



# Horticulture Newsletter

**March 3, 2026**

**KANSAS STATE**  
UNIVERSITY

Horticulture and  
Natural Resources

## Welcome From The Editor:

Hello, and welcome to the first K-State Horticulture Newsletter of 2026. My name is Matthew McKernan, and I am the new steward of the K-State Horticulture Newsletter. Just a few weeks ago I began my new role as Consumer Horticulture Extension Associate, with the Department of Horticulture & Natural Resources at Kansas State University. In this role I will work to provide you with newsletters, fact sheets, publications, and other forms of information to help you plan and grow successful gardens and landscapes, while also helping you to navigate the insects, diseases, and weeds you encounter along the way.



To share with you a little about myself, I am a lifelong Kansan, born and raised in Wichita Kansas. I have always had a passion for horticulture and plants, even from a young age. I love to travel, always touring botanical gardens, demonstration gardens, and national parks along my journeys. For the past decade, I have served as a Horticulture Agent with the K-State Extension Office in Sedgwick County. There I focused on community education related to ornamental plants.

While I am new to this role, my time with K-State has made me a long-time reader of the Horticulture Newsletter. I value the weekly insights, reminders, and tips for what is going on in the landscape. Moving forward, I hope to continue that tradition, and provide you with information that will enhance the success of your landscape and garden. As I work to make good on that promise, I appreciate your patience and understanding as I settle into my new role, and work to improve the resources K-State has to offer you. While there will inevitably be changes in how our services evolve and are delivered to you, my commitment to you stays constant – to deliver high quality, timely research-based information you can trust.

I look forward to the journey we will share together. Thank you for being a loyal supporter of the Horticulture Newsletter. - Matthew McKernan

## Video of the Week:

When starting seeds indoors, it is critical to provide high quality lighting in order to develop healthy transplants. [This week's video highlights how to make an easy grow light at home](#) for less than \$20.00 in supplies, plus the cost of the light.



## Announcements:

### **March K-State Garden Hour:**

Learn how to create beautiful, resilient, naturalistic landscapes by blending native and modern plants into your landscape design during this month's K-State Garden Hour. Join us from Noon to 1:00pm this Wednesday, March 4, 2026 for the free webinar, "Naturalistic Landscape Design Style - Kansas Perspectives & Flexible Approaches for Every Garden". Register now to join us live, or watch the recording afterwards online at: <http://ksre-learn.com/KStateGardenHour>



#KSTATEGARDENHOUR

## K-STATE GARDEN HOUR

### Naturalistic Landscape Design Style: Kansas Perspectives & Flexible Approaches for Every Garden

Wednesday, March 4th 12:00PM -1:00PM CST

Learn how Kansans perceive and implement a naturalistic landscape design style. Join Dr. Cheryl Boyer, Horticulture Extension Specialist, as she highlights flexible approaches to blending native and modern plants, applying landscape design principles that work for any size garden. Gain inspiration and actionable ideas for overcoming the common challenges of creating resilient, beautiful, naturalistic landscapes.

Register here!



Please register for this free Zoom Webinar at: [ksre-learn.com/KStateGardenHour](http://ksre-learn.com/KStateGardenHour)

KANSAS STATE UNIVERSITY  
Extension

### **2025 Horticulture Newsletter Index:**

All of the Horticulture Newsletter articles published in 2025 have been indexed according to subject. If you are looking for advice on your favorite plant or garden subject, [visit the index posted on the Horticulture Newsletter website to quickly find past articles](http://hnr.k-state.edu/extension/info-center/newsletters/) (<http://hnr.k-state.edu/extension/info-center/newsletters/>). A special thank you to Johnson County Extension Master Gardener, Lori Dickey, for her efforts to organize all our 2025 articles.

## Garden Calendar:

- Cut back ornamental grasses just above ground level, leaving no more than 3-6 inches of stubble. This allows for new growth, while reducing the frequency with which grasses may need divided.
- Continue starting seeds indoors. Many cool season vegetable crops can be transplanted outdoors into the garden from mid-March to mid-April, including broccoli, kale, cabbage, potatoes, and beets.
- Peas, leeks, lettuce, and onions can be planted outside in early March if weather conditions allow. These seeds are able to sprout in cooler weather, when soil temperatures reach around 35°F.
- Fertilize spring flowering bulbs as growth emerges. Once flowering begins, fertilizers will be too late to benefit the bulb for the next growing season.
- Conduct a soil test before the growing season begins. Soil amendments will be much easier to incorporate before new gardens or flowerbeds are planted.

## Vegetables:

### **Testing Germination Rate Of Old Seeds**

Most gardeners have seeds from past gardening seasons. Whether they were extra seeds leftover at the end of the row, seeds collected from the garden, or gifts from other gardeners, the question that remains is this: will these old seeds still grow?

Seeds, just like the plants they come from, are living things. This means that even though they sit in a dormant state, waiting for the ideal conditions to start growing, they are alive and impacted by their storage conditions. The longer a seed is stored, the more the quality of that seed decreases, and the less likely it is to grow. Heat, humidity, moisture, and temperature fluctuations the seed is exposed to during storage only further decrease a seed's lifespan.

Most seeds, when stored well, can easily be saved for one year and still germinate, or sprout from the seed and grow well. Seeds stored for three to four years often experience a significant decrease in their ability to germinate, however when stored in ideal conditions, some seeds can survive ten or more years in storage and still germinate. Since there is so much variability in how long a seed can be stored, it is best to test old seeds before planting.



**To test if old seeds are still worth planting, gather up a paper towel, plastic bag or container, and some water for an easy, at-home experiment. Here is what you will do:**

1. Start by taking a couple of sheets of paper towel and dampen them with water. Wring out any excess water and lay the paper towel out flat.
2. Place 10 or more seeds on one-half of the damp paper towel. The more seeds tested, the more accurate the results, however, only plan to use a portion of the total seeds available.
3. Fold the paper towel over the seeds, covering the seeds, and place it in a plastic bag or container. Seal the bag to trap in the moisture. Consider labeling the bag with the date and type of seed tested.
4. Place the bag in a warm location of the house, such as on top of the refrigerator, in a sunny window, or over a heating vent. Warm temperatures above 70°F will speed up germination.
5. Check the seeds every few days for signs of germination and see if additional water is needed to keep the paper towel damp. Most seeds will germinate within 5-10 days, however some seeds may take slightly longer.



Determine the germination rate of the seeds by counting the number of seeds that have started to grow and divide that number by the total number of seeds tested on the paper towel. Multiply by 100 to determine the % germination rate.

$$\frac{\text{\# of Seeds Growing}}{\text{Total \# of Seeds Tested}} \times 100 = \% \text{ Germination Rate}$$

A germination rate of 90% or above is excellent for most seed species. Germination rates between 70-80% are still acceptable, and common for many types of seeds. For seeds within this range, consider planting a few additional seeds to

offset the lower germination rate. If your germination rate is 50-60% or less, it will probably be best to purchase new seeds for the upcoming growing season.

When the germination test is over, most often seeds from the test are disposed of. Seedlings are extremely delicate as their first root (called a radicle) emerges, and handling and seed counting may damage the radicle. If the emerging roots or shoots are damaged, the plant will not survive. If the seed can be handled carefully, without damaging the emerging plant, the seeds can be planted in the garden or in pots for transplanting outside later. This will be most easily accomplished with larger seeds, such as sunflowers, pumpkins, or squash.

## Trees & Shrubs:

### Determining The Best Time To Prune:

For most trees and shrubs, early spring is a great time to prune, however, the ideal time to prune can vary depending on the specific type of tree or shrub. When evaluating when to prune a tree or shrub, first determine when the plant's flowers are in full bloom.

If the plant blooms in early spring (such as redbud, crabapple, lilac, magnolia, forsythia, or quince), consider waiting to prune until immediately after the plant finishes flowering (mid-April to mid-May). Pruning these plants before they bloom will not damage the tree or shrub but will reduce the number of spring blooms the plant has.



If the plant blooms in the summer or fall months (such as butterfly bush, crape myrtle, rose of sharon, catalpa, golden raintree, or linden), late winter to early spring is generally the best time to prune. These plants will bloom on new growth that is produced in the spring, so pruning while dormant will not significantly reduce the number of flowers that growing season.

If flowering is not a concern, late winter through early spring (late February through early April), before new growth begins is the best time to prune most deciduous trees. Without leaves, a tree's structure is easy to evaluate and improve with pruning. This also allows for the quickest wound healing, helping to prevent disease and decay within the tree.

Like any good rule, there are always a few exceptions:

- Oak trees are best pruned when dormant in the early winter months (December through February) to reduce the risk of spreading Oak Wilt disease while pruning.
- Trees with heavy spring sap flow (such as River Birch, Maple, or Elm), may be pruned mid-summer to reduce the mess of bleeding pruning cuts. While this excess sap flow is not damaging to the tree, it can create an undesired and preventable mess.

Evergreens (such as pine, spruce, or juniper) are best pruned in early summer (May to June) as the new growth develops. Most evergreens cannot develop new growth from the interior of the plant, so plant size has to be managed by pruning evergreen growth as it develops and expands.

## Miscellaneous:

### **Where Did The Flower Go?**

With the onset of spring, Crocus are one of the first plants to flower. On bright, sunny days they add a beautiful pop of color in the winter landscape, ranging from yellow, white, purple, and lavender. But what happens to these flowers at night?



Have you ever noticed that while crocus are spectacular in the daylight, at night the flowers all but disappear? This is a phenomenon called nyctinasty (pronounced nik-tə-na-stē). Nyctinasty is a movement of plant parts, usually in the flowers or the leaves, in response to the onset of darkness. Most commonly, nyctinasty is observed in plants when the flowers close at night, or plant leaves take a different orientation at night versus the day. For crocus this means the flowers close at night, or on cloudy days.

Crocus is not the only plant to do this. Nyctinasty is observed in certain plants from every ecosystem on earth, including in the rainforests, deserts, swamps and mountainous regions. In our own backyard, we may witness this phenomenon in plants such as tulip, Anemone, poppy, Magnolia, rose moss (*Portulaca*), water lily, and even dandelion, all of which demonstrate nyctinasty by closing their flowers at night. Many plants in the Fabaceae (Bean) family also demonstrate nyctinasty in the movement of their leaves, including peas, soybeans, and vetch.

What is even more interesting about this phenomenon is that experiments have shown that plants will continue making nyctinastic movements at approximately the same time each day, even when placed under continuous light or continuous dark conditions for several days. So, while light may be a factor in the opening and closing of the crocus flowers, the response is also driven by an internal clock within the plant.

While most flowers stay open all night long, nyctinastic flowers close at night, and why that occurs, the science is still unsettled on. Some popular theories include:

- Improves the temperature regulation of plants
- Helps remove surface water from leaves
- Prevents the disruption of photoperiodism by moonlight
- Discourages insect feeding
- Protects against low temperatures
- Protects flower pollen from dew and rain
- Preserves water and sugar levels in the plant when conditions are not optimal for photosynthesis
- Protects from nocturnal herbivore foraging by aiding the nocturnal predators that hunt the herbivores (due to reduced leaf mass for herbivores to hide behind and for carnivores to rustle against hunting)



While all these theories may have merit, none perfectly answer the purpose of nyctinasty in every plant. Whatever the exact cause, you can rest well at night knowing that your crocus flowers are also asleep, awaiting tomorrow's sunshine to reawaken their flower.

## **Excellence Spotlight:**



Before we close this week's newsletter, I want to take this opportunity to thank Dr. Cynthia Domenghini for her support in my new role. Cynthia, who has authored the Horticulture Newsletter for the past several years, has transitioned her position with K-State to take on more teaching responsibilities. I am thankful for her guidance and her continuing the long-standing tradition of the K-State Horticulture Newsletter. Thank you, Cynthia!

### **Contributors:**

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