Broccoli, Brussels Sprouts, Cabbage and Cauliflower

Broccoli, brussels sprouts and cauliflower are members of the cabbage family, or cole crops. These cool season crops are somewhat hardy and will tolerate various degrees of frost. They grow best in the fall when the weather turns from warm to cool. When these crops mature in cool weather, they are of the highest quality. A spring crop is possible, but you should select varieties that are heat resistant and mature early.

When these crops are grown in the fall, they are often direct-seeded into the warm soil from July through early September. Cabbage and cauliflower may be seeded slightly earlier. Don't seed cauliflower after August. The plants also may be seeded in a lightly fertilized nursery bed area or in pots and then transplanted into the garden about four weeks after seeding. Spring-grown crops of cabbage, cauliflower and broccoli can be started as early as six weeks before the average last frost in your area, then transplanted into the garden about two weeks before the average last frost. Since brussels sprouts are such a long season crop, it may be best to plant them up to a late September planting for harvesting in early spring.

Soil Preparation and Fertilization

The best soil for cole crops is one which is rich with humus, well drained and able to supply plenty of soil moisture. Select an area where these or cabbage crops were not grown the previous year. Average soils in Louisiana will require about 3 pounds of an 8-24-24 fertilizer or about 6-8 pounds of 8-8-8 drilled in a strip 6 inches deep for each 100 feet of row. This amount may also be broadcast over 300 square feet of garden area. When applying fertilizer, especially compost, it's best to do so several weeks before planting the garden.

If the soil is very acidic, it needs an application of lime, based on soil test recommendations. Apply lime several months before the planting season, because it acts slowly. The best soil pH for these crops is about 6. High pH can cause head browning.

When preparing the seed bed or garden row, rake all the soil into high beds for good drainage. In areas where drainage is adequate, lower beds may be formed. Just before planting the seeds, rake or drag off the top of the row to expose fresh, moist soil. Plant the seeds 1/4 inch deep. Firm the loose soil over the seed with a rake. When you are planting in soils that tend to form a crust after rains, seed a little heavier. The germinating seed is at a delicate stage and must receive adequate soil moisture. If the moisture is sufficient, the seeds should sprout in about four days.

Set out transplants at about the depth they were originally grown. Plants grown in full sun from the start are short and healthy green. Plants grown in some shade will stretch and be a little lighter green. Young plants and transplants will quickly run their tap roots deep into the ground even though they may look very poor during the late summer heat. When the cooler fall weather arrives in late September, they'll take on life and grow like weeds. Allow 12 to 18 inches between plants.

Sidedress young plants with fertilizer about three to four weeks after transplanting, and then again in two to three weeks. Most soils need only nitrogen as a sidedressing. About 1 pound of ammonium nitrate or 1 pound of ammonium sulfate per 100 feet of row is the recommended rate. On light, sandy soils, sidedress with about 3 pounds of 8-8-8. This sidedressing placed 4 to 6 inches away from the base of the plant, along with good moisture, will keep the plant growing vigorously until harvest. Such growth is very important for a top quality head or sprout.

Broccoli

Broccoli, also called sprouting broccoli, is less demanding than cauliflower. It requires no special treatment to maintain its color or quality and will...
The most common insect pests of these crops include aphids and various caterpillars. Caterpillars are controlled with a biological spray formula containing **Bacillus thuringiensis**. Apply alone or with Permethrin, Spintor, Diazinon or Thiodan as needed. Aphids are easily controlled by sprays containing Malathion, Thiodan or Diazinon. Apply as needed. Foliage sprays do better with a spreader-sticker added.

Read all labels before applying pesticides, and follow directions. The proper use of pesticides will benefit you, your crops and their environments. Proper timing of application and amount used are important for the safe use of pesticides. Be sure to wait the recommended time between applying and harvesting. See also LSU AgCenter Publication No. 2341 Insect Management in Home Vegetable Gardens.

Mole crickets can be a problem on young plants. They feed on the roots and dig up the plants, causing the roots to dry out. Diazinon granules may be used to control them either before or after planting.

**Note**

1. Make dust application when the air is calm, preferably in the late afternoon, night or very early morning. Don't dust when it is windy.
2. Destroy all old crop remnants and you will kill the insects present and prevent further breeding. Collards and other cruciferous crops growing in the summer supply breeding grounds for cabbage caterpillars that will damage fall plantings.

**Acknowledgment**

The author expresses his appreciation to Drs. Don Ferrin, Ken Whitam (retired), specialists in plant pathology, and Drs. Dale Pollet and James E. Boudreaux, specialists in entomology and horticulture, respectively, for their suggestions and information on insect and disease control practices and varieties.