BUCKEYE YARD AND GARDEN LINE 2014-11
06/12/14

From: Curtis E. Young (Lead editor and contributing author) and Denise Johnson (Co-editor and contributing author).

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Buckeye Yard and Garden Line (BYGL) enhanced with photos and links is available online at: [http://bygl.osu.edu]. Become a fan of the BYGL on Facebook at [http://www.facebook.com/OSUBYGL] or follow the BYGL on Twitter at [http://www.twitter.com/OSUBYGL].

This is the 11th 2014 edition of the Buckeye Yard and Garden Line (BYGL). BYGL is developed from a Tuesday morning conference call of Extension Educators, Specialists, and other contributors in Ohio.

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Dear loyal readers of BYGL,

Next week, our writing team and senders have some logistical challenges that may result in a delay in the posting of the newsletter to the web site. It may not appear until Friday morning and the emailed version may not be sent until late on Thursday evening. Sorry for any inconveniences that this may cause. Sometimes delays are unavoidable.

Thanks for your loyal following of BYGL,

Curtis E. Young, Lead Editor

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1. PLANTS OF THE WEEK.

*ANNUAL - ZINNIA (Zinnia hybrids). Gardeners tend to sometimes shy away from Zinnias due to their problems with powdery mildew disease. However, despite the challenges of growing Zinnias without powdery mildew, they still remain popular. There are around 20 species of Zinnias but only a few are cultivated for garden use. Zinnia elegans or common Zinnia, was used in early gardens for cut flowers because of the stem height and large flowers. This group is quite susceptible to powdery mildew.

Many of today’s hybrids have been developed with disease resistance in mind. The 'Profusion' and 'Zahara' cultivars have performed quite well in the field trials at the Gateway Learning Gardens in Springfield, Ohio. Very little leaf spot and no powdery mildew have been observed.

Zinnias tolerate full hot sun and are very drought tolerant. In fact, the hotter and drier the weather, the decreased possibility for diseases to develop exists. In addition, be sure to provide adequate spacing between plants to allow for good air circulation.

Heights of the hybrids are anywhere from 1 - 3’ and equally as wide. Many of the newer hybrids keep blooming all season and don’t require deadheading. The blooms start in the early spring and are red, yellow, cream, pink, orange and scarlet. Zinnia blooms are also very attractive to butterflies.

Author: Pamela J. Bennett

*PERENNIAL - BAPTISIA or FALSE INDIGO (Baptisia spp.). This durable, long-lived North American native Perennial of the Year (2010) likes to be planted and left alone! Therefore, select a sunny site that has well-drained normal Midwest soil as its permanent home. If the plants are grown in light-shade or fertile soil, they tend to get tall and floppy. Baptisia plants grow to around 2.5 - 3.5’ tall and around 3 - 4’ wide in a rounded mound, depending upon the variety or cultivar. It is relatively pest-free and has great heat and drought tolerance. One of the best features is that it's deer resistant!

Baptisia or false indigo also has great bluish-green foliage. The bluish lupine-like flowers appear on spikes in late May and early June. The seed pods that develop are also quite attractive and last into the fall. The seed pods can be used in dried arrangements.

Many breeding programs around the country have introduced new cultivars with great features, including 'Purple Smoke'. This was discovered at the North Carolina Botanical Garden, Chapel Hill by curator Rob Gardner. It is a hybrid of B. australis X B. alba and is loaded with smoky violet flowers on charcoal gray flower stems; it has smaller leaflets than B. australis and gets
around 2 - 3’ tall. ‘Screamin’ Yellow’ is a cultivar that gets about 2 - 3’ tall and around 5’ wide with a profuse bloom of yellow flowers lasts for about 2 weeks.

Author: Pamela J. Bennett

*WOODY - COMMON or EASTERN COTTONWOOD (Populus deltoides). The cottonwood is a very rapid-growing tree that can grow to 80 - 100’ in height and 3 - 4’ in diameter in as little as 80 years. However, it is a relatively short-lived tree, and will likely die before it reaches 80 years of age. Majorly impressive specimens can be found growing in flood plains, and along rivers, streams and creeks in moist, well-drained, fine sandy loams or silt loams. Even though the above mentioned conditions are cottonwood’s preferred conditions, it can grow in much drier habitats including many urban environments.

The wood of eastern cottonwood, because of its rapid growth, is light, soft, and weak. It is a poor source of construction wood. It is used principally for containers, interior parts of furniture, core-stock in plywood, and high-grade pulp. As a living tree, it is used in windbreaks, for strip mine reclamation projects, for providing quick shade around new recreational developments, campsites and picnic areas. It has also been occasionally planted as an ornamental shade tree. However, it may not be the best tree for this purpose because of its potential to reach large sizes and its susceptibility to wind and ice damage, and lightning strikes.

Another drawback to cottonwood is during its seed production period. Cottonwood is dioecious with each sex expressed on separate trees. The seeds produced by the female trees are covered with many fine hairs and when female flowers on aments or catkins mature, they release massive numbers of seeds in what look like cottony masses. The seeds in cottony fluff float on the air to disperse the seed. The fluff accumulates in piles at the edges of sidewalks, driveways and curbs. It gets sucked into air vents, windows and air conditioners becoming an annoyance to anyone living in the presence of cottonwoods. One city that suffers from the fluff storm from cottonwoods is Moscow, Russia. Rumor or urban legend has it that the cottonwoods planted in Moscow were the result of a recommendation of President Franklin D. Roosevelt to Premier Joseph Stalin. However, others say that the cottonwoods were present before the meetings of the two political leaders.

Author: Curtis E. Young

*VEGETABLE - SQUASH (Curcubita spp.). It’s not too late to plant squash in the garden as long as one selects a variety that matures before the season’s end. These plants have very similar cultural requirements and are pretty easy to grow successfully. Summer squash (zucchini, crookneck, scallop, etc.) have shorter growing requirements and can be planted now and a few weeks later for continual harvest. Look for varieties that mature anywhere from 45 - 75 days; one can go a little longer in the season by covering these plants with a greenhouse-like structure. Directly plant seeds into the garden or purchase transplants at the garden centers if they are still available. Most of these plants require a large amount of room to grow; however, there are varieties that have a ‘bush’ or compact growing habit for smaller gardens. Space the plants according to label directions on seed packets or pot tags.

Watch for insects on this group of plants as there are some insects that transmit viruses. In addition, squash vine borer can prevent even the best gardener from growing zucchini! For details on specific pest problems, go to [http://ohioline.osu.edu] and click on Vegetables and then Pumpkins and Squash. Harvest into the fall and enjoy.
*WEED - MULTIFLORA ROSE (Rosa multiflora).* Many of the BYGL writers reported seeing multiflora rose in bloom throughout the state. Multiflora rose was originally introduced to the US as a rootstock for ornamental roses and is now considered an invasive plant in Ohio and throughout much of the eastern US.

Multiflora rose is a thorny shrub with arching stems. Leaves are divided into 5 - 11 sharply toothed leaflets. Leaf stalks boast fringed stipules, which native roses lack. Five-petaled white flowers bloom in May and June and develop into small, round red fruits called rose hips later in summer. Multiflora rose invades a variety of habitats including roadsides, old fields, stream banks, forest edges, and open woodlands.

It's important to note that multiflora rose is not the only wild rose in bloom right now. CAROLINA ROSE (Rosa carolina) is also blooming, however, while multiflora rose blooms are white, the flowers of Carolina rose (and other native roses) are pink.

To control multiflora rose, repeated cutting or mowing can be effective. This technique may require cutting or mowing 3 - 6 times throughout a single growing season. Plants can also be dug up, however, canes can root themselves, so it's important to monitor sites for regrowth. Chemical control is often recommended for difficult infestations. A glyphosate-based herbicide can be applied as a foliar application or on cut stumps.

**Author: Danae Wolfe**

2. HORT SHORTS.

A. MEET THE PROGRAM MANAGER. Meet Denise Johnson, Program Manager for OSUE Master Gardener Volunteer (MGV) Program and BYGL contributor. Denise joined OSU Extension in July, 2012 after working on the planning and implementation of the OSUE Nursery Short Course for several years. She recently earned her Master's Degree in Public Administration from the OSU's John Glenn School of Public Administration.

Denise manages the Ask a Master Gardener Project, the online service which utilizes advanced-trained Master Gardeners to respond to consumers' backyard horticulture questions. She also enjoys assisting Pamela Bennett, State MGV Specialist, in advancing the goals of the program and working with the 4,000 amazing volunteers around the state. Denise is a backyard gardener and relishes the opportunities to learn from Ohio’s master gardener volunteers and the specialists on the team.

**Author: Denise M. Johnson**

3. BUGBYTES.

A. GYPSY MOTH CATERPILLAR BECOMING MORE EVIDENT – WHAT ARE YOU SEEING? Gypsy moth (Lymantria dispar) caterpillars that hatched last month are making their mark feeding on trees in landscapes, streetscapes, parks and woodlands. While oaks (Quercus spp.) tend to be a favorite, their host list includes hundreds of trees and shrubs.
In addition to seeing caterpillars doing the mighty lunch-munch, you may also notice the following: partial pieces of leaves that have fallen to the ground as the caterpillars feed; a rain-like sound that is actually frass (also referred to as excrement, insect droppings, or bug poop) falling from above; and/or a defoliated or thin canopy.

Caterpillars in northwest Ohio range from the 3rd to 5th instar in their development. BYGL writers are interested in receiving observations and input as it relates to gypsy moth populations in your area. Do you see gypsy moth caterpillars? How large are the caterpillars? Is this year’s population greater than, or less than last season levels? It is also important to share your location. This information can be reported using the Great Lake Early Detection Network (GLEDN) Smartphone App ([http://apps.bugwood.org/mobile/gledn.html](http://apps.bugwood.org/mobile/gledn.html)), or by emailing Amy Stone at [stone.91@osu.edu](mailto:stone.91@osu.edu).

Next week the Ohio Department of Agriculture (ODA) will begin mating-disruption (MD) treatments in already identified areas across 15 Ohio counties including: Allen, Athens, Auglaize, Crawford, Delaware, Franklin, Fairfield, Gallia, Hancock, Hardin, Hocking, Jackson, Marion, Perry and Wyandot. ODA will be using a single application of the product Disrupt II. This product does not kill the adult moth, but it does disrupt the mating process by confusing the male as it searches for a female moth. Disrupt II is not harmful to birds, plants, pets or humans.

To receive the latest updates as it relates the upcoming mating disruption treatments, you can call the following numbers after 5:00 pm – 614-387-0907 or 800-282-1955 ext. 37. A recorded message will provide the latest information. Maps and additional information about the treatment blocks can also be found on the ODA website. That link is: [http://www.agri.ohio.gov/divs/plant/gypsy/gypsy-index.aspx](http://www.agri.ohio.gov/divs/plant/gypsy/gypsy-index.aspx).

Author: Amy Stone

B. HOLLYHOCK TROUBLES. Pam Bennett noted that hollyhock (Alcea spp.) plants are getting hammered in the central Ohio area by HOLLYHOCK WEEVIL (Apion longirostre) and hollyhock rust (Puccinia malvacearum). The one thing they weren’t dealing with was HOLLYHOCK SAWFLY (Neoptilia malvacearum) and Curtis Young noted that they have this insect in NW Ohio.

Hollyhock weevil is about 1/4 - 3/8” long and has a snout that is visible to the naked eye. This snout is used to chew hole in the flower buds in order to lay eggs. When the flowers open, it looks like a snowflake with all of the holes. You can take the flower buds of the plant and knock the weevils off into your hand and identify them (a control tactic also).

Hollyhock sawfly chews on the leaves, skeletonizing them to the point where very little green tissue if left. And if there is any leaf tissue left, it has the orangish-brown pustules of rust on the underside of the leaf.

These 3 things as well as a leaf miner tend to hit hollyhock every year. Hollyhocks are pretty tough and can look really bad and still survive. However, if you want your plants without holes and orange spots, you must be diligent and ready for these pests early. See more information below on how to manage these pests.

Author: Pamela J. Bennett
C. AILANTHUS NEMESIS. Curtis Young reported that first generation AILANTHUS WEBWORM (*Atteva aurea*) caterpillars are beginning to feed on its namesake host. Reports of plant pests generally solicit concerns; however, since the caterpillars of this ermine moth (Family Yponomeutidae) feed exclusively on the non-native, invasive TREE OF HEAVEN (*Ailanthus altissima*), Curtis’ report generated delight, if not great hope!

The webworms produce communal nests by pulling leaflets into a network of loose webbing. Several caterpillars live within the nests consuming the leaflets bound by the webbing. The webworms can grow up to 1 - 1.5” long and they have a wide, light greenish-brown stripe down their backs and several thin, alternating white and olive green stripes along their sides. The caterpillars are sparsely covered with short, erect hairs, which help to suspend them within the webbing. When disturbed, the caterpillars move backwards out of the nest and drop towards the ground on strands of silk.

Ailanthus webworms are native to tropical regions in Central and South America where the caterpillars feed on native trees in the genus *Simarouba* (family Simaroubaceae). The moth was originally assigned the scientific name, *Atteva punctella*, and it was known that the moth jumped from its native hosts to the non-native Tree of Heaven (Simaroubaceae). It was assumed the moths exploited the ever-expanding range of Tree of Heaven to move north into the U.S. and Canada. However, research involving DNA bar-coding, moth morphology, and food plant records eventually revealed that while *A. punctella* and *A. aurea* co-habit tropical regions of the New World, the moth in the U.S. and Canada is *A. aurea*.

Ailanthus webworm moths are multivoltine meaning that there are several generations per year. The caterpillars are capable of defoliating their odoriferous namesake host and they may feed on stem tissue once all leaves are devoured. Unfortunately, such extreme damage is rare on large trees. Although feeding by this webworm has yet to halt the spread of tree of heaven, hope springs eternal since this is one of only a few insects known to infest this encroaching interloper.

Author: Joe Boggs

D. WILD PARSNIP PEST...YIPPEE! Wild parsnip (*Pastinaca sativa*) is another non-native invasive plant that left behind many of its natural enemies once it arrived in North America. It is now widespread throughout much of the U.S. as well as many parts of Canada. The plant packs a serious chemical punch; its juices can cause phytophotodermatitis (a.k.a. Berloque dermatitis). Wild parsnip sap contains chemicals called furocoumarins which are used for defense against herbivores. However, if absorbed through the skin and energized by ultraviolet light, such as exposure to sunlight, furocoumarin molecules go on a skin cell destroying rampage causing severe burning including long-lasting blisters. Skin discoloration may last for months after the blisters disappear. The toxic nature of the sap makes mechanical control of wild parsnip problematic.

Joe Boggs reported finding a group of wild parsnip plants in southwest Ohio that are heavily infested with the PARSNIP WEBWORM (*Depressaria pastinacella*). The top half of the bicolored caterpillars are almost flesh-toned and the lower half is light yellow. They are covered in black spots with 1 - 2 short black erect hairs arising from each of the spots. Short hairs are common on nest-making caterpillars and help to suspend the caterpillars in their webbing.

The caterpillars damage wild parsnip in two ways. First, early and middle instar caterpillars envelop the flower parts with ever-expanding silk nests, and they feed on the plant tissue within
their nests. As the caterpillars grow, the nests become larger until all of the parsnip's flowers are being consumed by caterpillars. Next, mature caterpillars switch from feeding on flower parts to become stalk borers. The large caterpillars migrate to lower portions of the stem where they bore into the stalk. Numerous webworms boring into the stalk can completely cutoff the vascular tissue connected to the upper portions of the plant causing premature plant death.

As with other herbivores that are tuned to a host plant possessing chemical defenses, the parsnip webworm has evolved a method to thwart the plant's chemical warfare. The caterpillars simply excrete most of the furocoumarins in their feces. Interestingly, some of the furocoumarins are incorporated into the caterpillar's silk webbing. The purpose is unknown, but given that the webbing totally surrounds the caterpillars as they feed on the flower parts, the furocoumarins in the webbing may provide protection against predators and parasitoids.

There has been little research on the impact of the parsnip webworm on the persistence and spread of wild parsnip. However, since this is a biennial weed, it is speculated that the double effect of eliminating seed coupled with plant death before re-flowering could potentially reduce stands of the invasive weed … double YIPPEE!

Author: Joe Boggs

E. FLEECY FLATIDS. Participants at this week's SW Ohio Diagnostic Walk-About observed fleecy white PLANTHOPPER nymphs on the lower stems of herbaceous perennials and low-growing woody ornamentals. Planthoppers belong to the Family Flatidae (Order Hemiptera; Suborder Auchenorrhyncha), and are sometimes referred to as "flatids." The nymphs of several flatid species cloak themselves in a dense tangle of waxy, white "fluff." They also congregate in groups, or "colonies," and their profusion of flocculent material on affected plant stems draws attention to the insects. The nymphs also produce copious quantities of honeydew which may coat the plant and become colonized by black sooty molds.

Planthoppers are related to aphids and the nymphs are sometimes mistaken for woolly aphids. However, planthoppers...hop. Aphids just mosey around. Planthopper adults are 1/4 - 3/8" long, purplish blue, lime green, or powdery white, and they hold their broad wings vertically in a tent-like fashion covering the sides of the body and legs. They usually have little impact on the overall health of landscape plants and seldom become more than a nuisance pest. The nymphs can be washed from affected plants using a coarse stream of water, or killed using an insecticide labeled for use on the host plant.

Author: Joe Boggs

F. ERIOPHYIDE MITES ON BLACK TUPELO. Reporting from the Teachers Field Day held by the Ohio Department of Natural Resources (ODNR) at Vinton Furnace State Experimental Forest in Vinton County, OH, Joe Boggs noted that participants observed the fascinating gall-making handiwork of two eriophyid mites (family Eriophyidae) on black tupelo (a.k.a. black gum, sour gum). Part of the teacher's training included tree identification and the black tupelo trees were identified by Dave Apsley (Natural Resources Specialist, OSU Extension).

As participants gathered around Dave to learn the key identifying features and overall virtues of black tupelo, Joe asserted that the most fascinating features were two types of eriophyid galls adorning the leaves of this native forest/landscape tree! The most obvious were small, light green, bead-like bladder galls produced under the direction of the eriophyid mite, Eriophyes nyssae. These galls appear randomly either singly or in clusters on the upper leaf surface.
The second type of eriophyid gall were the so-called leaf edge roll galls produced by *E. dinus*. The galls appear as irregularities along the leaf margins consisting of thickened, puckered tissue that rolls tightly towards the center of the upper leaf surface. The overall affect makes leaves look like they are trimmed in ruffles. The affected tissue is light green at first, but later turns red and finally brown.

As with most eriophyid leaf galls, the galls on black tupelo cause no significant harm to the overall health of affected trees. Indeed, Joe made the case that the galls actually added ornamental value to the trees. He lost his case; beauty is in the eyes of the beholder!

**Author: Joe Boggs**

G. WINDSHIELD WIPES. BYGLers also ran into several other interesting arthropods this week including:

* Joe Boggs reported observing very small red mites attached to the legs and bodies of HARVESTMEN (class Arachnida; order Opiliones). Harvestmen (a.k.a. daddy longlegs) are not spiders, although they both have 8 legs and belong to the same class. Spiders are exclusively predators; they have venom glands and mouthparts that are designed for a liquid diet. Harvestmen have no venom glands and their mouthparts allow them to consume both solid and liquid foods. Some species are meat eaters while others are omnivores eating whatever comes their way.

It is possible that the red mites are the same as the CONCRETE MITES (*Balaustium murorum* (family Erythraeidae)) reported in last week's BYGL since these mites are known predators. However, there are several scientific reports of erythraeid mites in the genus *Leptus* making a living as ectoparasites on harvestmen. They use their spider-like mouthparts to punch through the harvestmen's exoskeleton to extract the essence-of-harvestmen. As noted in last week's BYGLOSophy: "... a flea hath smaller fleas that on him prey; and these have smaller fleas to bite 'em. And so proceeds Ad infinitum." - Jonathan Swift

**Author: Joe Boggs**

* BAGWORM UPDATE. Pam Bennett noted that she found bagworms had hatched last Tuesday, June 3, 2014 in the Dayton area and were still first instar or the "duncecap stage." On a walkabout at Cox Arboretum (Dayton) she pointed out to the attendees the damage caused by this early instar larvae. Instead of eating the entire needle or leaf of an evergreen, they tend to feed on the epidermis layer, leaving a noticeable browning of the foliage and overall plant.

**Author: Pamela J. Bennett**

* EMERALD ASH BORER DETECTED IN MEIGS AND WASHINGTON COUNTIES. New records of the emerald ash borer (EAB) have been confirmed in Meigs and Washington counties. This is the first record of this invasive species in both counties. For additional information on the EAB, check out the regional EAB website: [www.emeraldashborer.info](http://www.emeraldashborer.info).

**Author: Amy Stone**

4. DISEASE DIGEST.
A. FEARS FIRE UP OVER ERWINIA. Curtis Young in NW Ohio and Tim Malinich in Erie County, Ohio were fired up as it was reported that ornamental Callery pears are smoking ruins with their branches flagged from FIRE BLIGHT (Erwinia amylovora). Of course this report brought a firestorm of debate as BYGLers wondered whether these strikes were merely a local artifact or preview of the raging wildfire to come. Pam Bennett in SW Ohio and Erik Draper in NE Ohio both indicated that as of yet, there were no indications of the bacterial disease, fire blight. Curtis and Tim stated that it is so bad that people were leaving samples on their home porch steps to diagnose what was going on with their trees! We shall see what happens regarding the impact of fire blight, throughout Ohio, in the coming weeks.

Remember that fire blight can infect a tree by both blossoms and new, succulent, vegetative shoot tissues. The tiny bacterium can enter into the new shoots via wounding caused by hail, insects, branches rubbing together in the winds, pruning, and even the lenticles. Once inside the branch tissue, the bacteria replicate and produce a polysaccaride, which apparently plugs the xylem of infected shoots and twigs. This results in the characteristic wilting, rapid death and blighting of infected shoots from the loss of turgor pressure in the cells; consequently, the characteristic collapse, blackening and "crooking" of the young branch, quickly becomes evident. Symptoms usually appear 1 - 3 weeks after inoculation, depending on temperature and humidity.

For fascinated plant diagnostoids, bear in mind that fire blight only occurs on plants in the Rosaceae family. Unfortunately, that is also the plant family that is the single largest contributor to the horticultural industry. This bacterial disease of certain plants in the rose family, such as apple and crabapple, ornamental pear, pyracantha, mountainash, and cotoneaster, all have varying degrees of susceptibility to this disease. Epiphytotic events of fire blight are favored by warm (60 - 90F), humid (relative humidity >60%), wet weather during bloom of the affected host plants. While fire blight is impossible to control, the best management approach is to use genetic resistance to combat this disease. Develop a list of possible plant selections by carefully reviewing multiple reports and/or studies of fire blight challenged plants. Choose the most resistant plants from the list to plant in the landscape...to avoid those landscape plantings go up in flames!

Author: Erik Draper

B. ANGST OVER ANTHRACNOSES. In Northeast Ohio, there has been a flood of samples and calls, most likely due to a heightened sensitivity toward tree killing, invasive insects, which merit a clarification about ANTHRACNOSES. We wish to emphasize to highly anxious and worried citizenry that the deformation, leaf blotching and leaf drop of ash, which is occurring right now, is in no way associated with an insect. Those misshapen, spotted or blotched leaves and ultimately the loss of those affected leaves are symptoms of a fungal disease called ASH ANTHRACNOSE, pathogen Gnomoniella fraxini.

Ash anthracnose occurs in landscapes almost every year, but becomes much more noticeable in years where Spring consists of cool, wet weather during leaf expansion. This year appears to be one in which ash anthracnose is more noticeable than usual; however, this fungus is not a major health problem for the plant. Why? Because a plant may lose up to one-third of all of its foliage and still be perfectly healthy and able to produce all of the carbohydrates necessary to meet its physiological requirements. What can be done right now? Fungicidal applications now will not eliminate any existing foliar damage and any new, significant infections are not likely as the weather warms and the leaf tissue rapidly matures. Fungicide sprays earlier in spring can
protect the newly emerging leaves from infections by the fungi, which overwinters on twigs on the trees, but these sprays are typically not recommended. Fungicide applications may be warranted where customer eye appeal is high, in nursery production situations, and in high profile sites such as garden centers. It should be stressed that tree anthracnose diseases are typically not major problems for the tree, even though it may look pretty dreadful in some years, before the tree refoliates.

Other anthracnose diseases intermittently noted so far this year include maple anthracnose, pathogen *Discula campestris*, and oak anthracnose, pathogen *Apiognomonia quercina*. Maples this year are exhibiting atypical symptoms consisting of blackened, necrotic leaf spots with vein-associated lesions. Oaks are just beginning to exhibit a greater amount of leaf blotching and foliar distortion on the lower portions of plants, where poor air movement and a lack of drying conditions initiate more foliar lesions.

The take home message of all of these fungal anthracnoses is simply this… RELAX and don't panic because it will not affect the overall health of the tree if some leaves are lost.

Author: Erik Draper

5. TURF TIPS.

A. IT'S FERTILIZATION TIME FOR TURFGRASS AGAIN. If your lawn is not as green as you would like, it may be in need of nitrogen. It is time to fertilize. Nitrogen is one of the nutrients that can be depleted as plants grow and reproduce; it needs to be replenished. The amount of nitrogen your lawn needs will depend on the type of grass and its environmental conditions. Kentucky bluegrass and perennial ryegrass varieties require 33-50% more nitrogen annually than the turf-type tall fescue and fine fescue grasses. The OhioLine fact sheet below provides a chart with suggested quantities and timing for fertilization. Determine your type of grass and apply the appropriate amount of fertilizer.

Grass fertilizers should contain nitrogen, phosphorus and potassium. A soil test will determine what proportions are needed for a healthy lawn. Other tips for good lawn health include mowing your lawn high to shade out weeds; avoiding excessive watering; and mulching grass clippings into your lawn to provide extra nitrogen.

Author: Denise M. Johnson

6. INDUSTRY INSIGHTS.

A. YELLOW POPLAR WEEVIL. Participants in the Teachers Field Day held by the ODNR at Vinton Furnace State Experimental Forest viewed heavy adult feeding damage caused by the yellow poplar weevil (*Odontopus calceatus*) on its namesake host. Joe Boggs and fellow team-teacher Dave Apsley (Natural Resources Specialist, OSU Extension) discussed the life-cycle and host range of this native forest and landscape pest. Yellow poplar weevils will feed and lay eggs on their namesake host (a.k.a. tuliptree; tulip poplar) as well as magnolia and sassafras. Indeed, alternate common names include "sassafras weevil" or "the magnolia leafminer."

The small (1/8" long), oval-shaped weevils (order Coleoptera; family Curculionidae) range in color from black to brownish-black to reddish-brown and have deeply grooved wing covers
Although they are good flyers, the weevils often elect to fold their legs, drop to the ground, and "play dead" when disturbed; a defense strategy that is common among weevils. In the eyes of some people, yellow poplar weevils resemble ticks which may generate calls to Extension offices concerning "flying ticks" during outbreak years. Of course, ticks can't fly.

Yellow poplar weevils have one generation per year; however, adults feed twice during the growing season. Adult feeding damage appears as characteristic half-moon-shaped holes in the foliage. Numerous feeding holes can cause leaves to wilt, turn brown, and die. Overwintered adults feed in the spring and lay eggs in leaf midribs. The resulting larvae feed as leafminers either singly or in groups to produce large blotch mines. Although larval leafminers are noticeable, the most serious damage is caused by the adults. Newly emerged adults feed throughout mid-summer and typically cause the most significant damage owing to their larger numbers. Eventually, the new adults will cease feeding, move from their host trees and seek out overwintering sites which is often in the duff beneath trees.

Yellow poplar weevil populations are extremely cyclic with outbreak years followed by several years with almost no weevils observed. High localized populations were observed last year in central, northeast, and western Ohio (BYGL 2013-07 (05/16/13); 2013-14 (07/05/14)). Thus far, there have been no reports of a repeat performance by the weevils in those parts of the state.

Author: Joe Boggs

B. ASIAN LONGHORNED BEETLE UPDATE. On a regular basis, ODA and USDA sends out media updates to communicate updates as it relates to this non-native invasive species the Asian Longhorned Beetle.

Program highlights include:
* 1,210,438 host trees have been surveyed
* 12,616 surveyed trees identified as infested
* 11,175 infested trees removed
* 32,101 potential host trees removed
* 26,291 trees being treated
* 61 square mile

This update is intended to provide you with the most current information about the ALB response efforts in Ohio. The media update reflects information relating to efforts within Clermont County and can be found on the at: [http://agri.ohio.gov/Public_Docs/TopNews/ALB/Ohio%20Media%20Update_05152014.pdf].

Author: Amy Stone

7. WEATHERWATCH.

A. WEATHER UPDATE. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from June 1 - 11, 2014, with the exception of the soil temperatures which are readings from Wednesday, June 11, 2014 at 5:05 p.m.

Many BYGLers reported receiving rain last weekend. Curtis Young mentioned that there were areas in Allen, Van Wert and Hardin counties that received 2”. Erik Draper reported that
portions of Geauga County recorded 1". While Curtis and Erik’s rain events occurred on Saturday, June 7, 2014, Pam Bennett reported receiving precipitation in Clark County on Sunday, June 8, 2014. This rainfall event was an all-day soaker.

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<tbody>
<tr>
<td>Ashtabula</td>
<td>NE</td>
<td>74.3</td>
<td>53.4</td>
<td>0.79</td>
<td>1.8</td>
<td>78.70/75.63</td>
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<tr>
<td>Wooster</td>
<td>NE</td>
<td>76.5</td>
<td>54.0</td>
<td>1.59</td>
<td>1.4</td>
<td>71.06/69.32</td>
</tr>
<tr>
<td>Hoytville</td>
<td>NW</td>
<td>80.9</td>
<td>56.9</td>
<td>0.88</td>
<td>1.4</td>
<td>72.39/69.43</td>
</tr>
<tr>
<td>Columbus</td>
<td>Central</td>
<td>79.1</td>
<td>58.7</td>
<td>2.63</td>
<td>1.5</td>
<td>73.31/71.01</td>
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<tr>
<td>Piketon</td>
<td>South</td>
<td>79.3</td>
<td>56.8</td>
<td>2.93</td>
<td>1.3</td>
<td>75.81/74.89</td>
</tr>
</tbody>
</table>

For a link to the OARDC Weather Stations, visit: [http://www.oardc.ohio-state.edu/centernet/weather.htm].

Author: Amy Stone

B. GROWING DEGREE DAYS (GDD). GDD is a measure of the daily maximum and minimum temperature and directly relates to growth and development of plants and insects. The GDD of any zip code location in Ohio is estimated using the GDD of ten OARDC weather stations and available on the web at: [http://www.oardc.ohio-state.edu/gdd/].

The range of GDD accumulations in Ohio from north to south is 613 to 953. Following is a report of GDD for several locations around Ohio as of end of the day of June 11, 2014: Painesville, 613; Cleveland, 650; Toledo, 737; Canfield, 679; Findlay, 748; Van Wert, 764; Wooster, 723; Coshocton, 824; Columbus, 907; Springfield, 880; Dayton, 885; Cincinnati, 927; Ironton, 951; Portsmouth, 953; and Piketon, 942.

To put these GDD accumulations into perspective, the following is an abbreviated listing of plant and insect species with their respective phenological event and average GDD accumulations at which these events occur. Due to variations in weather, temperature, humidity, etc., these events may occur a few days earlier or later than predicted by the average GDD. By looking at a city, town, or village nearby on the above list, or visiting the above web site, one can see what is approximately taking place in the landscape.

American yellowwood, full bloom, 599; arrowwood viburnum, full bloom, 621; multiflora rose, full bloom, 643; northern catalpa, first bloom, 675; black vine weevil, first leaf notching due to adult feeding, 677; Washington hawthorn, full bloom, 731; calico scale, egg hatch, 748; greater peach tree borer, adult emergence, 775; rhododendron borer, adult emergence, 815; northern catalpa, full bloom, 816; mountain laurel, full bloom, 822; dogwood borer, adult emergence, 830; oakleaf hydrangea, first bloom, 835; cottony maple scale, egg hatch, 851; panicle hydrangea, first bloom, 856; fall webworm, egg hatch (first generation), 867; mimosa webworm, egg hatch (first generation), 874; fuzzy deutzia, full bloom, 884; winged euonymus scale, egg hatch, 892; spruce budscale, egg hatch, 894; winterberry holly, full bloom, 897; panicled goldenrain tree, first bloom, 924; June bride littleleaf linden, first bloom, 953; azalea bark scale, egg hatch, 957; and Japanese beetle, adult emergence, 970.

Author: Curtis E. Young
8. COMING ATTRACTIONS.

A. ONE CHAINSAW SAFETY WORKSHOP. As the emerald ash borer marches across Ohio, it has left millions of dead ash trees - and a cleanup challenge for land managers, foresters, and homeowners. That's why the Ohio Woodland Stewards Program is co-sponsoring an upcoming workshop on chainsaw safety with the Ohio Forestry Association (OFA). Dead ash trees often must be cut down for safety reasons, especially around homes and buildings or in public places. The workshop will meet at Ovalwood Hall on Ohio State University's Mansfield Campus, 1760 University Drive, Mansfield, Ohio.

* The remaining workshop, CSAW-Level 1 Training, 8:00 a.m. - 5:00 p.m., June 20, 2014 takes an advanced look at chainsaw safety, felling techniques, and personal protective equipment. Participants will fell a tree while guided by an instructor. Registration is $100 for OFA members and $150 for non-members. The deadline to register is June 16, 2014. Details and a link to register are at [http://go.osu.edu/hVZ].

B. PESTICIDE SAFETY TRAINING - New Commercial Applicators and Training Servicepersons, August 27, 2014. Core and Trained Serviceperson trainings are held in the morning, and Categories 8, 5, 2c, and 6c in the afternoon. The session will be held at the ODA in Reynoldsburg, Ohio. For more information about the event, check out the PestED website at [http://peed.osu.edu].

C. PESTICIDE SAFETY TRAINING - New Commercial Applicators and Training Servicepersons, September 24, 2014. Core and Trained Serviceperson trainings are held in the morning, and Categories 8, 5, 2c, and 6c in the afternoon. The session will be held at the ODA in Reynoldsburg, Ohio. For more information about the event, check out the PestED website at [http://peed.osu.edu].

D. WOOD-DESTROYING INSECT INSPECTION TRAINING, October 8, 2014. Mandatory training is required for applicators becoming licensed in commercial Category 12. Recertification credit is available. The session will be held at the ODA in Reynoldsburg, Ohio. For more information about this event, check out the PestED website at [http://peed.osu.edu].

9. BYGLOSOPHY. "In June, as many as a dozen species may burst their buds on a single day. No man can heed all of these anniversaries; no man can ignore all of them." - Aldo Leopold

APPENDIX
ADDITIONAL WEBSITE RESOURCES:

Ask a Master Gardener Volunteer
http://mastergardener.osu.edu/as

Buckeye Turf
http://buckeyeturf.osu.edu

Emerald Ash Borer Information
http://ashalert.osu.edu
National Plant Diagnostic Network and First Detector Program
https://www.npdn.org/first_detector

Growing Degree Days and Phenology for Ohio
http://www.oardc.ohio-state.edu/gdd/

Hungry Pests Website
http://www.HungryPests.com

Ohio Pesticide Safety Education Program
http://pested.osu.edu/

Ohio State University Department of Horticulture and Crop Science Plantfacts
http://plantfacts.osu.edu/web/

Ohio State University Extension Bee Lab
http://u.osu.edu/beelab/

Ohio State University Extension Master Gardener Volunteer Program
http://mastergardener.osu.edu

The C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)
http://ppdc.osu.edu/

USDA APHIS Beetle Buster Website (Asian Longhorned Beetle)
http://www.beetlebusters.info/

USDA APHIS Beetle Detective Website (Asian Longhorned Beetle and Emerald Ash Borer)
http://beetledetectives.com/

Following are the participants in the June 10th conference call: Pam Bennett (Clark); Joe Boggs (Hamilton); Erik Draper (Geauga); Denise Johnson (Master Gardener Volunteer Program); Ashley Kulhanek (Medina); Joe Rimelspach (Plant Pathology); Amy Stone (Lucas); Nancy Taylor (C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)); Danae Wolfe (Summit); and Curtis E. Young (Van Wert).

BYGL is available via email, contact Cheryl Fischnich [fischnich.1@osu.edu] to subscribe. Additional fact sheet information on any of these articles may be found through the OSU FactSheet database [http://plantfacts.osu.edu/web].

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BYGL is available online at: [http://bygl.osu.edu], a website sponsored by the Ohio State University Department of Horticulture and Crop Sciences (HCS) as part of the "Horticulture in Virtual Perspective." The online version of BYGL has images associated with the articles and links to additional information.

BYGL is a service of OSU Extension and is aided by support from the ONLA (Ohio Nursery and Landscape Association) [http://onla.org/; http://buckeyegardening.com/] to the OSU Extension Nursery, Landscape and Turf Team (ENLTT).
Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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Keith L. Smith, 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.