

IN THIS ISSUE:
TIMELY TIPS 2
BOXWOOD ISSUES 3
TOMATO DISEASES 4
FLYERS 5-7
SPOTTED LANTERNFLY 8
RECIPE 9
HORT WEBINAR 10



NOTE FROM AGENT

Hello Gardeners,

This year has been a difficult year due to low amounts of rainfall. Make sure plants get at least 1-inch rain per week; watering by hand is needed during dry weather. When watering, pour the water on the soil, not the leaves; wet foliage promotes diseases.

Macy Fawns
Horticulture Agent

Timely Tips

JULY & AUGST

Shrubs & Trees

Monitor evergreens for spider mite damage.
 Drought stressed plants are particularly at risk. If you see signs of browning shake the branch over a white surface, if you see tiny moving red specks you likely have mites. Minor infestations can be treated with a daily spray from the hose. Larger problems may need chemical control.



Flowers

- Divide bearded irises, if needed through September.
- Deadhead: annuals and some perennials to help promote growth. Deadhead chrysanthemums back every few weeks until mid July.
- Roses: Keep removing dying blooms from roses to encourage new foliage and flower growth.

Vegetables





- Start seed broccoli, cabbage, and cauliflower for a fall harvest.
- Weed out gardens to help with disease control and so plants will not have to compete with weeds.
- When watering, try to avoid wetting foliage or watering late in the evening as both can promote disease.

Winter Woes on Woody Landscape Plant's Winter Drying

The UK Plant Disease Diagnostic Laboratory (PDDL) has received many broadleaf and needled evergreen samples with discolored foliage recently. Despite relatively mild weather during much of the winter thus far, extremely low temperatures, low humidity, and strong winds during the third week of December 2022 resulted in a range of winter injury symptoms in landscape plants. Furthermore, other environmental and cultural stress factors preceded the severe weather in many cases and have contributed to the extent of damage visible now.

Symptoms

Since the beginning of January, most of the samples with winter injury that have arrived in the PDDL have shown symptoms of winter drying. On broadleaf evergreens (boxwood, cherrylaurel, holly, magnolia, rhododendron, etc.) symptoms typically include marginal leaf scorch, irregular spotting, complete browning of the leaves, and occasionally extensive leaf drop. Conifer (arborvitae, Leyland cypress, Cryptomeria, juniper, etc.) symptoms include pale, bronze or brown needles or needle tips, particularly on the exterior foliage and branch tips. Symptoms are often more noticeable on the wind-exposed side of affected plants.

Figure 1:
Taxus shrubs along an
exposed border
show needle discoloration
from winter drying
(Photo: Julie Beale, UK).





Figure 2:
Severe leaf burn on
windward side of boxwood
(Photo: Julie Beale, UK)

Causes of Winter Injury

Unlike their deciduous counterparts, "evergreen" plants retain foliage year-round. Even during winter months when active growth is not occurring, water is still lost through the leaves and needles of these plant species via transpiration, although more slowly than during times of active growth. Environmental and cultural factors that affect overall moisture availability in plants increase the likelihood of winter drying symptoms, including:

Areas where soil is frozen, limiting, or preventing water uptake by roots.

Low moisture retained in leaves/needles due to drought (i.e., late summer and fall 2022).

Sunny winter days with wind and low humidity which increase transpiration rates.

Inadequate root systems from recent transplanting (within 3-4 years), a restricted root zone (due to nearby sidewalk, driveway, or building) or mechanical injury to roots.

Plants or sections of plants in a protected area (i.e., along a warm brick wall) that have not completely hardened off.

Management of Winter Injury Symptoms

Resisting the urge to promptly remove the damaged plant material may be difficult, but for the next several weeks, patience is key. Often the foliage is damaged, but the stems and buds are still viable and will produce new healthy growth in spring. A "wait and see" approach is often best when dealing with winter-injured plants. When new growth begins to emerge in spring, it will be clear which symptoms are "cosmetic" and which symptoms indicate significant plant damage.

To help reduce the risk of winter drying in the future, good general plant care practices, such as watering during periods of drought and applying mulch, are beneficial. Supply adequate irrigation to broadleaf evergreen and conifer plants, especially late in the growing season so that plants have sufficient moisture during the winter months. Fertilizer is not typically recommended as this can encourage succulent top growth that is easily damaged in winter. If fertilizer must be applied, a fall application is best, since spring fertilization may promote more new growth than roots can support during summer droughts. Locate sensitive plants in sheltered locations. If severe cold and wind is predicted, protect plants that are prone to winter drying and located in exposed sites with temporary fencing to block the wind or a light covering of burlap or fabric (e.g., old bed sheets). Wetting the fabric before windy weather will allow the covering to freeze, increasing wind protection.

By Julie Beale, Plant Disease Diagnostician, and Sara Long, Plant Diagnostic Assistant

Early Blight & Septoria Leaf Spot of Tomato

By: Kim Leonberger, Plant Pathology Extension Associate, and Nicole Gauthier, Plant Pathology Extension Specialist

Early blight and Septoria leaf spot are the most common diseases of homegrown and commercial tomatoes in Kentucky. Tomatoes produced in greenhouses and high tunnels may also experience disease. These diseases may occur individually or together. While these diseases rarely result in plant death, the damage caused to leaves and fruit impacts overall yield and produce quality. Cultural and sanitation practices can help reduce severity of these diseases, but chemical management may be needed to protect plants from infection.

Early Blight Facts

- Symptoms often first appear on older leaves as small, brown lesions, which over time expand and develop a concentric ring pattern (bullseye) (Figure 1). Disease spreads upward and lesions develop on newer growth as disease progresses. Lesions may merge together resulting in a rapid dieback of plant tissue. Fruit may also become infected. Affected fruit develop dark, brown to black lesions with concentric ring patterns near the stem attachment point (Figure 2).
- Disease overwinters in plant debris left over from the previous season.
- Early blight spreads when spores are carried by water, such as irrigation and rain splash.
- Warm, wet conditions and periods of high humidity favor disease development.
- Early blight is caused by the fungal pathogen Alternaria linariae.
 Septoria Leaf Spot Facts
- Symptoms first appear as small circular lesions with tan-brown centers on older leaves (Figure 3) and lower portions of stems. Over time disease progresses up the plant to new growth. As disease spreads, leaves may begin to dieback rapidly. However, individually, lesions can still be observed. During periods of high humidity, small, black reproductive structures may be seen in centers of spots.
 Septoria leaf spot does not affect fruit.
- Disease overwinters in plant debris left from the previous season.
- Septoria leaf spot is spread by water, such as irrigation and rain.
- Warm, wet conditions and periods of high humidity favor disease development.
- Septoria leaf spot is caused by the fungal pathogen Septoria lycopersici.

Management

- Purchase certified disease-free seeds or transplants.
- Utilize cultivars with resistance or tolerance to diseases.
 - Manage weeds in and near plantings.

Rotate crops.

Increase plant spacing.

Apply mulch layer.

- Remove and destroy infected plants or plant parts.
- Avoid overhead watering.
- Clean and sanitize tools, pots, and equipment.
 - Remove and destroy plant debris at the end of the season.



Figure 1: Early blight results in the development of brown lesions with a bulls-eye pattern. (Photo: Kim Leonberger, UK)

Figure 2: Fruit affected by early blight develop brown to black lesions with concentric rings. (Photo: University of Kentucky Vegetable IPM Scouting Guide Team, UK)





Figure 3: Septoria leaf spot symptoms include the development of circular lesions with tan-brown centers on stems, petioles, and leaves. (Photo:

Kenny Seebold, UK)



University of Kentucky College of Agriculture, Food and Environment Cooperative Extension Service



Monarchs &

Caterpillars

Thursday, July 20th, 9:00 A.M

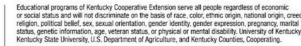
ID Monarchs and Caterpillars,

Make a Pollinator Waterer

Located at Old Washington Park

Please Call ahead to register at 606-564-6808





CERTIFIED



TRAINING PROGRAM









BEGINS: AUGUST 15, 2023

CONCLUDES: NOVEMBER 14, 2023

LOCATION: FLEMING COUNTY EXTENSION OFFICE

FEE: \$75.00

12:30PM-3:30PM

2 FIELD TRIPS WILL BE ALL DAY

TUESDAYS

Requirements:

- Attend classes (can only miss 2)
- First year- volunteer 40 hours
- Complete volunteer application
- Go through a background check

TO REGISTER PLEASE CONTACT YOUR LOCAL OFFICE AT:

FLEMING COUNTY: (606) 845-4641MASON COUNTY: (606) 564-6808

• ROWAN COUNTY: (606) 784-5457

REGISTRATION & FEE DEADLINE: AUGUST 1

Minimum of 10 registered folks for program to continue

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regarcless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.









BUFFALO TRACE BEEKEEPER ASSOCIATION

bi-nonthly

Join us at 6:00 PM on the third Wednesday of March, May, July, Sept, & Nov 2023

Learn about bees & ask questions!

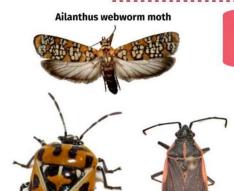
Mason County Extension Office 800 US Highway 68 Maysville, KY Spotted lanternfly lookalikes

While SLF is unique looking, there are some insects that resemble it!

Some moth species have similar looking under-wings. They will be fuzzy and lack the other designs SLF has.







Other insects may have spots or stripes but not quite the same mixture as the SLF.





Leopard moth

Harlequin bug

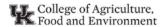
Boxelder bug

Fast Facts

- Spotted lanternfly (SLF) is an invasive species, originally from Asia, that was first confirmed in the US in 2014.
- The adult is distinctive looking, with front wings that have a mixture of stripes and spots while the back wings have a bright red color that contrasts with white, black, and khaki coloration on the rest of the body.
- Tree of heaven is their primary host plant, but they are known to feed on over 70 different species of plants including grapes, apples, and maples.
- If you believe you have seen or captured a spotted lanternfly, please take a photo or capture the specimen and get it identified by the entomology department or submit it to a local extension professional.

Rockin' Chicken Tacos

Servings: Makes 6 servings Serving Size: 2 tacos Recipe Cost: \$6.65 Cost per Serving: \$1.11







Ingredients:

- Low-Sodium Taco Blend
- 1 tablespoon chili powder
- 1 teaspoon garlic powder
- 1 teaspoon dried oregano
- 1 teaspoon onion powder
- ½ teaspoon red pepper flakes
- ½ teaspoon black pepper
- ¼ teaspoon paprika
- Chicken and Vegetables
- 1 pound boneless, thin-sliced chicken or chicken tenders
- 1 (15 ounce) can low-sodium black beans, rinsed
- 1 (15 ounce) can no-salt-added diced tomatoes
- 1 (15 ounce) can low sodium corn, drained

Directions:

Low-sodium Taco Blend

1. Mix together taco blend ingredients and set aside.

Chicken and Vegetables

- Preheat oven to 350 degrees F.
- 2. Place chicken in 13-by-9 baking pan.
- 3. Top with black beans, tomatoes, and corn.
- 4. Sprinkle with low-sodium taco blend.
- 5. Cover, and bake for 45 minutes or until chicken is done.
- Remove chicken and shred. Mix shredded chicken with vegetables and serve.





