BUCKEYE YARD AND GARDEN LINE 2012-09
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This is the 9th 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 - NEW GUINEA IMPATIENS (Impatiens hawkeri). Bedding impatiens have held the title of #1 bedding plant for many years and along with the New Guinea impatiens "group," these 2 dominate the bedding market. New Guinea impatiens are very similar to the bedding impatiens in regards to bloom color; however, they have the added feature of colorful variegated foliage as well as the ability to tolerate a little more sun than bedding impatiens. New Guinea impatiens thrive in full shade or in a morning sun and afternoon shade situation. They don't tolerate full sun all day long, however. Moisture requirements are similar to bedding impatiens.

The variety of flower colors on New Guinea impatiens is almost overwhelming. They come in white and almost every shade of red, pink, salmon, and orange. In fact, if one tries to match the colors to the color of a home or the shutters, it's best to see the plants in full bloom because of all of the color variations. Recent
breeding efforts have resulted in larger flowers and more of them on the 1’ rounded, mounded plants. In
addition, cultivars show a variety of variegation on the foliage, including vivid yellow and green, red, and more. New Guinea impatiens can be planted in masses in beds, in containers, or in hanging baskets.

*PERENNIAL - GARDEN LILIES (*Lilium* group). When garden lilies are in bloom, one has to stop and marvel at the intricacy and beauty of the flower as many of cultivars are quite bold and visible in the garden. Lilies are classified into 9 major groups based primarily on flower form and orientation. The Asiatic lilies are in Division 1 and have upward, outward, or downward facing flowers on stems anywhere from 2 - 7' tall. They are usually non-fragrant and bloom in early summer. Oriental lilies are in Division 7 and are generally fragrant with bowl-like or flat-shaped flowers that bloom in mid- to late summer. The Missouri Botanical Garden Kemper Center for Home Gardening has a listing of the different divisions and their habits at the following site [http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A462]

Lilies are true bulbs and are quite easy to grow. Plant the bulbs in well-drained soil as they do not tolerate wet areas. Lilies prefer to be planted in full sun. However, if the roots are shaded, they tend to thrive. If they are inter-planted with other perennials, the perennials provide the shade for the roots and hide the foliage after the blooms decline. This works out great in the perennial garden as once the flowers petals fall, the remaining foliage doesn't provide a lot of interest. If one doesn't like the look of the plant when the petals fall, trim it back to the top of the foliage but leave the foliage until it turns yellow (sometime in the fall).

*WOODY - KENTUCKY COFFEETREE (*Gymnocladus dioica*). Kentucky coffeetree is a nice large tree for landscapes. This tree can reach 80' tall and 50' wide. It is easily recognized by its huge bipinnately compound leaves that are up to 2’ long and 2’ wide. This tree is found more often in the western half of Ohio where the soils are more alkaline. Thick fruit pods containing large seeds are found only on female trees, and often hang on the tree throughout the winter. Pioneers used the seeds as a coffee substitute (often referred to as poor man's coffee) thus leading to the common name of this tree. Care should be taken for those who want to try the drink made from this tree, it has been found to cause toxicosis in livestock and humans. Kentucky coffeetree thrives almost anywhere it is planted, except for permanently wet soils. It is extremely tolerant to many stresses, including poor soils, high pH soils, occasional brief flooding, and air pollution. It grows in full sun to partial sun.

*VEGETABLE - BASIL (*Ocimum basilicum*). One of the most popular and easiest culinary herbs to grow is SWEET BASIL. A member of the mint family (Lamiaceae), it is native to India and Asia and has been cultivated there for more than 5,000 years. This tender annual is primarily grown for its fragrant leaves, used fresh or dried, to spice up numerous dishes of both Asian and Western cuisines. There are numerous varieties of basil, some of the unusual fragrances and flavors include cinnamon, lemon, and anise. Foliage colors range from pale to dark green, magenta and varying shades of purple.

Like most herbs, basil requires a sunny location that receives at least 6 - 8 hours of sunlight per day, and requires well drained and fertile soil. It is easy to grow from seed regardless of whether you start the seeds indoors or direct seed in the garden after the danger of frost has passed. Basil is very sensitive to frost injury. Since moisture is important to a good basil crop, adding organic mulch will help to keep the soil moist and also help to minimize weeds. To maximize production and to encourage a bushy and healthy plant it is important to prune basil regularly through the growing season. If basil is allowed to flower and form seed, it will become woody and yields will be much less.

*WEED - WHITE AND YELLOW SWEET CLOVER (*Melilotus alba* and *M. officinalis*). These European and Asian biennial legumes were brought to the US in the late 1600's for forage and honey production. They appear very similar except for the distinguishing yellow or white flowers. Yellow sweet clover is usually smaller than white sweet clover and blooms earlier. Plants are strictly vegetative in the first year and have a small, branched stem with clover-like leaves. Leaves are divided into 3 finely toothed leaflets, with the middle leaflet occurring on a distinct stalk. In the second year, plants may appear bushy, and grow from 3 - 5' in
The flowers are packed densely on the top 4" of an elongated stem. Unfortunately, sweet clovers are aggressive, weedy plants that degrade native grasslands by overtopping and shading native sun-loving species.

2. HORT SHORTS.

A. 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 701 to 1,073. Following is a report of GDD for several locations around Ohio as of May 30, 2012: Painesville, 701; Cleveland, 753; Toledo, 859; Canfield, 778; Findlay, 879; Van Wert, 892; Wooster, 825; Coshocton, 931; Columbus, 1,063; Springfield, 1,012; Dayton, 1,015; Cincinnati, 1,051; Ironton, 1,071; Portsmouth, 1,073; and Piketon, 1,040.

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 website, one can see what is taking place in the landscape.

- **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; paniceled goldenraintree, first bloom, 924; June bride littleleaf linden, first bloom, 953; **azalea bark scale, egg hatch, 957**; Japanese beetle, adult emergence, 970; rosebay rhododendron, first bloom, 1,010; and June bride littleleaf linden, full bloom, and 1,115.

B. POOR FRUIT SET IN RASPBERRIES. Gary Gao received several questions about raspberries not setting fruit. One gardener had blooms on her red raspberry plants for 3 years, but had no fruits. It is hard to know what the cause was without seeing the plant(s). Gary did find out that the plants were purchased quite "cheap." One possible cause of having no fruit is that the plants may have had a virus, which could cause sterility. Gary reminded the gardener of the importance of purchasing virus indexed plants. His recommendations were to buy new plants from a reputable nursery and plant them in new area.

Other possible causes of the poor fruit set in raspberries are fungal diseases. Anthracnose and phytophthora are two examples. If the canes or roots are damaged by these fungal diseases, the flowers will not be able to develop fully. Refer to a fact sheet written by John Hartman, professor emeritus of the University of Kentucky, "Poor Fruit Set in Brambles," that is available only at [http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtm/PPFS-FR-S-9.pdf].

C. LEAVES OF THREE, LET IT BE. With summer here many folks have been taking part in outdoor activities. Whether you are hiking, gardening, or just out enjoying some fresh air, familiarizing yourself with the plant and its many forms is important because all parts of this plant are poisonous. Poison ivy contains the irritating oil, urushiol, which can cause severe skin rashes and/or blisters. While some folks may not have an allergic reaction after coming into contact with this plant, it is best that it should be avoided because new allergic reactions can develop at any age of a person's life.
Poison ivy shows variation in its growth habit, which is the reason that this plant is sometimes harder to recognize. Poison ivy can grow as a vine, shrub, or prostrate plant. In the vine form, poison ivy has a "hairy" appearance, because of the aerial rootlets that entangle themselves on trees, fences, walls, etc. and allow the plant to grow in difficult areas. Leaves can also be toothed, scalloped or smooth causing even more confusion with identification. The main identifying feature is the compound leaf made up of three leaves.

Poison ivy is most dangerous during the spring and summer months when the plants are producing more oils. Reaction from contact with this plant can develop within several hours to two weeks from contact. People can contract a rash by exposure to smoke from burning poison ivy; be careful not to burn wood with the poison ivy vine attached to it. Take extreme caution to avoid contact of smoke with skin and clothing. If you know you have come into contact with poison ivy, wash the area with water or a poison ivy wash specially made for washing the oils from skin. Contact your family physician for recommendations for effective medication.

D. GARDENING FOR BIRDS: ATTRACTING BIRDS WITH PLANTS. This is the first of a series of short articles on ways to attract songbirds to a backyard. This first article will address attracting songbirds by providing a diversity of plants. When attracting any species of wildlife, it's important to consider the necessary habitat, in other words, the food, shelter, water, and space that a species needs to survive. When it comes to songbirds, a diversity of grasses, flowers, shrubs, and trees can provide an excellent variety of food; seeds, nectar, berries, and nuts.

Chickadees and goldfinches will appreciate plantings of seed producing plants such as asters (Aster spp.), goldenrods (Solidago spp.), sunflowers (Helianthus spp.), and sedums (Sedum spp.). Sedums and goldenrods serve double food duty by also attracting insects. Some of the best nectar producing plants, causing ruby-throated hummingbirds to hover with joy, include bee balms (Monarda spp.), blazing stars (Liatris spp.), and cardinal flower (Lobelia cardinalis).

When it comes to selecting shrubs to plant, choose the berry producing shrubs. Berries are designed with birds in mind. They are often bright in color, making them easy for birds to see, and are located on the tips of branches, making them easily accessible and ripe (pun intended) for plucking. Provide berries year-round so there is always a food source available. Early summer berry producers include serviceberry (Amelanchier spp.) and choke cherry (Prunus spp.). Blackberries, raspberries (Rubus spp.), and blueberries (Vaccinium spp.) are ready mid-summer, and dogwood (Cornus spp.) and viburnums (Viburnum spp.) produce in the fall. Don't forget to provide for songbirds that brave the winter months. Holly (Ilex spp.) and sumacs (Rhus spp.) are excellent choices.

Trees also supply a great diversity of food for birds, not only with the fruits, nuts, and seeds they produce, but also with the insects they attract. Oaks (Quercus spp.) support over 500 different insect species, which make birds such as warblers, vireos, and flycatchers very happy. The best fruit trees are cherries (Prunus spp.), junipers (Juniperus spp.), and hackberries (Celtis spp.). While robins and cedar waxwings are feasting on the cherries and junipers, tufted titmice and blue jays turn to seed and nut producing trees, such as pines (Pinus spp.), beech (Fagus spp.), and oaks.

When making decisions, remember diversity is the best of goals and try to select a plant or two from each of the seed, insect, nut, and berry producing categories. Stay tuned for next week's article on attracting birds to backyards using feeders! Happy bird gardening!

E. SQUIRREL WARS. Recently, Curtis Young and Marne Titchenell have curiously observed groups of squabbling, chattering gray squirrels leaping, scurrying, and engaging in feats of aerobatics within the treetops and along the ground as they chase one other. What is going on with the squirrels this time of year? Turf wars? Squirrel truth or dare? Perhaps bullying occurs in squirrel society, too? It turns out the answer is quite simple - it's mating season - the same season that riles up many species of wildlife. Squirrels have two mating seasons,
one in winter, and another in early summer. In Ohio, the summer mating season peaks from mid-May to mid-June. Male squirrels will compete with other males for females, creating a dominance hierarchy, which leads to dominate males chasing younger males away from any available females. Sometimes related individuals will work together to defend a territory, especially the females within that territory. Females often mate with more than one male, meaning some of the chasing and chattering going on may be on the part of the females as well. So until June comes to a close, be prepared to encounter squirrel mating wars - as Curtis and Marne discovered, it can be quite amusing to watch!

3. BUG BYTES.

A. SCARLET OAK SAWFLY. Joe Boggs reported that first generation scarlet oak sawfly (*Caliroa quercuscoccinea*) larvae are munching oak leaves in southwest Ohio. Despite this sawfly's common name, larvae may be found feeding on a wide range of oaks including pin, black, red, and white oaks as well as its namesake oak. The larvae feed gregariously side-by-side on the lower leaf surface consuming everything except the veins and upper leaf epidermis. Initially, the upper epidermis has a faded, whitish appearance. Eventually the epidermis dries out, turns brown, and drops from the leaf leaving behind the veins to produce the skeletonizing symptom associated with this sawfly.

The larvae are currently a little over 1/4" long. Their semi-transparent bodies are flattened towards the front and tapered towards the back. The flattened area is trimmed in yellow with the visible gut contents making it appear a greenish-black line is running down the middle. The tapered area is grayish-black to black. The larvae glisten in the sun and appear slug-like. This is due to their interesting habit of covering themselves with their own excrement which helps them stick to leaves and presumably dissuades predators. Their slimy appearance gives rise to another common name: oak slug sawfly.

The sawfly spends the winter as late instar larvae inside cocoons in the leaf litter. Development is completed in the spring. Once the black, fly-like females are mated, they use their saw-like ovipositors to insert eggs in rows along major leaf veins. There are 2 - 3 generations per season in Ohio; consequently damage tends to escalate as the season progresses.

First generation populations appear to be small and randomly scattered. However, populations of each succeeding generation should be closely monitored because this sawfly has a history of producing significant defoliation on oaks in Ohio forests and landscapes. Last season, Erik Draper reported heavy defoliation of oaks in the northeast part of the state and heavy defoliation of oaks occurred in the southern part of the state in 1997 and 1998.

B. ANT WARS. Joe also reported observing an interesting insect spectacle playing out in the Boggscape last week. Tens of thousands of ants had gathered in several seething masses along the edge of his driveway. This was not an "ant swarm" where large numbers of male and female ants with wings ("reproductives") emerge to fly off and mate; love was definitely not in the air! In fact, it was the opposite ... it was an ant war! The battling ants were pavement ants (*Tetremorium caespitum*), a pugnacious non-native that was introduced into the U.S. over 100 years ago. The ants get their name from their habit of nesting beneath the pavement of sidewalks or at the edges of driveways.

Pavement ants are very territorial and they expand their territories in the spring. If two neighboring colonies try to "plant their flags" in each other's territories, total warfare ensues and each colony quickly pours all their fighting-aged members into melee. Battles may occur as a single, massive, swirling brawl, or as a series of smaller pitched skirmishes with constantly shifting battle lines. The fights are bloody affairs with macerated bodies quickly piling up. Fortunately for both sides, the wars are usually short-lived; the battle for the Boggscape only lasted for about two hours. Joe couldn't tell who won the contest since all the ants looked alike
and they weren't wearing uniforms! However, he thinks the "driveway colony" got the best of the "garage pad colony".

C. WINDSHIELD WIPES. BYGLers also reported on a number of other insects last week including:

*Dave Shetlar noted that based on reports from Lexington, KY, the emergence of JAPANESE BEETLES (Popillia japonica) in Ohio is just around the corner. Dan Potter (University of Kentucky, Department of Entomology) e-mailed fellow entomologists last week that beetles had started to emerge in central Kentucky and the timing is about 2 - 2 1/2 weeks earlier than in "normal" years back in the 1990s. Curtis Young reminded BYGLers that beetles will often emerge almost en masse if a prolonged period of dry weather is followed by a heavy rainfall event which is exactly what is happening this week throughout Ohio.

*Several BYGLers reported that LIGHTNING BEETLES (Family Lampyridae) (a.k.a. lightningbugs, fireflies, etc.) are just beginning to flash across the evening skies. The number of lightning beetles seen each season depends upon the previous year's growing conditions. Specifically, how plentiful food resources were for developing larvae. Larvae of lightning beetles feed upon the eggs of snails and slugs in the soil. When breeding conditions for snails and slugs are good, the eating for lightning beetle larvae will be good. Put another way, a flash from a lightning beetle this season meant lights out for some poor slug last season!

4. DISEASE DIGEST.

A. SITE VISIT TO TCD LOCATION ENLIGHTING. Last week, attendees at the Association of Natural Resources Extension Professionals (ANREP) Conference made a detour on the return trip to Ohio, stopping in Knoxville, Tennessee. In 2010 within one week, Tennessee announced the detection of emerald ash borer and THOUSAND CANKERS DISEASE (TCD) of WALNUT. Double whammy!

The group began their visit at the University of Tennessee Department of Entomology and Plant Pathology touring the labs and getting up to speed on the research being done on the Volunteer's campus. Entomologist, Dr. Jerome Grant; Plant Pathologist, Dr. Mark Windham; Extension Specialist, Elizabeth Long; and several post docs, graduate students, and research assistants shared their knowledge and expertise. We also were taken to the field to see real-life examples of the twig beetle (Pityophthorus juglandis), fungus (Geosmithia morbida) and declining walnuts up close and personal.

TCD occurs in 9 western states, and since 2010 has been found in Tennessee, Virginia, and Pennsylvania. Trapping for the twig beetle is slated to occur in Ohio and other states.

The earliest symptom is yellowing foliage that progresses rapidly to brown wilted foliage, and finally branch mortality. Numerous small cankers can be found just underneath the bark surface, along with evidence of very tiny bark beetles – very tiny exit holes, galleries, and even the beetle themselves. The fungus eventually kills the walnut trees by clogging the vascular system.

If you suspect TCD in Ohio, contact your local county Extension office or the Ohio Department of Agriculture.

B. BLACK SPOT ON ROSES. Some BYGLers have reported that this often very common disease has not been a problem in many areas so far this year. However, Dave Dyke reported that in some areas of southwest Ohio black spot on roses has been a problem. Why the difference? Well, some areas in Dave's neck of the woods have received more rainfall than much of the rest of the state. The fungus causing this disease, Diplocarpon rosae, requires free water for infection to occur. The spores must be wet for at least 7 hours before they can germinate. A temperature of 65F is best for spore germination and the disease develops most rapidly at about 75F. Temperatures of 85F and above inhibit the spread of the disease.
Black spot will cause a general weakening of the plant so that progressively fewer and fewer blooms are formed if the disease is left unchecked. Plants weakened are increasingly subject to winter injury. Infected leaves show black spots especially on the upper leaf surface. The spots can be up to 1/2" in diameter and typically have fringed borders. Yellowing of the leaf begins surrounding the spots and the entire leaf may yellow and eventually drop off.

5. TURF TIPS.

A. TREAT TWICE WITH NEONICS?! Dave Shetlar has kept BYGLers updated on the activities of different turfgrass insect pests and continues to remind us and readers that one needs to keep an eye out for these different pests, especially those that occasionally slip under the radar such as bluegrass billbug. This year, things may be more problematic then in other years with everything being accelerated by the mild winter temperatures and episodes of unseasonably high temperatures in February, March, April, and now May. Even the insects have been accelerated in their growth, development and emergences. To contend with this, turfgrass managers may have been forced to apply soil insecticides (e.g. imidacloprid) earlier than what would be desired for the expected life of the product to target pests in a timely manner. A primary concern now is for imidacloprid applications that were made in late April or early May to manage the activity of black turfgrass ataenius beetles and bluegrass billbugs. These applications may not survive long enough into the season to give satisfactory control of white grubs (e.g. Japanese beetles) in August and September. Thus, these early treatments may need to be followed up with a second application of grub insecticide in June or July to efficiently control grubs to come in late summer. WARNING! Imidacloprid can only be applied once a year. The second application of a grub control product will have to be of a different active ingredient (e.g. clothianidin or thiamethoxam).

6. INDUSTRY INSIGHTS.

A. CUCURBIT DOWNY MILDEW SPORES DETECTED IN EASTERN MICHIGAN. On Saturday, May 26, 2012, Dr. Sally Miller in the Department of Plant Pathology, distributed an email message giving a heads-up regarding cucurbit downy mildew (CDM). While there have been NO reports of the disease in Ohio, Michigan, or Ontario in field cucumbers or melons, spores have been detected in southeastern Michigan. Dr. Mary Hausbeck's lab routinely monitors for airborne CDM and recently detected the spores in Monroe and Frankenmuth counties [http://msue.anr.msu.edu/news/influx_of_cucurbit_downy_mildew_sporangia_detected_in_eastern_michigan/]. The following information was taken from Dr. Miller's email message.

While it is not possible to predict precisely when the disease will occur based on spore counts, previous experience in Michigan suggests that spore detection precedes downy mildew outbreaks. The incubation period for CDM in cucumbers and melons is about 5 days. Ohio cucumber and melon commercial growers in the northern counties should begin fungicide programs to manage the disease as soon as possible.

CDM is a very serious problem, particularly on cucumbers and melons and particularly in northern Ohio. During the past 7 years, CDM has been reported in northern Ohio counties approximately at the end of June. The pathogen causing this disease requires living plants to survive and therefore does not overwinter outside in Ohio. However, cucumbers growing in northern greenhouses are thought to provide a "green bridge" for the CDM pathogen. We do not know if CDM will be detected early this year; disease development depends not only on the presence of spores, but also on environmental conditions. Cool, moist, overcast/cloudy conditions favor the disease.

The CDM pathogen is specific to cucurbits, therefore other downy mildews, such as those on impatiens, grapes, onions, etc. have no effect on cucurbits.
Suggested downy mildew management programs for commercial cucumbers and melons:

*Protection before disease appears: Apply one of the following fungicides on a 7 - 10 day schedule, tank mixed with Bravo, Manzate or Dithane: Presidio, Ranman, Previcur Flex, Tanos, Curzate or Gavel (Gavel already contains mancozeb) - alternating products. The application interval can be lengthened under dry conditions. Use the shorter interval under cool, moist conditions.

*Management after disease appears: Apply one of the following fungicides on a 5 - 7 day schedule, tank mixed with Bravo or Dithane: Presidio, Ranman, Previcur Flex, or Tanos. Alternate products. The application interval can be lengthened under dry conditions. Use the shorter interval under cool, moist conditions. See product labels for fungicide rates.

Note that the fungicides recommended above have different preharvest intervals (PHI). Applicators keep this in mind when fungicides are applied after harvesting begins.

B. POTATO LEAFHOPPERS HERE IN FULL FORCE. The annual migration and distribution of the potato leafhopper (PLH) (Empoasca fabae) into Ohio has occurred in most areas. Curtis Young has reported for the past couple of weeks that he has been seeing the little, apple-green menace in the Lima area, but only a few at a time. This week Curtis reported that numerous PLH adults were congregating around the porch lights of his home. Although PLH will initially migrate toward field and forage crops such as alfalfa, it will also spread into many landscape plants. Of particular interest will be plants in nursery production areas. Plants such as hedge, 'Red Sunset' and 'October Glory' maples can be severely impacted in their growth form and development which may influence their salability. Leaves on these trees can be cupped and new growth stunted.

Growers of nursery stock and landscapers need to be on the lookout for PLH especially on plants still expanding new growth that could be damaged by PLH feeding. Several other tree species that are very susceptible to injury include amur, Norway and sugar maples, birches, apple, chestnut, and Persian walnut. These trees can be injured both in the landscapes and nurseries areas, especially if located near alfalfa production fields.

Insecticide sprays will need to be applied in production areas to prevent reduced plant growth and vigor and to avoid distorted tree shape due to dieback and stunting. Some insecticides that appear to have fairly good activity against the PLH include foliar sprays of imidacloprid, cyfluthrin or a product with a combination of the two (e.g. Discus). Read insecticide labels carefully for application restrictions and potential chemical injury to host plants. Refer to OSU Extension Bulletin 504, "Insect and Mite Control on Woody Ornamentals and Herbaceous Perennials" for further details.

C. 2012 HAMILTON COUNTY AREA EXTENSION RELOADED TOUR - A NEW TWIST. In 2011 Dave Dyke led an Extension Reloaded tour of 3 leading Cincinnati/Indiana area greenhouses and garden centers to observe and learn greenhouse and garden center production and marketing strategies to enable growers to market and produce better plants more efficiently - using less pesticides, labor, and energy. While these tours have been conducted by OSU Extension in the Hamilton County area in collaboration with the Cincinnati Flower Grower Association (CFGA) for more than 5 years, the 2011 tour was especially special, because for the first time, OSU Extension personnel were joined by their colleagues from Purdue, and CFGA members were joined by Indiana growers. Extension personnel participating included horticulturists, plant pathologists, greenhouse engineers, and entomologists, who made joint PowerPoint presentations on what was observed and learned on the tour after dinner at the CFGA meeting held at the last stop on the tour. The tour was so successful that all involved decided that Purdue Extension should reciprocate and organize the tour in 2012.

That tour, to be held in the Indianapolis area, has now been organized. It will be held on Thursday, June 14, and include a tour of 3 Indianapolis area greenhouses, a presentation, "Growers Need Marketing, too!" by Dr. Bridget Behe from Michigan State University, and optional dinner. There is no cost to attend the Extension
Reloaded tour or Educational Sessions. Growers and educators from other states are welcome to attend. Attendees can obtain a brochure, which includes registration materials, from Dave Dyke at [dyke.15@cfaes.osu.edu]. You can confirm your attendance and that of others in your firm by sending an e-mail to Tammy Goodale [tgoodale@purdue.edu]. If you will be having dinner, please send your $15 check payable to Indiana Flower Growers Association for your meal by June 5, 2012 to: Tammy Goodale, Purdue University, 625 Agriculture Mall Dr., West Lafayette, IN 47907.

7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from May 1 - 30, 2012, with the exception of the soil temperatures which are readings from Wednesday, May 30, 2012 at 6:05 p.m.

Tim Malinich reported that the northern portion of Lorain County recently received 2" of rain, where not too far away, only 3/10" was recorded. Randy Zondag mentioned in his report that Perry received 1/4" of precipitation, following 17 days without any rain. Curtis Young chimed in that the Ada area received its first rain in 3 weeks. Rain amounts in the Toledo area ranged from 1/2 - 4" according to Amy Stone. While the rain was a welcome site, it is a general consensus that more is needed.

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<td>Ashtabula</td>
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<td>74.2</td>
<td>52.0</td>
<td>1.26&quot;</td>
<td>3.1&quot;</td>
<td>80.70/82.12</td>
</tr>
<tr>
<td>Wooster</td>
<td>NE</td>
<td>78.2</td>
<td>52.3</td>
<td>2.21&quot;</td>
<td>3.8&quot;</td>
<td>75.57/74.11</td>
</tr>
<tr>
<td>Hoytville</td>
<td>NW</td>
<td>79.5</td>
<td>54.6</td>
<td>2.3&quot;</td>
<td>3.3&quot;</td>
<td>67.87/69.65</td>
</tr>
<tr>
<td>Columbus</td>
<td>Central</td>
<td>81.5</td>
<td>57.7</td>
<td>1.87&quot;</td>
<td>4.2&quot;</td>
<td>73.93/72.48</td>
</tr>
<tr>
<td>Piketon</td>
<td>South</td>
<td>79.5</td>
<td>55.7</td>
<td>5.8&quot;</td>
<td>4.3&quot;</td>
<td>83.10/82.12</td>
</tr>
</tbody>
</table>

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. The first class will be held at Sunset Memorial Park, 7:30 a.m. - 9:00 a.m., on June 7. Pre-registration is required and class size is limited to 30 per class. ODA, ISA and OCNT credits are available. For registration, location and pesticide credit information see: [http://www.onla.org].

B. SOUTHWEST OHIO BYGLIVE! DIAGNOSTIC WALK-ABOUT. The third 2012 Southwest Ohio BYGLive! Diagnostic Walk-About will be held on Monday, June 11, at the Stanley M. Rowe Arboretum, 4600 Muchmore Rd., Indian Hill, 45243. The program will start at 12:00 p.m. and walk-about with our host Chris Daeger looking at plants, plant pests, diseases, and other points of considerable interest until 3:00 p.m.

This monthly hands-on training series for Green Industry professionals provides the following training credits: ISA Certified Arborist CEU’s; ONLA OCNT credits, and Landscape Architecture Continuing Education System (LA CES) CEU’s for Landscape Architects. Visit the following website for more information including registration information as well as driving directions: [http://hamilton.osu.edu/topics/horticulture/byglive-diagnostic-walk-about].

C. PLANT DIAGNOSTIC DILEMMAS UNDONE WORKSHOP. On Wednesday, June 13, 2012 from 10 a.m. - 3:30 p.m. there will be a plant diagnostic workshop held at Secrest Arboretum in Wooster, Ohio. The workshop will highlight the latest and greatest plant maladies and diseases that are afflicting plants throughout
Ohio. As is the tradition of our diagnostic workshops, there will be multiple plant samples to help refine critical diagnostic skills. There will be exploration of findings regarding Imprelis symptoms, discussions of new and emerging diseases in Ohio and samples, samples, samples! Jim Chatfield and Erik Draper will be the instructors for this hands-on, clinical catharsis of plant diseases workshop. Lunch, handouts, snacks and prizes are all included in the $40.00 fee for this workshop. To register for this workshop or to obtain additional information, please contact the Ohio State University Extension, Geauga County at 440-834-4656.

D. 2012 NW OHIO SUMMER SESSION. Save the date for this year's NW Ohio Summer Session for green industry professionals. The event will be held on Wednesday, August 1, 2012 at Owens Community College just south of Toledo, Ohio. The yearly event is kicked off with lunch, followed by concurrent sessions during the afternoon. Registration materials will be available next month.

E. WOODY PLANT ID WORKSHOP AT SECREST ARBORETUM - NOTE: DATE CHANGE!!! On Wednesday, August 8, 2012 from 10:00 a.m. - 3:30 p.m., there will be a woody plant identification class held at Secrest Arboretum in Wooster, Ohio. This workshop will highlight plant identification terms, describe and explain them, and then show these characteristics on plants and samples, common taxonomic terms used in most dichotomous plant identification keys. Jim Chatfield and Erik Draper will be the instructors for this hands-on, samples galore workshop. Lunch, handouts, snacks and prizes are all included in the $40 fee for this workshop. To register for this workshop or to obtain additional information, contact the Ohio State University Extension, Geauga County at 440-834-4656.

F. 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/commmnewapp.html].

9. BYGLOSSOPHY: "As the poet said, "Only God can make a tree" - probably because it's so hard to figure out how to get the bark on." - Woody Allen

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 May 29th conference call: Joe Boggs (Hamilton); Dave Dyke (Hamilton); Julie Crook (Hamilton); Marne Titchenell (School of Environment and Natural Resources); Amy Stone (Lucas); Cindy Meyer (Butler); (Tim Malinich (Erie); Dave Shetlar (Entomology); Nancy Taylor (C. Wayne Ellet Plant and Pest Diagnostic Clinic); 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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