

# Keep it cool with cole crops

Whether you are a new or seasoned gardener, you have most likely heard the term *cole crops*. For many Wyoming gardeners, the moniker is associated with crops that grow well in cold environments. While cole crops do grow

well in cooler environments, the name *cole* is actually a historic term used in gardening that refers to the plant family name, Cruciferae. This plant family, now called Brassicaceae, is more commonly known as the mustard family.

## Growing cole crops

As members of the mustard family, some cole crops can be quite spicy, while others have a milder taste. There are lots of cole crops to choose from. Options include broccoli, Brussels sprouts, cabbage, cauliflower, kale, kohlrabi, turnips, rutabaga, collard greens, arugula, radish, and mustard. For each species listed there are

unique varieties with different colors, tastes, and culinary uses.

Cole crops enjoy cooler soil and air temperatures compared to some garden vegetables, such as corn and squash, making them ideal plants for many Wyoming gardens. Most cole crops can withstand exposure to light periods of frost. Kale, for example, can handle temperatures that dip into the 26–27°F range.

It is important to be aware that some cole crops “bolt,” or flower and go to seed, when exposed to hot temperatures (usually greater than 80°F). This can ruin the crop. Some gardeners plant cole crops at the beginning and the end of the growing season to avoid hot

temperatures. This method works well because gardeners are able to harvest twice for certain cole crops, such as kale, radishes, and arugula. Other cole crops, such as cabbage or Brussels sprouts, require a longer time to mature; these crops

can be planted in the spring, then harvested later in the summer.

Depending on the specific crop, cole crops can be directly seeded into the garden or transferred as small plants. Some cole crops do well when transferred to the garden space as young plants, but others do not. Radishes, for example, should be directly seeded and do not survive well when transplanted.

Cabbage, broccoli, and Brussels sprouts have a better survival rate when transplanted as young plants. These plants can be started inside early and then transferred to the garden when temperatures are more favorable for growing.

Each cole crop requires specific distances between plants for



Kale

proper growth. Radish plants require less distance between plants as compared to cabbage plants, for example. Overcrowding can lead to decreased yields and stunted plants. Crops that are broadcast as seeds into the garden tend to have overcrowding issues and should be thinned once seedlings are 1–2 inches tall.

To ensure plants are spaced correctly, follow the recommendations on the seed packet.

### **Water and soil**

Proper watering techniques and nutrient-rich soils are important for cole crops. Water needs to be available to plants when they are actively growing. The timing of watering must be consistent, as plants that are not watered consistently may experience growth problems.

Radishes, for example, may develop cracks or splits in their roots due to a lack of water; splits may also develop if there is rapid and copious application of water. If cole crops do not receive adequate water when plants are forming flowers, often referred to as “heads,” the result can be heads that are deformed or not formed at all.

Soils that are low in nutrients can cause decreased yields. Applications of fertilizer at least once, and most likely twice for soils that are depleted of nutrients, may be required for plants to grow properly.

Compacted soils can also be an issue for some cole crops.



Cabbage

Radishes and turnips that are grown in compacted soil may have deformed or misshapen roots. Contacting your local UW Extension office is a good starting point for addressing soil questions and issues.

### **Insect and disease issues**

The same insect and disease issues affect many cole crops. While this can be a challenge if you have a lot of cole crops in your garden, it can also be a blessing because you can potentially use some of the same control methods for different crops.

Since the leaves and flowering parts of cole crops are often consumed, it is important to carefully monitor for pests throughout the entire growing season. When assessing damage,

keep in mind that impact varies. Leaf damage to a head of cabbage is obviously more damaging than leaf damage to turnips or radishes.

Consult the *Wyoming Vegetable & Fruit Growing Guide* at <https://bit.ly/WY-fruit-veg> to learn about the types of insects that affect cole crops and what damage looks like from these pests.

### **Harvest and care**

Each type of cole crop has certain characteristics to look for when plants are ready to be harvested. It is important to cool harvested plants and plant parts right after harvesting to increase their storage life and keep plants crisp for eating.

Some cole crops will continue to grow during the growing season and produce edible parts for a second harvest. Information on harvesting, variety selection, and specific management and care for cole crops can also be found in the *Wyoming Vegetable & Fruit Growing Guide*.

While it might not feel like it now, warm temperatures will eventually return to Wyoming, and cole crops are a great option for gardeners who like to get an early start to the season. Most cole crop seeds can be purchased from local and nationwide sources. As spring approaches, look for small transplants in local nurseries.

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**Brian Sebade** wouldn't mind if Santa brought him a stocking full of cole (crops). He is a UW Extension educator serving southeast Wyoming and can be reached at (307) 721-2571 or [bsebade@uwyo.edu](mailto:bsebade@uwyo.edu).