

Wisconsin Horticulture Update Summary, August 9, 2013

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WI WEATHER REVIEW

For the week ending August 4, 2013, temperatures were unusually cool and precipitation was light. Topsoil moisture was down, with 44% short to very short for the week, compared to 34% the previous week. The weather station in Eau Claire reported the second driest July ever recorded there, with 0.64" precipitation total for the month; the record stands at 0.12" for July 1936. In spite of this, total precipitation for the year to date remains the third highest on record for the Eau Claire reporting station.

Across the reporting stations, average temperatures last week were 5° to 7° below normal. Average high temperatures ranged from 75° to 79°, while average low temperatures ranged from 53° to 60°. Precipitation totals ranged from 0.02" in La Crosse to 0.73" in Milwaukee. (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 1271.8 to 1949.4. Following is a list of GDD as of Aug. 9, 2013 for the following cities: Bayfield 1271.8, Beloit 1949.4, Crandon 1271.8, Cumberland 1432.9, Dubuque 1833.2, Eau Claire 1615.5, Fond du Lac 1565.0, Green Bay 1042.9, La Crosse 1732.3, Madison 1774.9, Milwaukee 1537.7, Wausau 1389.8. 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**; **greater peach tree borer adult emergence 775**; northern catalpa full bloom 816; **cottony maple scale egg hatch 851**; panicle hydrangea first bloom 856; **fall webworm egg hatch 867**; fuzzy deutzia full bloom 884; **winged euonymus scale egg hatch 892**; chickory full bloom, **squash vine borer adult emergence 900**; **Japanese beetle first emergence 970**; littleleaf linden full bloom 1117; Rose-of-Sharon first bloom 1347; **pine needle scale egg hatch, 2nd gen. 1923**; **magnolia scale egg hatch 1938**; **banded ash clearwing borer adult emergence 2195**.

INTRODUCTION

The host for today's WHU was Racine Horticulture Educator Patti Nagai. PDDC Director Brian Hudelson, Insect Lab Director Phil Pellitteri and "Plants + People" Coordinator Patti Nagai were special guests. Participants in today's discussions were representatives from the following counties: Brown (Vijai Pandian), Burnett/Washburn/Sawyer (Kevin Schoessow), Columbia (George Koepf), Fond du Lac (Mike Rankin), La Crosse (Steve Huntzicker), Marinette/Oconto/Florence (Scott Reuss), Outagamie (Jill Botvinik), Portage (Sophie Demchik), Racine (Patti Nagai), Rock (Christy Marsden), Walworth (Chrissy Wen), and Waukesha (Kristin Krokowski).

HORTS' SHORTS

Agents report the following issues to be of interest this week. Weather conditions around the state have been varied, with drought in the west, violent storms in central and east, and scattered rain in the southeast. Growing degree days continued to lag behind normal in most of the state.

Observations covered a wide array of problems and issues. In droughty areas, lawns were starting to brown and gardens required supplemental watering. Storms took down trees in Portage, Outagamie and Brown counties. Other tree problems included oaks showing stress from last year's drought in Waukesha; ash declining in large numbers in Walworth; tar spot showing on maple in Fond du Lac; oak wilt suspected in Portage; and maple bark falling off in Fond du Lac.

Squash vine borer, corn rootworm, corn earworm, and powdery mildew on cucurbits were some of the problems reported on vegetables. Tomatoes were having a tough time throughout the state, with evidence of early blight, Septoria leaf spot, and other disorders. Late blight (race 23) was detected on tomatoes in Racine and Brown Counties.

Fruit crops were not without problems, as Spotted Wing Drosophila was found in raspberry in La Crosse County, scab was seen on apple and/or pear in Waukesha and La Crosse, and raspberry borer and peach leaf curl were observed in Outagamie.

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.

Plant Disease Update

Oak Wilt remained quite active, with eight samples testing positive this week, bringing the seasonal total to twenty-one.

A blueberry with distinctive red rings was diagnosed with **red ringspot virus**.

An interesting tomato sample came in having bizarre distorted fruit bulging at the sides, distorted growth of leaves, and leathery leaves. An initial virus test for five common viruses came out negative; the client refused further virus testing that would have been very expensive.

Late blight was detected on tomato in Racine and Brown Counties this week.

Spruce trees continued to have problems; this week **Rhizosphaera** and **Diplodia** pathogens were found in samples.

There were a number of samples with **herbicide injuries** this week. A catalpa presented distorted leaf growth likely due to a glyphosate application made around the base of the plant with possible absorption through the roots or bark. A hickory exhibiting brooming on one side of the tree, probably due to an Imprelis® application made 50' away from the affected side of the tree two years ago. A grape sample came in with fan-shaped and fringed-edged leaves and very distinctive veins, most probably due to growth-regulating herbicides.

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

Scouting Your Fields for Blueberry Red Ringspot Virus (NCSU):

<http://www.smallfruits.org/Blueberries/pestinformation/2008/BRRVscoutingguide26feb08.pdf>

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

Rhizosphaera Needle Cast (UWEX):

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

Diplodia Shoot Blight and Canker (UWEX):

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

Herbicide Damage (UWEX): http://labs.russell.wisc.edu/pddc/files/Fact_Sheets/FC_PDF/Herbicide_Damage.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 Update

This week **strawberry root weevil** and **imported longhorn root weevil** were becoming nuisances, migrating into houses.

Bird mite activity was high this week. Bird mite bites can leaving nasty welts on the skin. Because they are very small they are often overlooked as culprits for skin irritation. If bird mites are found entering the house, look for the source, usually a bird nest near the house, and remove it. Advise clients who have this concern not to use birdmite.com as a credible source of information; it is a source of certain information with no scientific validity.

Spiders are becoming more numerous, especially the large, colorful orb weavers. They are not problematic insects.

Wasp populations, normally higher this time of year, are getting attention now. Yellow jacket numbers seem to be lower because of the cool and wet summer.

Phil Brock, a resident of Madison, has been keeping track of **Japanese beetle** populations since their onset in the area and has found statistically the numbers to be 1/30th of the numbers at their peak ten years ago. This is likely due to both last year's drought and the long-standing population's normal decline.

Insect ID (UWEX): <http://www.entomology.wisc.edu/insectid/beetle.php>

Controlling Nuisance Weevils (UWEX): <http://richland.uwex.edu/files/2012/08/Nuisance-weevils.pdf>

Bird Mites (PSU): <http://ento.psu.edu/extension/factsheets/bird-mites>

Common Spiders in and around the House(UWEX): <http://learningstore.uwex.edu/Assets/pdfs/A2135.pdf>

The Gatecrasher in the Loud Yellow and Black Suit (WDNR): <http://learningstore.uwex.edu/Assets/pdfs/A2135.pdf>

Insect Questions

Grub ID

I received a grub sample, approximately 1" long, from a landscaped area. Looking at the rastral pattern (hair pattern on the tail section), there are no zipper-shaped or v-shaped hairs suggestive of the white grub or Japanese beetle grub type. Could it be a grub of the masked chafer beetle?

Two weeks ago the first sample of the European masked chafer beetle was found in the state. An annual grub, these chafer adults are emerging now, so grubs would not be expected.

There are hundreds of scarab species with subtle differences among the grubs. About half of them would be normally found in decaying matter. Your sample most probably is a grub breaking down leaf litter or mulch and would not be a problem, but a sample could be sent to me for positive identification.

Identifying White Grubs (MSU): <http://www.fs.fed.us/outernet/r6/nr/fid/fidls/fidl-55.pdf>

Red Turpentine Beetle

A nurseryman had a question about Eastern white pine. Pitch was evident low on the trunk, but he could not find any insects. He questioned what borers might cause this.

It seems to be the classic symptoms of the red turpentine beetle. One of the bark beetles, it is larger than the ips beetle, and is notorious for entering low on the trunk and creating pitch tubes. It may be a sign that the trees are fighting back and the beetles are not getting established.

Red Turpentine Beetle (USDA): <http://www.fs.fed.us/outernet/r6/nr/fid/fidls/fidl-55.pdf>

SPECIAL TOPIC: People + Plants

Presented by Patti Nagai, Horticulture Educator, Racine Co., Project Leader of People + Plants patricia.nagai@ces.uwex.edu

The People+Plants project has been a joint effort among Patti Nagai, Mike Maddox, Kristine Zaballos, the UW-Extension Horticulture team, and the UW-Extension publication department, to produce much needed resource materials for communities and individuals interested in starting and maintaining community gardens across the state.

Resources available

Twelve publications were produced on various aspects of community gardening. These publication will be found on the UW-Extension Learning Store and People + Plants websites as they are finalized:

- Community Gardens—Where People and Plants Come Together
- Starting a Community Garden—How to Put Your Plot on the Path to Success
- Soil Contaminants in Community Gardens
- Raised Beds and Containers for Community Gardens
- A Year in the Life of a Community Garden
- Common Crops for Community Gardens
- Common Crops for Community Gardens (Español)
- Youth Gardening
- Chemical-free Community Gardening (may have a title change)
- Food Safety in Harvesting

- Common Crop Posters (print material in poster format)
- Harvesting Vegetables Safely
- Handling and Storing Vegetables Safely

Two videos were produced and are now available on the People + Plants website:

- Site Considerations
- Raised Beds and Container Gardens

Five short videos, in the process of completion, explain how to build, maintain and make the best use of a community garden; how to look for powdery mildew; what to do about Japanese beetle; how to get water; and the difference between cool season and warm season plants.

Community Gardens Roadshow 2014

The People + Plants team has proposed taking community garden education “on the road” in a statewide project for 2014. For the Community Gardens Roadshow 2014, the definition of community gardens will be very broad, encompassing all types of gardens found throughout the state such as, but not limited to, youth, rental plot, pantry, sensory, fragrance, vegetable, church, and therapeutic gardens.

Horticulture educators around the state were asked if they would be interested in hosting or presenting workshops in their areas for their community gardens partners. An opportunity for multi-county collaborations, the workshops could be offered in central locations accessible to the targeted audiences.

Entertaining such topics as How to Start a Community Garden, How to Maintain a Community Garden, and Growing Techniques, educators were asked to solicit presentation ideas that would attract and interest groups of twenty-five to one-hundred participants in their areas.

A scheduling goal for the Community Gardens Roadshow 2014 is to have topics selected and sites determined by October.

UW-Extension horticulture/agriculture educators already indicating an interest in hosting or presenting a workshop included Bill Halfman (Monroe Co.), Barb Larsen (Kenosha Co.), Chrissy Wen (Walworth Co.), Patti Nagai (Racine Co.), Ann Weid and Kristin Krokowski (Waukesha Co.), Jane Anklum (Douglas Co.), Kevin Shoessow (Burnett, Sawyer, Washburn Cos.) and Christy Marsden (Rock Co.). UW-Extension Nutrition, 4-H, Family Living and other educators and groups involved with community gardens will be invited to participate in the community gardens survey and Roadshow project.

Some themes of interest entertained for the Community Gardens Roadshow were school gardens, church gardens, urban gardens and housing authority gardens.

Contact Patti Nagai with ideas and questions for the Community Gardens Roadshow 2014.

People + Plants: <http://fyi.uwex.edu/peopleplants/>

GENERAL QUESTIONS

Loose Maple Bark

In Fond du Lac Co., 6” to 10” diameter maples have been losing their bark. Three clients have come to the office recently with this problem. Is anyone else seeing this? What might be the cause?

It has been also been observed in Columbia Co.

In Brown Co., we had a few weeks of mysterious maple decline earlier in the season. Mature maples would lose large branches and younger trees would suddenly collapse. Samples sent to the disease clinic found no indication of disease. Girdling roots did not seem to be the culprit, as they would cause trees to decline slowly.

Some thoughts were that the drought of 2012 stressed the trees and made them more vulnerable to winter injuries; and that the heat and drought of 2012 may have caused physiological changes to the water conduction vessels rendering them less capable of handling high water capacity this wet spring.

Cracks in Barks of Maple (Morton Arb June 2013): http://www.mortonarb.org/images/stories/phcr/9_June_14.pdf

Split Happens (OSU): http://buckeyeturf.osu.edu/index.php?option=com_content&view=article&id=1008&catid=1:latest-news&Itemid=170

ANNOUNCEMENTS

August 17: West Madison Hort Field Day, 10 AM – 2 PM

August 20: Annual Twilight Garden Tour, Spooner Agriculture Research Station. Demonstrations, music, and speakers including Erin Silva, and Brian Smith. <http://ars.wisc.edu/spooner/Programs.php?ID=63624&PAGE=>

August 20 – 22: Diagnosing Tree/Shrub Diseases & Pests Workshops sponsored by Winnebago, Outagamie and Brown Co. UW -Extensions. http://winnebago.uwex.edu/files/2010/05/2013-Insect_Disease-Brochure.pdf

FINAL NOTES

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

Next week, the Wisconsin Horticulture Update host will be Mike Rankin. The special topic will be fruits, presented by Brian Smith.

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:

Vegetable Crop Updates

Vegetable Crop Update #15

Topics covered in the Aug. 7 issue are:

- Late blight updates (additional counties with confirmed late blight: Brown and Langlade)
- Continued and enhanced scouting and fungicide application is necessary for late blight control in WI
- DSVs and Blitecast for late blight management
- PDays for early blight management
- Cucurbit downy mildew updates and management
- Spotted Wing Drosophila insect alert for fruit

Disease Supplement #6

The 6th supplement was issued on Aug. 9.

Additional counties with confirmed late blight in WI were identified. Genotypes of recent submissions from Racine, Waushara, and Portage Counties have all been US-23. See attached for summary and access to management information. Also, please note that on Monday August 12, 2013, UW West Madison Ag Research Station will be hosting the Organic Vegetable Field Day - details on page 2 of supplement. Contact Dr. Erin Silva (emsilva@wisc.edu) for further information.

Disease Supplement #7

The 7th supplement was issued on Aug. 9

Supplement 7 provides some clarity on label allowances of chlorothalonil and mefenoxam/metalaxyl fungicides for potato disease control in conventional systems.

Vegetable Crop Update #15 and Supplement #6 may be found at: <http://www.plantpath.wisc.edu/wivegdis/>

EAB Update

Winnebago County To Be Quarantined for EAB

Contact: Donna Gilson, 608-224-5130, donna.gilson@wi.gov or Jim Dick, Communications Director, 608-224-5020, jim.dick@wi.gov

MADISON – Emerald ash borer has been found for the first time in Winnebago County, and the county will join 18 others on the quarantine list in Wisconsin.

The tree-killing pest was found in the yard of a private home in the Town of Black Wolf on Aug. 1. A University of Wisconsin-Extension Service staff member in Winnebago County noticed signs of EAB damage, and notified the local forester with the Department of Natural Resources. The forester collected a larva, or immature EAB, at the site. The Wisconsin Department of Agriculture, Trade and Consumer Protection provided initial identification, and the U.S. Department of Agriculture gave final confirmation Aug. 6.

The quarantine will apply to all of Winnebago County. It prohibits wood products from being moved out of the county to areas that are not infested.

For private citizens, this means that they cannot take firewood from Winnebago County to non-quarantine counties. For businesses handling wood products that could carry EAB, it means that they must work with DATCP to assure that their products are pest-free before shipping.

The quarantine will be put in place temporarily by a Wisconsin emergency rule, until the U.S. Department of Agriculture completes the process to put a federal quarantine in place.

DATCP recommends that property owners who have ash trees in quarantine counties:

- Keep a close watch on ash trees for signs of possible EAB infestation: Thinning in the canopy, D-shaped holes in the bark, new branches sprouting low on the trunk, cracked bark, and woodpeckers pulling at the bark to get to insect larvae beneath it.
- Consider preventive treatments if your property is within 15 miles of a known infestation. Whether to treat depends on the age, size and number of ash trees. Treatment costs vary depending on size of the tree and whether you do the treatments yourself or hire a professional.
- Consider planting different species of trees that are not susceptible to EAB.
- Call a professional arborist for expert advice, and visit emeraldashborer.wi.gov for detailed information.

Emerald ash borer is native to China and probably entered the United States about 20 years ago on packing material, showing up first in Michigan about 10 years ago. It was first found in Wisconsin in 2008 in Washington County. Winnebago County will join 18 others under quarantine in Wisconsin: Brown, Crawford, Dodge, Fond du Lac, Jefferson, Kenosha, La Crosse, Milwaukee, Ozaukee, Racine, Rock, Sauk, Sheboygan, Trempealeau,

Vernon, Walworth, Washington and Waukesha counties.

EAB adults lay eggs on the bark of ash trees in mid- to late summer. When the eggs hatch a week or two later, the larvae burrow under the bark for the winter and eat the wood, destroying the tree's ability to take up nutrients and water. In summer, the adults emerge through D-shaped holes in the bark.

The Wisconsin Emerald Ash Borer Program includes partners from the following agencies: Wisconsin Department of Agriculture, Trade and Consumer Protection; Wisconsin Department of Natural Resources; University of Wisconsin – Madison; UW-Extension; United States Department of Agriculture- Forest Service and Animal and Plant Health Inspection Service.

PDDC UPDATE

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

Brian Hudelson, Ann Joy, Erin DeWinter and Joyce Wu, 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 August 3, 2013 through August 9, 2013.

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
BROAD-LEAVED WOODY ORNAMENTALS			
Ash (Unidentified)	Phyllosticta Leaf Spot	<i>Phyllosticta</i> sp.	Dane
Burning Bush	Phomopsis Canker	<i>Phomopsis</i> sp.	Waukesha
Catalpa	Glyphosate Injury	None	Milwaukee
Hickory	Imprelis Injury	None	Kenosha
Magnolia	Phomopsis Canker	<i>Phomopsis</i> sp.	Milwaukee
Oak (Bur)	Anthracnose	<i>Discula</i> sp.	Waukesha
	Oak Wilt	<i>Ceratocystis fagacearum</i>	Dane, Waukesha
	Tubakia Leaf Spot	<i>Tubakia</i> sp.	Waukesha
Oak (Pin)	Oak Wilt	<i>Ceratocystis fagacearum</i>	Dane, Waukesha
Oak (Red)	Chlorosis	None	Dane, Milwaukee, Washington
	Oak Wilt	<i>Ceratocystis fagacearum</i>	Houston (MN)
Oak (Unidentified)	Oak Wilt	<i>Ceratocystis fagacearum</i>	Dane, Jackson
Witch-Hazel	Sphaeropsis Canker	<i>Sphaeropsis</i> sp.	Dane
FRUIT CROPS			
Blueberry	Phomopsis Canker	<i>Phomopsis</i> sp.	Brown
	Red Ring Spot	Red Ringspot Virus	Brown
Chokeberry	Cercospora Leaf Spot	<i>Cercospora</i> sp.	Dane
	Phomopsis Canker	<i>Phomopsis</i> sp.	Dane
	Rhizoctonia Stem Blight	<i>Rhizoctonia</i> sp.	Dane
Grape	Growth Regulator Herbicide Injury	None	Dane
	Oxidant Stipple	None	Dane
Grape	Brown Rot	<i>Monilinia fructicola</i>	Dane
	Plum Pockets	<i>Taphrina communis</i>	Dane
Raspberry	Root/Crown Rot	<i>Phytophthora</i> sp., <i>Pythium</i> sp., <i>Rhizoctonia</i> sp.	Columbia
HERBACEOUS ORNAMENTALS			
Geranium	Bacterial Blight	<i>Xanthomonas hortorum</i> pv. <i>pelargonii</i>	Dane
Hosta	Root Rot	<i>Pythium</i> sp.	Racine
Petunia	Fusarium Stem Rot and Wilt	<i>Fusarium oxysporum</i>	Brown
	Root Rot	<i>Pythium</i> sp.	Brown

NEEDED WOODY ORNAMENTALS			
Juniper	Kabatina Tip Blight	<i>Kabatina</i> sp.	Ozaukee
Spruce (Blue)	Cytospora Canker	<i>Leucocytophora kunzei</i>	Waukesha
	Phomopsis Canker	<i>Phomopsis</i> sp.	Waukesha
	Rhizosphaera Needle Cast	<i>Rhizosphaera kalkhoffii</i>	Waukesha
Spruce (Unidentified)	Diplodia Shoot Blight	<i>Diplodia</i> sp.	Dane
	Rhizosphaera Needle Cast	<i>Rhizosphaera</i> sp.	Dane
VEGETABLES			
Potato	Late Blight	<i>Phytophthora infestans</i>	Adams, Brown
Squash	Root Rot	<i>Rhizoctonia solani</i>	Dane
Tomato	Late Blight	<i>Phytophthora infestans</i>	Brown, Racine
	Unidentified Viral Disease	Not identified	Polk
	Walnut Toxicity	None	Wood

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