Lettuce help growers have a green thumb in Wyoming

Are you interested in growing a vegetable that requires minimal time and care? Look no further than lettuce.

Lettuce (*Lactuca sativa*), an annual cool-season crop, is very versatile. Tolerance to cold temperatures, short days to maturity and the ability to grow in a wide range of physical spaces and soil conditions makes lettuce a great crop for many growers in our state. Growers of lettuce may be surprised to learn it is in the Asteraceae plant family (the sunflower or aster plant family). Close relatives include sunflowers, chrysanthemums, yarrow and tarragon.

There are five main groups of lettuce: loose leaf, crisphead, butterhead, romaine (also known as Cos) and Stem lettuce (also known as Celtuce). **Crisphead** is the head lettuce you often see in the grocery store with its leaves tightly packed together in a ball. **Butterhead** lettuce also holds its leaves in a head shape; however, the heads are much looser than crisphead types. Its outer leaves are generally smoother than the inner leaves, and inner leaves are often yellow. Crisphead and

romaine lettuce tend to store longer than more fragile types of lettuce. Loose leaf lettuce tends to produce tender leaves held on the stem in a more open shape. Some varieties of leaf loose lettuce can be harvested earlier than head lettuce and will tolerate cut-and-come-again harvesting (leaves are cut off leaving one inch of stem allowing leaves to grow back for multiple harvests). Romaine lettuce generally has upright, more rigid leaves that grow closer together than leaf lettuce. Stem lettuce (Celtuce) is a bit unusual and less well known than other types of lettuce. It grows upright with leaves on a long stalkboth the leaves and the stalk are eaten. With so many lettuce varieties to choose it helps to consider the type of lettuce (head or leaf), days-to-maturity, flavor, color and texture. Red, yellow and green are the most common leaf colors.

Growing conditions

Many parts of Wyoming are well-suited for growing lettuce (cool weather and limited number of growing days). Laramie was one of the larger producers of lettuce in the nation during the early 20th century. The cool climate helped to keep the lettuce plants from bolting (flowering and turning bitter). The river's winter ice was cut and stored for use in shipping the crop out fresh via the railroad during the harvest season.

Common lettuce varieties

(days to maturity in parenthesis)

Crisphead

- Iceberg (65)
- Great Lakes (75)
- · Ice Queen (80)

Romaine (also known as Cos)

- · Cimmeron (65)
- Crisp Mint (65)
- Paris Island (70)

Leaf

- Red Sails (40)
- Salad Bowl (45)
- Royal Oak (50)
- Merlot (55)
- Black Seeded Simpson (55)

Butterhead

- Buttercrunch (65)
- Butter King (65)
- Dynamite (75)

Stem

· Celtuce (80)

It is best to grow lettuce when the weather will be cool as the plants do not tolerate hot temperatures. Leaves may become bitter or tough when temperatures are over 85 degrees F. These temperatures can also make plants "bolt," or begin to flower, which causes a decline in quality. Romaine and leaf lettuces are considered a little more tolerant to higher temperatures. Reading variety descriptions to find ones more heat tolerant and bolting resistant can help growers select varieties suited to their conditions. Lettuce has a very shallow root system, so consistent watering during the growing season is important. Drought stress can cause bitterness to develop. Lettuce pest management can be difficult for those growing it for sale because consumers have exhibited little tolerance for cosmetic damage on the leaves of a plant that is eaten raw. Visit barnyardsandbackyards.com to read our new Wyoming Vegetable & Fruit Growing Guide for more information on pest and disease

issues. Lettuce seedlings do not compete well with weeds, so consistent weeding is also important.

Planting

Lettuce can be planted in the spring and fall. It can be directly seeded into the ground or started indoors and transplanted. Due to the hardiness of lettuce. transplants can be planted outside earlier in the spring than many other crops. Lettuce seedlings can withstand periods of frost. Young plants can tolerate temperatures as low as 25 degrees F, older plants are more sensitive to frost. Seeds can be planted outdoors after soil temperatures reach 40 degrees F. Plants grow best when daytime temperatures are 60 to 70 degrees F and nights are cooler. Seeds are quite small and can easily be planted too deep. Plant seeds \(^1\frac{1}{4}\)- to \(^1\frac{1}{2}\)-inch deep. Broadcasting or rows can be used for planting. Leaf type lettuce is most often broadcast (seeds are scattered randomly but evenly as possible on the soil) into a growing area, whereas head types are commonly planted in rows. Plan on 8 to 15 inches between plants (variety dependent) and 12 to 24 inches between rows depending on type. Seed for baby lettuce production is usually planted closer together. Keep in mind lettuce should be rotated throughout the growing area like other vegetables. Most varieties can mature in 35–80 days. Consider short days to maturity varieties for planting as a spring and fall crop.

Harvesting

Plan to harvest lettuce early in the day before the plants become heat stressed. Wash leaves or heads with cold water after harvesting to help preserve crispness and taste. Store at 34 to 36 degrees F. Leaf type lettuce can be harvested several times, as mentioned previously, whereas head type lettuce will only be harvested once. Crisphead can be cut when the heads are firm. Romaine and butterhead varieties should be harvested when heads are starting to mature. Waiting too long to harvest can cause off flavors with these varieties. Head and stalk types of lettuce can be cut with a serrated knife or large scissors. Leaf lettuce can be harvested by using scissors or tearing leaves off by hand.

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