

THE OUTSIDER

Illinois Extension Horticulture serving Henry, Mercer, Rock Island, and Stark



EARLY RISERS: COOL SEASON VEGETABLES KICKSTART THE GARDENING SEASON

After a long winter's rest, many Outsiders are ready to start growing fresh produce once again. To be successful, growers benefit from planting species at an appropriate time of year. Although the temperatures remain cool some crops tolerate, even prefer these early-season conditions, and are ready to get the gardening season going.

Known as cool-season crops, or hardy vegetables, species that are tolerant of the still-cool soil and air temperatures of early spring can be planted outside four to six weeks before the last frost-free date. Even though the risk of frost remains, these plants still thrive. This is because some species require a cold period before completing life cycle processes.

PLANTING

It is important to plant cool-season crops at the right time so they can grow and develop before the heat of summer. Although some cool-season crops can tolerate warm temperatures, the highest quality harvest will occur if vegetables are cultivated while temperatures remain relatively cool.

Hardy vegetables are those that are most cold-tolerant and can be planted four to six weeks before the last average frost date. Half-hardy species are more cold tolerant than warm-season vegetables but less cold tolerant than hardy vegetables. Typically, half-hardy species are planted a few weeks after hardy vegetables can be planted.



HARDY VEGETABLES

- Broccoli
- Brussels sprouts
- Cabbage
- Kale
- Kohlrabi
- Leek
- Onion
- Pea
- Spinach
- Turnup

HALF-HARDY VEGETABLES

- Beet
- Carrot
- Cauliflower
- Leaf lettuce
- Parsnip
- Potato
- Radish
- Swiss Chard

PLANTING METHOD

Many of the leafy green vegetables can be planted by directly placing seeds into prepared soil. To optimize germination rates, be sure to provide consistent moisture.

Many of the most popular species in the *Brassicaceae* family can be planted by direct seed or as transplants. Species include broccoli, Brussels sprouts, cauliflower, and cabbage. Transplants are recommended because they establish faster and reach maturity earlier than through direct seeding. This produces a higher quality harvest before summer heat.

Root crops such as beet, carrot, parsnip, radish, and potato require well-drained soil. Plant seeds or cuttings in a shallow trench; cover and keep moist until leaves have emerged. Thin the plantings to achieve the correct spacing according to the seed packet once plants are two inches tall. To protect plants that will continue to grow, thin the planting by cutting seedlings rather than pulling them. Pulling seedlings can disturb soil and loosen the roots of vegetables that will remain adversely impacting their development.

Crops can be planted in succession if an ongoing harvest is desired. This is most useful for leafy green species and root vegetables such as carrots, beets, and radish.

GROWING VOCABULARY

Vernalization is the process of cold exposure that initiates a biological process within plants. Many species rely on temperature to trigger gene expression, often a change from producing vegetative growth to reproductive development. The response to seasonal cues helps plants synchronize flowering and seed production. In a diverse, natural environment, reproductive success can be maximized by coordinating development stages.



PLANTING METHOD

Cool-season crops that have not reached their harvest potential before the summer heat and longer days have arrived are at risk of bolting or bitterness. Bolting is a term used to describe premature flowering. Leafy greens that have shifted from vegetative growth to reproductive growth are no longer desirable. The foliage becomes bitter and undesirable for consumption.

To minimize the risk of heat diminishing harvest quality, choose cultivars that have been selected for heat tolerance or resistance to bolting. Cultural practices such as keeping soil moisture levels up and using an organic mulch can help cool soil temperatures.



Lettuce



Carrots, Beets, Turnips



Broccoli

COOL SEASON CROPS IN THE FALL

In Illinois, it is possible to plant many cool seasons crops twice during the year. One harvest can be achieved by planting in the early spring and a second harvest can be grown during the fall months as temperatures drop. If a fall crop is desired, plants must be planted early enough to be able to reach maturity prior to the arrival of severe cold. The average first frost date for Northern Illinois arrives in mid-October. Seed packets indicate the days to maturity and should be used in combination with the first frost date to determine the optimal planting date.

OUTSIDER ACTION

Try these activities to be more of an Outsider

- Choose a cool season crop to purchase and plant.
- Find a new recipe to try that utilizes a cool-season crop.

Don't miss an issue - Sign up for The Outsider to be sent to your email!
@ go.illinois.edu/TheOutsider



Emily Swihart, Horticulture Educator
Tracy Jo Mulliken, Program Coordinator

321 West 2nd Avenue, Milan, IL 61264
(309) 756-9978
Email: ESwihart@illinois.edu