

Cool Season Vegetables



For many, gardening takes place in the summer. However, for a growing number of gardeners, we are growing in the garden nearly all year long!

Vegetables can be categorized into two categories; warm-season and cool-season crops. Warm-season crops contain classic garden vegetables such as tomatoes, peppers, zucchini, eggplant, and cucumber. Warm-season crops are planted or sown later in the spring after all danger of frost has passed. Cool-season crops include some popular crops like broccoli, peas, and carrots, but they are some types of cool-season crops that are becoming popular such as kohlrabi, kale, turnips, and Asian greens (like bok choy). Vegetable breeders have shifted much effort in creating varieties that perform well and taste good.

If you are desperate to get outside in the garden in the early spring (let's face it, we all are!), don't make the mistake of planting warm-season crops too soon. Utilize cool-season crops early in the spring. They are well-adapted to grow during a time of year with random frosts, even snow.

Some cool-season crops like kale and brussels sprouts are very cold hardy and will stand up to freezing weather.

Start cool-season crops inside to get an even better jump on the growing season. Following is a table adapted from the University of New Hampshire Extension, that details recommended times to start seed indoors and then when to transplant out in the garden.

Crop	Time from seed to transplant	Safe to set out in the garden
Broccoli ^S	4 to 6 weeks	2 to 4 weeks before last frost
Cabbage ^T	4 to 6 weeks	4 weeks before last frost
Cauliflower ^T	4 to 6 weeks	2 weeks before last frost
Kale	4 to 6 weeks	4 weeks before last frost
Kohlrabi	4 to 6 weeks	4 weeks before last frost
Lettuce ^S	4 to 5 weeks	3 to 4 weeks before last frost
Pea	Direct Seed	As soon as the soil thaws
Radish	Direct Seed	2 to 4 weeks before last frost
Spinach	4 to 6 weeks	3 to 6 weeks before last frost
Turnip	Direct Seed	2 to 4 weeks before last frost

T – Crops marked with a ^T should be started from seed indoors and set out as transplants.

S – Crops marked with an ^S have a relatively short harvest season, which can be prolonged by doing multiple smaller “sequence” plantings.

Don't be lulled into thinking cool-season crops are only for the early spring. Indeed, these crops thrive in the autumn. Sometimes and with a little extra protection, you can extend these crops into the winter months.

As the weather cools in autumn, plants convert carbohydrates into sugars to protect their cells from freezing temperatures. This sugary 'antifreeze' imparts a deliciously sweet flavor to many cool-season crops during the fall and winter months. Spinach and carrots harvested in the late fall and winter are especially a treat that one must experience!

A majority of work for a fall and winter garden takes place in the summer. Most fall vegetables should be seeded in the ground by early August, but this can vary based on the crop and your location. The key is to get plants established when we still have ample daylight. In the fall as the days shorten, plant growth slows considerably. Once we hit late fall, plant growth has all but stopped. At that point, we are just maintaining plants until we get around to harvest.

Top-five favorite cool-season crops are:

1. **Carrots** – Germination can be tricky for these along with soil prep. The key to germination is keeping the seedbed moist (not saturated) A light watering, almost daily, depending on the weather, is what they need for good germination. Grow in raised beds, which allows for good root development.
2. **Spinach** – Cooler soils encourage germination. Some gardeners will even sow their seeds when snow is on the ground and as it melts and warms to spring the spinach will germinate. If soils are warmer you can cool them using shade (i.e. lay burlap over the seedbed) or irrigation.
3. **Turnips** – This is an easy crop to grow. The white turnip variety Hakurie is a favorite!
4. **Kale** – Another easy crop to grow. Yes, to some kale is a four-letter word, but fall-harvested kale straight from the garden has a wonderful flavor. Keep an eye out for cabbage worms. The best control is an organic pesticide containing *Bacillus thuringiensis kurstaki* (*btk*)
5. **Head lettuces** – Butterhead and Romaine head lettuces are easy to germinate, as well as leaf lettuce.

Contact the Master Gardener Helpline for additional recommendations of cool-season crops.
<http://monroe.cce.cornell.edu/horticulture/gardening-helpline>