



Cauliflower

Climatic requirements

Cauliflower generally grows best in areas where temperatures are warm during the early stages of growth and cooler as the curd (head) begins to develop.

Varieties

Below 1000 feet elevation: 'Pua Kea'. Between 1000 and 2500 feet elevation: 'Snow King', 'Snow Queen', and 'Extra Early Snowball'. Above 2500 feet elevation: 'Super Snowball', 'Early Snowball', and 'Perfect Snowball'.

Soil preparation

Cauliflower requires a fairly fertile, well drained soil with a good water-holding capacity and a pH range of 6 to 7. Work the soil to break up any hardpan, and incorporate manure or compost to a depth of 6–8 inches. If soil must be treated² for root knot nematode, do this after the soil is prepared, and allow an interval of 2–3 weeks after treatment before planting.

Planting

Cauliflower can be transplanted or seeded directly into the garden. If transplants are to be used, sow seed in seedling flats, beds, or pots. Seeds will germinate in 3–5 days and can be ready for transplanting in 3–6 weeks. Water the seedlings regularly, preferably in the morning to allow the plants to dry as soon as possible. Seedlings that are overcrowded and kept wet will often become infested with diseases. Seedlings that are stunted or checked in growth will usually form small, button-sized heads prematurely after transplanting.

Transplant seedlings 2–3 ft apart between rows and 12–15 inches apart within the rows, depending upon the variety grown.

Cultivation

Cultivate the garden frequently to control weeds and break up surface crusting to improve water penetration. Cultivation should be shallow to prevent root injury.

Irrigation

Irrigate regularly, or whenever needed to prevent plants from wilting. If allowed to wilt, the crop will be delayed in maturing and the size of heads will be reduced.

Fertilizer

A general garden fertilizer, such as 10-30-10, can be applied at the rate of 2–3 pounds per 100 square feet. Apply one-half of the complete fertilizer at the time of transplanting or soon thereafter, and the second half 3–4 weeks later. An additional side-dressing of about ½ pound of sulfate of ammonia per 100 square feet at the stage of curd formation will help increase the size of heads.

Insect control

Insects that infest cauliflower, such as aphids, cabbage looper, cabbage worm, and cabbage web worm, can be controlled with insecticides². Red spider mites can be controlled with sulfur-containing miticides². The cutworms that attack the seedling stages of the plant can be controlled by applying insecticides² before planting or to the base of the seedlings.

²Read any pesticide's label carefully to ensure that its use on cauliflower is allowed, and follow the label directions.

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Disease control

The most common diseases of cauliflower are wire stem and black leg in the seedling stages and black rot and downy mildew in the mature stages. Wire stem disease can best be controlled by treating seed with a disinfectant², and black leg can be controlled by hot-water seed treatment at 122°F for 15–20 minutes. Downy mildew may become serious in cool, wet areas and seasons. Spraying with fungicides² can control this disease.

Harvesting

As the heads develop and approach the stage for harvesting, bend one or two inner leaves inward at the

midribs (some cultivars do this automatically) to protect the curd from sunlight and keep the curd white. Curds exposed to sunlight will turn yellow.

Heads should be harvested at the correct stage of maturity, when the curd is compact and smooth in appearance. “Ricey” or overmature curds appear irregular and uneven, with spaces showing in the curds.

Seed availability

Seed of ‘Pua Kea’ cauliflower is available from the CTAHR Department of Horticulture. Seed of other varieties may be found on seed racks in garden stores or ordered from seed companies.

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