



# Seed Savers EXCHANGE

## **How to Grow Cauliflower (*Brassica oleracea*)**

*Cauliflower belongs to the species *Brassica oleracea*, which also includes broccoli, kale, Brussels sprouts, and cabbage. Like other Brassica crops, cauliflower requires a generous amount of space in the garden to grow, especially in its second year of growth.*

**Time of Planting:** Figuring out the best time to start cauliflower plants can be challenging. Plants prefer consistent, cool weather (60 degrees F is ideal) and will not produce a full head if temperatures are too high. Days to maturity can also vary greatly from 55-100 days.

Cauliflower plants are regularly started in flats and subsequently transplanted to the garden. Start seedlings indoors at least 4-6 weeks before your expected transplant date.

**Spacing Requirements:** Sow cauliflower seeds  $\frac{1}{4}$  inch deep. Space cauliflower 24 inches apart in the garden.

**Time to Germination:** 3-10 days

**Special Considerations:** Northern gardeners may transplant seedlings to the garden in the early spring after danger of hard frost has passed, or try a late summer planting for a fall harvest. Southern gardeners will find success growing plants anytime in the fall and winter when hard frost can be avoided and temperatures are consistently cool.

**Common Pests and Diseases (and how to manage):** Cabbage butterfly, cabbage looper, and flea beetles are common garden pests for cauliflower. Cauliflower can also suffer from downy mildew, black rot, and several other diseases. Cauliflower, like broccoli and other *Brassica* crops, can be protected with row cover to prevent early damage from pests such as flea beetles.

**Harvest (when and how):** Cut cauliflower heads from the plant when they are large and firm. If left too long on the plant, cauliflower heads can become off-colored and mushy. Blanching, or wrapping the developing head with the plant's own leaves, can help prevent discoloration.

**Eating:** Cauliflower can be enjoyed fresh, steamed, roasted, stir fried, and pureed. It is an incredibly versatile vegetable that is also great to blanch, freeze, and store for winter.

**Storing:** Fresh cauliflower heads will store in the refrigerator for several weeks after harvest.

## **How to Save Cauliflower Seeds**

*Cauliflower belong to the *Brassica oleracea* species, which includes many other crop types, like broccoli, Brussels sprouts, and collards. Because of this, isolation needs to be managed thoughtfully, but because*

*most are biennials that will not flower until their second season, a gardener can grow multiple varieties for eating while simultaneously growing one variety for seed saving.*

**Life Cycle:** Biennial

**Recommended Isolation Distance:** Separate varieties by 800 to ½ mile in their second year of growth.

**Recommended Population Sizes:** To ensure viable seeds, save seeds from at least 5 plants. When maintaining a variety over many generations, save seeds from 20-50 plants. If you're saving seeds for genetic preservation of a rare variety, save seeds from 80 plants.

**Vernalization:** If your region does not regularly experience temperatures below 35 degrees F, try overwintering cauliflower outside in the ground. In this case, time planting so that plants have only formed small, loose heads when the growing season ends.

When plants cannot be successfully overwintered in the garden, they can be vernalized in storage. First, time planting so that plants have fully formed heads at the time of lifting. Take care to dig up the entire plant, roots and all. Then, trim off loose leaves, but be sure to leave the heads intact. Trimmed plants should be replanted into containers filled with slightly moist potting mix or sand for storage.

The optimum storage conditions for cauliflower vernalization ranges from 34-39 degrees F and 80-95% relative humidity. A traditional root cellar is ideal for this, but garages, sheds, and other unheated structures work well in some climates.

In the spring, when the soil can be worked, replant cauliflower in your garden, taking care to give them a lot of room to resume growing and to flower. In their second year, increase Brassica spacing to 18-24 inches in rows that are at least 36 inches apart. Staking the plants is recommended.

**Assessing Seed Maturity:** After flowering in their second year of growth, mature seed pods become dry and turn brown as the seeds inside also mature and brown. As with many of the Brassica crops, the window of time for an optimal harvest may be short as mature pods will begin to shatter and bird predation can become a problem.

**Harvesting:** Seeds can be gathered by cutting entire branches or by harvesting whole plants. Because of this species' tendency to shatter, the harvested material should be placed on drop cloths or in containers to prevent seed loss.

**Cleaning and Processing:** Branches of mature fruits can be threshed by rubbing the pods between one's hands or by hitting the brittle pods against any surface that will cause fruits to break open. If the pods are dry, they will release their seeds easily when threshed.

**Storage and Viability:** Store cauliflower seeds in cool, dark, and dry places and always keep them in an airtight container to keep out moisture and humidity. Properly stored cauliflower seeds will remain viable for several years.

**For more seed saving and gardening tips, visit:**

[seedsavers.org/learn](https://seedsavers.org/learn)