

# Okra

## Planting and Spacing

Seed 12 to 18 inches apart in rows 36 inches apart. Seed only after the soil has warmed to 65°F to 70°F for several days. Black plastic mulch with drip irrigation will increase yields. Transplants can be used for early production.

## Fertilizing

**Lime:** To maintain a soil pH of 6.0 to 6.5. Okra is very sensitive to low pH soils.

**Preplant:** N: 40 pounds N per acre preplant broadcast and disked in prior to seeding. P<sub>2</sub>O<sub>5</sub>: 0 to 200 pounds per acre. K<sub>2</sub>O: 0 to 300 pounds per acre. Adjust according to soil type, previous management, and soil test results.

**Sidedress N:** Apply 40 pounds N as a sidedress after the first harvest.

## Harvest

Okra should be harvested every 2 to 3 days to maintain optimal market size (2- to 4-inch long pods). Frequent harvesting increases overall yield since the plant will reset pods faster. Okra will yield 8,000 to 10,000 pounds per acre. Okra can be stored at 45°F to 55°F and 90 percent to 95 percent relative humidity for 7 to 10 days.

## Pesticide Use in Greenhouses

Before using any pesticide, always read the product label for mention of greenhouse restrictions. See Selected Information About Recommended Fungicides (page 79), Selected Information About Recommended Herbicides (page 69), and Selected Information About Recommended Insecticides (page 54).

## Disease Control

### **Fusarium Wilt**

Avoid fields with a history of Fusarium wilt.

Rotations of several years may reduce Fusarium wilt severity.

## Weed Control

Weeds in okra can be managed with cultivation and handweeding, plastic or other mulches, and herbicides. Because okra is a warm-season, transplanted crop, there should be enough time in the spring to prepare a stale seedbed before planting, which should reduce weed pressure in the crop. Herbicide choices are limited, and

the products that can be broadcast do not control many broadleaf weeds, so it is important to include mechanical control in the weed management plan.

For specific weeds controlled by each herbicide, check Relative Effectiveness of Herbicides for Vegetable Crops (page 68).

Rates provided in the recommendations below are given for overall coverage. For band treatment, reduce amounts according to the portion of acre treated.

### **Burndown or Directed/Shielded**

### **Applications Broadleaves and Grasses**

#### **Recommended Products**

**Glyphosate** products at 0.75-3.75 lbs. acid equivalent (ae) per acre. Use formulations containing 3 lbs. ae per gal. (4 lbs. isopropylamine salt per gal.) at 1-5 qts. per acre, or formulations containing 4.5 lbs. ae per gal. (5 lbs. potassium salt per gal.) at 0.66-3.3 qts. per acre. Broadcast at least 3 days before transplanting or apply between crop rows with hooded or shielded sprayers. Use low rate for annuals and higher rates for perennials. See label for suggested application volume and adjuvants. Remove herbicide residue from plastic mulch prior to transplanting. 14-day PHI.

### **Burndown or Directed/Shielded**

### **Applications Broadleaves**

#### **Recommended Products**

**Aim EC**® at 0.5-2 fl. oz. per acre. Apply prior to transplanting or apply between crop rows with hooded sprayer. Do not apply before direct seeding. Do not allow spray to contact crop. Use COC or NIS. Weeds must be actively growing and less than 4 inches tall. Do not exceed 6.1 fl. oz. per acre per season.

### **Preemergence Broadleaves and Grasses**

#### **Recommended Products**

**Callisto**® at 6 fl. oz. per acre banded to row middles prior to weed emergence. Leave 1 foot over row or 6 inches on each side of row unsprayed. Do not apply directly over the planted okra row or severe injury may occur. Injury risk is greatest on coarse-textured soils (sand, sandy loam, or loamy sands). A postemergence hooded application can be made at 3 oz. per acre to weeds at least 3 inches tall at time of application. Add 0.25% NIS v/v to spray solution. Avoid any contact with okra plant foliage. Do not exceed 1 application and 6 oz. per acre per year. 28-day PHI.

**Dual Magnum**® at 1-2 pts. per acre. *Indiana, Michigan, and Ohio only.* Apply to okra at least 4 inches tall before weeds emerge. Direct the spray to minimize contact with crop foliage, or apply only between crop rows. Do not incorporate. Do not exceed 2 pts. per acre or 1 application per crop per season. 60-day PHI.

**Prometryn**® at 0.75-1.5 pts. per acre. Apply as a directed spray to row middles at 7-9 leaf stage and when weeds are less than 2 inches tall. 14-day PHI.

**Trifluralin** products at 0.5-1 lb. a.i. per acre. Use 4EC formulations at 1-2 pts. per acre. Use low rate on soils with less than 2% organic matter. Broadcast and incorporate before transplanting. Not effective on muck or high organic matter soils.

## Preemergence Broadleaves and Nutsedge

### Recommended Products

**Sandea**® at 0.5- 1 oz. per acre. Apply between rows of direct-seeded or transplanted crop. Use lower rates on coarse soils with low organic matter. Add 0.5-1 pt. of NIS per 25 gals. of spray solution if emerged weeds are present. Avoid contact of the herbicide with the crop. Avoid contact with surface of plastic mulch if present. Do not exceed 2 oz. per acre per 12-month period. 30-day PHI.

## Postemergence Broadleaves and Grasses

### Recommended Products

**Glyphosate** products. See details above for Burndown or Directed/Shielded Applications.

## Postemergence Broadleaves

### Recommended Products

**Aim EC**®. See details above for Burndown or Directed/Shielded Applications Broadleaves.

**Sandea**®. See details above for Preemergence Broadleaves and Nutsedge.

## Postemergence Grasses

### Recommended Products

**Poast 1.5E**® at 1-1.5 pts. per acre. Use 1 qt. of COC per acre. Spray on actively growing grass. Use high rate on quackgrass. Do not exceed 5.5 pts. per acre per season. 14-day PHI.

## Insect Control

### Aphids

#### Recommended Products

**Admire Pro**® (4.6F) at the following rates:

*Soil applications:* 7-14 fl. oz. per acre. Do not exceed 14 fl. oz. per acre per season. 21-day PHI.

*Foliar applications:* 1.3-2.2 fl. oz. per acre. Do not exceed 6.7 fl. oz. per acre per season. 0-day PHI.

See pollinator precautions.

**RR** **Assail 30SG**® at 2-4 oz. per acre. 7-day PHI.

**Beleaf**® (50SC) at 2.8-4.28 oz. per acre. 0-day PHI.

**Malathion 5EC**® at 1.5 pts. per acre. 1-day PHI.

**Movento**® (2SC) at 4-5 fl. oz. per acre. 1-day PHI.

**Sivanto Prime**® (1.67SL) at 7-14 fl. oz. per acre. 1-day PHI.

## Corn Earworms (Tomato Fruitworms)

### Recommended Products

**Baythroid XL**® at 1.6-2.8 fl. oz. per acre. 7-day PHI. *RUP.*

**Brigade**® (2EC) at 2.1-6.4 fl. oz. per acre. Do not exceed 12.8 fl. oz. per acre per season. 7-day PHI. *RUP.*

**RR** **Coragen**® (1.67SC) at 3.5-7.5 fl. oz. per acre per season. 1-day PHI.

**Entrust**® (2SC) at 3-6 fl. oz. per acre. Also controls hornworms, armyworms, and loopers. Do not exceed 29 fl. oz. per acre per season. 1-day PHI.

**Exirel**® at 7-13.5 fl. oz. per acre. Do not exceed 61 fl. oz. per acre per season. 1-day PHI.

**RR** **Radiant SC**® (1SC) at 5-10 fl. oz. per acre. Do not exceed 34 fl. oz. per acre per season. 1-day PHI.

**Sevin XLR PLUS**® (4F) at 1-2 qts. per acre. Do not exceed 8 qts. per acre per season. 3-day PHI.

## Japanese Beetles

### Recommended Product

**Evergreen Pro 60-6**® at 2-12.6 fl. oz. per acre. 0-day PHI.

## Mites

### Recommended Products

**RR** **Acramite 50WS**® at 0.75-1.0 lb. per acre. Do not exceed 1 application per season. 3-day PHI.

**Zeal (72WSP)**® at 2-3 oz. per acre. Do not exceed 1 application per season. 7-day PHI.


## Stink Bugs

### Recommended Products

**Baythroid XL**® at 1.6-2.8 fl. oz. per acre. Do not exceed 16.8 fl. oz. per acre per season. 7-day PHI. *RUP.*

**Brigade**® (2EC) at 2.1-6.4 fl. oz. per acre. Do not exceed 12.8 fl. oz. per acre per season. 7-day PHI. *RUP.*

**RR** This is a reduced-risk pesticide. See page 37 for details.

 May be acceptable for use in certified organic production. Check with your certifier before use.