

## When To Plant

The old saying that “patience is a virtue” applies to gardeners who get the itch to garden when temperatures warm up in the spring. One of the ways to determine when to plant veggies is based on their hardiness or their ability to withstand frost and cold temperatures.

**Very hardy vegetables** can be planted four to six weeks before the frost-free date in the spring. Potato tubers and onion sets can be planted. Asparagus, broccoli and cabbage can be planted as transplants. Collards, spinach, peas, lettuce and turnips can be planted from seed.

**Frost-tolerant vegetables** can be planted two to three weeks before the frost-free date. Cauliflower can be planted as a transplant. Carrots, mustard, parsnip, beets and radishes can be planted from seed.

**Tender vegetables** can be planted on or after the frost-free date. Beans, sweet corn, and summer squash can be planted from seed. Tomatoes transplants can be planted.

**Warm-loving vegetables** can be planted one to two weeks after the frost-free date. Warm-loving vegetables need warm temperatures and warm soil before planting. Vining crops like watermelon, cucumbers, pumpkins and cantaloupe can be planted. Pepper, eggplant and sweet potatoes should also be planted.

## What To Plant

Don't go overboard with your seed ordering after viewing all the colorful garden catalogs with their beautiful pictures of veggies or you may be the gardener in your neighborhood trying to give away zucchini. Grow what your family likes to eat. As a first time gardener, stay away from "exotic" veggies like kohlrabi or hard to grow veggies like cauliflower or head lettuce. Instead, start with hybrid vegetables. Hybrid vegetables are usually stronger and healthier than other vegetables. They often have higher yields. Many have a built-in disease resistance and they are more likely to recover from bad weather. Hybrids may cost a little bit more than other types of vegetables, but the cost is worth it. If you save seeds, remember that hybrids do not reproduce true to type, meaning the new plant will be inferior to the mother plant.

Choose vegetables that have earned the All-America Selections award. All-America Selections is an organization that has been evaluating new vegetable varieties in trial and display gardens across the United States and Canada since 1933. Each year after the evaluations have been analyzed a number of the most outstanding vegetables are designated as All-America Selections indicating that they performed well under all types of conditions.

Choose disease-resistant varieties of vegetables. Just because a vegetable has built-in resistance to a specific disease doesn't mean that that vegetable will not get the disease, but it will fare better than a vegetable that has no resistance to the disease. For example, verticillium and fusarium wilt attack tomatoes. The letters VF by the variety's name in a garden catalog or on a plant label indicates that the plant is resistant to both wilts.

## How To Plant

After digging your soil to a depth of 6-10 inches, break up any large clods with a rake. Use the rake to prepare a smooth seedbed. If needed, spread 1-1/2 pounds of a garden fertilizer over every 100 square feet of your vegetable garden. A one pound coffee can holds 1-1/2 pounds of fertilizer. Rake the fertilizer into the top 2-4 inches of soil. If you plan to use an organic fertilizer, add a two to four inch layer of organic matter over the vegetable garden and dig it into the soil. Organic matter will improve your soil structure besides adding nutrients to the soil.

## Seeding

Before seeding, be sure you have created a smooth seedbed. To avoid compacting the soil, try to avoid walking over areas you will be seeding and planting. Be sure to follow the directions on the seed packet for planting depth of seeds. As a general rule seeds should be planted to a depth 2 to 4 times their diameter or largest width.

Cover the seed with soil and tamp it down with the back of your hoe. Water lightly and keep moist until germination occurs.

## Transplants

Vegetables like tomatoes, peppers, cabbage, broccoli, eggplants and collards are planted as transplants. Avoid purchasing transplants that may be carrying diseases by purchasing from local landscape nurseries, greenhouses, etc.

When you purchase transplants, choose transplants with the following characteristics:

- Choose plants with healthy green leaves. Avoid plants with yellowing or browning leaves. These plants may be diseased. Gently remove transplants from their tray to check the root system; roots should be white.
- Avoid plants in pots with roots growing out of the drainage hole. This usually indicates the plant may be root-bound. Tap the plant out of the pot and check the roots. Healthy roots will be white. Roots that have browned are dead. Avoid purchasing these plants.
- Check the plants for insects. Shake the plant. If you see tiny white flying insects, they may be whiteflies. Check the undersides of the leaves for aphids. Aphids are tiny, oval-shaped insects that cluster on the undersides of leaves. Both of these insects are sucking insects that will cause browning and curling of leaves. Do not buy insect-infested plants.

Before planting your transplants, harden off your plants. Hardening off is a process of slowly introducing transplants to cooler temperatures and brighter light conditions outdoors. Gradually increase the time your transplants spend outdoors over a week to ten days before planting. Try to plant on a cloudy day or in the late afternoon to avoid planting in high temperatures. Planting in high temperatures will put your plants under a lot of stress. Dig a hole big enough for the plant's root ball. Try not to damage the root system as you remove the plant from its pot. Space the transplants at recommended distances. Water your transplants in with a cup of a starter fertilizer. Mix one to two tablespoons of a soluble starter fertilizer with a gallon of water. A starter fertilizer is high in phosphorus. Phosphorus helps to promote root development. Promoting root development will get your plant off to a good start. Be sure to label all the plants in your garden. It is very difficult to identify plants, especially just after germination.

## Planting Tips

Save tuna cans to use as barriers around newly transplanted plants to protect them from the cutworm. Cutworms will chew through the stems at soil level. Cut both ends from the cans and push them about an inch into the soil around the plants. After two to three weeks, the cans can be removed because the stems will have thickened enough to withstand any cutworm damage.

Protect cucurbit crops (cucumbers, melons, squash, pumpkins) from cucumber beetles and the cucumber wilt that they spread as they feed with floating row covers after planting. Make sure to remove the row cover after the plants have begun flowering, so that they can be pollinated.

Carrots can be planted as early as the end of March/first of April. To get long straight carrots the soil should be loose, worked deeply, well-drained and have no clods or rocks in the soil.

Plant onion sets in April. Buy sets early before they start sprouting in garden centers. Divide the sets up into those that are larger than a dime in diameter and those smaller. The bigger sets are best grown for green onions. The smaller sets make the best large onions for storage. Torpedo-shaped onions will produce round onions while the round sets will produce flat onions. For green onions, plant the bigger sets one inch deep and touching each other. For large, dry onions plant the small sets one inch deep and two to four inches apart.

Plant flowers in your vegetable garden. Many flowers will attract the beneficial insects, parasites and predators that help control pests. Good choices are sweet alyssum, dill, fennel, tansy, cosmos, yarrow, coneflower and sunflower. Choose disease-resistant varieties. Provide good air circulation to help control disease. Stake or cage plants and allow proper spacing.

Time plantings to avoid insect problems. For instance, to avoid the worst time for squash vine borer and corn earworm, plant squash and corn so it can be harvested by July.

Sow radish, lettuce, spinach, beet and turnip seed late in August. These vegetables will mature in the cooler fall weather.

## Questions?

Trained volunteers at the UVM Extension Master Gardener Helpline are able to answer your gardening questions at [go.uvm.edu/gardeninghelp](http://go.uvm.edu/gardeninghelp). We are open 24/7/365 for online questions and on Thursday mornings for phone inquiries during the season at 802-656-5421.