



October-November/2016

ANR EXTENSION CONNECTION

Agriculture and Natural Resource News & Events for Jefferson County

A lot has happened here at the Jefferson County Extension office since the last newsletter: a great crowd was present at the Jefferson County Fair (where I met some of you) and the Farm Science Review had some great programs and fantastic turn-out (despite the heat). The Jefferson/Harrison Master Gardeners were keeping busy with the seed library, community gardens, and farmers markets.

Now we must turn our attention towards fall and leaf peeping season.

If you are excited about the fall foliage, peak fall color is predicted for mid-October. Why do deciduous leaves change color?

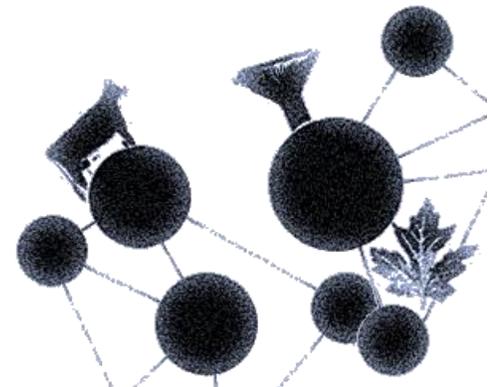
Chlorophyll, the primary pigment that captures sunlight and transforms it into sugar, gives foliage the green appearance in the spring and summer. However, in the autumn months, the amount of chlorophyll in a plant is reduced at a more rapid rate than other pigments (carotenoids and xanthophylls), thereby changing the ratio of pigments so that reds, oranges, and yellows stand out. Enjoy your maples!



It's never too early to start planning for next spring, and that is especially true for the ANR program. Keep an eye on the website calendar and the next newsletter for winter-spring programming. Pesticide recertification and fertilizer certification classes will run in February and March, and there will also be a program on shale energy. And for those of you interested, there is a Master Gardeners training class for new volunteers. Those who would like to join see page 7 of this newsletter.

If you have questions, concerns, or would like to see a specific program, drop by the office or give us a call. We look forward to hearing from you!

Erika Lyon
Extension Educator, Agriculture & Natural Resources
Ohio State University Extension



Oak Leaf Itch Mite

by Christine Gelley, Extension Educator Noble County

A couple weeks ago a story was circulating on social media about oak mites in the Cleveland area. Reports indicated that people were being bitten by the mites and that the bites could cause startling skin reactions. It sparked quite a bit of discussion and concern in social circles, giving me the inspiration to write about the tiny critters.

The oak leaf itch mite, *Pyemotes herfsi*, is a mite that primarily feeds on midge flies. Midge flies create galls on the margins of oak leaves, where their larvae feed and grow. The mites colonize the galls and feed on the larvae. This feeding pattern makes the oak mite preferential to oak trees, particularly pin oaks and red oaks. The mites are so tiny that they cannot be seen by the naked eye. The interaction between oak mites and humans occurs when a person comes near an infested oak tree. The mites may fall from the tree's canopy or be blown from the tree by the wind, inadvertently landing on a passerby. Then mites may accidentally bite the person. Humans are not a host for these mites. They will not colonize in homes or cars or on pets.

The oak mite's bite can produce an itchy, swollen, and red rash that may be accompanied by small raised bumps. The bites themselves do not leave lasting damage, but itching the irritating rash could lead to a secondary bacterial infection. Therefore, calamine lotions and hydrocortisone creams are often recommended to reduce inflammation and itching.

The mites are most active in late summer and into the fall. Most people encounter them while raking leaves. Controlling the mite population is difficult and rarely accomplished, because the mites find protection within the leaf galls created by the midge flies. The best way to avoid the mites is to limit time near infested trees, launder clothes, and shower promptly after working near the tree.

There have been reports of the oak leaf itch mites in the Southeastern Ohio region, but there is no need to panic. They mite populations will begin to die off with the first frost. In addition, the midge flies and the mites rarely have a detrimental impact on the overall health of oak trees in the landscape.

DID YOU KNOW?

Recent research suggests that some lichens (including the stuff you may see growing all over trees) are not just symbiotic relationship between fungi and algae (or cyanobacteria) but may also include yet a 3rd partner: yeast, which is another type of fungus. In some lichens where this relationship has been identified, the presence of yeast may mean a more toxic lichen – if the lichen is consumed. But never fear...lichens are not harmful to trees.

How to Contact the Jefferson County Extension Team:

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Suite C
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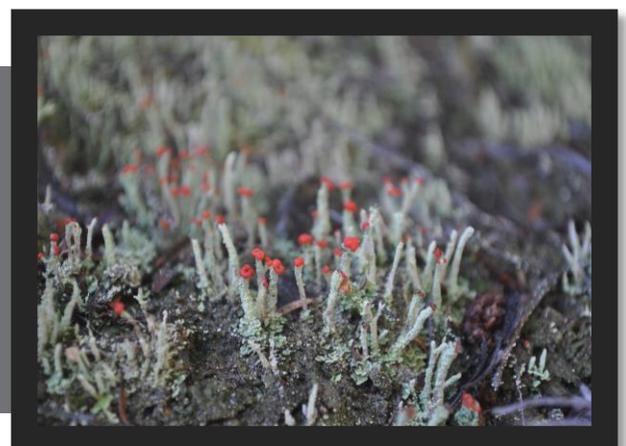
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Outdoor Photo Tips:

Photography has been a hobby of mine since 8 years old. There is just something magical about capturing a single moment in time, whether it is a honey bee pollinating a flower, a loon taking flight, or a still of a family gathering. I know my fascination with photography is shared by many, so I will be posting on what I have learned since I first picked up a camera.



Photo Tip: Trying to capture the autumn colors? Fall is the perfect time to experiment with different angles. Don't just stand in one spot...explore! Macro, zoom, and wide angle lenses all work great during this time of year.

Contrast and white balance (color temperature) can impact the appearance of your autumn photos. Sunny days are not always the best days for autumn foliage. Go out on overcast days when light is diffused across a landscape. Fog can make a fall photo more interesting by emphasizing foliage color. Finally, don't be afraid to adjust the white balance by either using the Autumn or Manual settings on your camera.

Fall Calendar

October

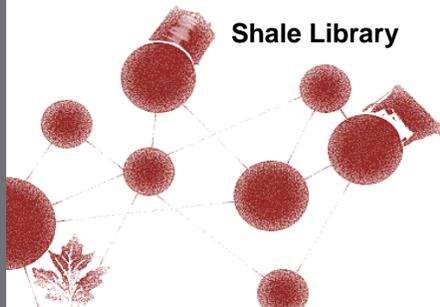
- 10/2 National 4-H Week
- 10/14 A Day in the Woods 9am @ Wayne National Forest Headquarters, 13700 US 33, Nelsonville, OH
- 10/27 Pasture Walk (Eastern Ohio Grazing Council) Location TBA; event begins at 6pm

November

- 11/5 Crop Production Partnership Field Day Eric Hutchinson Farm, 2239 Brussel Road NE, Carrollton beginning at 5:30pm

RESOURCES AVAILABLE TO YOU FROM OSU:

Beef Team	u.osu.edu/beefteam
Sheep Team	sheep.osu.edu
Agronomic Crops Team	agcrops.osu.edu
Agricultural Law & Taxation	aglaw.osu.edu
Farm Management	aede.osu.edu/research/osu-farm-management
Bee Lab	u.osu.edu/thebuzz
VegNet	vegnet.osu.edu
Buckeye Yard & Garden Online	bygl.osu.edu
Ohio Agricultural Research and Development Center	oardc.osu.edu
Shale Library	shalegas.osu.edu



Looking for an Ohio State University expert? Check out the directory: <https://apps.cfaes.ohio-state.edu/persdirectory> or check in with your local Extension office!

EXTENSION'S MOST WANTED:

- Keep an eye out for Cressleaf Groundsel. This weed is poisonous to livestock.
- Now is the time to watch for waterhemp and Palmer amaranth. If these weeds are suspected in a field, get a positive ID prior to harvesting. We want to minimize further spread. Find out more at <http://go.osu.edu/BcND>
- Suspect you have a major problem in your field or pasture? Contact your Jefferson County Extension office and we will come take a look and provide unbiased suggestions...free of charge!

Fall Pruning

Thinking of pruning that tree? If done incorrectly, pruning can do more harm than good. Where and how you prune matters. Trees will often develop callus tissue over wounds to prevent infections, but improper cuts and care can prevent callus formation, leaving a tree vulnerable to infection. Much like surgery, use sterile equipment while pruning. You wouldn't go to a surgeon who doesn't sterilize his/her scalpel blades, would you? Read more about pruning at <http://ohioline.osu.edu/factsheet/HYG-3311-09>



Above: Prune wound with little callus growth.



Left: Pleasing Fungus Beetles found near a dying tree. These insects feed on fungi in the wood.

What's on Your Mind? Questions & Concerns from the Jefferson County Community

Pleasing Fungus Beetles

Seen these beetles around your trees? Don't panic! The Pleasing Fungus Beetle is a scavenger of fungi – mold, mushrooms, and other microbes – and does not kill trees. If you have these beetles in abundance outdoors, don't pull out the insecticides just yet...much like cicadas, fungus beetles are short lived (only around at the end of summer and into the fall). Find out more on fungus beetles at ohioline.osu.edu/factsheet/HYG-2084-10

Fall Manure Application Tips

By Glen Arnold, OSU Extension Manure Management Field Specialist and Kevin Elder, Chief of the Division of Livestock Environmental Permitting, ODA

Silage harvest is moving along rapidly in Ohio, with corn and soybean harvest expected to be earlier this year than normal. Livestock producers and commercial manure applicators will be applying both liquid and solid manure as fields become available.

For poultry manure, handlers are reminded to stockpile poultry litter close to the fields actually receiving the manure. Stockpiles need to be 500 feet from a residence, 300 feet from a water source and 1,500 feet from a public water intake. Poultry litter cannot be stockpiled in a floodplain and cannot have offsite water running across the litter stockpile area. The site also cannot have a slope greater than six percent.

Litter stockpiles need to be monitored for insect activity and steps taken to keep insect populations in check if necessary. Farmers receiving poultry litter from a permitted facility need to have their fertilizer certification training completed. While field application rates of two to three tons per acre of poultry litter are common, farmers should still have soil tests and manure tests taken so manure nutrients being applied are fully utilized by the following crop rotations.

For liquid manure applicators, examine fields for tile blowouts, soil cracks, worm holes, and any other situations that might allow manure to reach surface waters. Old clay tile that are not charted, and may have an outlet buried in the bottom of a ditch, have caused a number of manure escapes in Ohio over the years.

Liquid manure application rates are limited to the moisture holding capacity of the soil or no more than a half inch or ~13,500 gallons per acre for tiled fields. Limiting application rates below legal limits can help keep more nutrients on fields. Remember, a corn-soybean rotation will remove about 120 pounds of P₂O₅ over two good growing seasons. That will drop your soil test level about 6 pounds per acre. Applying high amounts of manure will rapidly raise soil test levels and result in greater losses of phosphorus from farm fields.

Incorporated liquid manure or liquid manure incorporated within 24 hours does not have a setback requirement from ditches and streams this time of year. If just surface applied, with no plan of immediate incorporation, a vegetative setback of 35 feet is recommended or a 100 foot setback if there is little or no vegetation growing in the field. These recommendations for non-permitted farms are the rules for permitted farms.

The state-wide rule for surface manure application is a weather forecast saying “not greater than a 50% chance of a half inch or more of rain in the next 24 hours or for very heavy soils (typically Hydrologic group D) ¼ inch of rainfall can cause runoff when combined with a half inch of liquid applied on the surface. It’s advisable to print out the weather forecast when you start applying manure so you have the needed proof if an unexpected storm drenches the area.

The rain forecast does not apply to incorporated manure. However, the soil must be fractured and disturbed when manure is applied to qualify for incorporated. Just poking holes in the soil does not qualify as incorporation. Deep incorporation of manure nutrients could help break up the phosphorus stratification issues that may be contributing to the increasing levels of dissolved phosphorus leaving Ohio farm fields.

For permitted farms, when more than 50 pounds per acre of manure nitrogen is being applied, it’s required that a field have a growing crop or cover crop be planted. In manure amounts, this could be a little as 1,500 gallons per acre of swine finishing manure, one ton of poultry litter, 3,000 gallons of dairy manure, 1,000 gallons of liquid beef manure or five tons per acre of solid pen pack manure.

All farmers should consider utilizing cover crops with manure applications to capture the available nitrogen and turn it into organic nitrogen in the form of additional roots and stems. Livestock producers in the Western Lake Erie Basin watersheds must have a growing cover crop in the field if they intend to apply manure to snow covered or frozen soil this winter.

Cover crops can help livestock farmers recapture manure nutrients and conserve soil by reducing erosion. Cover crop seedings do not have to be perfect. The goal is to combine nutrient recovery and protecting the environment.

Hort Shorts - There We Go...The Harbinger of Autumn Appears!

By Erik Draper, OSU Extension, Geauga County

As I was driving along the roadways of Geauga County, I suddenly noticed the upright pillars of changing color wrapped around tree trunks. Yes, I believe that it is most likely, that autumnal color is the ONLY redeeming quality of *Toxicodendron radicans*, commonly known as Poison Ivy! At this time of year, the fall colors of this rash inducing woody vine, are unparalleled for their stunning reds, oranges, yellows and every color mixture in-between. It almost makes one want to go up to collect some leaves to put in a fall color collage between pieces of waxed paper to hang on the wall.

But please, please don’t touch, don’t save the leaves and do not hold them up to your face to see if they smell faintly like burnt sugar. The best way to enjoy the colors of poison ivy will ALWAYS be... as far away as possible... and yet, still close enough to determine which colors are your favorite!

And on that note...



Excerpts from *Leaves of Three, Let it Be: Poison Ivy*

By Curtis Young, OSU Extension Educator, Van Wert County

Poison ivy (*Toxicodendron radicans*) is a native species to the US that can be found in numerous environments from woodlots to urban streets. It is dispersed by birds and other animals that eat the fruit then drop the seeds with their feces in new locations. Thus poison ivy is frequently found growing in places beneath roosting sites and hiding places for animals such as fence rows, at bases of trees, on roadsides, and along the edges of woods. Although poison-ivy grows in many soil types, it prefers soils with high calcium content.

Contrary to what some believe, only the oil can produce the skin reaction. Liquid released from the blisters will not spread the reaction. However, if the victim still has oil under their fingernails, scratching at the reaction site will introduce more oil. The oil may also be on clothing, furniture upholstery, gardening gloves and tools, and other items. The oil can also be found on the fur of pets that have walked through a patch of poison ivy and when they come in contact with owners, the oil can be transferred. Surprisingly, only humans react to the oil. Dogs and cats do not. Many animals (e.g. horses, sheep, goats, and cows) even eat poison ivy with no reaction.



One problem that many people have with poison ivy is not being able to identify the plant. Poison ivy is a deciduous woody perennial. Part of the confusion that people have with identifying poison ivy is that it grows in a variety of forms including short shrubby plants that grow on the ground and spread by horizontal underground stems (rhizomes) to vines that climb trees, walls and poles. Poison-ivy produces aerial roots from the sides of its vining stem. These roots attach the vine to other plants and objects such as walls. The aerial roots give the vines a hairy appearance. The most distinguishing characteristic of poison ivy is its leaves of three leaflets. The stalk attached to the middle leaflet is considerably longer than that attached to either of the two outer leaflets. Once again, the identification of poison ivy can be confounding and challenging because the leaves of three

can have considerable variability in size and shape of the leaflets.

Management of poison ivy can be difficult and may take several efforts to fully remove the plant from a garden, hedge, fence row and/or landscape. Hand removal may require several attempts to remove all plant parts that might re-establish the poison ivy. The risk of exposure is great if hand removing. Vines growing up objects can be severed near the ground and allowed to shrivel and die. Afterwards the root and new growth that it will produce can be more easily managed. Broad spectrum, non-selective herbicides such as glyphosate (e.g., Roundup) or triclopyr (e.g., Ortho Poison Ivy & Tough Brush Killer) are used to control poison ivy. One must use these products according to their labeling and with caution for they will kill everything on which they come in contact. Treatments are typically most successful when applied in late summer or early fall. Repeat applications may be necessary. Clean up sprays may also need to be applied again in the spring.

If uncertain of a plant's identification, leave it alone or carefully collect a sample and bring it to an OSU Extension office for identification. To collect a sample, wear chemical resistant gloves and long-sleeved shirt. Be careful not to brush the plant over one's face. If inadvertent contact does occur, wash immediately with soap and water or alcohol to remove any oil on the skin.

OHIO STATE UNIVERSITY EXTENSION MASTER GARDENERS

New Master Gardener Training Spring 2017

The Ohio State University Extension offices in Jefferson and Harrison Counties are currently accepting new applications for the Master Gardener Volunteer training program for residents of both counties. Master Gardener Volunteers in Ohio contributed over 180,000 hours of service in 2015 and offer assistance with home horticultural questions, pest identification, school programs, demonstrations, research, and continuing education programs. Training sessions will begin in March and continue into early summer. Participants interested in receiving the 50 hour intensive training will learn about basic botany, plant physiology, soils, entomology, plant pathology, plant diagnostics, integrated pest management, pesticide use and safety, lawn care, home vegetable and fruit production, backyard wildlife management and much more! Working with county Ohio State Extension personnel, Master Gardener Volunteers provide educational services to their communities. If you are a garden enthusiast, this is a great opportunity to share your gardening know-how and skills with others in your community.

Applications due
**November
15th, 2016**

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Dr. Thomas Graham, Dave Maple, Jr., and Thomas Gentile.

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Roger Rennekamp, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension; and Gist Chair in Extension Education and Leadership.

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