NC STATE UNIVERSITY

College of Agriculture & Life Sciences
Department of Horticultural Science

Horticulture Information Leaflet 8019
Revised 1/01 -- Author Reviewed 1/01

HOME GARDEN OKRA

Douglas C. Sanders, Extension Horticultural Specialist

Okra is grown throughout North Carolina in home gardens and for commercial markets. It is a warm season crop that belongs to the cotton (Mallow) family and should not be planted until the soil has thoroughly warmed in the spring. Okra is referred to as 'Gumbo' in some areas.

Soils - Well drained sandy loams high in organic matter are the most desirable. It is difficult to get good stands on heavy clays. Poorly drained soils may result in drowning of the plants. Okra is susceptible to several soil borne disease pests (nematodes, Southern stem blight and wilts) thus crop rotation should be so planned to avoid these where possible.

Varieties

Clemson Spineless is a uniform spineless variety with medium dark green, angular pods. It requires 55 to 58 days from seeding to maturity.

Emerald is a spineless variety with dark green, smooth, round pods. It requires 58 to 60 days from seeding to maturity.

Lee is a spineless variety with deep bright green, very straight angular pods. The plant is a semi-dwarf type.

Annie Oakley is a hybrid, spineless variety with bright green, angular pods. It requires 53 to 55 days from seeding to maturity.

Prelude (PVP) is a new open pollinated, spineless variety with very dark glossy green fluted pods. It can be harvested when pods are $^1/_2$ to $^3/_4$ inches longer than other varieties and still remain tender. It requires 50 to 55 days from seed and generally yields better than Clemson Spineless.

Fertilization - Before planting, have the soil tested and follow recommendations. If no soil test was made, a general recommendation would be to apply 2 lb of 10-10-10 per 100 ft^2 and make two sidedressings of 3 oz of 10-10-10 per 100 ft of row, beginning when plants are 6 to 8 inches tall and again 2 to 3 weeks later. Additional sidedressing may be needed if heavy rains occur. **Do not overuse nitrogen**, since it can cause excessive vigor and poor yield.

Spacing and Seeding - Space rows 36 to 42 inches apart with 12 to 15 inches between plants. Seed should be chemically treated to reduce "damping-off" (seedling rot) and planted about one inch deep. To establish good stands, plant 3 to 4 seeds per foot and thin. Soaking seeds overnight will hasten germination.

Cultivation and Weed Control* - Okra is harvested over a long period of time and full season weed control is important. Where mechanical cultivation is necessary it should be shallow and only as often as necessary to control weeds.

Insect Control* - The insects found on okra vary from year to year, but generally various beetles (flea, Japanese, blister and cucumber beetles) and worms (mostly corn earworm) are most common.

Disease Control* - The more serious disease pests are rootknot nematode, Southern stem blight and wilt. A combination of crop rotation and soil fumigation is important for control of these diseases. Foliage blights may occur, but generally they do not reach epidemic proportions. Blossom blight can be serious in persistent rainy periods.

Harvesting - The plant continues to produce so long as pods are removed. Mature pods left on the plant will reduce flowering and fruit set. Generally pods are harvested when 2 $^1/_2$ to 3$^1/_2$ inches long. When plants are healthy and actively growing 5-inch pods are usually tender and acceptable. To achieve maximum yields the pods must be harvested every other day. Most pods are ready for harvesting 4 to 6 days after the bloom opens. Pods may be cut with a knife or snapped off by hand. Cutting is slower, but produces a nicer result. Most people are sensitive to the small spines on okra and often get a rash or itch. When harvesting, pickers should be provided with gloves and wear long sleeves and long pants for protection.

Cutback - After the market price drops in the late spring, cutting back okra will allow the plant to rejuvenate and produce a fall crop. Cut plants with a weedeater or mower to 8 to 10 nodes, 6 to 8 inches above the ground. Refertilize with 15-0-14, 8-0-24 or 13-0-44 at 6 oz per 100 ft of row to encourage regrowth and side branches. Fall yields of cutback crops will often exceed spring crop yields.

Mulching - Plastic mulching has increased yields and earlier production. Transplanting pat of a crop will also result in earlier production. Okra should be transplanted at 3- to 4-leaf stage in double rows 15 to 18 inches apart and 12 inches between plants. If drip irrigation is used in conjunction with plastic mulch, the tube should be centered between the rows and buried approximately 2 to 3 inches deep. Transplants and mulch allow earlier harvest and increased profit due to higher early prices. (See HIL - 8033, *Using Plastic Mulches and Drip Irrigation for Vegetable Gardens*.)

Storage - Harvested okra deteriorates rapidly, and normally it is stored only for short periods. If the pods are in good condition, they can be stored 7 to 10 days at 45 to 50 °F and 90 to 95% humidity. Upon removal from storage the pods must be sold relatively quickly. At temperatures below 45°F okra is subject to chilling injury which results in surface discoloration, pitting and decay.

***** Consult the current NCCVR (*North Carolina Commercial Vegetable Recommendations,* AG-586) or your county Extension agent for pest and weed control recommendations.