

Plant Health Care Report

Scouting Report of The Morton Arboretum

April 19, 2013

Issue 2013.2

Our report includes up-to-date disease and insect pest reports, as well as color images, for northeastern Illinois. You'll also find a table of accumulated growing degree days throughout Illinois, precipitation, and plant phenology indicators to help predict pest emergence. The report is published bi-weekly on Fridays in April and August, and weekly May-July.

Arboretum staff and volunteers will be scouting for insects and diseases throughout the season. We will also be including information about other pest and disease problems based on samples brought into The Arboretum's Plant Clinic from homeowners and professionals.

If you have any comments or concerns regarding the Plant Health Care Report, please send them to Sharon Yiesla at syiesla@mortonarb.org.

Due to the extreme weather in northern Illinois, the April 19 PHCR was delayed.

Quick View

What indicator plant is in bloom at the Arboretum?

Corneliancherry Dogwood (*Cornus mas*) (Figure 1)

Accumulated Growing Degree Days (Base 50): 14.5 (as of April 18)

Accumulated Growing Degree Days (Base 30): 424 (as of April 18)

Insects:

- Euonymus scale
- Egg masses

Disease:

- Pestalotiopsis
- Alternaria blight

Miscellaneous:

- Flooding



Figure 1 *Cornus mas* (Corneliancherry Dogwood)

Degree Days and Weather Information

As of April 18, we are at 14.5 base-50 growing degree days (GDD). From April 6 to 18, we have had 7.8 inches of precipitation. Of that amount, 5.52 inches fell on April 18. At this time I do not have access to weather records between April 18 and 22.

| Location | B ₅₀ Growing Degree Days Through April 18, 2013 | Precipitation (in) April 5-18, 2013 |
|--------------------------|--|-------------------------------------|
| Carbondale, IL* | 199 | |
| Champaign, IL* | 101 | |
| Chicago Botanic Garden** | 2 (as of April 11) | |
| Chicago O'Hare* | 16 | |
| Kankakee, IL* | 55 | |
| The Morton Arboretum | 14.5 (as of April 18) | 7.8" |
| Northbrook, IL** | 15.5 (as of April 17) | 2.14" (4/3-16) |
| Quincy, IL* | 91 | |
| Rockford, IL* | 4 | |
| Springfield, IL* | 111 | |
| Waukegan, IL* | 7 | |

**Thank you to Mike Brouillard, Northbrook Park District and Mike Annes, Chicago Botanic Garden, for supplying us with this information.

*We obtain most of our degree day information from the GDD Tracker from Michigan State University web site. For additional locations and daily degree days, go to <http://www.gddtracker.net/>

New this year: To make the Plant Health Care Report (PHCR) more effective, each pest/disease article will be marked parenthetically this year to indicate the severity of the problem. Problems that have the potential to be serious and which may warrant chemical control measures will be marked "potentially serious". Problems that are included in the PHCR, but are seldom serious enough for pesticide treatment, will be marked "minor". Articles that discuss a problem that is seen now, but would be treated with a pesticide at a later date, are marked "treat later". As the season goes on please give me feedback as to whether this system helps you or not. Contact me at syiesla@mortonarb.org.

Pest Updates: Insects

Euonymus scale (treat later)

Euonymus scale (*Unaspis euonymi*) is one of those pests that we can see all year long, especially on ground cover euonymus. The pest is being reported to the Plant Clinic with some regularity. At this time we are only seeing the overwintering adults, so this is not the time for any insecticide treatment. That type of treatment should be done when the crawlers emerge, which will be around the early part of June



Figure 2 Euonymus scale males (white) and female (brown)

Male adult scales are white and the females are dark brown and oystershell-shaped (figure 2). Euonymus scale overwinters as mated females on plant stems (that is the stage we are seeing now). Eggs develop beneath the scale and hatch during late spring.

Management: Pesticides won't help at this time, but if the population is heavy prune out heavily infested branches to reduce the number of scales. Then, when it is time to use an insecticide, the product will be more effective.

Egg masses (treat later)

While the prolonged cool weather has been less than ideal for horticulture, there is one benefit to it. We have a longer time to scout for egg masses like Eastern tent caterpillar and gypsy moth. We have not really had enough heat to get the eggs hatching (hatching starts around 100 growing degree days base 50). If you can find the egg masses now and destroy them, this will reduce the population for the coming season.



Eastern tent caterpillar egg masses (Fig. 3) are dark gray to black and are wrapped around twigs that are about the diameter of a pencil. Prune out branches with egg masses attached. Gypsy moth egg masses (Fig. 4) are buff colored, covered with hairs, and about 1 1/2 inches long. Each female usually lays one egg mass, which could contain as many as 1,000 eggs. Egg masses can be carefully scraped off bark and destroyed before they hatch.

Fig



Figure 4 Egg masses of gypsy moth

Pest Updates: Disease

Pestalotiopsis (minor)

Pestalotiopsis blight has been found on *Thuja* 'Green Giant'. The blight is caused by the fungus *Pestalotiopsis* sp., which attacks injured or weakened foliage and causes foliage to turn yellow, then dark brown to almost black (Fig. 5). The disease symptoms start at the tips of the foliage and progresses toward the leaf base. Damaged foliage is usually near the base of the plant where snow or mulch has accumulated, keeping moisture conditions high.



Figure 5 *Pestalotiopsis* on arborvitae

Management: This is a minor disease and can be controlled by pruning out the damage as soon as you see it in the spring. Do not allow snow to accumulate at the base of the plant for an extended period of time. Keep mulch away from the trunk.

***Alternaria* blight (minor)**

Alternaria blight, caused by the fungus *Alternaria*, has been diagnosed on Canadian hemlock (*Tsuga canadensis*) (Fig. 6). *Alternaria* blight exhibits different symptoms depending on host species. Typical symptoms are small dark brown leaf spots with tan centers. Dark brown conidia (spores) form in the spots and can be seen with a hand lens.



Figure 6 *Alternaria* on hemlock

Generally, *Alternaria* spp. are common saprophytes (live on dead material), but a few are pathogenic to trees and shrubs.

Management: *Alternaria* overwinters as mycelium and thick-walled spores in plant debris. Collect and destroy leaves in the fall to reduce the source of inoculum.

Miscellaneous

Flooding

Welcome to the Midwest. One week we are discussing if we are still in drought and the next week we are in the middle of a flood. For our plants this could mean double trouble. Trees and shrubs that are stressed from drought damage may pick up more stress from the flooding. How much will depend on several factors including the age and health of the trees, the species and the duration of the flooding. Excellent care will be the order of the day this year.

Here are some tips for the current flooding situation:

- Hire an arborist to deal with storm damaged trees
- Let your yard dry out before you do any digging or even walking; wet clay compacts easily
- If your yard was flooded with sewer or river water, put debris in landscape waste, not the compost pile
- Watch trees carefully through the year, especially if they stand in flood waters for days on end

The Plant Health Care Report is prepared by Sharon Yiesla, M.S., Plant Clinic Assistant and edited by Stephanie Adams, M.S. Research Specialist in Plant Health Care; Fredric Miller, Ph.D., Research Entomologist at The Morton Arboretum and Professor at Joliet Junior College; Doris Taylor, Plant Information Specialist, and Carol Belshaw, an Arboretum Volunteer. The information presented is believed to be accurate, but the authors provide no guarantee and will not be held liable for consequences of actions taken based on the information.

Thank you...I would like to thank the volunteers who will be scouting for us this season. They find most of the insects and diseases that are in this report. The Scouting Volunteers include: LeeAnn Cosper, Deborah Finch-Murphy, Anne Finn, Ann Klingele, Arnis Krusow, Loraine Miranda, Bill Sheahan and Kathy Stephens. Your hard work is appreciated.

Literature recommendation:

Indicator plants are chosen because of work done by Donald A. Orton, which is published in the book Coincide, The Orton System of Pest and Disease Management. This book may be purchased through the publisher at: <http://www.laborofloveconservatory.com/>

The Commercial Landscape & Turfgrass Pest Management Handbook (CPM), for commercial applicators, and the Home, Yard & Garden Pest Guide (HYG) for homeowners from the University of Illinois, are available by calling (800-345-6087).

This report is available as a PDF at The Morton Arboretum website at <http://www.mortonarb.org/tree-plant-advice.html>

For pest and disease questions, please contact the Plant Clinic at (630) 719-2424 between 10:00 and 4:00 Mondays through Saturdays or email plantclinic@mortonarb.org . Inquiries or comments about the PHC reports should be directed to Sharon Yiesla at syiesla@mortonarb.org .

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