BUCKEYE YARD AND GARDEN LINE 2012-21
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This is the 21st 2012 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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1. PLANTS OF THE WEEK.

*ANNUAL - DWARF MORNING GLORY (Evolvulus hybrid). This dwarf morning glory, Evolvulus 'Blue My Mind' is a new introduction this season and has performed all summer long in the field trials at the Gateway Learning Gardens in Springfield, Ohio. It's quite heat tolerant as exhibited this season. The brilliant true-blue flowers are the size of a nickel and bloom all summer long without the need for deadheading. The plant has a mounding, trailing habit and gets about 1' tall by about 1 1/2' wide with silver gray foliage. It's an excellent spiller in containers and looks great next to orange flowers. It can also be used in the perennial border or annual flower bed.

*PERENNIAL - FALSE SUNFLOWER (Heliopsis helianthoides). These sometimes-overlooked plants provide great color for a long period of time, going into the mid- and late summer. They are very tolerant of the extreme heat and dry conditions Ohio is experiencing this season. The bright yellow, daisy-like flowers grow on tall stems and attract butterflies. They can also be used as cut flowers. The foliage is coarse green and takes full sun and dry soils. False sunflowers grow 3 - 4' tall and about as wide. 'Bressingham Doubloon' is a double flowered cultivar and 'Midwest Dreams' is a bit more compact and is not knocked over by the wind.
*WOODY - PAWPAW (Asimina triloba). Some of the lucky folks who have grown up in our neck of the woods have had the privilege of tasting the tropical-like fruit of this small tree native to the eastern US. Its sweet, highly aromatic, almost tropical-like fruit can be eaten fresh or prepared in a variety of desserts.

This unique tree prefers deep, fertile soils that are well drained and slightly acidic. Heavy or waterlogged soils should be avoided. Although it is capable of fruiting in the shade, it performs best on sites with full-sun exposure, but requires some protection from wind because of its large leaves. Seedlings, however, will not survive under full sun conditions because the young shoot is extremely sensitive to sunlight. Shading for the first year, and sometimes the second, is usually required. Therefore, pawpaws are primarily an understory tree in the wild.

Since 1994, Kentucky State University [http://www.pawpaw.kysu.edu/] has served as the USDA National Clonal Germplasm Repository, for Asimina species, as a satellite site of the NCGR repository at Corvallis, OR. There are over 2,000 accessions (trees) from 17 states that are planted on 12 acres at the KSU farm. Researchers there are evaluating the genetic diversity contained in wild pawpaw populations so that unique material can be added to the KYSU repository [http://www.pawpaw.kysu.edu/KYSUrepository.htm] collection to be used in breeding efforts. For additional information on this tree please refer to; [http://www.uky.edu/Ag/NewCrops/introsheets/pawpaw.pdf]; and [http://www.hort.purdue.edu/ext/ho-220.pdf].

For an unusual recreational and educational opportunity, visit the 14th Annual Ohio Pawpaw Festival, September 14-16, 2012, at scenic Lake Snowden in Albany, Ohio for 3 days of Pawpaw music, food, contests, art, history, education, sustainable living workshops and activities for the kids! [http://www.ohiopawpawfest.com/].

*VEGETABLE - WATERMELON (Citrullus lanatus). Watermelons need a long growing season of at least 80 days, and warm ground for the seeds to germinate and grow in the spring. Soil temperatures in the spring should have been 70°F to plant successfully. While eager gardeners may experiment with starting seeds inside to get a jump start when soil temperatures stall during a cool spring, watermelon seedlings don't necessarily transplant especially well. Once growing in the garden, watermelons need a lot of space. Vines can grow up to 20’. This time of the year, you should begin enjoying the fruits of the gardeners’ labor - a sweet summer treat!

It can be tricky to determine if watermelons are ripe or not. Some experience is required to harvest a watermelon at its peak of perfection. As a watermelon ripens, the ground spot changes from pale green or white to cream or yellow. The tendrils near the fruit stem will dry and turn brown. The sound of a watermelon, when thumped with a finger, is a muffled, dull tone if it is ripe. An immature fruit will thump with a clear, metallic ringing tone.

Enjoy the taste of summer!

*WEED - VELVETLEAF (Abutilon theophrasti). Velvetleaf is a summer annual that has a truly descriptive name. Almost every part of the plant is covered in fine hairs giving it a velvety feel and soft appearance. If allowed to reach full size, velvetleaf will grow up to 4’ tall, standing out in the farm, nursery or fencerow. Seeds germinate late spring to early summer and can emerge from several inches below the soil surface. Leaves are heart-shaped, palmately veined and covered with fine hairs. The plant is normally unbranched; petioles and stems are also covered with fine hairs, especially in immature plants.

Flowers are yellow and have 5 petals. The resulting fruit is a cup-shaped disc made up of individual sections. Each section will break off throughout fall and winter to release several seeds, which are, of course, covered with fine hairs. The stem and seedpods remain erect throughout winter. The seeds are persistent in the soil for up to 50 years, meaning that uncontrolled velvetleaf can be a problem for decades to come.

2. HORT SHORTS.

A. BLUEBIRD NESTING SEASON WRAP-UP! August is coming to a close and so is the bluebird nesting season. Bluebirds are typically completing their nesting season by the end of August, but as everything was a little bit early this year due to the weather, so too were the bluebirds. A question arose as to how to maintain bluebird
nest boxes over the winter to discourage bluebirds from sticking around. However it is typically the available food supply, and not open nest boxes that influences whether bluebirds choose to migrate or stay to tough out the cold winter months. If food is plentiful in the area before migration, bluebirds may stick around. Winter is a tough season and food can become scarce, leaving bluebirds at risk of starvation. But the payoff is big if bluebirds survive the winter - they get their first pick of nest boxes and natural cavities before the migrant bluebirds return. There are some definite advantages to skipping migration! Help overwintering bluebirds out by supplying seed and suet at feeders during winter.

So what is to be done with bluebird boxes over winter? Bluebird boxes left open over the winter can provide shelter for other birds that overwinter, as well as mice and other small mammals. However, some bluebird box owners prefer to close their boxes for the winter to protect them from the elements and to keep out wandering rodents. If that is desired, once the nesting season is complete and the bluebirds are no longer hanging around the nest box, clean it out. Some of the best bluebird box cleaning tools are around the home - a stiff brush like used to clean a grill, a putty knife, and a spray bottle with a 10% bleach solution (this is optional). If bleach is used, give the box a couple of days to air out. Once the box is clean, cover it with a garbage bag and secure the bag to the post underneath the box. This usually prevents any critters from using the box during the winter and keeps the box dry and protected from the elements. Another option would be to simply plug the hole to the entrance of the box. This option of course does not protect the box from weathering.

Bluebirds can arrive back in Ohio early, so be sure to open the boxes back up sometime in February for a bit of 'dusting off'. This would also be the time to do any needed maintenance on the box (loose nails, seal up cracks, secure mounting). If the boxes were left open during the winter, this is also the time to give them a good cleaning. The boxes should be clean and ready to go for the bluebirds by March.

B. RACCOON-RABIES VACCINATION BAITING SLATED FOR AUGUST 24 - SEPTEMBER 7. The following article is a press release that has been distributed from the Ohio Department of Health (ODH) through a variety of sources, including OSU Extension.

The ODH and Natural Resources (ODNR), in partnership with the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services program and local health departments (LHDs) will begin fall oral rabies vaccination (ORV) operations this month in 14 northeast and eastern Ohio counties. Weather permitting, baiting will begin Friday, August 24 and will cover 4,334 square miles of the state's northeastern and eastern border. Bait distribution should be complete within ten business days.

As in past years, bait distribution with the oral rabies vaccine Raboral V-RG will take place in all of Ashtabula, Columbiana, Jefferson, Mahoning and Trumbull counties and parts of Belmont, Carroll, Harrison, and Monroe counties. In addition, a new oral rabies vaccine called ONRAB will be field tested in parts of Lake, Portage, Geauga, Summit, and Cuyahoga counties as part of a national trial involving five states.

Baits will be distributed by various methods in each county, including fixed-wing aircraft, helicopter and vehicles staffed by USDA and LHDs. Residents in the areas to be baited should be aware of low-flying aircraft and should keep children and pets away from the baits. Dogs in particular are attracted to the baits and will occasionally eat them. The baits are not harmful to pets. Please keep the following information in mind:

* Know what the baits look like. The coated sachet, which will be distributed by aircraft, is about the size of a ketchup packet. It is white and rolled in a brown fishmeal glaze. In urban areas, where baits will be distributed by vehicle, the sachet will be inside a hard, brown fishmeal block, about 2-x-2-inch square. The ONRAB blister pack, which will be distributed by aircraft and by vehicle in Lake, Portage, Geauga, Summit, and Cuyahoga counties only, is about 1 by 2" and has a dark-green coloring and sweet-smelling waxy coating.
* Instruct children to leave the baits alone.
* Once your area is baited, keep dogs and cats inside or on leashes for up to five days. Most baits disappear within 24 hours; however, it is important raccoons have every opportunity to eat them.
* Do not attempt to take bait away from your pet; you may be bitten.
* Anyone handling baits should wear gloves. If baits are found in areas frequented by pets or children, toss them into deeper cover. Damaged baits can be disposed of in the trash.
* If a person is exposed to the vaccine (liquid), thoroughly wash any areas of the skin that came into contact with the vaccine with soap and water.
* If someone has been exposed to the vaccine or has questions about the baiting, call the ORV Information line at 614-752-1387 or your local health department.

Rabies is a viral disease that affects mammals and people. It is almost always fatal. Rabies vaccine baiting operations are intended to create an immune barrier along Ohio's state lines to prevent the spread of raccoon-rabies variant (RRV) into the rest of the state.

During 2011, 13 cases of RRV were confirmed in Ohio, including eight skunks from Lake County, three raccoons from Ashtabula, one raccoon from Trumbull County, and one dog from Summit County. Details of rabies cases are available on the ODH website.

The rabies virus is found in the saliva of affected animals, most often raccoons, skunks, and bats, and is spread when saliva from an infected animal gets into a wound or mucous membrane (such as the eye or mouth). Animal bites are the most common route of exposure. Bats, raccoons and skunks pose the greatest risk of rabies in Ohio. To protect your family against this still-deadly disease:

* Avoid contact with wild animals and animals you do not know.
* Vaccinate your pets against rabies and keep them current on their shots.
* If bitten, call your doctor. If your pet has contact with a wild animal, call your veterinarian.
* Rabies exposures should also be reported to your LHD.

Ohio's partners in the multistate baiting are North Carolina, Pennsylvania, Tennessee, Virginia and West Virginia, in what is known as the Appalachian Ridge ORV program. The six-state effort will involve distribution of about 5 million baits and cover more than 26,000 square miles. ODH has participated in the program since 1997 and almost 14 million baits have been distributed in Ohio over that time.

C. LATE SEASON GROWTH. Renewed growth spurts are beginning to show up in landscapes and nurseries. The rather unusual early season followed by normal frost and freeze events caused a great deal of damage to some plants. The summer drought, still underway in some locations, limited the availability of applied nutrients. Additionally, late season moisture has finally given some plants everything they need to push new growth. Any of the above events, individually or in combination, can be contributing to the surge of shoot growth. There are no control options but make note of the overachieving plants as they may be prone to more winter damage if the new growth does not harden off sufficiently before winter weather arrives.

3. BUG BYTES.

A. EUROPEAN HORNETS CAUSE STEM DAMAGE. Joe Boggs reported receiving a report from a landscaper who observed European hornets (*Vespa crabro*) causing serious damage to the stems of a lilac in a home landscape in southwest Ohio. European hornets were first found in the US in New York State around 1840. Since that time, the hornets have spread to most states east of the Mississippi and a few states to the west. European hornets are impressively large, measuring 1 - 1 1/4" in length. Their black and yellow markings on their abdomen make them look like yellowjackets on steroids; however, their head and thorax have distinct chestnut-colored markings. Yellowjackets have black and yellow markings on the head and thorax.

Technically, this non-native is the only "true hornet" found in Ohio. Taxonomically, our native BALD-FACED HORNETS (*Dolichovespula maculata*) are not actually hornets; they are grouped with yellowjackets which is why they are in the same genus as AERIAL YELLOWJACKETS (*D. arenaria*). Unlike our native yellowjackets and wasps, European hornets can cause significant girdling damage to twigs and branches of trees and shrubs by stripping bark to the white wood. It is speculated they extract sugar from the consumed phloem tissue. It has been
reported that the hornets will feed on a wide range of trees and shrubs including the aforementioned dogwood, lilac, and viburnums as well as ash, birch, boxwood, horse chestnut, and rhododendron.

European hornets construct paper nests similar to bald-faced hornets; however, they prefer to nest in hollow trees and sometimes in the walls of homes. Normally, the hornets behave like bald-faced hornets, wasps, and yellowjackets with only the queens that are produced this season surviving the winter. Under these circumstances, the new queens will soon leave the nests to seek protected overwintering sites; old nests are not re-used. However, occasionally the entire European hornet nest will survive the winter if they are sufficiently protected. Indeed, although it is rare, nests in Ohio have been observed surviving through three winters.

European hornets are reputed to be highly aggressive and their large size does make them look pretty scary. However, Joe has observed just the opposite. During past encounters with the hornet, he was able take close-up images and move branches with hornets on them without being stung or even charged by the hornets. Still, landscapers should be cautious around these large stinging insects. Like wasps and yellowjackets, they are capable of stinging repeatedly. The hornets also commonly fly at night and may be attracted to porch lights or lights shining through windows. They have been known to repeatedly charge windows at night inducing panic in homeowners. Activity by the hornets will soon subside for the season. While the hornets may occasionally cause harm to plants, it is becoming too late in the season to justify applying control measures.

B. BLACK WIDOW SPIDERS ARE NOT RARE. Joe Boggs reported receiving an e-mail message from a homeowner offering to share a captured black widow spider. They believed black widows do not occur or are rarely found in Ohio; a common misconception. In fact, both the southern black widow (Latrodectus mactans), and the northern black widow (L. variolus) are found throughout the state. However, they are not commonly encountered because of their secretive habits. The widow spiders are grouped with "cobweb weavers" (family Theridiidae) and produce a small, tangled web. They are medium-sized spiders with bulbous abdomens and a covering of short, fine surface hairs give them a shiny or satiny sheen. Of course, black widows are . . . black.

The old saying, "hour-glass red, you are dead," is based on two other misconceptions about black widows. The deep red marking on the underside of the abdomen is not always shaped like an hour-glass, and it may be orangish-red or yellow. The middle part of the hour-glass may be missing, or there may only be some variation of a "V"-shaped marking. Some individuals have no markings, while others sport a red line on the top of the abdomen. Male spiders are about half the size of female black widows and their abdomen has red spots flanked by white lines or bars. Of course, the males are notoriously short-lived once they meet a female . . . the females are called "widows" for a good reason.

While there are historical records of deaths being caused by black widow spiders, the spiders are not aggressive and seldom venture into occupied homes or buildings. Both the northern and southern black widows prefer to live outside in old abandoned buildings, barns, and wooden outhouses. Indeed, painful encounters declined with the widespread adoption of indoor plumbing. The northern widow also resides under rocks or logs, and may occasionally be found within dense shrubs. If a black widow is found outdoors, simply leave it alone. The spiders do not represent a serious threat to Ohioans. Indeed, they are considered beneficial since they do represent a serious threat to insects.

C. WINDSHIELD WIPES. BYGLers also ran into several other plant pests this week including:

* The COMMON BAGWORM (Thyridopteryx ephemeraeformis) feeding season is coming to an end. Joe Boggs reported that around fifty percent of the bagworm caterpillars in the Cincinnati area have tie-off their bags to anchorage points to prepare to pupate. Dave Shetlar reported a similar ratio for central Ohio and Curtis Young noted that bagworms in northwest Ohio have reached final instar stages. This means the time to treat with an insecticide to manage bagworm populations has come to an end. Hand-picking the bagworms from host plants is the only effective management option available at this time.

* BYGLers discussed the general population densities and distribution MIMOSA WEBWORMS (Homadaula anisocentra) in Ohio this season. Despite its common name, mimosa webworms feed on honeylocust in Ohio. The
caterpillars feed gregariously as skeletonizers within webs spun over the foliage. There are two to three overlapping generations per season in Ohio, and female moths often lay eggs on nests from which they developed, so the nests are expanded by each new crop of caterpillars. Joe Boggs, Curtis Young, and Dave Shetlar reported almost no infestations in the southwest, northwest, and central parts of the state, respectively. Tim Malinich reported heavy infestations in the northeast part of the state; however, he found that around 75% of the nests were empty. Either the webworms were between generations or they had succumbed to heavy predation and/or parasitism.

* Dave Shetlar reported that ground dwelling GERMAN YELLOWJACKETS (*Vespula germanica*) appear to be particularly heavy this season in central Ohio. Indeed, he noted that there are two nests in his own landscaping and his neighbor has three nests. Dave observed that the yellowjackets were relatively docile either because they had not yet switched from "predator mode" to "sugar mode," or because he had showered and was wearing light-colored clothing so he did not look or smell like a bear! Throughout most of the season, yellowjackets behave as predators by harvesting soft-bodied insects such as caterpillars or sawfly larvae to feed to their young. However, yellowjackets become more aggressive late in the season as they search for carbohydrates to feed to the drone and new queens in the nest.

* Tim Malinich reported that HORNWORMS are devouring tomato plants in both home gardens and in commercial production fields. The caterpillars of two closely related species, the TOMATO HORNWORM (*Manduca quinquemaculata*) and the TOBACCO HORNWORM (*M. sexta*), can be found on tomato plants throughout Ohio. Of the two species, the tobacco hornworm tends to be the more common one found feeding on tomato plants. Late instar hornworms can be up to 4 - 4 1/2" in length and as big around as a penny. And yet, they can be very difficult to spot in amongst the foliage of the plants upon which they are feeding, although the damage that they produce is quite conspicuous. One way to locate a hornworm on a tomato plant is to look at the soil beneath the plant. As hornworms feed, they produce dark green to black barrel-shaded droppings (frass = caterpillar poop) that can be conspicuous. Search the foliage above where the droppings have accumulated for the culprit producing them. Late instar caterpillars not only feed on the foliage, they will also feed on the fruits. The last instar caterpillar consumes nearly as much as all the younger instars combined.

Once found, control of hornworms can be accomplished by handpicking, insecticide sprays and/or biological control agents (Bt products early in the development of the caterpillars, parasitic wasps). After the growing season is over, rototilling the area where tomatoes and other nightshade family plants were located will destroy overwintering pupae in the soil.

4. DISEASE DIGEST.

A. ANTHRACNOSE DROPPING WALNUT LEAVES. Joe Boggs reported that the annual dropping of walnut leaflets and leaves due to walnut anthracnose has commenced in southwest Ohio. The disease is caused by the fungus, *Gnomonia leptostyla*, which is specific to walnut. Unlike some of the other anthracnose diseases, walnut anthracnose is characterized by small dark brown spots rather than the larger irregularly shaped necrotic lesions seen with ash or oak anthracnose. From a distance, the leaflet discoloration and defoliation symptoms caused by walnut anthracnose could be mistaken for drought injury. However, an up-close inspection will reveal the tell-tale leaf-spot symptoms that are characteristic of this disease.

The dark brown spots on the walnut leaflets can be 1/16 - 1/4" in diameter and are usually surrounded by a yellow halo. Initially, the lesions are seen only on the underside of the leaflets, but they eventually cover both leaflet surfaces as the season progresses. Infected leaflets turn yellow and drop individually, or the entire compound leaf drops. Severe infections can defoliate a tree by early to mid-August. Trees in good health can tolerate the leaf loss; however, repeated defoliation of trees that are in poor health can kill the trees, or leave them susceptible to other insect or disease problems. Infection of walnut husks can result in incomplete nut development and a reduction in the quality of the nut meat.
The fungal spores overwinter on fallen leaves and infections occur on the new growth in the spring. The fungus needs to have 12 or more hours of continued leaf wetness to infect the plant. These first lesions produce spores to create more infections throughout the season. Control may be impractical on large trees and in forest plantings. Control in landscape or nursery situations can be achieved with fungicide sprays during the primary infection period in the spring and through the early growing season. Removing fallen leaves from the area will also reduce the infections of next year's leaves.

5. TURF TIPS.

A. RUSTY TURFGRASS. The fungal disease known as RUST is appearing on lawns, sports fields, and golf course roughs in southwest Ohio. The fungus (\textit{Puccinia spp}) can infect all common turfgrasses used in the United States. In Ohio, it is most commonly found on Kentucky bluegrass and perennial ryegrass. The fungus seldom causes severe damage to turfgrass plants; however, it causes the epidermis of the leaf to rupture and release enormous amounts of orangish-yellow or rusty colored spores. The spores can become a real nuisance as they are easily rubbed off onto shoes, lawn mowers, pet fur, fingers, cloths, etc.

Rust usually affects turfgrass in the late summer and fall and infections are most commonly found on slow-growing turfgrass. Juvenile turfgrass that is less than a year old is often more severely affected than mature established turfgrass. The disease may be especially severe on poorly fertilized turfgrass, drought stressed turfgrass, and on sites with compacted soils. Under poor turfgrass growing conditions, the fungus infects the leaf tissue faster than new leaf blades are being produced so the diseased tissue is not mowed off. Healthy turfgrass is capable of "outgrowing" the disease.

If the disease has been a problem in the past, it will most likely reoccur year after year unless growing conditions are improved. Provide adequate water and fertilizer to keep the grass growing. The turfgrass should be core aerated annually to improve water and fertilizer infiltration and uptake, reduce soil compaction, improve root growth, and improve the overall growth and health of the turfgrass plants. Management strategies should also include prevention through plant selection by using blends of resistant turfgrass cultivars. The National Turf Evaluation Program (NTEP) provides free information on their website [http://www.ntep.org/] regarding overall turfgrass cultivar quality and disease tolerance.

Fungicide applications will suppress the disease if the applications are made preventatively or during the very early stages of disease development. Research at OSU has suggested that the sterol inhibitors and strobilurins show good to excellent efficacy. However, since this disease is strongly linked to poor cultural practices as well as certain environmental conditions, relying on fungicides alone to suppress the disease sometimes yields disappointing results. A fungicide program should be combined with improvements in turfgrass cultural practices.

6. INDUSTRY INSIGHTS.

A. BLACK VINE WEEVIL LANDSCAPE CHALLENGE. Joe Boggs reported observing a heavy black vine weevil (BVW) (\textit{Otiorhynchus sulcatus}) infestation in a landscape in southwest Ohio. Although BVW has less of an impact on established plants in landscapes compared to plants in nurseries, the occurrence of this non-native weevil in landscapes may present several pest identification and management challenges. First, adults feed at night and hide during the day in the duff beneath infested plants. Second, although the weevil is most commonly associated with yews and rhododendrons, the adults can feed on over 100 different plant species. Landscape managers should examine multiple plant species for the characteristic leaf-notching damage caused by the adult weevils.

The adults are approximately 1/4" long. They have a narrower head and relatively short snout when compared too many other weevils. Their thorax is rounded and their abdomen is oblong-shaped. As their common name indicates, they are black; however, their color is slightly muted by pits and deep striations as well as small patches of yellow hairs on their wing covers. Their wing covers are fused which means the adults cannot fly. When disturbed, the adults feign death by remaining motionless and holding their legs against their body.
BVW larvae also present a number of diagnostic and management challenges. First, they live in the soil. Second, they consume roots and their feeding damage mimics symptoms caused by other root problems such as moisture stress (too little, or too much water), root-rots, and vole damage. Landscape managers should excavate and examine the root systems of wilting plants for BVW larvae and/or larval feeding damage. The creamy-white larvae have brown, bulbous head capsules and they are C-shaped causing them to superficially resemble white grubs; however, BVW larvae are legless. The larvae are capable of consuming entire root systems and girdling plant stems below the soil line.

The most effective BVW management option in landscapes is to avoid the problem by inspecting plants before they are installed. Since the adults cannot fly, their primary means of long-distance dispersal is by hitchhiking on infested plants. Other management options include making insecticide applications earlier in the season that target adults before they lay eggs, or insecticide applications that target early instar larvae before they cause significant damage.

A mid-to-late August soil drench application of imidacloprid (e.g. Merit) targets a "bottleneck" in the life-cycle of the weevil. At this time of the year, a high percentage of the weevil population is in the first instar stage; they are much easier to kill compared to late instar larvae. Also, by eliminating early instar larvae in late summer to early fall, landscape managers may avoid the extensive root damage caused by the much larger larvae in the spring. Unfortunately, while entomopathogenic nematodes such as *Steinernema* spp. and *Heterorhabditis* spp. have been successful in controlling BVW larvae in containerized plants, results have been highly variable on landscape plants.

B. KNOCK, KNOCK. . .IS ANYBODY THERE? Dave Shetlar reported that he has been checking out a multitude of tree and shrubs that have obvious SPIDER MITE damage on their leaves to see what levels of populations are still there and if they require treatment to slow or stop any further damage. Oaks, lindens, maples, and honeylocusts, all with their own respective mite species, are showing typical spider mite damage on their leaves. However, Dave could only find actively feeding mites on the maples and honeylocusts.

Maple spider mites produce a stippling on the leaves of silver and red maples. While the honeylocust spider mite is causing leaves to turn yellow and fall off of the trees. Some may think that this is just the response of the honeylocust trees to the extended dryness and heat. However, if one looks closely, one will find stippling, but the damage often appears as just a yellowing along the mid-veins of the leaflets. Both of these spider mites feed primarily on the leaf undersurfaces.

Another plant that is showing the defoliating ability of mite feeding is burning bush. These plants were majorly impacted by the twospotted spider mite earlier this season resulting in major leaf drop on many of these bushes in July. Some only have a few refloshed leaves on them at this time. . .they look pretty sad. But even on these plants, Dave could only find a few active mites and remnants of destroyed eggs and mites. . .foul play in the mite world seems to have occurred! There are predators of mites afoot.

Dave reported that there are many predators that specialize on spider mites and their eggs, but most don't arrive or build up effective, destroying populations until after visible damage has occurred to the host plants. These predators include several predatory mite species. Predatory mites are usually white, yellow or orange in color and move rapidly across leaf surfaces. Sometimes they look spastic, whirling in circles searching for prey. While these predatory mites are common, they do spread slowly from one plant to another because they don't have wings and must walk, hitch a ride or be blown by the wind to get to new locations. Other common mite predators include small species of lady beetles, syrphid fly maggots and lacewing larvae. All of these insects can fly and they commonly move in where spider mite populations have exploded, too late to prevent damage.

Dave's main take home message from his report was to look before one treats. One should look carefully with a hand lens to see if the mite damage is still progressing with active mites. If there are no active mites, there is no reason to apply a control. If spider mite control is necessary, there are several effective products from which to choose (e.g. Avid, Floramite, Forbid, Hexagon, Sanmite). Miticidal soaps and/or horticultural oils are also effective if one gets good coverage of the plant foliage.
7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from August 1 - 15, 2012, with the exception of the soil temperatures which are readings from Wednesday, August 15, 2012 at 6:05 p.m.

Recent rains have been spotted across the buckeye the state - a continued welcome site after a very hot and dry summer. While many BYGLers reported receiving rains, some mentioned that these rains have missed some areas within their region.

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<tbody>
<tr>
<td>Ashtabula</td>
<td>NE</td>
<td>79.2</td>
<td>59.9</td>
<td>1.62&quot;</td>
<td>3.1&quot;</td>
<td>63.62/69.44</td>
</tr>
<tr>
<td>Wooster</td>
<td>NE</td>
<td>82.5</td>
<td>58.4</td>
<td>2.03&quot;</td>
<td>2.7&quot;</td>
<td>70.95/71.97</td>
</tr>
<tr>
<td>Hoytville</td>
<td>NW</td>
<td>81.7</td>
<td>58.4</td>
<td>5.47&quot;</td>
<td>2.2&quot;</td>
<td>71.10/72.92</td>
</tr>
<tr>
<td>Columbus</td>
<td>Central</td>
<td>87.0</td>
<td>62.3</td>
<td>1.44&quot;</td>
<td>2.8&quot;</td>
<td>76.92/76.65</td>
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<tr>
<td>Piketon</td>
<td>South</td>
<td>85.5</td>
<td>59.6</td>
<td>1.38&quot;</td>
<td>1.9&quot;</td>
<td>72.60/74.74</td>
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</tbody>
</table>

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

8. COMING ATTRACTIONS.

A. CLASS FOR GRAPE GROWERS. Spend the day at Put-In-Bay, but start the morning off with a fruit grower meeting, August 29, 2012 at 10:00 a.m. This program provides pesticide recertification credits and information for commercial fruit growers (primarily grapes). We'll start off with a hands-on sprayer calibration lab - properly calibrated equipment will save significant money. The program finishes up with a look at diseases and insects in grapes and a weed panel-discussion. Presenters: Mike Ellis, OARDC; Roger Williams, OARDC; Randy Zondag, OSU Extension Lake County; and Tim Malinich, OSU Extension Erie County. For more information, contact: [malinich.1@osu.edu].

B. 2012 COMMERCIAL NEW APPLICATOR TRAINING SCHEDULED. The Ohio State University Extension's Pesticide Safety Education Program has scheduled four training dates for those preparing to take the commercial applicator's exams including Core, 8 (Turf), 5 (Industrial Vegetation); 6c (Ornamental Weed) and 2c (Agricultural Weed). The morning session also qualifies as Trained Serviceperson training. The dates are August 29, 2012; and September 26, 2012. Registration begins at 8:30 a.m. Additional information, including pre-registration is available on the web at [http://pested.osu.edu/commnewapp.html].

C. 72nd OHIO PLANT DIAGNOSTIC WORKSHOP. Friday, September 7, 2012 (9:30 a.m. - 3:30 p.m. or later) will be the next edition of the Ohio Plant Diagnostic Workshop for dedicated green industry, university, and other plant problem diagnosticians. The program at Secrest Arboretum on OSU's Ohio Agricultural Research and Development Center in Wooster will feature everything from Death and Taxus (a tale of two seasons) to Honeylocust Not (correct spelling), from perspectives on invasive plants, pests, and pathogens to clinic catharsis and diagmoshtics. Secrest Arboretum update and tour will also be a key program component. Registration is $40 for a fine day of food, fundamentals, frustrations finally filed away, and fun. Contact Cheryl Fischnich at [fischnich.1@osu.edu], 330-263-3831, or OSU Extension Northeast Regional Office, 1680 Madison Avenue, Wooster, Ohio 44691.

D. DIAGNOSTIC WALKABOUTS FOR THE GREEN INDUSTRY. The last two classes will be held in the Cleveland area in September at Cleveland Metroparks Zoo, September 13, 2012 and Sunset Memorial Park, September 27, 2012. Both classes are 7:30 - 9:30 a.m. Pre-registration is required and class size is limited to 35 per class. ODA, ISA and OCNT credits are available. For registration, location and pesticide credit information see: [http://www.onla.org].
E. WHY TREES MATTER FORUM: SAVE THE DATE. Wednesday, October 17, 2012 will be the next Forum, to be held in Wooster Ohio at the Hilton Garden Inn adjacent to the Ohio Agricultural Research and Development Center campus. There is a full slate of programs ranging from keynoters Scott Maco of Davey Tree Expert in Seattle speaking on the most recent i-Tree applications (including air quality and human health aspects) and Kelaine Vargas from San Francisco speaking on the Urban Forest Map project and community participation in mapping projects, as well as the Ohio Why Trees Matter projects, including Ohio Tree Campus USA advancements at the College of Wooster and Ohio State University. More details coming soon.

9. BYGLOSOPHY: "Doesn't matter what you do, or how you do it, your neighbors are gon'na talk about you ANYWAY." - Felder Rushing

APPENDIX - ADDITIONAL INTERNET RESOURCES:

Buckeye Turf
http://buckeyeturf.osu.edu

Emerald Ash Borer Information
http://ashalert.osu.edu

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

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

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

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 were the participants in the August 21st conference call: Joe Boggs (Hamilton); Dave Dyke (Hamilton); Tim Malinch (Erie); Dave Shetlar (Entomology); Amy Stone (Lucas); Curtis Young (Van Wert); and Randy Zondag (Lake).

BYGL is available via email, contact Cheryl Fischnich [fischnich.1@cfaes.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/].

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). Any materials in this newsletter may be reproduced for educational purposes providing the source is credited.

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.

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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