BUCKEYE YARD AND GARDEN LINE 2013-18
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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 18th 2013 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 - CREEPING ZINNIA (Zinnia angustifolia). Many gardeners tend to shy away from zinnias because of problems with leaf spots and powdery mildew; however, creeping zinnias are an excellent choice because they don't tend to have these problems. In addition, they keep blooming well into the fall, providing gardens with additional fall color. These easy-to-grow, sun-loving annuals do best in well-drained soils. They can be sown directly into the ground or from seedlings in the spring and provide a spectacular display of small, 1" flowers by late June. The flowers are orange, yellow, gold, pink, red, or white, cover the entire plant, and don't require deadheading. The flower color doesn't fade as some zinnia flowers do; delightfully, they maintain their bold color throughout the summer. The plants grow in a compact rounded-mound and are around 1' tall by 1' wide.
PERENNIAL - GARDEN PHLOX \((Phlox paniculata)\). An obvious focal point in today's garden is the garden phlox which started blooming in July and will continue through September. A perennial favorite tall garden phlox grow from 2 - 5' tall with a spread of 2 - 3', depending on the cultivar. It comes in a variety of colors including white, pink, rose, purple, blue, lavender and orange. It is both beautiful and fragrant.

With over 100 cultivars, there is a garden phlox suited to any garden design and more are being marketed each year. The upright clump of the phlox blends well when mixed with other perennials such as sedum and salvia. Although a hardy perennial for zones 4 to 8, phlox are not necessarily easy to grow and are subject to powdery mildew and spider mites.

Newer cultivars such as 'David' are bred to be resistant to powdery mildew. Based on a 2011 study by the Chicago Botanic Garden, 'Shortwood' was highly rated for resistance to powdery mildew and spider mites.

Garden phlox prefer full sun to part shade with moist but well-drained soil. Provide space between plants to allow air flow and water the base of the plant to avoid wetting the leaves. Both will help limit powdery mildew. Garden phlox prefer moist roots, so mulching is advised.

WOODY - BLACK WALNUT \((Juglans nigra)\). Though black walnuts are not typically considered a landscape plant, they are certainly an important forest denizen in Ohio and the Midwest, which make thousand cankers disease (TCD) of black walnut such a great concern for woodland owners, furniture and fine wood products artisans, nut growers, and all of us. Imagine a world without walnut veneer or without the ultimate treat, a black walnut-studded brownie. The one-two punch of the walnut twig beetle and the \(Geosmithia\) fungal pathogen makes TCD a major problem of black walnut. The insect and fungus were polite twig-killing nuisances on Arizona walnut, but are killers of black walnut, which were introduced out west and native to states in the East, including Ohio. More on that in upcoming weeks, but this topic was certainly of interest to over 130 attendees at this Wednesday's TCD workshop at OSU Extension Butler County office, the county in which the walnut twig beetle has been found.

Black walnuts are a medium to large sized tree, growing to 70' or taller, especially in that elusive, moist but well-drained, organic soil we all covet. Black walnut thrives in bottomlands but also can tolerate drier upland and open sites, though may grow more slowly in these sites. Black walnut has large compound leaves with 11 - 23 leaflets (there is a terminal and many pairs), almost racquet-ball sized nuts, all of which smell woodsily wonderful. Black walnuts are fierce competitors in woods and yards, producing the chemical juglone in all plant parts. The juglones are toxic to many other plants, notably tomatoes which cannot grow within the root zone of the black walnut tree. Tomato plants wilt and die; walnut roots continue to grow and have an advantage in nutrient availability.

But, oh, that wood. As noted in the Ohio Department of Natural Resources web site ([www.ohiodnr.com](http://www.ohiodnr.com)): "Its beautiful fine-grained chocolate-brown heartwood is the ultimate choice for making solid wood furniture, interior trim, gunstocks, and high-quality veneer."

VEGETABLE - EDAMAME \((Glycine max)\). Edamame is a term used to define soybeans eaten fresh in the green stage. It is the same species as grain soybeans, but vegetable edamame varieties are available that are sweeter and more suited for fresh consumption and digestibility. These seed packets, which are labeled "fresh or Green", should be purchased for those interested in growing edamame in the home garden.

Edamame seeds should be selected based on their "maturity group" first, which identifies the seeds that will grow, flower, and mature at the proper times in their region. Then considerations for height and other
selectable traits can be addressed. New growers may need to help soybeans by inoculating fields with the rhizobium strains recommended for soybeans. Edamame planted in existing soybean fields may not require re-inoculation. Edamame will be subject to the same pests as traditional grain soybeans, however pesticides registered for grain soybeans may NOT be approved for fresh soybeans grown as a PRODUCE/VEGETABLE item. Always read the label.

Soybean is one of the major field crops in Ohio, but the growing popularity of edamame as fresh produce, instead of oilseed, presents a unique opportunity for farmers interested in expanding their market. Edamame is high in protein, low in fat, and has nutritional value to consumers looking for new and unique vegetables. Edamame is often boiled or steamed as a snack or added to salads or Asian cuisine. The University of Kentucky has been conducting marketing research on edamame. More research on its feasibility as a crop and how to grow it is being conducted at the Universities of Kentucky and Vermont.

*WEED - BURDOCK (*Arctium minus*). Burdock is a biennial that produces a rosette of very large leaves in the first year and a branched stem with many burs during the second year. Burdock is native to Europe and northern Asia and has become widespread throughout the US. It is found across the upper half of the United States and is most commonly found as a weed of pastures, hay fields, and fence rows. A member of the daisy family, burdock is a stout, common weed with burrs that stick to clothing or animal fur. The plant grows to a height of approximately 3 - 4’. The identifying characteristic is the large basal rosette of leaves with hollow lower petioles, and flowers with hooked bracts. After senescence, the remaining burrs on the stems of common burdock may resemble a thistle. Be careful not to mistake thistle for burdock. Thistle plants do not have hooked bracts like common burdock.

2. HORT SHORTS.

A. MULCH FUNGI. The wet weather this summer may cause some problems for our mulched areas. Often after soaking rains, mold and fungus pop up in mulched areas. DOG VOMIT FUNGUS (actually a slime mold) has been spotted in many mulched areas and, while it is not harmful to your plants, it is aesthetically unpleasant. BIRD'S NEST and ARTILLERY FUNGUS can be more problematic. These tiny cup-shaped fruiting bodies shoot off spores that can float long distances, which then land and stick to homes and cars. These are not dangerous to pets or plants, but the spores are difficult to remove and may even cause damage to paint in the process of removal.

Leaving only a thin layer of mulch can help reduce the growth of some fungi. The fungi will clear up after the mulch dries out or after the reproductive phase is over. To speed the process, homeowners can rake mulch to help promote drying, but this may spread spores around as well if done after fruiting bodies have shown up.

B. ON THE LOOSE, CAUSING STRIFE! PURPLE LOOSESTRIFE (*Lythrum salicaria*) has been spotted in bloom in the ditches of northwest Ohio. It is a perennial plant that grows in wetland areas and along ditches and drainage areas. It averages 2 - 4’ tall, but can reach 10’ in nutrient-rich areas. The flower is a tall spike of purple flowers that blooms from July to September. Purple loosestrife has been a popular landscape plant because it is non-native and therefore has few pests or disease problems, is vigorous, and is considered a "pretty" flower. However, it is now considered an invasive plant that has escaped cultivation and has successfully invaded natural wetland areas. Because it has few disease or pest problems, it out competes native plants such as cattails and other wetland plants that are important food and habitat sources for native wildlife.
New varieties have been cultivated to be less aggressive, but still present a risk as loosestrife spreads both vegetatively and by seed. A single stalk can produce 300,000 seeds and each mature plant is said to produce 2.7 million seeds annually, making it effective at spreading.

C. SOIL COMPACTION. A couple BYGLers reported visiting landscapes in the last week that were suffering from compaction problems. Soil compaction is commonly seen in newer home construction sites and is caused by excessive traffic flow and/or heavy cultivation in and around the constructed area. Compaction reduces the amount of pore space which restricts the amount of air and water through the soil thus causing the land owner lots of problems in the landscape as plants get older or when the root systems are reaching into the parent material.

Amending the soil is the easiest way to combat compaction. Ideally, adding organic soil amendments into the top 6 - 8” of the soil helps reduce compaction. On compacted/clayey soils, anything less can lead to a shallow rooting system with reduced plant growth, lower vigor, and lower stress tolerance. Sand is not recommended! On clayey soils, sand works as the key ingredient to make really nice concrete or if enough is applied it can become a soil replacement thus reducing the quality of soil.

A soil test is recommended to determine the nutrient and organic matter content of the soil. It is also advisable to try to amend areas around plantings to encourage root growth. When looking at plants it may be easier to visualize an area that is approximately 40% larger than the plants drip-line, which is the area that is recommended for amending to encourage optimal growth.

3. BUG BYTES.

A. YELLOWJACKETS BECOMING EVIDENT. Last week, we reported in the BYGL (2013-17, 07/25/13) that BOLDFACED HORNETS (Dolichovespula maculata) nests were becoming evident in Ohio. This week, BYGLers reported that yellowjackets (Vespula spp. and Dolichovespula spp.) populations are likewise on the rise throughout the state. All reported that they have experienced some buzzing activity and have received phone calls loaded with stinging commentaries regarding yellowjackets. Yellowjackets are found in Ohio throughout the growing season; however, nest populations reach their zenith in late summer to early fall.

Fertilized queens spend the winter outside of the nests from which they developed; alone and in protected locations such as under loose tree bark. The overwintered queens start looking for suitable nesting sites as soon as they warm-up in the spring. All species of yellowjackets in Ohio build circular to oblong paper nests. The non-native GERMAN (EUROPEAN) (Vespula germanica) and COMMON (V. vulgaris) YELLOWJACKETS build nests underground or occasionally in hollow trees, rock crevices, or crevices in buildings. The native EASTERN YELLOWJACKETS (V. maculifrons) and SOUTHERN YELLOWJACKETS (V. squamosa) also most often build their nests underground although the southern yellowjacket will occasionally build their nests in wall voids. AERIAL YELLOWJACKETS (Dolichovespula arenaria) build exposed nests in trees, shrubs, or on buildings.

Overwintered queens start laying eggs once they have constructed a few brood cells in their small nests. Sterile workers that develop from these cells soon join the queen in gathering food and expanding the nest. Eventually, the queen is only involved with laying eggs. From late-spring through the summer, the ever-expanding numbers of yellowjacket workers keep busy enlarging their nest and foraging for caterpillars, sawfly larvae, and other soft-bodied insects. They use their powerful mandibles to grind-up these protein-rich meat items to feed to developing yellowjacket larvae. Thus, throughout much of the season, yellowjackets are considered beneficial insects.
However, in late-summer to early fall, drones (males) and new queens begin to develop in the nests. These new-comers do not require protein since they are not growing; they need energy from carbohydrates. So, they lounge around the nest begging the workers for sweets. In an effort to appease these freeloaders, the workers search for foods that have this much needed energy boost, such as soda, donuts, hamburgers, and French fries; the fine cuisine severed at county fairs! Thankfully for the over-worked workers, nest populations of adults begin to peak in the fall with 5,000 or more workers in the colony.

As fall comes to an end, the new queens and drones leave their nest to mate, and the queens seek protected overwintering sites. The colony from which they developed dies during the winter; yellowjacket nests only last one season. This means that there is no point in trying to kill yellowjacket colonies at this time of the year since they will eventually die-out on their own; with no fanfare for the poor overworked workers.

B. POTTER WASPS. Joe Boggs reported coming across a potter wasp (Eumenes sp.) clay nest hanging from the underside of a maple leaf. The wasp belongs to the family Vespidae, which includes paper wasps, yellowjackets, and hornets; however, potter wasps create their nesting artistry using clay rather than paper.

As their common name describes, potter wasps fashion small rounded jug-like nests out of clay, and they attach the nests to leaves, twigs, or to structures such as window seals. The 3/8" - 3/4" long potter wasp females don't gather mud for their nests. They first collect water and then they mix it with dry soil using their mandibles. The mud mixture is then transported to the nest-making site where it is fashioned into individual pots ranging in size from 1/4" - 3/8" in diameter. The entire construction process may require a couple of hundred trips over several hours.

As the pot nears completion, the female lays a single egg attached by a thread to the inside surface of the nest. They then provision the pot with a caterpillar or beetle larva that has been paralyzed by a sting. Once provisioned, the pot is sealed with a clay plug leaving the hapless paralyzed prey to await an appointment with the wasp's hatchling larva. Thus, potter wasps are considered beneficial … to all but their prey!

C. MAGNOLIA SERPENTINE LEAFMINING CATERPILLAR. Joe Boggs also reported that the highly visible handiwork of the magnolia serpentine leafmining caterpillar (Phyllocnistis magnoliella) is becoming evident in nurseries and landscapes in southern Ohio. The moth belongs to the leafmining family Gracillariidae. The tiny caterpillars of this aptly named moth feed close to the upper leaf epidermis, producing long, thin, serpentine mines that appear as silvery tracks snaking across the leaf surface.

Hosts for this leafminer includes southern, cucumber, sweet bay, star, umbrella, and the aforementioned bigleaf magnolias. Large numbers of mines on a single leaf can cause the leaf to turn brown and drop from the tree. Little is known of the life-cycle of this moth making the effective timing of insecticide applications to control the caterpillars problematic. Indeed, efforts to control this leafminer in nurseries in Ohio and in the southern U.S. are marked by reports of high insecticide failure rates. Fortunately, heavy populations involving multiple leaves appear to be a rare occurrence. Thus, populations may be managed by removing and destroying infested leaves when mines first appear.

D. MOSSY ROSES. The bizarre looking MOSSY ROSE GALLS are now becoming very noticeable on their namesake host in southern Ohio. The highly visible and unusual looking plant growths are produced under the direction of the tiny wasp, Diplolepsis rosae (family Cynipidae). The spherical, hairy-looking galls arise from year-old rose stems and may measure as much as 2" in diameter. A close examination
will reveal that the "hairs" are actually tendrils that are covered with short spikes. The tendrils are light green at first, but they quickly become much more colorful with the green becoming deep red accented by pink overtones. Eventually, the galls turn an unsightly grayish-brown and they may cling to the branches for 1-2 years before they degrade and disappear.

Mossy rose galls provide a good lesson in gall-terminology. The galls are plurilocular, meaning that there are multiple chambers in each gall, as opposed to unilocular which means there is only one chamber per gall. And, the galls are unilarval, meaning that each chamber houses a single gall-making wasp larva as opposed to multilarval which means gall chambers house more than one immature gall-maker. The plurilocular, unilarval mossy rose galls may house 10-20 wasp larvae.

The galls cause little harm to the overall health of rose plants; however, a heavy infestation may detract from plant aesthetics. Old galls remain evident long after they are vacated by the wasp. Since the wasp larvae spend the winter in the galls, pruning to remove the galls in the fall or very early spring provides an effective control by reducing wasp populations in rose plantings.

E. BLACK LOCUST BEETLES AND BUGS. Two leaf-feeding pests on black locust were observed by BYGLers this week: the LOCUST LEAFMINER BEETLE (*Odontota dorsalis*) and the BLACK LOCUST BUG (*Lopidea robiniae*). Damage caused by the beetle is often a familiar sight to travelers motoring on Ohio's interstate highways. Larval and especially adult feeding activity produces a captivating reddish-brown leaf coloration that highlights infested trees allowing black locusts to be positively identified at highway speeds! "Flamed" trees will not become apparent until later in the season.

The adult beetles are less than 1/4" long. They have a flattened appearance and are orangish-red with a median black line down the center of the back. Overwintered beetles emerge in the spring to feed as skeletonizers on the leaves of their namesake host as well as several other tree species including beech, cherry, crabapple, dogwood, elm, hawthorn, and yellowwood. They may also be found on a number of herbaceous plants such as soybeans. The early season feeding activity of the overwintered adults usually causes little obvious damage.

Eventually, the beetles begin laying eggs. While black locust is the preferred larval host, the beetles will also select yellowwood. Eggs are laid in clusters of three to five in late May or early June on the undersides of leaves. The larvae hatching from these eggs work their way into the leaf through one entrance hole and live in common blotch mines. Later, they go to other leaves and make separate mines. Larvae feed for about three weeks, pupation takes place in the mine, and beetles emerge a week or 10 days later. Larval leafmines coupled with the leaf-feeding activity of beetles that emerge from this season's mines produces the most obvious damage caused by this insect; the flame-orange black locusts.

BYGL readers are probably less familiar with the black locust bug. The locust bug is slightly larger than the leafmining beetle, but both share similar color patterns. The adult bugs are elongate in shape and have a median longitudinal black line down the center of the back that is flanked by two longitudinal orangish-yellow lines. Their legs and antennae are black. The nymphs are orangish-yellow with black legs, antennae, and wing pads. Both the adults and nymphs use their piercing-sucking mouthparts to extract juices from black locust leaves and their feeding activity produces small, yellow leaf spots.

Research conducted at Illinois State University and published in 2004 revealed that black locust bugs secrete chemical compounds that were implicated in defending the bugs against bird predation. When attacked, the bugs discharged liquid from metathoracic glands that contained a chemical brew that gave the bugs a strong and distinct odor. Birds were observed ejecting the bugs out of their mouth after biting them suggesting the chemical discharge served as a feeding deterrent. One can only imagine the birds making a "pa-toowie" sound.
4. DISEASE DIGEST.

A. FUNGAL DISEASES IN GRAPES. Gary Gao reported that a few fungal diseases were quite rampant in the wine grape demonstration vineyard at OSU Centers in Piketon. This year has been a very "good" year for the development of fungal diseases. Regular rain events have made spraying very difficult. Grapevines need to be sprayed almost weekly to keep diseases under control. Common diseases on the grapes he saw were BLACK ROT, PHOMOPSIS, DOWNY MILDEW and POWDERY MILDEW.

With grape black rot, the most critical period for fungicide application is one week before bloom, the week of bloom and one week after bloom. A fungicide with active ingredient mancozeb is high effective again the grape black rot. Commercial growers should refer to the OSU Extension Bulletin 506B2, "Midwest Small Fruit and Grape Spray Guide" for more information on labeled pesticides and the spray schedule.

Gary Gao also talked with a home grape grower who had grape black rot on her 'Concord' grapes. This grower did not spray fungicides on her grapes this year. She only sprayed insecticides. 'Concord' grape is highly susceptible to grape black rot. This wet season did not help. Some of the less disease susceptible grape cultivars are 'Marquis,' 'Jupiter,' and 'Mars.' Home gardeners should refer to the OSU Extension Bulletin 780, "Controlling Diseases and Insects in Home Fruit Plantings" for more information.

B. MOIST CHAMBER. The usual suspects for plant disease continue with this mostly moist summer of 2013. ROSE BLACK SPOT and APPLE SCAB are "Lake Wobegon above-average" this year. POWDERY MILDEW DISEASES are evident on everything from coreopsis to lilac. HOLLYHOCK RUST is showing the signs of bright orange pustules on foliage and the symptoms of leaf yellowing and leaf drop. SEPTORIA LEAF SPOT OF DOGWOOD is resulting in speckling and reddening of foliar tissue resulting in premature leaf coloration and defoliation and limiting the ornamental appeal of many shrub dogwoods.

5. TURF TIPS.

A. TURF DISEASE UPDATE. Unlike what Ohio has experienced over the past couple of years, weather conditions this year have permitted turfgrass to not go into summer dormancy and to continue vigorously growing through the month of July and now into August. Much of Ohio has also receive generous and in some cases excess amounts of rainfall leading to saturated soils and flooded areas in turfgrass. With these kinds of conditions, turfgrass diseases are also doing well in high-cut areas. In Joe Rimelspach's (Program Specialist - Turfgrass Pathology) most recent Turf Disease Update Video ([http://turfdisease.osu.edu/turf-disease-updates/video-turf-tips-july-26-2013 ]), Joe reviews which diseases are showing up and their symptomology. These diseases include BROWN PATCH, RUST, PYTHIUM BLIGHT, and with the recent cool-off in temperatures, lingering RED THREAD is also reappearing.

B. LAWN MOWER MID-SEASON MAINTENANCE. Regular, preventative maintenance on a lawn mower will prolong the life of the mower and assure proper mowing of the turfgrass. Here we are in mid-season for mowing lawns and the need for mowing has been relentless. In other years, the lawn mower has been sitting idle because of the lack of turfgrass growth. This year however, the grass has been growing non-stop and the lawn mowers have not gotten a break. Thus, it may be time to give the mower a little bit of attention.
Here are some things mower owners should be doing regularly or at least a couple of times through the mowing season. Remember, whenever doing maintenance on a lawn mower always disconnect the spark plug from the spark plug wire before working on the undercarriage to reduce the potential for accidental starting of the mower while working around the blade(s).

* Check the oil. Maintain a proper oil level in your mower to protect the engine. If oil looks like it has debris in it or if it is dark black in color, the oil should be replaced. Consult the owner's manual for instructions for changing the oil and use oil designed for small engines. Dispose of the used oil properly such as taking it to a recycle center that collects used oil.

* Inspect the air filter. A clogged or dirty air filter results in the mower running poorly and burning gas less efficiently. Replace the air filter at least once a year and/or whenever the filter looks dirty or clogged with debris.

* Change the spark plug. Like the air filter, the spark plug should be replaced at least once a year, usually at the start of the mowing season. However, if the mower is difficult to start during the mowing season, one should consider replacing the spark plug again to improve spark and starting.

* Clean out the undercarriage of the mower. Grass clippings can get caked in the undercarriage of the lawn mower especially when grass is wet during mowing. The buildup of grass clippings can reduce the efficiency of the mower to cut the grass properly, clog mower discharge chutes, reduce mulching action and lead to deterioration of the mower deck. Use a wire brush and/or putty knife to loosen grass clippings and dirt from the undercarriage. Any remaining material can be sprayed away with a hose.

* Sharpen the blade(s). A lawn mower blade endures a great deal of punishment through the mowing season from running over rocks, tree branches, hidden objects in the lawn such as children's toys, and the occasional scalping of turf down to the soil. Hitting these objects dulls the cutting edge of the blade. Just mowing grass blades will also dull the blade of the mower. A dull blade rips and tears grass instead of cleanly cutting it. The result of mowing with dull blade is shredded, ragged tips on the ends of grass blades that dry out and turn brown making the lawn look like it is not healthy. It reduces the greenness of the grass. After the blade(s) is(are) removed from the mower, it(they) can be sharpened with a vice and metal file. For those uncomfortable with sharpening their mower blades, a mower repair shop will sharpen blades for a small fee. Severely damaged blades should be replaced with new blades of proper size and type.

6. INDUSTRY INSIGHTS.

A. GET YOUR GREEN INDUSTRY FIX WEBINAR: AUGUST 14. We had a great Webinar session in July on powdery mildew disease, Ginkgoes, the Great Lakes Early Detection Network Application for Androids and iPhones, bagworms, Japanese beetles, and mushrooms in turfgrass. Next up: Wednesday, August 14, 8:00 - 8:50 a.m. Join OSU Buckeye Yard and Garden Line (BYGL) experts for this Ohio Nursery Landscape Association's Green Industry Webinar then. If you have questions about registering, contact ONLA at 614-899-1195 or 800-825-5062.

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 January
1 - July 31, 2013, with the exception of the soil temperatures which are readings from Wednesday, July 31, 2013 at 5:05 p.m.

Recent temperatures have not been hot, sticky, and summer-like, but rather quite enjoyable for the end of July. These temperatures have been a welcome sight, especially for those counties celebrating the summer with county fairs and other outdoor events.

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

8. COMING ATTRACTIONS.

A. DIAGNOSTIC WALKABOUT FOR THE GREEN INDUSTRY. Diagnostic Walkabout for the Green Industry series is once again occurring around Ohio this summer. ONLA, AGI and OSU Extension will be hosting 3 more events in 2013: August 15, Toledo Botanical Garden; September 12, Inniswood Metro Gardens, Westerville; and September 26, Sunset Memorial Park, North Olmsted. Pre-registration is required and class size is limited to 30 per class. ODA, ISA and OCNT credits available. For registration, location and pesticide credit information see: [http://www.onla.org].

B. GREEN INDUSTRY SUMMER SESSION IN NW OHIO. This year's event will be held on Wednesday, August 7, 2013 beginning at 11:00 a.m. on the campus of Owens Community College's Toledo Campus. Registration information can be requested by contacting Lee Richter at [richter.71@osu.edu]. Speakers and topics include: Matt Ross (Edible, Native Plants and Becoming Green in the Green Industry) and Chris Foley (Pest Diagnostics) of Owens Community College; Nancy Taylor (Plant Diseases We Have Known and What's New in Plant Diseases), Kathy Smith (Native Trees and Invasive Control of Non-Native Plants), Mark Koenig (Basic Pesticide Safety and Water Quality and Licenses, Records, and Review) Greg Meyer (A Calendar Year of Turf Diseases and The Problem of Phosphorus), Curtis Young (Leaf Miners and Boring Insects), and Amy Stone (Invasive Insects) of OSU Extension; and Laura Deeter (Container Gardening and Perfect Plants for an (Im)Perfect Garden) of ATI. OCNT, ODA, and ISA credits are available.

C. OHIO TURFGRASS RESEARCH FIELD DAY. The field day will be held at the OTF Research and Education Facility, 2710 North Star Road, Columbus, Ohio on Wednesday, August 7, 2013. There will be two tracks - golf turf and sports/lawn. Registration information is online at [http://www.ohioturfgrass.org/events/event_details.asp?id=326289].

D. YOUTH SCIENTIST ADULT EDUCATION CLASS. OSU Extension, USDA Forest Service, Ohio Woodland Stewards, and the Ohio Environmental Protection Agency- Ohio Environmental Education Fund are sponsoring an adult education class August 8 - 9, 2013. This class will showcase a new hands-on curriculum being developed for youth to learn about invasive species utilizing their own neighborhoods, school yards, and local parks. This curriculum fulfills newly revised State science
curriculum standards. The program will be held at the OSU Mansfield campus and includes lots of hands-on activities! Information about the workshop can be found on the Woodland Stewards website at [http://woodlandstewards.osu.edu]. The workshop runs from 9:00 a.m. Thursday through 3:00 p.m. Friday. Registration cost is $225 with Graduate Credit or $50 without graduate credit. Questions about the program can be directed to Cindy Meyer at 513-887-3722.

E. OHIO PLANT DIAGNOSTIC WORKSHOP. This is the first notice for the 81st (or so) running of the Ohio Plant Diagnostic Workshop, to be held on September 4, 2013 at the Secrest Arboretum of Ohio State University's Wooster Campus. This program, sponsored by OSU's Extension Nursery Landscape and Turf Team, the Ohio Nursery Landscape Association and the Davey Tree Expert Company is a full day of hands-on diagnostic samples and walks, and updates by OSU's Joe Boggs, Francesca Peduto, Nancy Taylor, Curtis Young, Erik Draper and Jim Chatfield, and all the assembled experts. Registration information is forthcoming, but get September 4 on your calendar if you want to learn, teach, and catharse about landscape, treescape, nursery and greenhouse plant health problems, from beetles to blights to botany.

F. NAME THAT TREE WORKSHOP. Join fellow tree IDers on September 27, 2013 at the Secrest Arboretum of Ohio State University's Ohio Agricultural Research and Development Center in Wooster, Ohio. We will be conducting a Name That Tree Workshop sponsored by the OSU Extension Woodland Stewards and Nursery Landscape and Turf Teams, combining tree ID from both sides now, from woodland species to landscape cultivars. You can register online at woodlandstewards.osu.edu. It will be a full day of indoor and outdoor sessions at the Jack and Deb Miller Pavilion and the Arboretum plantings. Cost is $35. Also check out all the other great Woodland Stewards programs listed on the site.

G. WHY TREES MATTER FORUM. The annual Why Trees Matter Forum, after a year's hiatus, returns to Ohio State and Wooster, Ohio this autumn on Wednesday, October 16, 2013. Details will be forthcoming regarding registration, but you will be sure to learn a great deal about the multiple benefits of trees and the practice of learning and teaching about these benefits. We will discuss the latest on i-Tree benefits, the OSU Arbo-Charrette Program, the Tree Campus USA program of the College of Wooster, updates on the pervasiveness of invasiveness in our urban and woodland forests (including the new Great Lakes Early Detection Network smartphone application). We will also highlight wildlife and trees, in a much-anticipated talk by Marne Titchenell of the OSU School of Environment and Natural Resources. Green ink your calendar.

9. BYGLOSOPHY. "Is not disease the rule of existence? There is not a lily pad floating on the river but has been riddled by insects. Almost every shrub and tree has its gall, oftentimes esteemed its chief ornament and hardly to be distinguished from the fruit. If misery loves company, misery has company enough. Now, at midsummer, find me a perfect leaf or fruit." - Henry David Thoreau

APPENDIX - ADDITIONAL WEBSITE RESOURCES:

Ask a Master Gardener Volunteer (Consumer Gardening Questions)  
http://mastergardener.osu.edu/ask

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 are the participants in the July 30th conference call: Joe Boggs (Hamilton); Jim Chatfield (Hort and Crop Science); Gary Gao (OSU South Centers); Denise Johnson (State Master Gardener Volunteer Program); Ashley Kulhanek (Medina); Tim Malinich (Erie); Cindy Meyer (Butler); Any Stone (Lucas); Nancy Taylor (PPDC); Curtis Young (Van Wert); and Randy Zondag (Lake).

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

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.

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