CABBAGE

Cabbage is a cool-season vegetable best suited to both spring and fall. Cabbage is grown for its leaves, which come in green, red and blue- or purple-tinted green. Each plant forms a tight round or pointed head whose size can be barely larger than a softball or big enough to fill a wheelbarrow. Leaves can be smooth or, with savoy types, crinkly. There is also ornamental flowering cabbage, which can have showy leaf marbling and white, cream, rose, or purple edges. Always remember that deer love cabbage as much as you do.

SOIL PREPARATION

Cabbage prefer a sandy soil, rich in organic matter, well drained, and not too heavy. They also need full sun exposure. Before planting, incorporate 1-2 inches of well composted organic matter, Humic, and 1 lb. of all-purpose fertilizer (we recommend "That's all it Takes" complete fertilizer or Happy Frog Organic Tomato & Vegetable Food) per 100 square feet and work them in to a depth of 4-6 inches. Heavy, clay-based soils must be amended with compost and organic matter to encourage and allow for good root development. For best results, add 2-4 inches of a variety of different types of organic matter and 50 lbs. of Zeolite soil conditioner per 100 square feet each fall for multiple years to increase drainage and nutrient availability. By doing this yearly, over time you can create a better growing environment for your garden plants to thrive in and produce. Please consult our Soil Preparation Guide in the attached appendix.

PLANTING

Like other Cole crops, cabbage tends to bolt when temperatures are high so plant in cool weather (March & April). Young plants can resist a light frost but not a hard freeze, but don't wait until May. Heat can stunt the early development of your crop. When planting starts, place plants 1.5-2 feet apart in the row, with 3 feet between rows. Planting into plastic or fabric mulches will accelerate early growth and encourage higher yields as well as suppress weed development. For best results, water immediately after transplanting with Kangaroots rooting solution and again for the first 2-3 waterings. This will prevent transplant shock and give your plants the best possible opportunity to thrive. When planting seed, plant 2 seeds every 12-18" and about $\frac{1}{4}$ - $\frac{3}{4}$ inch deep, and thin the sprouts when plants have 3-4 true leaves.

Remember, Cabbage can withstand cold temperatures and light frosts; they produce best in weather that does not exceed 70 degrees Fahrenheit. Cabbage require a fair amount of time to mature, so we have had best results planting them in Early August, and harvesting in cooler October temperatures.

VARIETIES

There are many great varieties offered that grow well in Utah such as the quick-harvest Golden Acre (65 days), late-season Danish Ballhead and Late Flat Dutch (100 - 110 days), and mid-season Stonehead, Copenhagen Market, Savoy Perfection, Red Rock, and Pak Choi (an Asian variety), all 70-80 days. Danish Ballhead and Late Flat Dutch regularly produce 10-15lb heads or greater. Our newest variety, Blue Point, combines amazing quality and heat tolerance with very large heads.

Water

Water cabbage deeply and infrequently while trying to maintain even soil moisture. Cabbage needs consistent watering for high quality and quantity production. Use a soaker hose for uniform water distribution and water lightly every 5-7 days to maintain soil moisture during essential growth stages. A light compost mulch can help as well if daytime temperatures start to climb over 80 degrees. Make sure to avoid moisture fluctuations during head growth because it will cause maturing heads to split open.









A few varieties of cabbage, left to right: Red Rock, Pak Choi, Savoy, Stonehead

FERTILIZER

Apply $\frac{1}{2}$ cup per 10 feet of row of "That's All it Takes" complete fertilizer or Happy Frog Organic Tomato & Vegetable Food 4 weeks after transplanting or thinning to encourage vigorous plant growth. Apply an additional $\frac{1}{4}$ cup of nitrogen-based fertilizer when the cabbage head is the size of a silver dollar. Make sure to water it in! Place the fertilizer 6 inches to the side of the plant and work it lightly into the soil before watering

COMMON PROBLEMS

Keep the weeds to a minimum with the use of plastic and organic mulches. We prefer the Dewitt Pro 5 weed barrier as it allows water and nutrients to pass through, but stops even the most difficult weeds as they germinate. Treflan and Corn Gluten weed preventative herbicides are also very effective ways to stop weeds before they start, saving you hours and hours of weeding. Be sure to control weeds when they are small to ensure damage is not done to cabbage root systems when weeds are removed. Practice crop rotation to discourage pest problems. Cabbage is subject to aphids, cabbage loopers, imported cabbage worms, and cabbage root maggots. Row covers will help protect plants from all of these pests.

CABBAGE	
PLANTING TIME	Group A, E
PLANTING METHOD	Rows
PLANT SPACING	24-36"
Row Spacing	3-4'
SEED DEPTH	1/4"
TIME TO HARVEST	50-110 Days
Water Needs	1/2", 3x weekly
Transplant/ Direct Sow	Direct
Special Issues	Weeds Cabbage Loopers, Leaf Miners, Flea Beetles, Aphids Heat causes bolting Late heavy water splits heads

NOTES _

All of the caterpillars may also be controlled using Bacillus thuringiensis (B.T.), spinosad, or pyrethrin. We prefer to spray Spinosad (since it is bacterial, it has no effect on people or pets) early or late in the day for best caterpillar control. Aphids can be controlled with an insecticide like Spinosad Soap or Ferti-lome Triple Action.

HARVESTING

Use pruners, loppers or a large, sharp knife to cut off heads when they're firm and well formed, but before they split and crack. Light frost will not harm cabbage, but harvest and store before a heavy freeze occurs. Cabbage can be stored for 2-6 months in a cool, dry, dark place. Alternatively, the whole cabbage plant can be dug up (roots and all) and placed upside down in the ground once temperatures average 40 for daytime highs. Leave the large, tough outer leaves on. These can be kept in the ground, under the snow, for up to 4 months and dug up when needed.



