

**HOME GARDEN COLLARDS**

Douglas C. Sanders, Extension Horticultural Specialist  
 Larry Bass, Extension Horticultural Specialist

The collard is a cool-season crop that should be grown during early spring or fall. The mature plant will withstand frosts and light to medium freezes. It is one of the most popular garden vegetables in the south and is rapidly becoming a delicacy in northern states as well. Collards provide a good source of vitamins and minerals.

**Soils** - Collards may be grown in a variety of soils. Heavier loamy soils will produce the greatest yields. The lighter, well drained, sandy soils are best for early spring crops. Soils should be well drained, rich in organic matter, and have a pH of 6.0 to 6.5.

**Fertilizer** - Leafy vegetables require quick, continuous growth for best quality. They need ample nitrogen for good green color and tender growth. Soil testing is recommended. For average soils, use 1 - 2 pounds of 10-10-10 per 100 ft<sup>2</sup> before planting. Side-dress with 3 oz of 10-10-10 per 100 ft<sup>2</sup>, 3 to 5 weeks after the seed comes up or after transplanting, and 2 to 3 weeks after that.

**Varieties** - Plant Vates, Carolina Improved Heading (or Morris), Georgia Southern, Blue Max, or Heavi Crop. These varieties have consistently done well in North Carolina conditions.

**Cropping Systems** - There are four general ways to produce collards.

1. Grow and set transplants in early spring, and harvest the whole plant 50 to 60 days later.
2. Grow and transplant in early spring, and market cropped leaves in late spring, and keep plants growing into fall when the entire plant is harvested.
3. Seed direct about August 15, or transplant from September 1 to 15, and harvest in late October to December.
4. Seed direct to field in spring. These may be harvested as leafy greens or thinned to 15 to 18 inches and carried over to fall.

**Growing Plants** - Plants may be grown by seeding directly in the field (0.1 to 0.2 oz per 100 ft of row) or in protected beds (1 pound of seed per 1000 ft<sup>2</sup>). About 6 to 8 weeks will be required to produce plants ready for transplanting.

**Direct Seeding** - There are several good precision seeders (Earth Way or Garden Way seeder) on the market. In general, the seeders reduce seed use by 40 to 70%. The stands are much more uniform and require very little thinning. Uniform stands are easier to grow and harvest, thus reducing the cost of production. Uniform stands grow evenly and are better weed competitors. Seed should be placed in moist soil usually 1/2 to 3/4 inch deep, but never deeper than 1 inch. If moisture is not adequate for germination in the top 3/4 inch, irrigation should be applied. Frequent irrigation is also

Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Employment and program opportunities are offered to all people regardless of race, color, national origin, sex, age, or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

important in obtaining good stands in hot weather ( $\frac{1}{4}$  inch per day at midday).

**Spacing** - Spacing depends on how the crop will be produced. If the plants are to be cut when half grown, they may be spaced 10 to 15 inches apart. If they are to be harvested when full grown they should be spaced 15 to 18 inches apart. If the seed is to be drilled in the row and the young collard plants are to be harvested, similar to mustard greens, the plants may be 2 to 4 inches apart. Rows should be 36 to 42 inches apart for conventional systems. However, multirow beds of 2 to 4 rows on 38 to 60 inch centers provide greater yields and improved quality. In such a system, rows on each bed are spaced 12 to 18 inches apart. This provides rapid ground cover, fewer weeds and more tender growth.

**Irrigation** - Collards, like other members of this plant family, require above average moisture. Use irrigation liberally in times of potential moisture stress, usually for a total of up to 1.5 inches per week when combined with precipitation is less than this.

**Weed Management\***- The production method you use and the season you plant the crop will determine the kind and extent of your weed problems. Herbicides are available for use on collards and are generally recommended. Whether you use a herbicide or not, some cultivation will likely be necessary. Avoid deep cultivation. Close spacing and rapid growth will help to suppress weeds.

**Insect Management\***- Several worms (imported Cabbage worm, Cabbage looper, Diamondback larvae) and Harlequin bugs are the predominant insects. A rigid control program will be necessary, especially during summer and fall. Aphids are also a serious problem

during cool weather. Use high pressure (200 psi) sprayers and a spray sticker to provide best control.

**Disease Management\***- Some diseases, such as black rot, are seed-borne. Insist on western grown, chemically treated seed to reduce this disease. Another major disease is Downy Mildew which produces discolored spots on the leaves. The Carolina variety has resistance to one or more strains of Downy Mildew. Refer to the *N.C. Agricultural Chemicals Manual* for chemical recommendations.

\* For all pesticide recommendations, check the latest issue of the *N.C. Agricultural Chemicals Manual*.

### **Harvesting**

Harvesting systems include:

1. Cutting entire plants when very young (spaced 2 to 4 inches apart), similar to mustard greens. Successive cutting can be done with these systems.
2. Cutting entire plants when about half grown (spaced 10 to 15 inches apart).
3. Cutting entire plants when full grown (spaced 15 to 18 inches apart).
4. Harvesting tender leaves from full grown plants.

### **Steps to Successful Collard Production**

1. Use crop rotation.
2. Lime to pH 6.0 to 6.5.
3. Test soil.
4. Plant to meet harvest expectations and desires.
5. Inspect transplants for black rot.
6. Space plants for the desired harvest method.
7. Use precision seeding.
8. Control weeds.
9. Manage pests.
10. Keep cool after harvest.