buy Local Challenge](#) - "Southern Maryland Style!"

Open to the public, the event (rain or shine) will be held on the evening of Monday, July 31 from 5:30 p.m. to 8:30 p.m. at Robin Hill Farm and Vineyards in Brandywine, Southern Maryland.

The 10th Anniversary Celebration event will feature tastings of Maryland farm products from vendors of fruits, vegetables, meats, wine and other locally produced beverages, ice cream, baked goods, and more. Also, enjoy a locally-sourced Southern Maryland style buffet dinner, [live music](#), the magnificent [Suttler Post Farm Clydesdales](#), a raffle and lawn games, and purchase from Maryland farmers, producers, artisans, and crafters. Ticketed guests will also receive a 'Buy Local' insulated tote bag to keep their purchases fresh from farm to fridge!

Event tickets must be purchased in advance and are available now on a first come first serve basis until sold out. [Click HERE](#) to purchase tickets and for full event details. We look forward to seeing you!

If you would like to help SMADC cross-promote this event, please share and post the event details through your social media platforms using the hash tag #BLCbash and these links:

[10th Anniversary Celebration Logo - Hi-res graphic](#)
[Share with a friend Ticket Link](#)
[Event Press Release](#)

Special Thanks to Our Sponsors:
 Grow & Fortify, MARBIDCO, Maryland's Best, Maryland Farm Bureau, the Maryland Agricultural Education Foundation, R&D Cross, and the Rural Maryland Council
 2017 Southern Maryland Farmers' Market Guide Released

Section 18 Emergency Exemption for use of the bifenthrin-based products, Brigade WSB, Bifenture EC, and Bifenture 10DF against brown marmorated stink bug in apples, peaches, and nectarines in Maryland.

This exemption applies only to the products mentioned above. The requirements of this Section 18 are that applications must be made only during the post-bloom period and by ground only, at a rate of 0.08 to 0.2 lb active ingredient (a.i.) per acre, with not more than 0.5 lb a.i. per acre per season. These application rates equate to 5.12 – 12.8 fl oz of Bifenture EC, 12.8 – 32.0 oz of Bifenture 10DF, and 12.8 – 32.0 oz of Brigade WSB per acre, and seasonal maximums of 32 fl oz of Bifenture EC, 80 oz of Bifenture 10DF, or 72 oz of Brigade WSB. Multiple applications may be made per season, at a minimum re-treatment interval of 30 days. The REI is 12 hours and the PHI is 14 days. This insecticide is extremely toxic to fish, aquatic invertebrates and bees, and all precautions to avoid these exposures must be observed. Specifically, to help minimize exposure to pollinators, the following statement about the application timing must be observed, “Do not apply this product until after petal fall”. Since bifenthrin is considered one of the strongest insecticides against brown marmorated stink bug but can be disruptive to natural enemies of secondary pests, we recommend its use later in the season for apples, when stink bug populations are highest. In peaches and nectarines, its benefits might be best as fruit approach maturity, but outside of the 14-day PHI. This Emergency Exemption expires on October 15, 2017.

Vegetable & Fruit News

A timely publication for the commercial vegetable and fruit industry available electronically in 2017 from April through October on the following dates: April 20, May 18, June 29, July 20, August 17, September 7 and October 26 (Special Research Edition).

Published by the University of Maryland Extension Focus Teams 1) Agriculture and Food Systems; and 2) Environment and Natural Resources.

Submit Articles to:

Editor,
R. David Myers, Extension Educator
Agriculture and Natural Resources
97 Dairy Lane
Gambrills, MD 21054
410 222-3906
myersrd@umd.edu



Article submission deadlines for 2017 at 4:30 p.m.
ON: April 19, May 17, June 28, July 19, August 16, September 6 and October 25 (Special Research Edition).

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.

Note: Registered Trade Mark® Products, Manufacturers, or Companies mentioned within this newsletter are not to be considered as sole endorsements. The information has been provided for educational purposes only.