

Wisconsin Horticulture Update Summary June 7, 2013

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WI WEATHER REVIEW

For the week ending June 3, 2013, spring planting dragged on. The warm days in midweek experienced sporadic thunderstorms, and were bracketed by rainy, cool and overcast days on either side. Statewide, topsoil moisture was 35% surplus, compared to 31% surplus the previous week.

Across the reporting stations, average temperatures last week were normal to 4° above normal. Average high temperatures ranged from 71° to 73°, while average low temperatures ranged from 53° to 57°. Precipitation totals ranged from 0.80" in Green Bay to 3.63" in La Crosse. (WI Crop Report)

Growing degree days (GDD)

Growing degree days is an accumulation of maximum and minimum temperature averages as related directly to plant and insect development. This week, the GDD_{mod50} in Wisconsin ranged from 215.0 to 608.3. Following is a list of GDD as of June 7, 2013 for the following cities: Bayfield 215.0, Beloit 608.3 Crandon 333.0, Cumberland 352.3, Dubuque 541.0, Eau Claire 401.4, Fond du Lac 414.3, Green Bay 345.8, La Crosse 449.1, Madison 506.0, Milwaukee 402.5, Wausau 360.5. To determine the GDD of any location in Wisconsin, use the degree day calculator at the UW Extension Ag Weather webpage http://www.soils.wisc.edu/uwex_agwx/thermal_models/degree_days

To put it in perspective, following is an abbreviated list of plant and insect phenological stages in relation to GDD accumulations at which the events occur. Common lilac first bloom 207; common flowering quince full bloom 208; Sargent crabapple first bloom 213; wafaring tree viburnum first bloom 227; **elm leafminer adult emergence 228**; Koreanspice viburnum full bloom 233; eastern redbud full bloom 254; common horsechestnut first bloom 260; **pine needle scale egg hatch 1st generation 277**; Sargent crab full bloom 282; **eastern spruce aldehyd egg hatch 283**; wayfaringtree viburnum full bloom 287; blackhaw viburnum first bloom 301; redosier dogwood first bloom 311; common lilac full bloom 323; **lilac borer adult emergence 324**; Vanhoutte spirea first bloom 329; common horsechestnut full bloom 344; **lesser peach tree borer adult emergence 362**; **oystershell scale egg hatch 363**; blackhaw viburnum full bloom 370 pagoda dogwood first bloom 376; redosier dogwood full bloom 408; Vanhoutte spirea full bloom 429; black locust first bloom 455; pagoda dogwood full bloom 486; smokebush, first bloom 501; common ninebark first bloom 507; arrowwood viburnum first bloom 534; **bronze birch borer adult emergence 547**; black locust full bloom 548; **potato leafhopper adult arrival 568**; **juniper scale egg hatch 571**; common ninebark full bloom 596; arrowwood viburnum full bloom 621; multiflora rose full bloom 643; northern catalpa first bloom 675; **black vine weevil first leaf notching due to adult feeding 677**; Washington hawthorn full bloom 731; **calico scale egg hatch 748**.

INTRODUCTION

The host for today's WHU was Kenosha horticulture educator Barb Larsen. PDDC Director Brian Hudelson, insect diagnostician Phil Pellitteri and UW weed specialist Mark Renz were special guests. Participants in today's discussions were representatives from the following counties: Eau Claire (Erin LaFavre), Kenosha (Barb Larsen), La Crosse (Steve Huntzicker), Pierce/St. Croix (Diana Alfuth), Racine (Patti Nagai), Spooner/Washburn/Sawyer (Kevin Schoessow), Walworth (Chrissy Wen), Winnebago (Kim Miller).

HORTS' SHORTS

Agents report the following issues to be of interest this week: Cold, rainy weather this week has produced lots of morel mushroom in Pierce Co., lush green turf, and a bumper crop of weeds, but not much else. Gardeners and farmers alike are still waiting for warmer growing days. Insect activity has been low, with only gnats, fruit flies and a few mosquitoes being a concern. Leaf diseases are starting to show, especially anthracnose. Gardeners are inquiring about reasons for dying trees and browning evergreens, plant identification, and controlling wildlife damage. In Pierce Co., a grove of red pine reportedly collapsed suddenly. A new emerald ash borer confirmation was made in Kenosha Co.

SPECIALIST REPORT: Plant Diagnostic Disease Clinic

Presented by Brian Hudelson, Sr. Outreach Specialist, UW-Plant Pathology and Director of the UW-Extension Plant Disease Diagnostics Clinic (PDDC) bdh@plantpath.wisc.edu

The PDDC update is attached to the end of this summary. Samples submitted to the clinic included the following:

Golden Canker

Golden canker is a disease of pagoda dogwood (*Cornus alternifolia*). It is a relatively easy disease to diagnose. Branches will turn golden-yellow, often with orange spots embedded in the gold tissue. The orange spots are the fruiting bodies of the fungus, *Cryptodiaporthe corni*, involved in the disease. It tends to go on pagoda dogwoods that have been under stress, and last year's drought certainly would have been a cause. In normal years, pagoda dogwood situated in sunny areas with excessively hot temperatures will often be affected with golden canker.

Golden Canker (UWEX):

http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Golden_Canker_Cryptodiaporthe_Canker.pdf

Verticillium Wilt

The first Verticillium wilt sample of the year, on a Japanese maple, was submitted from Dane Co.

Verticillium Wilt of Trees and Shrubs (UWEX):

http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Verticillium_Wilt_of_Trees_and_Shrubs.pdf

Powdery Mildew

Ninebark with powdery mildew is occurring often this year because the weather conditions have been conducive and ninebark is a very susceptible host.

Powdery Mildew (UWEX):

http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Powdery_Mildew_Woody_Ornamentals.pdf

Root Rots

Root rots were found on samples of Dianthus, apple trees, spruce and pachysandra; the pachysandra also had Volutella blight.

Root and Crown Rots (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Root_and_Crown_Rots.pdf

Volutella Blight (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Volutella_Blight.pdf

Phomopsis Tip Blight

A juniper, probably predisposed to disease by last year's drought, was diagnosed with Phomopsis tip blight. The wet weather this year provides a good environment for Phomopsis to occur.

Phomopsis Tip Blight (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Phomopsis_Tip_Blight.pdf

Sunburn

Plants that have not been acclimated properly are subject to sunburn. This week a ground cherry plant was submitted with sunburn symptoms.

Acclimating Plants Outdoors (UIUC): <http://urbanext.illinois.edu/news/news.cfm?newsid=5580>

Red Pines Collapsing

Q. Three different residents of a subdivision called about red pine in a 35-year-old old pine plantation dying suddenly. There are thousands of pine in the plantation, and hundreds turned brown and collapsed within a week. The subdivision is 20 years old and the lots are two-acre in size. In Pierce Co., last year's drought had not been as bad as in the rest of the state; we had rain until July, after which it was very dry. I have suggested it was probably due to a combination of things, including late season drought, but they are not accepting that. Neither bark beetles nor Armillaria would act so quickly, would they?

A. Drought, girdling roots, construction damage, water competition from closely planted trees, or other stresses negatively influencing water movement in the trees would be just some factors to look at. Even if there were rain in

the early part of the summer, it is often misjudged how much water conifers need require in fall. Last year, forestry specialists saw pines dying within a week or two due to the drought.

If white pines were planted in the plantation, and gooseberries or currants were planted nearby, white pine blister rust could be an added stress.

Armillaria could have been already been there and worsened with other stresses. Even a mini-drought could open a window for that fungus to infect, if it were around. Once the environmental conditions improve, the trees could keep it at bay, but the infection remains there, and when trees go into stress again, it provides another opportunity for the fungus to colonize more. It may be a step-wise decline associated with stress.

One of the most spectacular *Armillaria* infections I ever saw was in Winnebago county, where homeowners built a home on an old rest stop area. They had dug a trench between the house and an old well, severing roots during the process. When I visited it, there was a lawn of *Armillaria* fruiting mushroom, the honey mushroom.

Red pines are also susceptible to annosum root rot. Annosum would have already been established in the area, probably for quite awhile, not something that would suddenly infect. In combination with water stress last year, it could have lead to the collapse of the trees. Annosum is a Basidiomycetes fungus that forms conks as fruiting bodies. Signs of mushrooms, especially shelf fungi forming on or near the trees, could help determine if that disease is present. Send samples to the Clinic for identification. The WDNR does a fair amount of testing for annosum root rot and have the expertise to test for that disease if it is suspected. I can refer your clients to contacts there.

Armillaria Root Rot (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Armillaria_Root_Disease.pdf

Annosum Root Rot (WDNR): <http://dnr.wi.gov/topic/ForestHealth/AnnosumRootRot.html>

White Pine Blister Rust (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/White_Pine_Blister_Rust.pdf

Fascinating Fasciation with Aster Yellows

Q. A client sent photos of asparagus that were very low to the ground and curled; what could cause that?

A. Check to see if the stems are flattened. If there is a lot of distortion, and exhibit flattened stems, they may have been infected with aster yellow phytoplasma last year and this is a carryover. Aster yellows will cause fasciation, or flattened stems. If other plants in the vicinity were distorted, I would suspect herbicide drift.

Last year was a great year for aster yellow. Patti Nagai sent a fascinating picture of fasciation on asparagus from her sister's yard last year. The stems were almost 3" wide; it did a pigtail in a full circle and grew straight up. The problem with leaving up any plants with aster yellows is they could be a source of phytoplasma for leafhoppers to spread to other plants in the yard.

Aster yellows can cause a few symptoms:

- Widening and flattening of stems, or fasciation
- Overproduction of lateral buds, or brooming
- Yellowing of the plant
- Colored flowers that are green and leafy, particularly on coneflowers
- Secondary flower production in center of cones that are leafy and green

Aster Yellows (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Aster_Yellows.pdf

Wilt or Drought?

Q. I have photos of two large trees, a redbud and magnolia, both multi-trunked, with only little bits of side sprouts trying to emerge. At first I thought it was due to Verticillium, but perhaps it is due to stress. Are you seeing a lot of Verticillium on ornamental trees?

A. Only one sample of Verticillium wilt has been submitted so far. We usually see quite a bit every year. The trees could have a combination of stress and *Verticillium*. Verticillium wilt does not necessarily kill a tree quickly, but with drought stress, it could cause the collapse of the tree; usually a fatal disease, it would not likely resprout. Although both redbud and magnolia are very susceptible to *Verticillium*, if the new sprouts do not die back, they could have

been suffering from other stress. It would be worth testing to see if there is any *Verticillium*, but if the clients decide not to do that, it may be best to assume it is *Verticillium* wilt for the purposes of replanting.

Verticillium Wilt of Trees and Shrubs (UWEX):

http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Verticillium_Wilt_of_Trees_and_Shrubs.pdf

SPECIALIST REPORT: Insect Diagnostic Lab Update

Presented by Phil Pellitteri, Distinguished Faculty Associate, UW-Madison Department of Entomology and Director, UW-Extension Insect Diagnostic Lab pellitte@entomology.wisc.edu

Insect issues this week included the following:

Biters

There have been numerous calls about ticks, blackflies and things that bite indoors, but otherwise it has been quiet.

Aphids

There have not been many calls about aphids, but there is more activity from them than assumed. Cool springs tend to have more aphid activity because their predators are not out yet. There have been a good number of soybean aphids in agriculture settings. When the temperatures warm up, the good guys will take care of them.

Aphids (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Aphids.pdf

European Pine Sawfly

Another pest that is out but not being noticed is the European pine sawfly. It has been causing damage on pines.

European Pine Sawfly (UWEX): <http://www.entomology.wisc.edu/diaglab/pdfs/landscape/Eurpean%20pine%20saw.pdf>

Red Pine Decline

Regarding the earlier discussion on the collapse of red pine in the pine plantation, bark beetles may cause conifers problems this year, but they usually cause a slower decline. They do not cause an overnight collapse. There is a syndrome, red pine decline, that is not totally understood. It often hits trees in that age class, but it would be a slow decline, not as portrayed in the earlier discussion.

Association of Declining Pine Stands with Reduced Populations of Bark Beetles, Seasonal Increases in Root Colonizing Insects and Incidence of Root Pathogens (UW):

<http://www.entomology.wisc.edu/raffa/Research/AllPubs/Root%20Herbivores%20Native%20Invasive/Conifer%20Native>

Tick Controls

Q. A client wrote she has a yard full of ticks that are biting her dog. She would like to know if there are any non-chemical, or natural controls she can use on her dog.

A. She can hand-pick the ticks off the dog, cut the lawn very short because ticks don't do well in sunny environments, or restrict where the dog runs. If she is looking for a non-synthetic repellent, there are not any effective ones to protect the dog. The potential of acquiring some of the diseases may out-weigh the sensitivities the dog may have to the traditional tick medications. Dogs don't get the complications people get from Lyme disease, and the percentage of dogs getting the disease is less, but otherwise they don't handle it much better than people do.

Wisconsin Ticks and Tick-Borne Diseases on Pets (UW): <http://labs.russell.wisc.edu/wisconsin-ticks/on-pets/>

Q. A Christmas tree grower who does not use pesticides has aphids on the new growth on firs. They want to use organic options to control the aphids and are concerned about using pesticides and encouraging spider mites. Is insecticidal soap the best control option? They also asked about neem oil or Jerry Baker's nicotine recipe.

A. It is possible they may have missed the best window of time for treatment of the balsam twig aphid. That insect can cause a twisting and crippling of new growth, a cosmetic problem unless they intended to sell the trees this year. It is most aggressive after budbreak when the needles are plastered together. Insecticidal soap is the only product I would recommend. It would be very surprising if spider mites were a threat the way the weather is now; they like it hot and dry.

Neem, whether it is the purified azadirachta or some organic mixture, does not seem to be outstanding as an aphid killer. It is worth trying but may not be as effective as soap.

Nicotine was great for killing aphids, but is not recommended. Nicotine insecticide products have been pulled off the market. Just because it is a natural product does not mean it is safe.

Balsam Twig Aphid (UMN): <http://www.entomology.umn.edu/cues/Web/073BalsamTwigAphid.pdf>

SPECIAL REPORT: Weed and Invasive Plant Update

Presented by Mark Renz, UW-Extension Weed Scientist mrenz@wisc.edu

This discussion was accompanied by a powerpoint presentation found at: <http://labs.russell.wisc.edu/pddc/files/2013/06/RENZWHU2013Full.pdf>

It has been a unique year for weeds. Some of them are having much more of a presence this year due to bare spots in lawns and native areas. Some of the impacts seen in 2013 may continue in the future.

One of the best resources for the management of weeds and invasive plants is on the weed science website. It has a very good search engine to find information of brush management, CRP management, invasive plant management and agricultural weed management.

An invasive plant is a non-native plant that persists and spreads and causes some type of harm, whether economic or environmental. Native plants may be weedy, like the boxelder or aspen, but they are not considered invasive.

There is an invasive species rule in Wisconsin, NR40. There are over seventy plants and many other species listed as prohibited or restricted. Prohibited species are ones that exist in only very small populations or not all and will require management if they are found on anyone's property. Restricted species are legal to be on a property because they are already too widespread to be eradicated, but it is illegal for propagule seed or roots to be spread off infested areas. The Wisconsin DNR has more information on NR40.

NR40 has been effect for about three years, but the DNR is still educating people that the rule exists. At the same time, it is being updated. There are a number of species of common horticultural plants that are being proposed for regulation; two common ones are crown-vetch and specific varieties of Japanese barberry. The process is occurring now, with proposed recommendations going to a public comment period during which DNR staff will take comments into account and make revised recommendations. Those revised recommendations will be submitted for final approval to the natural resources board and governor in fall, 2014.

To effectively prevent the adverse impact of invasive plants, there are two main goals. The first is to avoid any establishment by preventing plants from entering the country or the state; federal and state programs are involved in those programs. The second is to detect and eradicate invasive plants before they become well-established.

With an early detection and rapid response program, the second goal can be met by increasing the understanding of where species currently exist so they can be prevented from establishing. For instance, current information would suggest Phragmites is found in southeast and northeast Wisconsin, as well as in Minnesota, with nothing in central Wisconsin. But that is not accurate information, because of other locations not being reported. Without accurate location information, local groups interested in preventing the plant from getting established are hindered.

Collecting new data on species location, and sharing information with other groups, are two goals of the Great Lakes Early Detection Network (GLEDN). That group promotes the contribution and sharing of information on locations, and acts as a central repository for location information.

The Network's website has been designed for ease of use and accuracy. To report a sighting, it will ask for the species and go to an interactive mode, placing a pin on the location, and asking for specific location information. Photos are capable of being located; they are very important because every observation must be verified by experts. If desired, the user can request to be notified by email if their observation was accurately identified.

There will be an option for anyone interested to register free with GLEDN to look at distribution maps and be placed on a weed alert system. The weed alert system will notify when a new plant comes in an area; that information should facilitate early detection and rapid response.

A mobile app is available for iPhone, iPad and Android systems, allowing users to report invasive species. If a user is out of network, the information is stored until they are back in network for uploading. The app, which is password

protected, is available through a GLEDN link but also through the app stores. Groups interested in using this app can contact us for training.

All data entered through the website or smartphone app will be verified by experts. If no image accompanies the report, someone will be sent out to verify the report; this is one reason a large number of verifiers is needed across the state. Master Gardeners or other interested individuals or groups may serve as verifiers. Verifiers may request to work in a certain geographic area and/or with certain species of plants with which they are comfortable.

Registered members may view the distribution of species, and sign up for the alert system to find out when new sightings in the area occur. This may be very helpful for detection and eradication efforts, making it a powerful resource. But one does not have to be a registered user to observe. If someone does not want a location to be known, it should not be entered. Once data is collected, the information will be public.

The data collected creates predictive models for where invasive plants may potentially spread. It will be able to indicate probabilities of areas susceptible for invasion, dependent on the habitat. Models are created on 30m grids, offering significant detail for land managers to view.

More invasive plant information is available on the weed science website in the form of identification videos. Currently there is information on eighteen plants, including uncommon ones like hill mustard, Japanese hedge parsley and poison hemlock. Each video lasts about three minutes, pointing to the plant and key characteristics.

Factsheets are now available. Professionally designed, the eighteen factsheets are available for downloading through the weed science website or for purchase from the learning store. The highly detailed information gives specifics on control methods, particularly herbicides, rates and timing. Included is information on highly advanced control methods that may not be applicable for every user.

Data used in the factsheets are also arranged in a searchable database on the Midwest Invasive Plant Network website. Users can specify whether they are novices or not, and then look for specific management techniques. For instance, a user classifying herself as a novice will not be informed of advanced burning techniques or advanced herbicides.

A First Detector Network is being developed for Wisconsin. The goal is to train a network of volunteers from Master Gardeners to citizen scientists on the key aspects of invasive species and techniques to detect them, to assist federal, state and local agencies. With general knowledge on invasive species and distribution, these individuals may do some monitoring on their own as well. Meeting with stakeholders now, the program will be developed this summer, with the first training scheduled for winter, 2013. Plans are for online training, conferences, yearly gatherings, awards, etc. Next summer, on site training and field days are potential plans for county agents. If any group is interested in participating in the First Detector Network, contact Mark Renz or Mike Maddox.

In the Weed Science lab, there are quite a few invasive plant projects being worked on. Documenting the invasiveness of ornamental plants; developing a video to show some plants that are invading our forests (with a release date this month); composting seeds of invasive plant to inactivate them, in particular buckthorn and garlic mustard; developing predictive maps for invasive plant spread; determining the impacts of Canada thistle on prairie establishment; and considering the effectiveness of herbicides on Japanese knotweed, sweet clovers and crown vetch.

Apps: <http://apps.bugwood.org/mobile/gledn.html>

DNR Invasive Species: <http://invasivespecies.wi.gov>

DNR Invasive Species Classification: <http://dnr.wi.gov/invasives/classification/>

GLEDN: www.gledn.org

Learning Store: <http://learningstore.uwex.edu>

Midwest Invasive Plant Network: <http://mipncontroldatabase.wisc.edu>

UW Weed Science: <http://fyi.uwex.edu/weedsci>

General Control of Broadleaf Weeds

Q. What is your suggestion for professionals who wish to control broadleaf weeds in a lawn?

A. For specific questions, ask Doug Soldat or Chris Williamson, but in general, any of the broadleaf turf herbicides should work if the weeds are managed when they are small. Usually a general 3-way combination 2,4-D, MCPA, or MCPP and Dicamba should work.

The challenge is what to do with the bare spots. Usually it requires a wait time before reseeding after spraying with these herbicides, often three to four weeks. Check labels for details.

Lawn Weed Prevention and Control (UWEX): <http://learningstore.uwex.edu/Assets/pdfs/A1990.pdf>

Covered in Clover

Q. There is an abundance of clover in Racine; patches are ten feet wide in places. I had been told this was associated with low nitrogen fertility but we are seeing it both on lawns that are highly maintained and those that are not. Is this weather related because of cool soils this year?

A. In pastures, clover was heavier than in previous years. We believed it was due to tough years of over-grazing, leaving bare spots that facilitated germination and growth of clover species.

2012 had a big impact on lawns. In the lower southeast part of the state, there may not have been as much thatch and open layers of turf may have facilitated the germination of clover. Depending on the clover species, many do not become very productive until later on, months after they germinate, so plants that germinated last year could be just showing their productivity now. When lawns are very stressed, as happened last year, clover can get a foothold, making their own nitrogen no matter how limiting the conditions are. Adding nitrogen to turf to hurt clover is a misconception; nitrogen helps the turf thicken but it isn't a disadvantage to clover.

Clover seed is everywhere in the state. With some of the hot days of summer, even with irrigation, the grass could not keep up and would shut down for a month, just long enough for clover to get established. Now they are expressing themselves and being productive.

For management, fall is the best time for control, but perennial weeds can be knocked back in spring, monitored during summer, and hit hard in fall. A general 3-way weed herbicide should work, making applications when it is growing actively, and a little later in the season. Expect about one to two months of control now.

Lawn Weed Prevention and Control (UWEX): <http://learningstore.uwex.edu/Assets/pdfs/A1990.pdf>

Pesky Broadleaf Weeds flowering in Turf (MSU):

http://msue.anr.msu.edu/news/pesky_broadleaf_weeds_flowering_in_turf?utm_source=Turf+%26+Landscape+-+MSU+Extension+News+-+6-7-13&utm_campaign=Turf+%26+Landscape+6-7-13&utm_medium=email

Tricky Thistle

Q. In the southern part of the state, thistles are really booming. Is that due to weather or something else? Can you make recommendations for management and control?

A. Canada thistle is a unique plant. It does tend to have boom and bust cycles, but we are not quite sure why. In the south it was very dry the last half of 2011 and all of 2012, creating open areas and allowing Canada thistle to flourish. Canada thistle has very deep taproots so when shallow plants struggle, they do not. Sometimes, though, Canada thistle populations just decline. In one research plot, there was 30-40% thistle cover in 2011, but only 1-2% in 2012; this year it is up to 30%. We don't really understand its population dynamics.

There are some diseases that knock back Canada thistle. White tips, or PST, is a bacterial infection, and there are fungi associated with Canada thistle too. All require moist/wet conditions to facilitate their spread like we are seeing this year. White tips is evident in roadside populations now so we may be getting good dissemination of some of those diseases.

Control is a challenge. There are herbicides that work very well but are not regulated for residential landscapes because they persist through the composting process. The weed factsheet goes through various management options, but herbicides give the best results. Timing for herbicides are when they are at flowerbud stage just before opening; or mow the plants and spray fall rosettes in September to October. In garden settings they can be sprayed as late as November, offering injury to the shoots, but it is tricky in flowerbeds.

Canada thistle (UWEX):

<https://docs.google.com/viewer?url=http%3A%2F%2Flearningstore.uwex.edu%2FAssets%2Fpdfs%2FA3924-04.pdf>

ANNOUNCEMENTS

A Tweet Away

A new Twitter account exists for the PDDC. Stay on top of the news for WHU notices and Garden Factsheet releases at @UWPDDC

Calling All Turf Rusts

Turf pathology researcher Paul Koch is looking for as many turf rust samples as possible. He is studying the genetic variability in the rust pathogen. To find out more about the project and submissions see the webpage: <http://www.tdl.wisc.edu/RustResearch.php>

FINAL NOTES

The full audio podcast of today's and archived WHU conferences can be found at <http://fyi.uwex.edu/wihortupdate/>

UW LINKS

Wisconsin Horticulture webpage <http://hort.uwex.edu>

UW Plant Disease Diagnostics webpage <http://labs.russell.wisc.edu/pddc/>

UW Insect Diagnostic Lab <http://www.entomology.wisc.edu/diaglab/>

UW Turfgrass Science <http://turf.wisc.edu/>

UW Vegetable Pathology Webpage <http://www.plantpath.wisc.edu/wivegdis/>

UW Vegetable Entomology Webpage <http://www.entomology.wisc.edu/vegento/people/groves.html#>

UW-Extension Weed Science <http://turf.wisc.edu/>

UW-Extension Learning Store <http://learningstore.uwex.edu>

UW Garden Facts <http://labs.russell.wisc.edu/pddc/fact-sheet-listing/>

WHU “OFF THE AIR”

During this past week specialists have commented on these issues off the air:

New Garden Factsheet

A new Garden Factsheet on White Grubs in Christmas Trees was made available this week. It can be found on the PDDC website as well as through the Wisconsin Horticulture website.

PDDC: http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/White_Grubs_on_Christmas_Trees.pdf

WIhort: <http://hort.uwex.edu/articles/white-grubs-christmas-trees>

Vegetable Updates

Vegetable Newsletter #7 addresses the following topics:

- DSVs/Blitecast for late blight management
- PDays for early blight management
- Basil downy mildew
- Carrot foliar disease control considerations
- Insect pest updates: seed maggots, aster leafhoppers, potato leafhoppers, onion thrips, soybean aphids

Supplemental Newsletter #1 and 2013 Updated Potato Blight Fungicide List

Both newsletters may be found at: <http://www.plantpath.wisc.edu/wivegdis/>

PDDC UPDATE

UW-Extension/Madison Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, and Erin DeWinter, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from June 1, 2013 through June 7, 2013.

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
BROAD-LEAVED WOODY ORNAMENTALS			
Boxwood	Root Rot	<i>Pythium</i> sp.	Walworth
Dogwood (Pagoda)	Golden Canker	<i>Cryptodiaporthe corni</i>	La Crosse
Maple (Japanese)	Verticillium Wilt	<i>Verticillium</i> sp.	Dane
Maple (Unidentified)	Cytospora Canker	<i>Cytospora</i> sp.	Marquette
Ninebark (Unidentified)	Powdery Mildew	<i>Oidium</i> sp.	La Crosse
Pachysandra	Root/Crown Rot	<i>Pythium</i> sp.	Dane
	Volutella Blight	<i>Volutella pachysandricola</i>	Dane
FRUIT CROPS			
Apple ('Gala')	Root/Crown Rot	<i>Phytophthora</i> sp.	Calumet
HERBACEOUS ORNAMENTALS			
Dianthus	Root Rot	<i>Pythium</i> sp.	Adams
NEEDED WOODY ORNAMENTALS			
Douglas-Fir	Water Stress	None	Dane
Juniper	Phomopsis Tip Blight	<i>Phomopsis juniperovora</i>	La Crosse
Spruce (Unidentified)	Rhizosphaera Needle Cast	<i>Rhizosphaera kalkhoffii</i>	Dane
	Root Rot	<i>Pythium</i> sp., <i>Fusarium</i> sp., <i>Cylindrocarpon</i> sp.	Walworth
VEGETABLES			
Ground Cherry	Chemical Burn	None	Dane
	Sunburn	None	Dane

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.