



## Warm Season Crop Cucumbers

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 7 to 10</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 50 to 70</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 5.0 to 6.0</li> <li>• Warm, moist soil</li> <li>• Hate “wet feet”</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 12 in.</li> <li>• Between rows: 48 in.</li> <li>• For hills, space hills 4 ft apart, sow 3 to 5 seeds per hill, and thin to 2 to 3 plants per hill.</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Skin should be completely dark green, and cucumbers should be large enough to use.</li> <li>• Harvest cucumbers before they mature completely to keep the vine producing.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Wash and dry thoroughly</li> <li>• Can be stored for 2 to 4 weeks at 50°F to 55°F</li> <li>• Very sensitive to ethylene gas</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• Cucumbers need plenty of water to stay crisp and juicy.</li> <li>• Water in the morning so that leaves can dry during the day.</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: cucumber beetles</li> <li>• Diseases: bacterial wilt, mildew, leaf spot</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Frost sensitive</li> </ul>

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Sources accessed October 19, 2005.



## Warm Season Crop

### Eggplants

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 10 to 14</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 80 to 90</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.0 to 6.8</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 24 in.</li> <li>• Between rows: 24 in. if cultivated by hand; 42 in. if field implements are used</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Skin should be shiny and eggplants should be 4 in. to 5 in. long. Dull skin indicates overripening.</li> <li>• Cut eggplants off the plant with a sharp knife; leave at least 1 in. of stem attached to the fruit.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Market immediately after harvest</li> <li>• Can be stored for 7 to 10 days at 45°F to 50°F and 90% to 95% relative humidity</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• At least 2 in. of water per week is required during the growing season.</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: cutworms, flea beetles, aphids, corn earworms, European corn borers, hornworms, cabbage loopers, Colorado potato beetles, spider mites, fruit flies, picnic beetles, whiteflies</li> <li>• Diseases: Phytophthora blight, Verticillium wilt, Phomopsis blight, Alternaria leaf spot, Cercospora leaf spot, anthracnose</li> </ul>
<b>Other Considerations</b>	

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Sources accessed October 17, 2005.



## Warm Season Crop Green Beans

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 5 to 8</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• Bush: 50 to 60</li> <li>• Pole: 60 to 70</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.0 to 6.8</li> <li>• Well-drained, loose-textured soil</li> <li>• Moderately high organic matter content</li> </ul>
<b>Spacing</b>	<p>Bush:</p> <ul style="list-style-type: none"> <li>• Between plants: 3 in.</li> <li>• Between rows: 24 in. if cultivated by hand; 42 in. if field implements are used</li> </ul> <p>Pole:</p> <ul style="list-style-type: none"> <li>• Between plants: 36 in.</li> <li>• Between rows: 30 in. if cultivated by hand; 42 in. if field implements are used</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Beans should be thin, bright green, and snap easily when bent.</li> <li>• Beans can over-mature quickly, particularly when temperatures are high. Over-mature beans lose color and become tough.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Can be stored for 8 to 12 days at 41°F to 46°F and 95% to 100% relative humidity</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• Sensitive to moisture stress</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: beetles, thrips, corn earworms, leafhoppers, aphids</li> <li>• Diseases: anthracnose, common blight, rust, damping-off, mosaic</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Bush beans require less space and produce more beans at one time, but pole beans provide a more constant supply.</li> <li>• Equipment considerations include poles for pole beans.</li> </ul>

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Sources accessed October 17, 2005.



## Warm Season Crop

### Okra

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 5 to 14</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 55 to 60</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.5 to 7.5</li> <li>• Fertile, loamy soil</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 12 in.</li> <li>• Between rows: 30 in. if cultivated by hand; 42 in. if field implements are used</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Okra pods are usually ready to harvest 4 to 7 days after their flowers open. Plants will bear until frost if pods are picked regularly.</li> <li>• Cut or gently pull okra pods from the plant while they are tender and free of fiber—2 in. to 4 in. long for most varieties.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Can be stored for 7 to 10 days at 45°F to 50°F and 90% to 95% relative humidity</li> <li>• Very sensitive to ethylene gas</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• Provide even moisture throughout the growing season.</li> <li>• Monthly side dressings of manure and monthly applications of a complete organic fertilizer are beneficial.</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: corn earworms, stink bugs, Japanese beetles, leafhoppers, European corn borers, vegetable leaf miners, aphids</li> <li>• Diseases: Fusarium wilt, root knot nematode, leaf spot, blossom and fruit blight, Southern blight, seedling disease, cotton root rot, charcoal rot</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Okra pods develop twice as fast with every 18°F rise in temperature. Harvest every other day in hot weather.</li> </ul>

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Sources accessed October 19, 2005.





## Warm Season Crop

### Peppers

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 10 to 14</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 70 to 80</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.0 to 6.8</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 18 in.</li> <li>• Between rows: 30 in. if cultivated by hand; 42 in. if field implements are used</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Peppers turn from green to the color that they will be at maturity.</li> <li>• Harvest peppers by cutting (not pulling) the mature fruit from the plant.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Store peppers at 45°F to 55°F and 90% to 95% relative humidity.</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• Peppers are shallow-rooted, so mulch can be used to prevent moisture loss.</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: European corn borers, corn earworms, aphids, flea beetles, whiteflies, mites</li> <li>• Diseases: pepper tobamovirus, pepper mottle virus, bacterial spot, bacterial leaf spot, tobacco mosaic virus</li> </ul>
<b>Other Considerations</b>	

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<http://www.hort.purdue.edu/rhodcv/hort410/pepper/pe00001.htm>.

Sources accessed October 17, 2005.



## Warm Season Crop Summer Squash

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 6 to 10</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 80 to 90</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 5.5 to 6.5</li> <li>• Provide moderate potassium and phosphorus and high nitrogen.</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 48 in.</li> <li>• Between rows: 48 in. if cultivated by hand; 60 in. if field implements are used</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Summer squash are ready to harvest when they turn their mature color.</li> <li>• Harvest zucchini and straightneck and crookneck squash at 1 1/2 in. to 2 in. in diameter.</li> <li>• Harvest scallop summer squash at 3 in. to 4 in. in diameter.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Can be stored for 7 to 14 days at 41°F to 50°F and 90% to 95% relative humidity</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• Water evenly throughout the growing season.</li> <li>• Monthly applications of a complete organic fertilizer are beneficial.</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: cucumber beetles, squash vine borers, squash bugs</li> <li>• Diseases: anthracnose, downy mildew, bacterial wilt</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Water in the early morning to help avoid mildew.</li> <li>• Plants are very prolific.</li> </ul>

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## Warm Season Crop

### Sweet Corn

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 7 to 10</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• Mature 22 to 24 days after silking</li> <li>• Maturity dates depend on the variety used.</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.0 to 6.8</li> <li>• Medium textured soil, sandy loam soil</li> <li>• Good drainage</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 8 in. for early and short varieties; 12 in. for tall and late-maturing varieties</li> <li>• Between rows: 36 in. to 38 in.</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Harvest sweet corn when the ears are full at the tip, husks are tight, and the silks have dried.</li> <li>• Kernels should be full and produce a milky liquid when punctured.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• At 86°F, traditional types of sweet corn will lose half of their sugar within 24 hours.</li> <li>• Super sweet and ultra sweet varieties retain their sweetness much longer.</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• 1 in. to 1 1/2 in. of water per week during June</li> <li>• 2 in. to 2 1/2 in. of water per week during July and early August</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: flea beetles, corn borers, corn earworms, cutworms, seed corn maggots, white grubs, wireworms</li> <li>• Diseases: Stewart's wilt, common smut, maize dwarf mosaic, wheat streak mosaic</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Cross pollination can adversely affect sweet corn appearance and taste. To avoid cross pollination, plant noncompatible types of sweet corn 250 ft apart or separate plantings by 14 days.</li> </ul>

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Sources accessed October 19, 2005.



## Warm Season Crop

### Tomatoes

<b>Days to Germination</b>	<ul style="list-style-type: none"> <li>• 7 to 14</li> </ul>
<b>Days to Maturity</b>	<ul style="list-style-type: none"> <li>• 70 to 75 staked; 75 to 90 not staked</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• pH: 6.5 to 7.0</li> <li>• Apply lime in late fall or early spring.</li> </ul>
<b>Spacing</b>	<ul style="list-style-type: none"> <li>• Between plants: 2 ft staked; 2 ft to 4 ft not staked</li> <li>• Between rows: 3 ft to 5 ft staked; 4 ft to 6 ft not staked</li> </ul>
<b>Harvest</b>	<ul style="list-style-type: none"> <li>• Tomato color and flavor is best when daily temperatures are an average of 75°F.</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>• Wrap tomatoes in paper and store at 60°F to 65°F.</li> </ul>
<b>Production Concerns</b>	<ul style="list-style-type: none"> <li>• At least 1 in. of water per week May through June</li> <li>• At least 2 in. of water per week July through September</li> </ul>
<b>Pests and Diseases</b>	<ul style="list-style-type: none"> <li>• Pests: cutworms, flea beetles, hornworms, leaf miners, stalk borers, stink bugs, tomato fruit worms, spider mites</li> <li>• Diseases: wilt, mosaic, leaf spot, anthracnose</li> </ul>
<b>Other Considerations</b>	<ul style="list-style-type: none"> <li>• Structure and equipment considerations include stakes, cages, and high tunnels.</li> </ul>

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<b>Days to Germination</b>	
<b>Days to Maturity</b>	
<b>Soil</b>	
<b>Spacing</b>	
<b>Harvest</b>	
<b>Postharvest</b>	
<b>Production Concerns</b>	
<b>Pests and Diseases</b>	
<b>Other Considerations</b>	

