

Modified Growing Degree Days (Base 50° F, March 1 through May 30)

| Station Location | Actual Total | Historical Average (11 year) | One- Week Projection | Two-Week Projection |
|------------------|--------------|------------------------------|----------------------|---------------------|
| Freeport | 400 | 447 | 491 | 610 |
| St. Charles | 388 | 425 | 472 | 583 |
| DeKalb | 376 | 492 | 474 | 598 |
| Monmouth | 505 | 546 | 607 | 735 |
| Peoria | 568 | 583 | 673 | 804 |
| Champaign | 661 | 597 | 772 | 910 |
| Springfield | 702 | 666 | 820 | 963 |
| Perry | 686 | 625 | 794 | 927 |
| Brownstown | 757 | 727 | 880 | 1028 |
| Belleville | 840 | 760 | 964 | 1106 |
| Rend Lake | 894 | 821 | 1027 | 1183 |
| Carbondale | 905 | 777 | 1032 | 1179 |
| Dixon Springs | 942 | 836 | 1074 | 1225 |

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*

(Kelly Estes)

Brownheaded ash sawfly

Brownheaded ash sawfly larvae (*Tomostethus multicolor*) are native insects that are currently defoliating ash trees in northern Illinois. These larvae are greenish-white to yellowish-white and look somewhat like caterpillars, except that they have six or more pairs of prolegs. They have green heads with obvious small black eyes.



Photos: (left) Brownheaded ash sawfly larvae photo submitted from the public 2019, (right) Brownheaded ash sawfly larvae and foliar damage by William M. Ciesla, Forest Health Management International, Bugwood.org

The larvae may feed for two or three weeks, drop to the soil where they construct cocoons around themselves and pupate in the soil. Wasp-like adults emerge the following spring when the leaf buds are turning green and lay eggs in the developing leaflets. The eggs hatch into larvae that feed on the leaves. There is one generation per year. In some cases, larvae can be dislodged from the foliage by strong winds which can make the number of larvae on the ground appear high.

These larvae feed primarily on red and white ash. There have been reports of large trees being totally defoliated. If the tree is healthy, this severe defoliation should not seriously harm it, and the tree will put out new leaves. If heavy defoliation occurs 3 or 4 years consecutively, it could cause the tree to die. However, this sawfly is not common in most years, it is unlikely to be numerous enough next year to cause serious defoliation and may not warrant treatment.

Because these pests are sawfly larvae and not true caterpillars, Btk (*Bacillus thuringiensis kurstaki*) products like Dipel or Thuricide will not control these insects. Carbaryl (Sevin) should be effective, as well as many other labeled insecticides. If a cultural or mechanical method is preferred, strong blasts of water from a hose can knock larvae from the foliage to the ground and prevent further feeding.

By Phil Nixon (edited by Sarah Hughson)

Catchweed Bedstraw is Catching On to a Landscape near You

I'm starting to see more and more catchweed bedstraw lately, which saddens me. Sure, it has somewhat of a cute appearance. But once you've hand pulled an unwanted, sticky patch of it, you will forever have a disdain for this plant.

Catchweed bedstraw (*Galium aparine*) is an annual weed with a semi-prostrate habit. The leaves are sessile in whorls of 6-8 at the nodes. The leaf blades are lanceolate in shape. Overall, the plant is fairly hairy or prickly allowing it to "catch" easily on skin, clothing, or fur so that seeds are disseminated. The stems and leaves have recurved prickles. Stems are square shaped and break easily. The upperside of the leaf is hairy. The underside has short prickly hairs. It is recommended that you wear long sleeves and gloves when hand pulling this plant as it can stick to skin and removal from said skin can be painful. Ask me how I know.

It earned the name *bedstraw* when it was used to minimize matting in mattress filling. This weed may also be known by other names including cleavers, Velcro plant, stickywilly, goose-grass, grip-grass, snatch-grass, and catch-grass. The leaves are narrow, but it's not a grass at all.

The flowers of catchweed bedstraw are produced in May-June in clusters near the axils of the whorls. They are white with 4 petals and 4 stamens. Flowers can occur in only 8 weeks after germination. The seeds are small (2-3 mm in diameter) and typically covered in small hooks, again to aid in dissemination. Seeds are capable of germinating over an extended period of time. One plant will typically produce 100 to 400 seeds, but occasionally 3,000 or more can be produced according to IPM specialists at the University of California. Seeds can remain viable in the soil for up to three years. Many of the plants I have seen this spring have flowers already. Seeds will be soon to follow, ensuring catchweed bedstraw's presence for the next few years.

Catchweed bedstraw is found in landscapes, nurseries, small grains, and meadows and commonly found in shaded or wooded areas climbing up over the top of surrounding vegetation. It can be found across North America. However, it appears to be a more serious problem in the Northwestern states.

It can be pulled fairly easily in moist soil as it has short roots. However, the stems can break off, making hand pulling more of a chore. Take advantage of the recent rains we have had so that hand weeding is more effective. Blooming plants should then be discarded so that seed development does not continue. The preemergent herbicide oryzalin can provide fair control of catchweed bedstraw. Postemergent herbicide options include glyphosate, oxyfluorfen, quinclorac, carfentrazone, and diclofenil. This list is not all inclusive but is provided as a starting point. Always be sure to read and follow all label directions. Prevention of seed dispersal is likely the best way to prevent future infestations of this plant.

A similar species is smooth bedstraw (*G. mollugo*) which is a perennial and is smooth overall except at the leaf margins. Carpetweed has a similar growth habit and leaf arrangement, but the stem is round and it is more branched.



Catchweed bedstraw in bloom.



The stems and leaves have recurved prickles.



Catchweed bedstraw growing in a landscape bed.

(Michelle Wiesbrook)

Sycamore Anthracnose

You have likely noticed that many sycamore trees have been slow to leaf out this spring. Until this past week, most of the sycamore trees in central Illinois have remained bare, with no signs of life. This year has been particularly severe for sycamore anthracnose. Infections from this fungal disease occur almost every spring. However, the severity of the infection is dependent on the weather. This spring's predominately cool and wet conditions have greatly favored disease development.



Sycamore anthracnose appears in three phases distinguished by the plant parts that are affected.

Bud and Twig Blight

Bud and twig blight, occurs in April or early May while the host tree is dormant. During this phase, small cankers kill either individual buds or the tips of one-year-old shoots. Mild weather during host dormancy allows the cankers and stem lesions to continue expanding. Severe outbreaks have been reported to kill more than 95% of a tree's buds.

Shoot Blight

Shoot blight occurs after new leaves have emerged. Sunken, girdling cankers form below the twig tips, causing the death of young shoots. Symptoms associated with this phase are often mistaken for frost injury. Damage is most prevalent when the average mean daily temperature during the two weeks following leaf emergence is below 55°F. Cooler temperatures likely prolong twig susceptibility. When the average temperatures are above 60°F during the same period, little or no shoot blight takes place.



Leaf Blight

The leaf blight phase occurs as a direct infection of new leaves. Symptoms appear as small to large, irregular, brown lesions that form along the veins to the leaf edges. This phase often results in premature leaf drop. Wet conditions and temperatures between 60°F and 75°F favor leaf blight.



Sycamore trees with serious anthracnose infections commonly recover by mid-July, as the second flush of growth matures. Thus, fungicides are not often warranted. However, fungicides injections may be a preventative option for clientele seeking to maintain the appearance of high-value trees. If you are looking to plant a sycamore, consider one of the resistant plane trees. Sycamores are highly susceptible, while London plane trees vary in their resistance. Be sure you are buying a resistant hybrid.

(Travis Cleveland)

Why are Yew so sad?



Yew plants are fairly pest-free once established into a landscape, and can be wonderful evergreen additions to the right area. However, we've seen several yew samples at the Plant Clinic in the last few weeks. Most of them come with pictures or descriptions of plants with needles turning bright yellow, then browning and eventually falling from the plant. When examined under the microscope, no pathogens or insect pests are found. Instead, corky bumps or blisters are observed, usually on the underside of the needle. These can be seen with the naked eye, though they may appear as spots.

University of Illinois Plant Clinic



This is a classic symptom of edema (oedema), a condition where more water is retained in the plant than can be used by the plant, resulting in damage to the needle tissue. Other plants can be affected by edema, but yew plants are particularly prone to this abiotic condition. In the past, we've had clients who mentioned they were concerned about edema and had improved drainage in the area with pea gravel and drains before installing yew plants. While these measures should improve drainage, the fact that we still find evidence of extensive damage due to edema indicates that it wasn't enough for the yew.

Management usually consists of decreasing irrigation, increasing drainage, and trying to maintain plant vitality via fertilizing and pruning out dead wood during dry weather. Replacing the yew with more water-tolerant plants is another option for stubbornly soggy areas.

(Diane Plewa)

Cancelation of 12 Neonicotinoid Products

The Environmental Protection Agency (EPA) published a notice in the Federal Register on May 20, 2019, stating that the registrations for 12 neonicotinoid insecticides have been canceled. A list of the insecticides canceled is shown in Table 1, taken from the Federal Register.

TABLE 1—PRODUCT CANCELLATIONS

| Registration No. | Company No. | Product name | Active ingredients |
|------------------|-------------|---------------------------------------|--|
| 100–1341 | 100 | Meridian 0.20G | Thiamethoxam. |
| 100–1346 | 100 | Meridian 0.14G | Thiamethoxam. |
| 100–1399 | 100 | Avicta Complete Corn 500 | Azoxystrobin; Metalaxyl-M; Fludioxonil; Thiabendazole; Abamectin & Thiamethoxam. |
| 100–1426 | 100 | THX_MXM_FDL_TBZ FS | Thiamethoxam; Metalaxyl-M; Fludioxonil & Thiabendazole. |
| 100–1449 | 100 | Adage Deluxe | Thiamethoxam; Metalaxyl-M; Fludioxonil & Azoxystrobin. |
| 100–1450 | 100 | Adage Premier | Thiamethoxam; Metalaxyl-M; Fludioxonil; Azoxystrobin & Thiabendazole. |
| 264–1125 | 264 | Eresto Quantum | Clothianidin & Penflufen. |
| 59639–164 | 59639 | V–10170 0.25 G GL Insecticide | Clothianidin. |
| 59639–176 | 59639 | Inovate Seed Protectant | Clothianidin; Metalaxyl & Ipconazole. |
| 59639–187 | 59639 | Inovate Neutral Seed Protectant | Clothianidin; Metalaxyl & Ipconazole. |
| 59639–214 | 59639 | Aloft GC G Insecticide | Bifenthrin & Clothianidin. |
| 72155–95 | 72155 | Flower, Rose & Shrub Care III | Clothianidin & Imidacloprid. |

According to the Federal Register notice, the registrations for these products are in effect as of May 20, 2019, and no additional orders of these products can be distributed or sold. Existing stocks of these products (those packaged, labeled and released for shipping prior to May 20, 2019) can be distributed, sold, and used until May 20, 2020. Persons other than the registrants, may distribute, sell, or use existing stores of the products until they are exhausted, as long as that usage is consistent with the product label.

To learn more, please refer to the cancellation notice in the Federal Register:

US Environmental Protection Agency. 2019. Product cancellation order for certain pesticide registrations. Federal Register. Vol. 84, No. 97. pg. 22841-22843. <https://www.govinfo.gov/content/pkg/FR-2019-05-20/pdf/2019-10447.pdf>

(Sarah Hughson)