



# Planting vegetables

**Q**uestion: I'm noticing that local stores are already selling tomato and pepper plants as well as other vegetables. How can I tell if it's the right time to plant these?



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eggplant, squash, corn and melons require a soil temperature of at least

60-70 degrees.

If you transplant those lovely tomato and pepper plants you found at

the store when the soil temperature is only 50 degrees, your plants will just sit there and "sulk" until the temperatures rise. They will also be harmed or killed off should old Jack Frost make an appearance in April. A rule of thumb is to pay attention to the night air temperature staying at a minimum of 55 degrees for an extended time.

No guess work is necessary when you use a soil thermometer, no matter what your garden climate or micro-climate. You can purchase one at any garden or hardware store. They are metal with a probe about 6-8 inches long, and a reading to measure temperatures from low 40's to upper 80's displayed on its face. Usually the face also tells you what vegetables require what temperatures, so it's super easy

**Answer:** After such a long, dreary winter, it's tempting to throw caution to the wind and plant all your vegetables at once, especially when the stores display such lovely tall tomato plants that say "take us home!" There is a sure-fire way to tell whether it's time to plant certain vegetables and that is using a soil thermometer. Soil temperature is much more crucial to seed germination or transplant growth than air temperature or the calendar, but unfortunately this handy tool is often never considered.

Vegetables that can germinate and grow in cool soil temperatures are radish, lettuce, cabbage, carrots, broccoli, kale, spinach and peas. These can be grown in soil temperatures of 40-45 degrees.

But warm-season crops such as tomatoes, peppers, beans, cucumbers,



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to read. Don't confuse a soil thermometer with a compost thermometer, however, as they are not interchangeable.

It's suggested you take two measurements of the garden bed in the late morning. For the first measurement, push the thermometer probe 1-2 inches down, slightly below where your seeds will be. Then take another measurement 4-6 inches down which will indicate if there's enough ground heat for growth or for your transplant's roots.

Remember that even if we get some warm sunny days which can raise the soil temperature rapidly in the first 2 inches, it can still be very cool down in the deeper root zone. To be sure of a consistent reading, repeat your

measuring for four to five days in a row before planting, keeping an eye on the weather forecast for any possible frost predictions.

If you simply can't wait, you can go ahead and plant your warm-season vegetables earlier by using such heat-protection devices as "wall-o'-waters," cloches, inverted plastic milk jugs, cold frames or floating row covers.

Some vegetables like corn, squash, cucumbers and beans grow quickly and are best grown from seed, not transplants. Best to wait to plant these when soil temperatures are high. Some cool-weather root vegetables that don't transplant well either like carrots, parsnips and beets are also best grown

from seed.

Another option is to artificially warm up your garden soil with plastic sheeting.

Also remember that if you buy warm-season vegetable plants now, these starts have been pampered in greenhouses and are likely not hardened off to the current outdoor conditions. Before planting them, protect them indoors during the nights, gradually putting them outside during the day for longer periods of time up to a week or so before planting them in your garden.

These plants are very susceptible to damage if suddenly exposed to cold outdoor conditions. Outdoor sunlight is often more intense than light provided by grow lights or in a greenhouse. It can easily cause sunburn to the leaves of plants that are not hardened off.

Initially, set your transplants outside on any warm day, ideally in partial shade where they're protected from wind. Leave them out for only a few hours, increasing the amount of time gradually each day as well as time in the sunlight.

Also gradually cut back on water and do not fertilize until you plant

them in the soil, and then only with a weak fertilizer solution. When they've spent the majority of their day in the sun and can tolerate less water, they're probably ready to plant.

With the help of your trusty soil thermometer, you can confidently know when to plant your garden this year.

*Email, call or visit the Douglas County Master Gardener Plant Clinic at [douglasmg@oregonstate.edu](mailto:douglasmg@oregonstate.edu), 541-672-4461, or 1134 SE Douglas Ave., Roseburg.*