



Horticulture Newsletter

September 22, 2026

KANSAS STATE
UNIVERSITY

Horticulture and
Natural Resources

Video of the Week:



Starting with the right grass seed is the first and most important step when renovating a lawn. While most grass seed looks the same, not all grasses will perform the same in the heat and drought of Kansas. As a result, looking for the right varieties and how viable those seeds are (the germination rate) is important. In addition, looking for grass seed that is free of weeds and other undesired crops is also critical. [This week's video covers why high quality grass seed is worth the extra expense](https://youtu.be/kSPyiH103fE?si=FiCjIW6ca2V50too), and discusses what you

should look for when purchasing grass seed this fall: <https://youtu.be/kSPyiH103fE?si=FiCjIW6ca2V50too>

Garden Calendar:

- Remove small tomatoes from their vines in order to help increase the development of more mature fruits.
- Remove weeds from the landscape and garden to prevent weeds from going to seed.
- Plant chrysanthemums and asters for a pop of fall color.
- Remove seed heads from perennial plants to prevent them from reseeding in the garden.
- Fertilize cool season grasses with a high nitrogen fertilizer if you haven't already done so this September.
- Prune out broken and dead branches from trees.
- Begin gradually reducing outdoor light conditions for houseplants. Plan to bring houseplants inside before outdoor temperatures drop into the fifties.

Vegetables:

Bitter Cucumbers In The Garden:

With intense summer heat the past few months, many plants are showing symptoms of stress on the outside of the plant - leaf scorch, leaf shedding, premature fall color, etc.. Some plants, however, display stress internally. In the case of cucumbers, potentially changing the flavor of the produce.



When cucumber plants are under stress, cucumbers have the potential to develop a bitter flavor. There are a wide variety of stresses that can cause this bitter flavor to develop, but heat stress, moisture stress, and cucumber variety are the three most common problems that cause bitter tastes to develop in cucumber. When bitterness develops as a result of stress, it is common for all cucumbers in the garden to develop a similar level of bitterness.

The bitter taste comes from a plant chemical called cucurbitacin. All plants in the cucumber family produce this compound, as it is a natural defense the plant creates against plant-eating wildlife. While most varieties of cucumbers are bred to minimize this compound, the amount of bitterness that can develop depends on both the plant variety and the severity of stress.

When bitter cucumbers develop, often the fruit can be salvaged by removing and discarding the stem end of the fruit. Additionally, peeling the cucumber also helps to remove bitterness, as the cucurbitacin tends to concentrate just below the cucumber skin. Some cucumbers may be bitter all the way through and should be discarded. Keep in mind that pickling bitter cucumbers will not improve the flavor.



As fall temperatures cool and more consistent water is provided to plants, levels of bitterness tend to decline, especially on newly developing cucumbers. Consistent watering, use of mulch, good soil pHs (6.0-6.5), adequate soil nutrients, and preventing cucumbers from over maturing on the vine can further help limit the development of bitterness in the fruit.



Next year, consider looking for bitter-free cultivars. While this may not guarantee bitter free cucumbers next year due to environmental stress of our Kansas summers, these varieties tend to produce a low percentage of bitter fruit.

Visit our [bitter cucumbers fact sheet](https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Cucumber%20Bitterness.pdf) for more information and how to avoid bitter cucumbers in the future: <https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Cucumber%20Bitterness.pdf>

Fruit:

Storing Apples:



With the right storage conditions, apples can be enjoyed far beyond when they are picked from the tree. When stored at room temperature, apples should generally be eaten within 7 days. Under refrigerated conditions, however, some apple cultivars will stay in firm, crisp condition for up to 6 to 8 months. For optimum storage conditions, place apples in temperatures between 32°F and 40°F, and ensure a relative humidity between 90% and 95% so fruit do not dehydrate and shrivel.

Apples will vary in the length of time that they can be stored depending on the apple cultivar. Some cultivars will keep well under refrigerated conditions for longer periods than others. The approximate length of time apple cultivars can be stored under optimal conditions is as follows:

- | | | |
|---------------------------|------------------------------|----------------------------|
| • Wealthy: 60 days | • Golden Delicious: 150 days | • Rome Beauty: 220 days |
| • Paula Red: 90 days | • Empire: 150 days | • Winesap: 220 days |
| • Gala: 120 days | • Delicious: 160 days | • Fuji: 240 days |
| • Jonathan: 120 days | • Braeburn: 180 days | • Granny Smith: 240 days |
| • Grimes Golden: 120 days | • Idared: 200 days | • Arkansas Black: 240 days |

In addition to cultivar, the condition of the apples and how they are stored will strongly influence the storage life. To help ensure good quality and maximum storage life of apples, be sure to:

- Store only the best quality apples. Consume blemished apples immediately, or use them in cooking, baking, or cider.
- Pick apples as they are first maturing.
- Avoid apples with skin breaks, disease, insect damage, or bruises.
- Store apples in a plastic bag to help the fruit retain moisture. The bag should have a few small holes for air exchange. Holes should be small enough to retain moisture but large enough to allow air circulation that prevents condensation. The bags of apples may be stored in boxes to prevent bruising if they must be stacked or moved from time to time.
- Refrigerate apples at about 35°F, but do not allow the fruit to freeze.
- Sort apples every 30 to 40 days to remove fruit that may be beginning to rot.



Visit our [Preserve It Fresh, Preserve It Safe: Apples](https://bookstore.ksre.ksu.edu/pubs/preserve-it-fresh-preserve-it-safe-apples) publication for more ways to safely prepare and preserve apples through freezing, dehydrating, canning, and other great recipes:

<https://bookstore.ksre.ksu.edu/pubs/preserve-it-fresh-preserve-it-safe-apples> MF1187.PDF

Flowers:

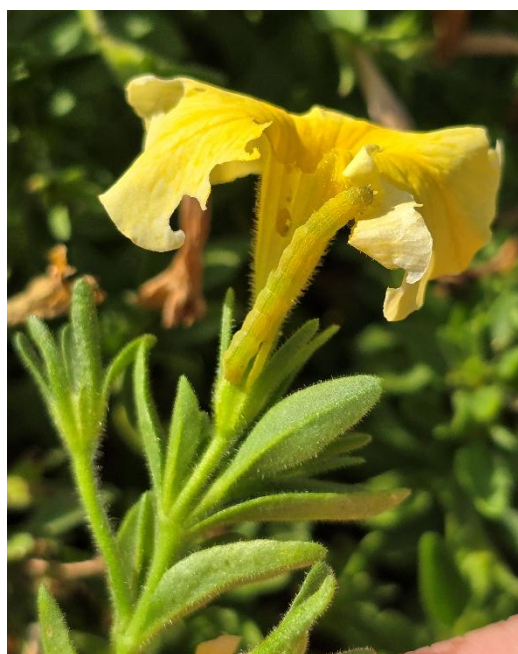
Budworm Damage On Annual Flowers:



When growing annual flowers, there is often not a pest more frustrating than the Geranium Budworm (*Helicoverpa virescens*). Also known as a Tobacco Budworm, this tiny caterpillar insect frequently causes significant damage to petunia, calibrachoa, geranium, and roses by boring into the buds and eating the flowers before they open.

Gardeners often grow big, beautiful petunia plants, but rarely see a flower blooming on the plant as a result of budworm feeding. Damaged flower buds often fail to open, and those that do frequently produce flowers with holes and evidence of feeding damage. This past month has shown the peak of budworm damage, as populations tend to hit their highest point in late summer with the second generation of caterpillar activity.

In Kansas there are normally two generations of budworms per year. Caterpillars emerge from eggs laid on the flower bud and begin to bore into the bud to feed. Caterpillars vary wildly in color, depending on the color of the flowers on which they eat. Most caterpillars have alternating light and dark stripes, which become more prominent with age. The caterpillars feed on the flowers for about a month and then tunnel 2 to 6 inches down into the soil to pupate. From the cocoon, adults emerge as a moth with a wingspan of about 1.5 inches. The wings are light green with gray or brown overtones and a few wavy, cream-colored bands.



The highest populations of budworms usually occur in the late summer and fall. For winter, some budworms will survive as cocoons in the soil (especially in potted plants that are moved indoors for winter). Outside, winter survival depends on weather conditions. Most overwintering pupa will be killed when winter temperatures reach below 20°F, however garden debris and garden microclimates may offer additional winter protection. New moths are also carried northward each summer, reintroducing budworms.

For budworm control, management options are often imperfect.

Monitoring regularly for early budworm detection is important. Look for small holes in the buds and flower petals. Handpicking caterpillars from small plantings can be effective. This is often easiest at dusk and in the early evening hours when caterpillars are most active, as most caterpillars hide around the base of the plant during the day.

Budworms can be difficult to control using insecticides. Many budworms have been reported to be resistant to many common garden insecticides. Another challenge is that much of the budworm feeding activity occurs

within buds and cannot be easily reached by insecticide sprays. For larger plantings, however, insecticides may be the only practical control option.

Insecticides that provide residual activity (for several hours or days after application) are more effective at controlling caterpillars. This includes Spinosad, as well as many pyrethroid insecticides (active ingredients such as permethrin, cyfluthrin, bifenthrin, gamma-cyhalothrin, or esfenvalerate). Caution must be used when applying these products, however, as they pose a greater risk to bees, butterflies, and non-target species.

With most budworm feeding activity happening at night, pesticide applications should be timed at dusk when caterpillars are most active. This will also help protect pollinators such as bees, which are not active at night. Pyrethroid insecticides should have limited use on flowering plants that attract bees and other pollinators. Be sure to read the label carefully in order to best protect pollinators.



While *Bacillus thuringiensis* var. *kurstaki* (Bt) can be used, it is often ineffective against budworms. For Bt to be effective, caterpillars must consume plant foliage that has been coated with Bt sprays or dusts. This results in an effectiveness that can be varied.

Ultimately, the best defense against budworm is to select annuals that are not susceptible to feeding damage. Lantana, pentas, begonia, coleus, salvia, zinnias and impatiens are typically not impacted by budworms, and can make a good alternative to petunias, geranium, and calibrachoa.

Turf:

Choosing To Plant A Lawn From Sod Versus Seed:



When planting a new lawn, a common question often arises - is it better to plant a new lawn from seed, or is it better to spend the extra money and plant sod?

While there is no simple answer to this question, there are advantages and disadvantages to planting a new lawn from sod versus seed. Evaluating each of these advantages and disadvantages will be important in making an informed decision about which option is right for you.

Some of the advantages of using sod include:

- Sod provides an “instant” lawn.
- There is a greater planting window for establishing sod versus seed. Sod can be planted about any time the ground is not frozen and water is available. While there are ideal windows for sod establishment, sod allows for planting and lawn establishment later into the fall and early winter months.
- Sod will tolerate traffic sooner since it has some established shoot and root growth. This helps keep the amount of dust and mud down on the property.
- For the same reasons, sod can also be useful in providing greater erosion control with existing plant growth.
- Most of the time, sod should be free of weeds.



When evaluating the disadvantages of sod, the list includes:

- The higher cost of sod is generally its biggest disadvantage.
- Establishing sod typically requires more water than planting grass seed. Sod cannot be allowed to dry out. Waterings require not only water to soak the sod, but enough water must be applied to reach the soil below the sod as well. This typically requires larger amounts of water and creates additional costs when planting sod, especially if the sprinklers run off municipal water.
- When purchasing sod, most sod producers grow only a set number of turf types. This means that there are often less choices of turfgrass species and cultivars.
- Sod is always produced in full sun environments, so sod may not be immediately well adapted to being grown in shaded environments.
- How quickly the sod establishes roots will depend on the season and weather conditions.
- Individual pieces of sod may shrink and swell as moisture levels change. When sod dries it shrinks, potentially allowing weeds to invade the areas between sod pieces.
- There is also the risk that the soil from the sod and the soil at the planting site do not mix well together and cause the sod to perform poorly.

Tips For Planting Sod:



When planting a lawn using sod, many of the same rules as planting grass seed should still be followed. When planting sod, however, additional flexibility is provided from planting a turfgrass that already has an existing root system.

To have the greatest likelihood of success, follow these tips for planting and establishing a cool season turfgrass sod:

Sourcing Sod: Select sod that contains turfgrass types well suited to your site. Always purchase healthy, freshly cut sod from a reputable dealer. Ideally sod is cut in the morning and installed later the same day to preserve turfgrass quality. Avoid sod that has been stored on pallets placed in full sun for extended periods of time and allowed to dry out.

Planting Time: While September is ideal for planting Tall Fescue sod, planting from now through early November is acceptable. Tall Fescue sod can also be planted in the spring, from March until mid-May. Under good conditions, most sod will begin to root within 14 days. Ideally, sod should be allowed 2-4 weeks for root establishment prior to the onset of the heat of summer or dead of winter. Planting sod during these times should be avoided whenever possible. The results of planting Tall Fescue sod from mid-November through early December will be variable, depending on the weather conditions each year.



Planting Preparations: Just like with seeding, begin by conducting a soil test of the site, and amending the soil as needed. When planting sod it is also important to loosen and level the soil on site before laying sod. Remove rocks, weeds, and other vegetation that would limit sod's contact with the soil. Sod will establish roots best when the sod has direct, uniform contact with the soil beneath it.

Be sure to have the site completely prepared for planting before sod arrives. Sod will need to be installed as quickly as possible after it arrives, in order to prevent the sod from drying out or heating up while stacked.

Installing Sod: When installing sod, place sod pieces down so that pieces fit tightly together. Unroll sod pieces but do not stretch them. Stretched sod will shrink as it dries, creating gaps that weeds can invade. Lay sod in a staggered, bricklike pattern. Avoid allowing end joints to line up from row to row. On steeply sloped areas, sod may need to be staked to prevent movement.

As sod is installed, avoid walking on freshly laid sod. Consider laying sod from the furthest back point of the property and moving closer in order to prevent hauling sod over freshly laid sections.

After the sod is laid, use a lightweight roller to press the sod down to ensure the sod has good contact with the soil. Good soil-to-root contact will encourage faster rooting and establishment.



Watering Newly Placed Sod: Immediately after installing sod, begin watering. Irrigate heavily in the beginning to ensure water soaks both the sod and penetrates beneath the sod to wet the underlying soil. Newly installed sod will require frequent irrigation during the first several weeks because roots have not yet grown into the soil below. Under good conditions sod will begin to root within 14 days.



Until sod is established, continue to irrigate frequently, making sure the soil below the sod is dampened to encourage root development. As rooting progresses, gradually decrease the irrigation frequency and increase the amount of water applied in each application. Moving to deeper, more infrequent watering will encourage deeper root growth over time.

Trees & Shrubs:

Bark Shedding On Trees:

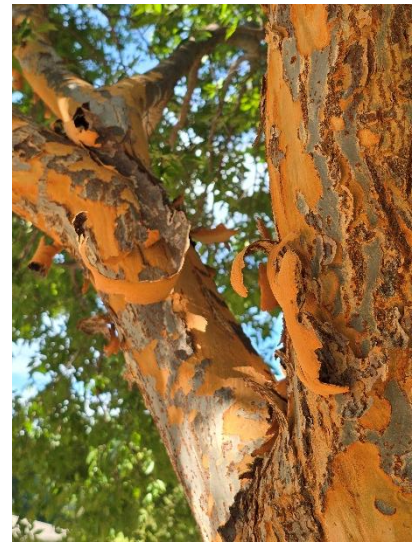


Trees are continually growing. It is easiest to see this growth in how a tree increases in height and width of the canopy overtime (called primary growth). The change in growth that is more difficult to see, however, is the continual increase in trunk and branch diameter (called secondary growth). Secondary growth is a much more gradual change, and it is difficult to see unless the trunk or branches are continually measured.

With secondary growth, new layers of growth are produced internally, in what is known as the vascular cambium. The vascular cambium is a thin layer where the bark and the wood meet, and the point from which all internal growth originates from within the tree. This growth usually occurs in two distinct flushes. The first is in the spring and called early season growth/earlywood. The second flush of growth occurs in the summer and fall and is known as late season growth/latewood. Combined, these two growth cycles make up the growth that increases trunk diameter, while also creating the rings of our trees.

With this constant expansion, trees are continually producing new layers of both wood (tree rings), and bark. For the purposes of this article, we will focus on the bark. The appearance of bark changes on most trees over time. Most all trees have a smooth bark on the trunk and branches when the tree is young. Over time, most tree bark changes in appearance, often developing a corkier appearance as bark layers build up on the exterior of the tree. This thicker bark provides additional external protection for the tree.

While most trees develop corky bark on the trunk and branches with age, this is not the case for all trees. Some trees shed, peel, and exfoliate old bark layers to maintain a smoother bark appearance. Many trees exhibit this characteristic, including Sycamores, London Planetrees, Eastern Redbuds, Lacebark Elms, River Birch, and many Maples (including Silver, Paperbark, and Trident Maples).



For these smooth barked trees, fall is the time of year when bark shedding, peeling, and exfoliating becomes most noticeable. While bark shedding from a tree can often cause concern, this is a natural process for thinly barked trees as late season growth expands the trunk and branches outward in diameter.



With natural bark shedding, the bark will come off the tree in large, irregular patches and strips. This shedding occurs throughout the tree and is most prominent on the largest diameter sections of the trunk and branches. Often the shedding bark will peel, roll, or curl upward from the edges, as the bark separates from the tree. Chunks of naturally peeling bark can vary from several inches to several feet and will collect around the base of the tree.

Underneath the newly peeled bark, a bright, temporary coloration is often exposed. Most trees will reveal an orange color, especially on lacebark elms, redbuds, and some maples. Other trees, such as sycamores and London planetrees, often reveal a bright green color instead.

Bark shedding is a completely normal process as long as a new bark layer is visible underneath the recently shed bark.

Although bark shedding is a natural process, it can sometimes indicate problems as well. Bark shedding is a concern if:

- Bark shedding occurs in localized areas of the tree, or in just one spot. Often sunscald damage causes this type of shedding.
- Bark shedding reveals bare wood underneath, or large visible cracks that extend into the wood of the tree.
- Bark chunks on the ground are of a uniform size or shape, often this can be an indication of wildlife damage, such as that of squirrels or porcupines.
- Bark shedding occurs outside the fall or spring timeframe when new growth is occurring.



Contributors:

Matthew McKernan, Consumer Horticulture Extension Associate

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

To have the KSU Horticulture Newsletter emailed to you, subscribe by sending an e-mail message to hortsupport@ksu.edu listing your e-mail address in the message.

*The KSU Horticulture Newsletter is also available online at:
<http://hnr.k-state.edu/extension/info-center/newsletters/>*

Mention of trade names, brand names or commercial products in this newsletter is solely for identification purposes and does not imply recommendation or endorsement by Kansas State University, nor is criticism implied of similar products not mentioned. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

Kansas State University is an equal opportunity provider and employer.