Horticulture Newsletter

June 30, 2026

Kansas State University
Horticulture and Natural Resources

Video of the Week:

While bagworm caterpillars are getting larger and causing more plant damage, there's still time to take action to control bagworms this summer. Controlling bagworms when they are small is key to successful bagworm management, but other things can help increase your success. This week's video covers controlling bagworms, and the management strategies you can use to protect your plants from damage this summer: https://kansashealthyyards.org/all-videos/video/bagworms-controlling

Announcements:

July K-State Garden Hour:

Join us tomorrow, Wednesday, July 1, 2026, for the next K-State Garden Hour webinar on "Addressing Food Insecurity Through Extension". Our food systems are complex, but navigating them successfully is necessary to improve food access for all in our communities. Learn what K-State is doing and how you can get involved in a meaningful way to combat food insecurity. Register to join us live, or view the recording afterwards online at: www.ksre-learn.com/KStateGardenHour

Garden Calendar:

- Fertilize renovated strawberry beds and water regularly to promote new growth.
- Preventatively treat the trunks of young peach trees (5 years old or less) for peachtree borers.
- Mulch flower gardens for the summer to conserve moisture, control weeds and cool the soil.
- Water plants as needed.

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- Check lawn mower engine oil and add or change according to owners' manual.
- Check for spider mite damage on various shrubs, especially burning bush, roses, euonymus, arborvitae, and spruce.

Vegetables:

Harvesting Potatoes:

As we flip the calendar over to July, most Irish potato crops begin to mature and are ready to be harvested. To determine if potatoes are ready to be harvested, look for vines to become approximately half dead. Potatoes can be harvested any time they are of sufficient size to be eaten, however as vines reach a half dead state, potato tuber development ends and the maximum yield is likely reached. Do not wait long after vines are completely dead, as this can result in potato injury & resprouting. Similarly, potatoes dug before plants begin to die back will have to be handled much more carefully to prevent sloughing of tender skins.

For most of Kansas, potatoes that are planted in mid-March should be ready to harvest in early to late July, depending on the planting date, the earliness of the variety, and growing conditions. In far northwestern Kansas, potatoes may be harvested as late as August.

To harvest potatoes, begin by removing excess vines, and carefully dig the tubers using a spade or fork. Digging will be easiest when the soil is dry to slightly moist. When digging, start out, away from the row – at least 8 to 12 inches from the plant. Potatoes often extend beyond the leaf canopy of the plant. Loosen the soil on multiple sides before lifting to reduce the chances of stabbing tubers. Lift gently and sift through it by hand. Knock off large chunks of dirt and debris, but do not begin cleaning potatoes too completely.

Next, allow potatoes to cure to prolong their storage lifespan. Place potatoes in a warm, shaded, airy location to dry for at least 3-7 days before storing. This will help to toughen the skin and prevent sunburning. During this time, protect potatoes from heat, direct sun, and wind, as these conditions may cause sunscald and skin discoloration. Potatoes should never be exposed to direct sunlight for more than 15 minutes in order to prevent greening. For best storage quality avoid digging potatoes during days with excessive heat in July or August.

Once curing is completed, select the best potatoes for storage, and use defective or injured potatoes for cooking right away. Optimum storage conditions are about 35°F to 40°F with moderate humidity, such as an unheated cellar or basement. Store potatoes in darkness to keep tuber surfaces from turning green. Potatoes should stay firm for 6-8 months without developing sprouts if stored below 40°F. Check tubers periodically, and do not allow potatoes to freeze.

Note that when stored in temperatures below 40°F, the starches inside the potato may be converted into sugars, giving the potatoes a peculiar, sweet taste. If this flavor is undesirable, this process can be reversed by moving the potatoes to room temperature (approximately 70°F) for one week before use.

Visit our Irish Potatoes publication for more information about growing, harvesting, and storing potatoes: https://bookstore.ksre.ksu.edu/download/irish-potatoes_MF488

Flowers:

Powdery Mildew Affecting Landscape Plants:

Recently warm, humid weather conditions have been favorable for a fungal disease called powdery mildew. Powdery mildew is a fungus that can infect a wide variety of plants. The fungus develops as a white, powdery substance on the upper leaf surface of plants. Weather conditions with high relative humidity (especially at night) and temperatures around 70-80°F favor disease development.

Powdery mildew is commonly found on many types of landscape plants, most frequently during the spring and late summer months. Strong winds and storms carry powdery mildew spores (conidia) long distances and introduce inoculum to new plants. Symptoms appear as a white to grey dusty growth on the upper surface of plant leaves, resembling talcum-powder-like growth. Infections begin as spots or patches on the upper leaf surface and can eventually cover the entire leaf surface. In some cases, powdery mildew first develops on the lower leaves of the plant (where airflow is limited) and moves upward through the canopy. In severe cases, powdery mildew can also affect the undersides of the leaf, young stems, buds, flowers, and young fruit. Severe infections may also distort leaves and cause defoliation.

Powdery mildew is most commonly found on lilac, peony, grape, roses, turfgrass, cucurbit vegetables (such as cucumber, squash, watermelon, and pumpkin), apple, crabapple, oak, ash, euonymus, phlox, zinnia, and bee balm in Kansas.

While a wide range of perennials, shrubs, and trees may be affected by powdery mildew, there are many different, but related, species of fungi that cause infections. Each infection is generally limited to only similar hosts in the same genus. This means powdery mildew on one host will only affect hosts in that genus. For example, powdery mildew fungi on oak trees will only affect other oaks and the powdery mildew found on grapes will only affect grapes.

The powdery mildew fungus damages plants by absorbing nutrients from the leaf and reducing the plant's carbohydrates. The fungal colonies may also be unsightly. Despite this, powdery mildews rarely cause significant damage to most plants in Kansas, especially trees and shrubs.

Current weather patterns with high humidity will continue to favor powdery mildew development. To limit powdery mildew in the landscape, select varieties with disease resistance whenever possible. Increase spacing between plants and prune to increase airflow through the canopy, limiting favorable conditions for powdery mildew development. Avoid late-summer applications of nitrogen fertilizers to limit the production of succulent growth, which is more susceptible to infection.

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When powdery mildew symptoms begin to appear on leaves, hand pick and remove infected leaves. Many diseases can be reduced by limiting the initial spread. As with all diseases, good sanitation practices at the end of the growing season are also recommended. Doing so will help eliminate infected plant material from the garden, however, it may not significantly prevent future infections of powdery mildew. In most stages of powdery mildew development, the disease requires living plant material to survive and will likely be reintroduced in future years by windblown spores.

Chemical controls are not recommended in most instances of powdery mildew, except in some fruit and vegetable production situations. Fungicides are only effective if applied before infection occurs. Any chemical control must be applied preventatively and will not have curative effects in most cases. Fungicides must be applied at 7 to 14-day intervals to provide continuous protection throughout the growing season.

Turf:

Mushrooms In The Lawn And Landscape:

The recent rainfalls across much of Kansas has resulted in the appearance of mushrooms in many lawns and flowerbeds. Although mushrooms are often spectacular in size and color, most are relatively harmless to plant life and beneficial to a healthy ecosystem.

When mushrooms appear, it is important to note that the above ground mushroom is only the fruiting body of the fungi that is always present in the soil (mycelium). Mushrooms develop after rain events to produce and spread fungal spores. The fungal mycelium that creates the mushroom are always present in the soil. They either break down dead organic matter (saprophytic), such as leaves, wood, or dead plant material, or the fungi have a mutually beneficial relationship with plant roots (symbiotic association). Many symbiotic mycorrhizae help plants with the uptake of soil nutrients. Because many of these fungi, and their associated mushrooms, are beneficial to a healthy garden ecosystem, their control or eradication is often unnecessary.

Identifying where and how a mushroom grows may indicate a lot about whether the mushroom indicates a problem or not in the landscape.

When mushrooms appear randomly, in no discernable pattern in the lawn or garden, they are often a mushroom that is beneficial, such as mushrooms good at breaking down organic matter. Many of these mushrooms often occur in areas where trees were previously removed, and the fungi is present in the soil breaking down dead tree roots.

When mushrooms appear growing on the trunks or branches of living trees, these mushrooms may indicate problems such as internal decay within the tree. If mushrooms appear on deadwood within a tree, often this is the beginning of the decomposition process, and is not a concern. Simply prune out dead wood from the tree to remove the fungi. When mushrooms occur on living parts of a tree, however, a certified arborist should evaluate the tree's structural safety. These mushrooms are usually a secondary problem for the tree, indicating a symptom of stress or other issues within the tree, rather than the cause of the tree decline. Hazardous trees should be removed.

When mushrooms appear in an arc or circle-like pattern in turfgrass, this is a condition called a fairy ring. The ring pattern is caused by the outward growth of fungal mycelium. The mycelium forms a dense, mat-like structure in the soil that decomposes organic matter. This decomposition releases nitrate into the soil, which in turn stimulates the growth of the grass at the outer portion of the ring. This results in a dark green appearance of the grass at the margin of the ring.

With fairy ring, there are varying types that each have different impact on the lawn. In some cases, a thick fungal mat formed by the fungus interferes with water infiltration. The fungus also may release certain byproducts that are toxic to the turf. This can lead to dieback of the turf close to the ring.

Fairy rings are difficult to control. You can sometimes eliminate the ring by digging to a depth of 6 to 12 inches and 12 inches wide on both sides of the ring, refilling the hole with non-infested soil. Symptoms may be masked by fertilizing the rest of the lawn so that it is as dark green as the ring. This often is not a good idea because it tends to promote other turf problems. Commercial lawncare businesses may use certain fungicides to control fairy rings, but these products are not available to homeowners. Visit our Fairy Ring publication for more information about Fairy Rings and the associated fungicides: https://bookstore.ksre.ksu.edu/pubs/fairy-rings-in-turfgrass_EP155.pdf

If mushrooms in the lawn or landscape are a concern, pick and dispose of mushrooms as they appear. Another option is to mow over mushrooms, causing the mushrooms to be chopped into fine enough pieces that kids or pets will not eat them. It is best to assume that all mushrooms in the lawn and landscape are poisonous, and not safe to eat for humans or pets. Never eat a mushroom unless the mushroom has been positively identified. As dry weather returns, soils will dry and mushrooms will disappear naturally.

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Trees & Shrubs:

Dutch Elm Disease Resistant American Elms:

American Elms have long been a beloved shade tree across Kansas, and most of the United States. Their graceful vase-shaped canopy, rapid growth, and ability to provide abundant shade made them a highly desirable and abundantly planted species. In addition, their adaptability to a wide range of soils and conditions made them a favorite tree for streets, parks, and home landscapes.

Unfortunately, Dutch Elm Disease entered the United States sometime in the 1920's, and since that time the fungus has devastated American Elm trees across the United States. In Kansas, Dutch Elm Disease was first reported in 1957 and since then, has eliminated most of the majestic American Elms in the state and continues to kill additional trees each year.

Although Dutch Elm Disease has caused American Elms to lose popularity, not all is lost. Since the discovery of Dutch Elm Disease, research has helped to identify cultivars of American Elm and Elm hybrids that are resistant to the disease.

In 2007, the John C. Pair Horticultural Center near Wichita established research as part of a National Elm Trial, testing 18 cultivars for Dutch Elm Disease resistance. All 18 of these cultivars are Dutch Elm Disease resistant, with four cultivars being true American Elms. 'Valley Forge', 'Princeton', 'New Harmony' and 'Lewis and Clark' (Prairie Expedition) are all four true American Elm cultivars, and have all shown excellent tolerance to Dutch Elm Disease.

In addition to testing the 18 cultivars for Dutch Elm Disease resistance, the research also looked to evaluate the performance of each of these new Elm varieties in Kansas. The top seven overall performers included:

- 'Emer II' (Allee)
- 'Morton' (Accolade)
- 'Morton Red Tip' (Danada Charm)
- 'New Harmony'
- 'New Horizon'
- 'Princeton'

For photos and more information from our National Elm Trial at the John C. Pair Horticultural Center, visit: https://www.sedgwick.k-state.edu/gardening-lawn-care/trees-shrubs-flowers/Kansas%20Elm%20Trial%20Jan%2024%202016.pdf

Miscellaneous:

Pesticide Label Acronyms – What Do They Mean?:

It comes as no surprise that reading and following the pesticide label is the first step toward conducting safe and legal applications. The reality is labels have multiple acronyms that are important to understand when reading the label. Below are some of the most common acronyms that are critical to know:

PPE = Personal Protective Equipment

Personal protective equipment refers to clothing or devices worn to protect the body from pesticide exposure. Examples of PPE include long sleeved shirt, long pants, chemical resistant coveralls, footwear, gloves, aprons, respirator, goggles, face shield and headgear. An applicator reduces pesticide exposure by wearing the required PPE listed on the label. It is also important to remember to handle your PPE with care.

Before mixing and spraying any pesticide, read the PPE section of the label and make sure the appropriate PPE is available. Inspect gloves and respirators for any damage. Wash reusable PPE after use and make sure to store PPE away from pesticides. Common mistakes include wearing cotton or leather gloves instead of chemical- resistant gloves.

WPS = Worker Protection Standard

The Worker Protection Standard is a federal regulation that protects workers and handlers from exposure to pesticides. The purpose of the regulation is to reduce pesticide related illnesses and injury among workers and handlers. The WPS requirements are outlined under the "Agricultural Use Requirements" on the label.

Make sure all workers and handlers are properly trained in the required information. Ensure they are provided and wear the required PPE.

REI = Restricted Entry Interval

The restricted entry interval indicates how much time must pass before workers are allowed back into treated areas without proper protective equipment. Toxicity of the pesticide, application rate, crop type and working practices all affect the length of the restricted entry interval. A typical REI ranges from 4 hours for low-risk products to more than 7 days for highly toxic fumigants. A fungicide with a 12-hour REI means humans and pets cannot enter the area without PPE until 12 hours after application.

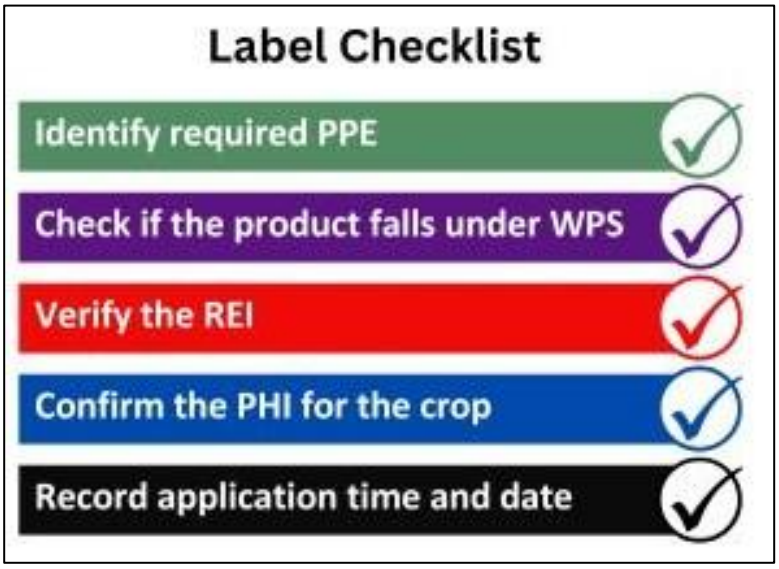
Before allowing humans and pets into a treated area, check the REI on the label. Post warning signs if required. Record the application time, so workers know when re-entry is allowed. Do not enter treated areas before the REI expires.

PHI = Post-Harvest Interval

The post-harvest interval is the minimum number of days after application that the fruit or vegetable crop must wait before it can be safely harvested. It is a pre-harvest restriction which ensures pesticide residues are below safe levels before the crop is marketed, sold or eaten. Pesticide, crop type, chemical

formulation, and application method all impact the post-harvest interval length. Some pesticides have a zero-day PHI, while others (like some fruit pesticides) require more than 14 days before harvest. The PHI is a crop safety requirement that must be followed before harvest. A pesticide with a 7-day PHI applied to tomatoes on June 1 cannot be harvested until June 8.

Check the PHI before selecting a product to apply to fruits, vegetables, and other crops. Do not assume all products have the same PHI.



As A Reminder:

It is important to remember to keep good records of all applications. Understanding these acronyms is more than memorizing terms as they are essential for protecting applicators, workers, consumers and the environment while staying compliant with pesticide laws.

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For questions or additional information, contact: hortsupport@ksu.edu

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