

Welcome to the 2020 edition of the Home, Yard, and Garden Pest Newsletter. This newsletter is written to keep professional landscapers, arborists, golf course superintendents, lawn care personnel, and garden center operators up-to-date on the commercial management of diseases, weeds, insects, and other pests. We will report on the pests we are seeing and anticipating throughout Illinois. To assist us in these efforts, we ask for your help in reporting pest situations as you see them throughout the year. Your assistance will help us to provide relevant and timely content for all of Illinois. Most of the newsletter's authors are only able to scout a small portion of east-central Illinois. The various restrictions related to COVID-19 have further limited their scouting areas backyards and neighborhoods, making this request especially important. Please send pest reports to, Travis Cleveland, at tclevela@illinois.edu.

Our main authors are plant pathologists Travis Cleveland (tclevela@illinois.edu), Diane Plewa (dplewa@illinois.edu), weed scientist Michelle Wiesbrook (buesinge@illinois.edu), IPM specialist Maria Turner (mrestrep@illinois.edu), and entomologists Kelly Estes and Sarah Hughson (hughson2@illinois.edu). We also plan to include content and observations from extension educators from around the state.

This year's newsletter will be published every two weeks throughout the growing season.

(Travis Cleveland)

Modified Growing Degree Days (Base 50° F, March 1 through April 19)

Station Location	Actual Total	Historical Average (11 year)	One- Week Projection	Two-Week Projection
Freeport	63	98	97	147
St. Charles	84	100	116	161
DeKalb	72	113	109	162
Monmouth	114	139	156	213
Peoria	124	156	171	233
Champaign	140	156	187	248
Springfield	159	179	212	279
Perry	160	182	209	271
Brownstown	189	214	247	320
Belleville	241	230	302	376
Rend Lake	232	253	299	379

Carbondale	264	245	327	404
Dixon Springs	275	270	344	427

Insect development is temperature dependent. We can use [degree days](#) to help predict insect emergence and activity. Home, Yard, and Garden readers can use the links below with the degree day accumulations above to determine what insect pests could be active in their area.

[GDD of Landscape Pests](#)

[GDD of Conifer Pests](#)

Degree day accumulations calculated using the [Illinois IPM Degree-Day](#) Calculator (a project by the Department of Crop Sciences at the University of Illinois and the Illinois Water Survey).

(Kelly Estes)

University of Illinois Plant Clinic Operations During COVID-19

Normally, this would be the time to welcome spring and remind people of how to submit a sample to the Plant Clinic. However, this year the Plant Clinic is adjusting operations in accordance with state and university guidelines. The impact of the COVID-19 (novel coronavirus) continues to create uncertainty and concern both globally and here in our community. Following Centers for Disease Control and Prevention (CDC) guidelines, the University of Illinois has implemented social-distancing protocols that impact all university activities. Illinois Extension, as the outreach program of the university, aligns with all policies related to public health and safety.

The Plant Clinic is currently accepting the following types of samples:

- Phytosanitary samples submitted for diagnostic testing necessary for the movement and/or sale of plant material.
- Commercial samples submitted by agronomic and horticultural industry personnel. This includes field and specialty crop producers, nursery staff, arborists, landscapers, and other green professionals. These are samples submitted as part of a business.
- Insect identification if the pest is a suspect human pest (bed bug, tick, etc.). Please contact the Plant Clinic (see below) for additional information before submitting this type of sample.
- Samples suspected to be infected or infested with a regulated plant pest. These include European gypsy moth, spotted lanternfly, sudden oak death, and boxwood blight.
- Food produce plant samples (fruit and vegetable production). To support safe, accessible food production, we are continuing to accept production plant samples regardless of the source.

We are encouraging homeowners and private individuals to email pictures and descriptions of ornamental plant problems to plantclinic@illinois.edu for additional assistance.

The Plant Clinic is running on a reduced staff in accordance with social distancing guidelines. As a result, fewer staff are in the lab, and we have a reduced ability to return phone calls. We ask that clients please send emails to plantclinic@illinois.edu, which can be replied to by staff members even when we are not present in the lab. However, if you do not have access to email, you may call and leave a voicemail with your question and contact information, and a staff member will call them back when we are able.

Submitting samples

Samples can be submitted by mail or dropped off at the Plant Clinic with slight changes in procedure:

Mail Samples:

- USPS: We recommend using USPS to ship samples. Please email the Plant Clinic with the tracking number, if there is one. USPS mail is currently arriving only once per week.
- FedEx: If you use FedEx, please email us the tracking number. Currently, FedEx is not delivering to the building so Plant Clinic staff have to go pick up packages (which they won't know to expect without a tracking number).
- UPS: We do not recommend using UPS at this time since we have not been able to set up a way to pick up samples shipped through UPS.

Drop-off Samples:

- Samples can be left in a large, green, drop-off box located at the south doors of Turner Hall (opposite the greenhouse). A map of the drop-off location is pictured below. Sample submission forms and pens are available in the box. The box is checked daily.

We expect these changes to persist at least through the end of the governor's stay-at-home order. Additional University guidelines may also impact our ability to fully open. However, we are committed to helping as many people with their plant problems as we can during this growing season. We'll keep you updated through this newsletter, and you can also contact us through email.

University of Illinois Plant Clinic Contact Information

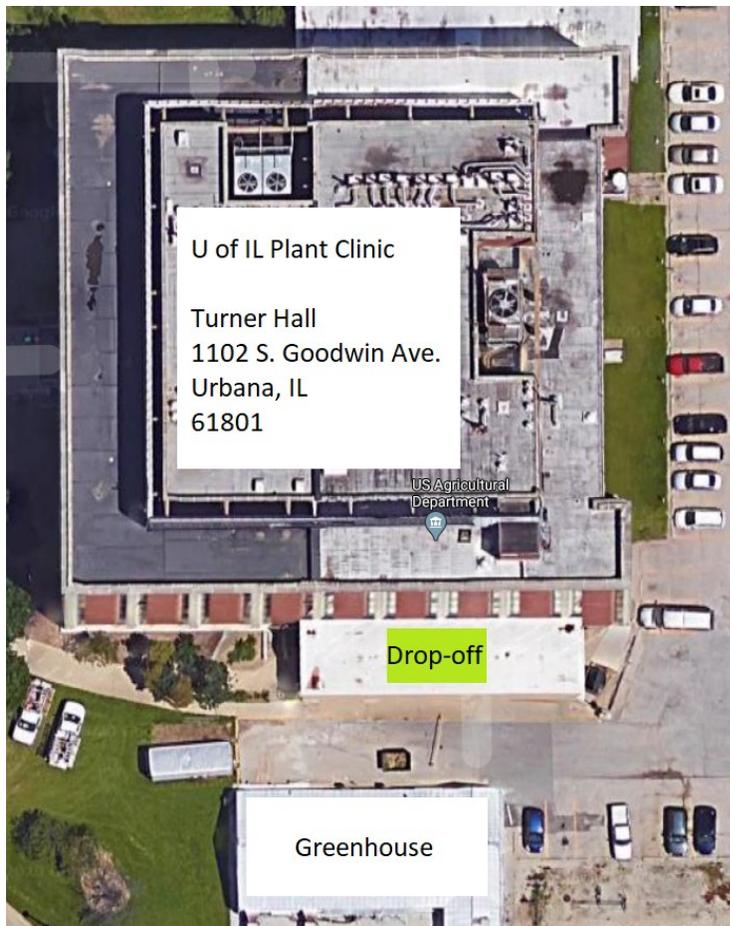
Website: <https://web.extension.illinois.edu/plantclinic/>

Email: plantclinic@illinois.edu

Mailing Address:

University of Illinois Plant Clinic
S-417 Turner Hall, 1102 S. Goodwin Ave.
Urbana, IL 61801

Phone: 217-333-0519



(Diane Plewa)

When the Magnolia Blooms: Using the Saucer Magnolia as an Indicator Plant

When it comes to managing pests, woody plant professionals know that spraying at the optimal time will make applications more successful. Don Orton, the author of *Coincide: The Orton System of Pest and Disease Management*, taught us how to use phenology, i.e., the stages of plant development (usually bloom time) to predict stages in pest development and susceptibility to controls. The full bloom of the Saucer Magnolia (*Magnolia x soulangeana*) coincides with the emergence of spruce spider mites, Zimmerman pine moth caterpillars and eastern tent caterpillars. It is also the time those insects are the most susceptible to chemical control.



Saucer Magnolia

Spruce spider mites feed on many needled evergreens despite their name. These include junipers, pines, Douglas fir, Fraser Fir, and larch. Stippling on the needles, browning, webbing, and even mites can be detected visually in larger populations. They begin to feed on the needles and are most active in the early spring, when the magnolias bloom. They spend the summer as eggs and when the weather cools in the fall they hatch again. Several YouTube videos demonstrate scouting for spruce spider mites by shaking the older portion of the tree limbs over a piece of white paper and smashing them. The streaks of color left behind let you know what these mites are eating. Those making greenish streaks are usually spider mites that are feeding on the foliage; those making yellow-orange streaks are usually predaceous mites that are feeding on the spider mites. When predaceous mites are present, a chemical control usually is not needed. However, the tree should be monitored for increase in population. A physical control option would be to do a hard water spray on the foliage knocking them off the plant. If a pesticide is needed, miticides and insecticidal soap can provide some quick knockdown.

Zimmerman pine moth caterpillars emerge from their protective hibernaculum, winter home, and begin to bore into pine trees, particularly Scots and Austrian. As they feed on the phloem, they push out frass and sap, creating the characteristic pitch that flows from the wounds in the tree and drip down the trunk. These entry holes are usually at the junction of the branch and trunk. Broken branches and branch dieback in the upper portion of the tree are indicators there may be feeding underneath the bark. In July and August, the adults emerge and begin to lay many eggs. These eggs hatch shortly after. A physical control option would be pruning out damaged branches or removal of entire tree. Removal may be necessary if there are many susceptible trees in the same area. If a pesticide is needed, permethrin or other chemistries can be sprayed on the surface of the trunk or branches in the spring, when magnolias bloom, and again in mid-August, when the goldenrod blooms, to control the newly hatched larvae on the surface of the bark.

Eastern tent caterpillars are a problem on some stressed trees and can cause defoliation. Larvae begin to hatch from overwintering egg masses. These egg masses are about ½ inch long, reddish brown and contain hundreds of eggs. The female moth chooses branches that are pencil-sized. After hatch, the larvae begin to make communal tents in the crotch angle of the tree. They leave the tent throughout the day and feed on leaves and as they grow bigger so does the tent. When they are fully grown caterpillars, they find a protected location and pupate. Adult moths emerge two weeks later and begin to lay egg masses. A mechanical control option is tearing open the tents to allow for predation. If a pesticide is needed, spray with *Bacillus thuringiensis kurstaki*, spinosad, neem oil or permethrin.

Using phenology cues, such as blooming in woody plants like magnolia, to time pesticide applications, enables you to gain the best control of the populations of these potentially devastating pests.

(Kelly Allsup)

Spring Clean-up for Plant Disease Management

As we look around the landscape now, we see fresh, new growth emerging. There is not a great deal in the way of disease problems at present. To help keep it that way longer, try some of these common-sense spring clean-up tips.

Once the threat of a major frost is past, remove old foliage from around annual and perennial beds, grasses, and weedy areas. Many diseases caused by fungal pathogens, such as black spot of roses, will over-winter on old, infected foliage. Tender new spring foliage is more susceptible to fungal infection than older, thickened leaves. Spring weather is usually cool and moist, favoring fungal growth. Removing the old, infected foliage will reduce the amount of fungal inoculum that might otherwise infect in the favorable spring conditions.

Remove dead wood in trees and shrubs. Most of the wood rotting fungi and canker fungi invade stressed or injured wood. They will, however, move from a dead stem into the older wood in the same plant. Now is a good time to remove dead or cankered wood. It is easy to spot against the new growth. Examples include dead branches from *Cytospora* canker on spruce, rose cane cankers, and stems of redosier dogwood killed by winter stress and subsequent canker fungi. If you are removing dead wood from pears, disinfect pruners between cuts to avoid spreading potential pathogens such as the bacterium that causes fire blight.

Cedars infected with cedar apple rust will be erupting soon so removing these galls now will reduce the infection in their broadleaves hosts. Also, Pines infected with *Diplodia* can benefit from spring clean up. Remove the dead stem tissue. Rake and remove pine cones where this fungus overwinters.

It is usually a good idea to avoid putting diseased material in compost piles. Infected foliage should be safe if the composted material is allowed to decompose. When in doubt, find other means of disposing of diseased plant material.

(Author: Nancy Pataky, adapted by Maria Turner)

Tips for Dealing with the Neighbors' Weeds

Recently, I read a social media post from a homeowner who was looking for guidance when dealing with his neighbor's seemingly problematic weedy lawn. Unfortunately, many of the suggestions in the comments were alarming. There were numerous suggestions that herbicides secretly be used, more specifically Roundup. A couple things come to mind. First, this is not the appropriate herbicide to use in a lawn for controlling dandelion. Glyphosate, the active ingredient in Roundup, is nonselective meaning that it controls many types of plants including turfgrass, so damage will likely occur to the lawn. It could, however, be used for spot applications made directly to individual weeds such as a large dandelion, but really there are other herbicides that would provide greater control of dandelion. Also, keep in mind that some formulations of Roundup have additional herbicides to provide residual control. These should never be used on lawns. Second, no matter if you have the best of intentions or malicious intentions, it is illegal to apply a pesticide onto someone else's property without their prior knowledge and agreement. Lawsuits can result. "Accidentally over spraying" from your property to theirs is illegal. Even if you are a licensed applicator, you need permission first.



So what can be done about the neighboring lawn that contains more weeds than you are comfortable with? Here are some options:

- Focus on pest management practices in your own lawn that will lead to a dense canopy turf that is less likely to have or show weeds. Maintain proper fertility. Mow high to shade out weeds. When necessary, preemergent herbicides can be used to prevent new weeds that can sprout up from the neighbor's wind-blown seed.
- Change your perspective. Dandelions are some of our first bloomers and pollinators such as bees rely on them for food. Plus, they can be a source of food for us too, as dandelion greens are edible.
- Build a fence. Some say that good fences make good neighbors. If you can't see it, you can't worry about it.
- Offer to help maintain the lawn while approaching the subject gently. Perhaps your neighbor cannot physically handle the work or does not have the necessary resources. Maybe your offer to hand remove weeds or to split the cost of professional lawn care services or chemicals would be accepted.
- Get to know your neighbor. Understand what their goals are for the lawn. This kind of relationship building can help to ease the "turf war".

- Politely educate your neighbor if needed. Perhaps you are a plant expert and you have spotted an invasive species that is proliferating on his property. He simply may not be aware of the situation or what specific problems that plant can cause. Knowledge is power.
- Contact local weed control officials within your city, town, village, township or even county for guidance and assistance. Nuisance weed laws may be in effect. The Illinois Noxious Weed Act requires the control of certain weed species. This article, "Regulated Weeds," discusses this law and the included species at: <http://hyg.ipm.illinois.edu/article.php?id=704>. Additionally, mowing ordinances may be in effect and timely mowing may be required to prevent weeds from reaching a specific height restriction.
- Lower your expectations. No one is perfect and with recent corona virus concerns, we all have other important things on our minds right now.

(Michelle Wiesbrook)

COVID-19 Effects on Illinois Pesticide Applicator Training, Testing, and Licensing

The impact of the COVID-19 (novel coronavirus) continues to create uncertainty and concern both globally and here in our community. Following [Centers for Disease Control and Prevention \(CDC\) guidelines](#), the University of Illinois has implemented social-distancing protocols that impact all university events. Illinois Extension, as the outreach program of the university, aligns with all policies related to public health and safety.

The Pesticide Applicator Training and Testing Clinics jointly administered by the Illinois Department of Agriculture (IDA) and University of Illinois Extension Pesticide Safety Education Program (PSEP) are cancelled for the remainder of the clinic season (through May). Refunds will be issued as soon as possible.

For those currently licensed, but needing to retest: The Illinois Department of Agriculture will extend licenses that expired on December 31, 2019 until December 31, 2020. If license verification is required, contact IDA at AGR.CLM@illinois.gov or (217) 785-2427.

For those who are unlicensed and would like to become an operator for 2020: Due to the special circumstance, non-certified applicators (operators) will not have a testing requirement for the remainder of 2020. Operators must continue to work under the direction of a certified applicator and receive general pesticide training. The supervising applicator must be certified in each category applicable to the pesticide use. A training option is this video, *Agricultural Worker and Handler Pesticide Safety Training* at <https://vimeo.com/215241678>.

For those NOT currently licensed and still needing to test in either General Standards or any category: All in-house testing has been suspended. IDA is offering online testing for a limited number of exam categories. To request and register for an exam, please carefully follow the instructions at <https://www2.illinois.gov/sites/agr/Pesticides/Pages/online-testing.aspx>. Please note that these exams

are being offered in response to the COVID-19 pandemic. IDA has stated that all individuals who take an online exam to receive a temporary license will be required to re-test in 2021.

For those who still have licensing and testing questions: Please consult IDA's FAQ site at <https://www2.illinois.gov/sites/agr/Pesticides/Pages/Cancellations-FAQ.aspx>.

For those who need training: PSEP offers several online trainings that can be used for individual study. For those preparing for the General Standards exam, the Private Applicator course online can serve as a substitute. A [new workbook](#) created for this purpose in English only is now available. Registration is required and the fee is \$15. For more information, visit www.pesticidesafety.illinois.edu.

For those who need study materials: Manuals and workbooks are available for order at pubsplus.illinois.edu. Shipping delays will likely occur due to the shelter in place mandate and restrictions in campus mailing. We are currently unable to accept publication orders through the Pesticide Safety Education Program's website.

Training and testing opportunities will be available at a later time, once stay at home restrictions are lifted. We are already starting on the 20-21 training and testing season schedule. Please consult the [University of Illinois PSEP Facebook Page](#) for up-to-date information regarding training and testing.

(Michelle Wiesbrook)