

# THE GRAPEVINE



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Larry Crouse

Extension Horticulture Agent

## SOIL TEMPERATURE AND VEGETABLES



One of the most neglected tools for vegetable gardeners is a soil thermometer. Soil temps are a much better measure of when to plant than air temperature or the calendar. Planting when soil is too cool can cause some seeds to rot and transplants to sit there. A number of vegetables can germinate and grow at cool temperatures. For example, peas will germinate and grow well at a soil temperature of 40 F. Though lettuce, parsnips, and spinach can sprout at a soil temperature of 35 F, they prefer at least 45 F for best germination and growth. Radishes also do well at a soil temperature of 45 F. Even if the seeds of these cool-season crops are planted below the recommended soil temperature, the seed will rarely rot. Warm-season crops such as tomatoes, sweet corn and beans are different. They prefer at least 55 F for germination (or transplanting), but others such as peppers, cucumbers, melons and sweet potatoes need it even warmer, about 60 F. If planted when soils are too cool, they likely will rot before germinating. Taking soil temperature accurately is a bit of a science. First, use a metal soil thermometer, which is sold in many garden, auto parts and hardware stores. Take temperature 2.5 inches deep at about 10 to 11 a.m. Temperature variations throughout the day and night affect soil temperature, with lowest readings after dawn and warmest around mid-afternoon. The late-morning reading gives a good average temperature. If taking the soil temperature at this time is not practical, take a reading before you leave for work and a second when you return home and use the average. Also be sure to get a consistent reading for four to five days in a row before planting, and make sure a cold snap is not predicted.

## *Forcing Stems of Woody Plants for Indoor Bloom*

Stems of a number of woody plants can be forced into bloom for indoor display. Of course, some are easier to force than others. Three of the easiest are forsythia, pussy willow, and flowering quince. These plants have now gone through enough cold weather to satisfy their chilling requirement and should bloom if given the right conditions. Remember that the flower buds on forsythia are killed as temperatures reach -10 degrees F. If your area has had temperatures this far below zero, use one of the other woody plants. Choose a day that is above freezing for collecting branches for blooming. Keep the stem length to 3 feet or less. As you cut, place the stems in a bucket of water. Once you have the number of branches you want, bring them into the house and soak them in warm water for several hours -- a bathtub works well for this. This ensures that the stems and buds are fully hydrated. Next, place them in a container that has a warm, preservative solution and place them in an environment with high humidity and plenty of light. Make your preservative solution by dissolving packets of floral preservative in water. These packets can often be obtained from your local florist. You can also make your own preservative by adding a tablespoon of Listerine per gallon of water, but commercial preservatives are preferred. Floral preservatives accomplish two functions; they prevent bacterial growth in your water and provide nutrients and energy for the life processes of the plants.

Many times our houses have a very low relative humidity during the winter. This low humidity can lead to dehydration of flower buds and blossoms. To raise the humidity around your plants, mist the plants or drape a dry cleaner's bag over your stems. If a cleaner's bag is too small, use a painter's clear plastic drop cloth. Humidifiers can also help raise humidity levels.

Normally, forsythia will take about nine days to flower, quince will require between 12 to 20, and pussy willow needs from five to 15 days. The time required will vary depending on indoor conditions and how late in the winter the branches were collected. Most woody plants should be in flower within three weeks of collection and will remain in flower for about a week before blooms start to fade.







## **Leaching Houseplants**

Everyone knows that someone stranded in the ocean should not drink the water. The salt content of that water will make a bad situation worse. What many people don't realize is that this same principle can harm plants. Fertilizers are salts or are converted to salts before plant take-up. They must be salts in order for the plant roots to absorb them. However, salt levels can build up over time and eventually may harm plant roots leading to scorched leaves and unhealthy plants. Though this can happen under field conditions, especially in low rainfall areas, it is particularly critical with houseplants. Houseplants have a certain soil volume that doesn't change until a plant is repotted. Salt build-up can be a crucial concern especially if plants are fertilized heavily. Leaching an overabundance of salts can be an important practice to ensure the health of our houseplants. Leaching is not a complicated or difficult process. It consists of adding enough water to wash out excess salts. How much water is enough? Add the amount of water that would equal twice the volume of the pot. This, of course, would need to be done outside or in a bathtub or sink. Water must be added slowly so that it doesn't overflow the rim of the pot. If salt has formed a crust on the surface of the soil, remove it but don't take more than 1/4 inch of the underlying media. This may also be a good time to repot the plant.

## **Cure the Itch by Planting Peas**

If you are tired of winter and hunger for spring, try planting peas as soon as the soil dries and the soil temperature reaches 40 degrees. There are several types of peas we can plant in Kansas. Probably the most common is the shelling pea and the old standard in this group is Little Marvel. Though Little Marvel is still on our recommended list, we have a number of others that do well including Green Arrow, Knight, Maestro, Burpeeana and Mr. Big. All of these are early maturing types that allow us to harvest a crop before the hot weather arrives and stops production. Snow peas are those commonly used in stir-fry that have a crisp edible pod. Recommended varieties include Dwarf Grey Sugar and Mammoth Melting Sugar. Sugar snap peas resemble shelling peas but have a thick, fleshy pod and can be eaten fresh, steamed or cooked. Like snow peas, they are not shelled but eaten pod and all. We recommend Sugar Bon, Sugar Ann, Super Sugar Snap and Sugar Sprint. Peas should be planted shallow, about one-half inch deep, to encourage rapid germination and emergence. Seed in the row should be spaced 2 inches apart. Many people often plant two rows 6 to 8 inches apart so the floppy plants can support one another. For some older varieties, this may not be enough. They may need trellising to support the growing vines. Fencing may be needed to keep rabbits away.

Larry E. Crouse  
Butler County Horticulture Agent  
K-State Research & Extension  
206 N Griffith, Suite A  
El Dorado, KS 67042  
(316)321-9660  
[lcrouse@ksu.edu](mailto:lcrouse@ksu.edu)



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