

## COLE CROPS

### (BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER)

For Asian Cole Crops see Specialty Vegetables in this chapter.

## Varieties

### Broccoli

**Fresh Market:** Greenbelt (trial), Emerald City (fall harvest), Patron, General (early), Denali, Diplomat, Ironman and Imperial.

**Process Market:** Greenbelt, Arcadia, Decathlon (trial), Emerald City (fall harvest), Patriot (fall harvest).

### Brussels Sprouts

**Fresh market:**

Early— Oliver, Brilliant, Confident.  
Mid—Vancouver, Brigitte, Cummulus.  
Mid/late— Lunet.

**Process market:** Brigitte (mechanical harvesting), Vancouver (mechanical harvesting), Lunet, Cummulus.

### Cabbage

**Green:** Early—Parel, Balbro, Surprise, Farao, BC63.  
Mid-season— Castello, Charmant, Bronco, Fast Vantage.  
Late (storage)— Bartolo, Loughton, Shelton.

**Red:** Ruby Perfection, Sombrero, Rona, Primero, Llectro.

**Savoy:** Clarissa, Wirosa, Famosa, Ermosa, Melissa.

### Cauliflower

**Fresh market:**

Early— Ravella, Venus.  
Mid-season— Ravella, Fremont, Cumberland, Phoenix, Concert.  
Late— Ravella, Shasta, Fremont, Absolute, Artica.

**Process market:** Shasta, Artica.

**Overwintering:** See end of Cole Crops section.

## Seed and Seed-bed Treatments

Use seed treated with Thiram seed protectant. Hot-water seed treatment is a safeguard against seed-borne diseases such as black rot, blackleg and Alternaria leaf spot.

When seedlings are to be grown in a seed-bed for production of transplants, choose a site where cole crops have not been grown before or fumigate prior to seeding with:

Vapam at 550 to 900 L/ha (220 to 360 L/acre).

To help prevent damping-off, wire stem and downy mildew, the young seedlings should also be drenched, using 1,000 to 2,000 L/ha (400 to 800 L/acre) of water every 5 to 7 days with one of the following:

Bravo 500 at 2.5 to 4.8 L/ha (1 to 1.9 L/acre).

Or Zineb 80 W at 1.1 to 3.3 kg/ha (0.45 to 1.3 kg/acre).

## Seeding

Seed in a greenhouse for an early crop, in a cold frame for a less early crop, and in outdoor seed-beds or directly in the field when the weather is warm enough for germination and growth (above 10°C). In each case, seed 4 to 6 weeks ahead of when the plants are wanted for transplanting.

## Greenhouse

Seed directly into styrofoam or plastic plug trays or blocks of a growing medium. The smaller the cell the lower the cost per plant, but the more demanding the management requirements.

Temperatures should be maintained above 7°C at night and below 30°C during the day. Seven days before transplanting start the hardening off process. (See below, under “Transplanting.”)

Follow the same process in a cold frame, or seed directly into the soil after it has been limed, fertilized and fumigated as for outdoor seed-beds.

## Seed-beds

Locate seed-beds in an open, well-drained area free of clubroot. Soil test prior to planting. Fertilize according to soil test recommendations. Fumigate prior to seeding if the area has been planted to cole crops in the past (see Chapter 5).