

Ohio State University Extension Auglaize County Top of Ohio EERA 208 South Blackhoof Street Wapakoneta, OH 45895-1902

> 419-739-6580 Phone 419-739-6581 Fax www.auglaize.osu.edu

OSU Extension - Auglaize County Weekly Horticulture Newsletter – 10-25-19

STORING SUMMER BLOOMERS

Many gardeners don't plant summer blooming bulbs and rhizomes (underground stem) because of the challenges and the work associated with digging and storing them for the winter. However, it can be done relatively easy by following some simple tips.

After a killing frost, which has occurred for some, it's time to start digging and storing bulbs, rhizomes, corms, and tubers such as dahlia, tuberous begonia, calla lily, cannas, and any other summer flowering bulbs. These bulbs (term used loosely as there are other terms that are more precise) are tender and usually won't make it through the winter. I have to say usually in this case because I have had cannas and calla lilies survive the winter in the ground. However, this is unusual and due to the fact that they were in a protected place. Most tender summer bulbs won't make it, therefore, you have to dig up the bulbs and bring them in.

Dahlias are actually tubers, not bulbs. Tubers are thickened parts of an underground stem or root. Dig the tubers after a frost has killed the foliage. Place tubers in sawdust or peat in a box. Store the box in a room that remains around 60F. Calla lilies are rhizomes and are stored in sawdust or peat moss just like dahlias.

For tuberous begonias, remove the stems after the frost has killed the foliage. Let the tubers dry for a week. Place single layers on a table in order for them to dry and to prevent disease. Clean the tubers and then store in a box of peat moss or sawdust in a room around 50F. Don't allow tubers to freeze. Tuberous begonias can be divided by separating the tuberous roots. Keep at least one shoot bud per root.

Cannas are probably the easiest to store for the winter. Cut off the dead foliage and dig the rhizomes out of the soil. Rhizomes are a horizontal stem that grows shoots and roots. Wash the soil off the rhizomes and allow drying. You can place the cannas in a box or crate and store in a room at around 45 - 50F. Again, don't allow them to freeze. Propagate cannas by separating the rhizomes, leaving at least one "eye" or bud on the rhizome.

Gladioli are corms; corms are swollen underground stems. Dig the corms out of the soil now and remove the soil and any old sub-corms. The sub-corm is the original plant; the new corms or cormels are around the side of the original plant. Air-dry the corms and store in a mesh bag at around 35 to 40F. The cormels can be planted in the spring and will take around 2 years to bloom since they are young plants.

Caladiums are tubers and should be dug now as well. Wipe off the soil and store in peat moss at 65 to 70F. These do not tolerate colder temperatures.



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The key to success is to make sure the bulbs are dry when placing them in their storage container and if you are putting them in peat moss or sawdust, make sure you layer them so that the bulbs themselves are not touching.

Having to dig them up and store them is probably the main reason that people don't partake of these fantastic flowering plants. It is sort of a pain but you can enjoy the beauty as well as propagate these plants for many years. In the spring, don't get too anxious to plant them. They don't tolerate cold damp spring soils and will definitely rot. If you want to get a jump on spring, start planting them in pots in the house in March and April. This way, you will have blooms earlier in the season. Plant them in the ground around mid- to late May.

Written by Pamela Bennett and Jeff Stachler

LATE FALL TURF TIP

It is not too late to apply fertilizer to your lawn. Apply 1 pound of actual nitrogen per 1000 square feet if you are making just a single application. If you made one in September then wait until mid to late November and apply 0.75 pounds of actual nitrogen per 1000 square feet.

Local Observations



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pixtastock.com - 11851359

Leaf lettuce

Good Afternoon! I pray you are well! Some rain in the past week!

It rained only 1 day this past week. Rainfall on Monday, October 21st, ranged from 0" at about 5 miles northwest of St. Marys to 0.5" at about 3 miles west of St. Marys. The range in rainfall for the week was the same as for Monday. The average for the week was 0.33". Temperatures have been above normal for this past week.

I'm in China and unsure how things are going in the garden and with the bees.

VegNet

No news this week



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BYGL

2020 Tri-State GIC: Save the Date!

Authors Julie Crook Published on October 22, 2019 Thursday, February 6, 2020 Sharonville Convention Center 11355 Chester Rd Cincinnati, OH 45246

SAVE THE DATE: MARK YOUR CALENDARS!

ONLINE REGISTRATION: Coming Soon!

Don't miss:

- Cutting edge horticultural training sessions •
- **Networking opportunities** •
- Vendor/Trade Show •
- Pesticide Re-certification (Ohio, Indiana, Kentucky) & Professional credit opportunities •
- **Professional Credits / CEUs**

Sponsorship Opportunities are Available!

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Click this hotlink to learn more: http://go.osu.edu/2020GIC



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The Tri-State Green Industry Conference is a collaborative educational effort between: Ohio State University Extension University of Kentucky Cooperative Extension Purdue Extension Cincinnati State Technical and Community College Boone County Arboretum Cincinnati Zoo and Botanical Garden Spring Grove Cemetery and Arboretum.

Questions? Call Julie Crook (513) 946-8998, or e-mail at: crook.46@osu.edu More Information OSU Extension, Hamilton County https://hamilton.osu.edu/program-areas/agriculture-and-natural-resources/hortic...

Putting Ash Wood to Good Use - Lessons from the Urban Wood Network

Authors Amy Stone Published on October 22, 2019



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Earlier this month, Emerald Ash Borer University (EABU) hosted an online webiner entitled, "Putting Ash Wood to Good Use - Lessons from the Urban Wood Network." While many of us from Ohio have already lived through the devastation of EAB; some may have utilized the ash, some may have not, but either way, you will enjoy the webinar presented by Don Peterson, executive director of the Urban Wood Network to learn more about what is happening in this arena across the county when it comes to urban wood utilization.

All EABU sessions are recorded and posted on the EABU You Tube Channel following the live presentation.



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To check out the Urban Wood Utilization session, check out this link: <u>https://www.youtube.com/watch?v=SrksAL-mGfM&feature=youtu.be</u>

To learn more about EABU and look at past session, or view a calendar of upcoming sessions, you can explore on the EABU webpage on the Regional Emerald Ash Borer website, <u>http://www.emeraldashborer.info/</u>

More Information Regional Emerald Ash Borer Website http://www.emeraldashborer.info/

Hemlock Woolly Adegid – A 2019 update

Authors <u>Thomas deHaas</u> <u>Jim Chatfield</u> <u>Amy Stone</u> Published on October 18, 2019



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In mid-October 2019, Jim Chatfield, Amy Stone, and Thomas deHaas attended the Central Appalachian Spruce Restoration Initiative (CASRI) to discuss conifer health, specifically, Canadian Hemlock (*Tsuga Canadensis*) and hemlock woolly adelgid (*Adelges tsugae*) (HWA) at Blackwater Falls, in Davis, West Virginia.



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HWA was first discovered in West Virginia in 1992. State suppression began in 2004. CASRI is a diverse partnership of private, state and federal organizations who share a common goal of restoring historic red spruce -



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northern hardwood ecosystems across the Central Appalachians. Speakers included: John Perez, Biologist - New River Gorge and Gauley, Amy Hill – USDA Forest Service, Hessel Lab –University of West Virginia, and Ben Smith, Forest Restoration Alliance, North Carolina State University

HWA is devastating and can cause death to trees in the course of several years. HWA is being treated aggressively in the New River Gorge, Bluestone and Gauley River National Recreation Area as well as other parts of West Virginia.



4588707 Ignazio Graziosi, University of Kentucky, Bugwood.org (Damage in Kentucky)



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Native to Asia, HWA is an invasive, aphid-like insect that attacks North American hemlocks. HWA are very small (1.5 mm) and often hard to see, but they can be easily identified by the white woolly masses they form on the underside of branches at the base of the needles.



0718057 John A. Weidhass, Virginia Polytechnic Institute and State University, Bugwood.org

Juvenile HWA, known as crawlers, search for suitable sites on the host tree, usually at the base of the needles. They insert their long mouthparts and begin feeding on the tree's stored starches. HWA remain in the same spot for the rest of their lives, continually feeding and developing into adults. Their feeding severely damages the



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canopy of the host tree by disrupting the flow of nutrients to its twigs and needles. Tree health declines and mortality usually occurs within 4 to 10 years.

Signs of infestation:

•

• White woolly masses (ovisacs) about one-quarter the size of a cotton swab on the underside of branches at the base of needles

- Needle loss and branch dieback
 - Gray-tinted needles

https://www.dec.ny.gov/animals/7250.html

Mortality of HWA begins at 13 degrees below zero F with total mortality at 25 below zero F. Several days of these cold temperatures causes even more mortality of the HWA.

Chemical controls are shown to be highly effective to control HWA. Imidacloprid in the form of Merit, Core-tech, and stem injection as well as Dinotefurin in the form of Safari.



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1344148 Great Smoky Mountains National Park Resource Management, USDI National Park Service, Bugwood.org

The chemical applications are effective and trees respond with healthy growth the following year after treatment. Treatments can last up to 7 years.

Laricobius nigrinus is a beneficial insect native to the Pacific Northwest. There is hope that these beneficials will help to control the spread of HWA. The main focus right now for biological control are two beetles in the genus Laricobius (*L. nigrinus* and *L. osakensis*), and research into a potential additional biocontrol; a species of silver fly in the genus Leucopis.

HWA was found on the border of Lake and Geauga County, Ohio on Little Mountain in Holden Arboretum. Those trees were treated and the adelgid populations have declined. The nurseries treat for HWA prior to shipping nursery stock.

If you believe you have found HWA in your Hemlock trees, contact your local OSU Extension Office or Ohio Department of Agriculture. Reports can also be made using the Great Lakes Early Detection Network App. HWA, as well as other pests can be reported using the App and confirmed reports populate an EDD maps that can be viewed to monitor the spread of these species.

https://apps.bugwood.org/apps/gledn/

As a side note, Hemlocks can become infested with Hemlock Elongate Scale, . Fiorinia externa Ferris.



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These also respond to chemical treatments.

The key to your hemlock health is active scouting, several times a year and timely treatment.

Ohio Department of Natural Resources-Division of Forestry will present a workshop "Protecting Hemlock Trees" on November 14th,2019 at Holden Arboretum:

http://forestry.ohiodnr.gov/news/post/hemlock-workshop-scheduled-for-nov-14



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Other Articles

"Breeding of organic varieties is driven by market needs"

Source: <u>https://www.hortidaily.com/article/9155283/breeding-of-organic-varieties-is-driven-by-market-</u> needs/

The organic vegetable market continues to show robust growth worldwide. Vegetable breeding company Rijk Zwaan is responding to that growth with new disease-resistant varieties that offer harvest reliability. Lettuce breeder Johan Schut: "We listen closely to the entire fresh produce chain's needs, and those needs are focused on what consumers of organic products want: high-quality, chemical-free vegetables that are also affordable."





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At Rijk Zwaan, the first phases of breeding are the same for new varieties, irrespective of whether they are conventional or organic. That's a conscious decision because it keeps all the company's breeding expertise centred in one place. Besides that, the growers' needs are roughly the same, says Johan Schut: "Strong, disease-resistant varieties are important for both markets. In the case of lettuce, the main resistances are against downy mildew, aphids, leaf miner, bacterial spots and Fusarium. But one important difference is that organic growers can't use any chemical agents, so a variety's resistances can be pivotal in whether the crop succeeds or fails. Harvest reliability is essential to their profitability."



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Fertiliser-efficient varieties

The second important requirement for organic varieties is that they grow easily without needing much



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fertiliser. "Organic farming is based on natural cycles and the use of organic fertiliser, so in our selection work we look for efficient varieties that perform well without an excess of nitrogen. A similar shift is happening in conventional farming, by the way – the fertiliser rules are becoming tighter all the time, so efficient varieties can be valuable for all growers."





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Close ties with partners

Rijk Zwaan's breeders discover the market needs by talking to their own colleagues, growers and other chain partners. It is a close-knit network, especially in the organic segment, according to Schut: "I recently attended an organic growers' day, which is where we provide an update on what we're working on and growers share their problems with us. That prompts new ideas. To give you one example, openfield organic lettuce growers plant flowerbeds in between their crops to encourage natural enemies of pests. If we find a variety with a partial resistance, that could be enough to keep a pathogen at bay in combination with such natural enemies, so we can run practical trials of the variety sooner."



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Organic trial field Talking of practical trials, that is usually the phase when the paths of conventional varieties and organic



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varieties diverge. This is logical, because Rijk Zwaan studies the performance of new organic varieties in its own organic trial field and/or at an organic grower's farm. Schut: "We have a separate trial field at our German facility in Welver where we grow crops organically, and when a variety is introduced commercially the seed production is done separately too, of course. Seed is produced by certified organic growers in the Netherlands and Australia. That seed is what ultimately forms the basis of high-quality, chemical-free and also affordable organic vegetables."





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For more information: <u>www.rijkzwaan.com/solutions/organic</u>

US: Promising new varieties expected to help growers meet market needs

Sources: <u>https://www.hortidaily.com/article/9153852/us-promising-new-varieties-expected-to-help-growers-meet-market-needs/</u>

The Syngenta Vegetable Seeds Americas Tour stopped at several research stations across the nation this summer. Each event highlighted crop species from the Syngenta portfolio and featured new commercially available varieties as well as experimental material coming soon.

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The Americas Tour began in Woodland, California, where domestic and international customers had access to the newest product offerings from Syngenta in tomato, melon, squash, pepper, bean, sweet corn and watermelon. In addition, customers had the opportunity to meet with the company's breeding, sales and product development teams to learn more about the newest technologies and innovations being developed by Syngenta.

At the Woodland event, Les Padley, Ph.D., squash breeding project lead at Syngenta, announced the newly granted U.S. potyvirus patent. This technology provides broad resistance to four of the most common potyviruses and will continue to be incorporated into new squash varieties. Syngenta also introduced several new melon varieties, including Harper-type melons Novira and Sweet Shield. For the Mexican markets, new western shipper melons T-Rex and Tarasco demonstrated high fruit quality in Syngenta trials. Additionally, Syngenta debuted new ESL melons, which exhibit improved taste and holding ability in the field, as well as longer shelf life in stores. The well-received Syngenta watermelon program, including consistent, adaptable and flavorful varieties such as Excursion and Fascination, was also a highlight.

Simultaneous to the Woodland trial event, the Americas Tour stop in Plainfield, Wisconsin, demonstrated advancements in vegetable breeding. This location hosted customers primarily from the Midwest, but also welcomed international attendees. Trials highlighted a range of products, including processor and fresh market sweet corn and beans.



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"Syngenta processor sweet corn hybrids have a long history of leading the market with our Midwest customers," said Joe Cecil, processor sales manager at Syngenta. "During trial week, we were proud to showcase an exciting pipeline of new introductions and evolving technology to continue our tradition of introducing hybrids that satisfy our customer needs as well as the demands of their customers."

For fresh market sweet corn, newer supersweet varieties such as Patriarch stood out at the Plainfield event for their superior eating quality and adaptability to multiple growing regions. Syngenta also debuted new experimental Cabo-type yellow varieties with disease resistance. "The Syngenta sweet corn program has been ahead of the curve when it comes to developing varieties with good disease packages," said Glenn McKay, Syngenta regional portfolio manager. "We are excited to see the continued development of the Syngenta sweet corn program with the newly integrated Abbott & Cobb germplasm, which expands our overall genetic diversity in temperate and tropical markets."

The Americas Tour continued in Hall, New York, where seed resellers had the opportunity to see a range of the latest Syngenta products. Organizers at this tour stop highlighted Grandprize squash for its beautiful deep-yellow color and exceptional plant vigor, as well as, personal-sized seedless watermelon Sirius for its uniform fruit size and earlier maturity. Glacial sweet corn also continues to stand out for its high eating quality, vibrant white kernel color and great husk marketability.

The last location for the summer portion of the Americas Tour was Gilroy, California, where tomato, leafy vegetable, brassicas and pepper took center stage. Wildcat tomato stood out as a high-yielding variety that tolerates varied temperatures on the coast. In addition, new leafy variety Boronda was showcased for its strong disease package, compact heart and very dense interior fill. Lacerta cauliflower, with its vigor and good self-protection, demonstrated that it is an ideal complement to Symphony cauliflower in the California overwinter and spring slot. Also showcased were soon-to-be commercialized 4-lobbed blocky pepper varieties with milestone resistance to TSWV and consistent high yield potential.

The Americas Tour will conclude in December with an additional event in Naples, Florida.

For more information: **Syngenta Vegetable Seeds** www.Syngenta-US.com/vegetables



Prepared by Jeff Stachler



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