Cucumber is a warm-season vegetable that yields a high return for the amount of space it occupies. It’s not uncommon for one plant to yield 30-40 fruit over a three- to four-week period. The fruit is low in calories, a favorite component in salads and a favorite in pickling.

Cucumbers, like other members of the cucurbit family, produce separate male and female flowers on the same plant (see illustration). The female flower has the “immature cucumber” attached to its base. Pollen must be transferred from the male to the female to get pollination and fruit development. This is accomplished primarily by honeybees and bumblebees.

The first flowers to develop early in the season are all male flowers; thus no fruit sets on early flowering plants. About a week to 10 days later, the female flowers also develop and normal fruit set takes place. Plant breeders have developed “gynoecious” varieties that produce practically all female flowers. Each flower is a potential fruit, and a more concentrated and earlier fruit set is obtained. Seed of a variety that produces both kinds of flowers is mixed (about 10 percent) with the “gynoecious” variety by the seed company to provide a source of pollen in the area. These seeds are usually color coded. Be sure to plant some of both varieties.

Gardeners in North Louisiana should plant cucumber seed from April to mid-May. A fall crop should be planted in early August. Gardeners in South Louisiana should plant seed from mid-March to mid-May. A fall crop is planted in late August in the South.

Varieties

Two general kinds of cucumbers are the pickling and slicing types. The pickling types produce short, blocky fruit with a tender skin that usually has more white coloration than the slicing types. The slicing types, used primarily for salads, are long, dark green, with a thick, tougher skin except for burpless kinds. The tougher skin makes them somewhat objectionable for pickling. Within these two types are white-spined and black-spined. The white-spined varieties have fruit that mature more slowly on the vine, so they can be allowed to stay on the vine longer without a rapid loss of quality.

Seed companies offer many different varieties, but all don’t perform well in the South. These varieties have proved their adaptability to our growing conditions:

**Slicing Types**

- **Dasher II** — a gynoecious, very dark green hybrid with good disease resistance (esp. mildew); vigorously produces medium-sized, white-spined fruit.
- **General Lee** — dark green hybrid with good production and good disease resistance.
- **Turbo** — a long, blocky hybrid with white spines; very productive, but late.
- **Thunder** — extra-long, dark fruit on gynoecious vine. Similar to Daytona.
- **Daytona** — gynoecious vigorous vine with long, dark fruit.
- **Speedway** — dark green gynoecious hybrid especially good in the fall; produces quickly.
- **Poinsett 76** — a dark green, smooth, open pollinating variety that is well-rounded at both ends. It has good resistance to downy and powdery mildew, anthracnose and angular leaf spot. Spines are white.
- **Slice Master Select** — an early improved gynoecious hybrid, tolerant to six diseases.
- **Diva** — AAS winner that is seedless and nonbitter.
Fanfare — AAS winner, semi-dwarf, monoecious hybrid that is disease resistant; produces large, dark green fruit.

Sweet Success — AAS winner hybrid that is gynoecious, self-setting and mostly seedless. Long, dark fruits with white spines are mild-flavored and burpless. Good in greenhouse or gardens, especially if staked.

Also good are Indy, Taledega, Sweet Slice, Rockingham, Intimidator and Stonewall.

Several bush types are available for containers and mini-gardens.

Pickling Types

Calypso — dark green gynoecious hybrid producing white-spined, medium-large, blocky pickles.

Fancipak — medium, blocky fruit producing high yields on gynoecious vines.

Jackson — dark, blocky, white spine fruit on short vines.

You can expect an ounce of cucumber seed to contain about 1,000 seeds.

Culture

Cucumbers take up a lot of garden space when allowed to run on the ground. A common practice is to grow cucumbers on a trellis or along a fence. They take up less garden space when grown in this manner and tend to make larger yields. The plants are much easier to spray or dust, and the fruit is held up off the ground, resulting in much less fruit rot. You may have to help the plants attach themselves to the trellis at first, but once they catch hold, they usually need no more assistance.

When selecting a site to plant cucumbers, if possible, choose a loose-textured, loamy soil that receives full sunlight most of the day. Good drainage is important for providing warm soils and good aeration. For best seed germination, soil temperatures should be 60-75 degrees F.

Prepare rows or hills a few weeks in advance. Work plenty of compost into the beds, or concentrate compost in the rows or underneath the hills. Apply about 15 lbs. of a complete fertilizer like 8-8-8 per 1,000 sq. ft. (or 6 lbs. per 100 ft. of row). About 12 lbs. of an 8-24-24 per 1,000 sq. ft. (or 4 lbs. per 100 ft. of row) is even better. When planting in hills, use 2 tablespoons of a complete fertilizer per hill as you develop the hills. Sidedress the hills with a level teaspoon of ammonium nitrate when the vines begin to run.

On most soils, cucumbers can benefit from one sidedressing of 2 lbs. ammonium nitrate per 1,000 sq. ft. (or 3/4 lb. per 100 ft. of row) when the vines begin to run. Sandy soils may require a sidedressing of a complete fertilizer which contains nitrogen, phosphorus and potassium.

Plant seeds about 1/2 inch deep in 3- to 3 1/2-foot rows. Thin to one plant every 12 inches or two plants every 24 inches. When planting in hills, plant about four seeds per hill and thin to two plants.

To maintain vigorous production, water soils deeply. Thorough flood irrigation is best because it saturates deeply, keeps excessive moisture off the leaves and doesn’t wash off pesticides. Drought-stressed cucumbers develop bitter fruit whose ends tend to be slender and pointed. This bitterness is located just under the skin and can often be peeled away.

Production will cease even if a few fruits are left to mature on the vine. Therefore, keep the vines well picked to maintain vigorous production, even if it means help from a neighbor. The pickling types are harvested when the young fruits are 2 to 6 inches long and about 1/2 to 2 inches in diameter. The slicing types are harvested when fruits are about 6 to 10 inches long and 1/2 to 2 inches in diameter. In any case, remove all fruits before the white areas in the skin begin to turn yellow and seed begin to mature.

With all pesticides, wait the recommended time between application and harvesting. Since cucumbers depend on bees for pollination, apply insecticides late in the afternoon so bees are not injured. For problems not listed, contact your county agent.

Pest Control

Growing cucumbers on black plastic mulch is very effective. The black film should cover the prepared row a week or more before planting. Soil warming affects advance early growth in the cool spring. Black plastic mulch also reduces problems with belly rot and controls most weeds around the plants.

Since cucumbers are sensitive to most herbicides, shallow cultivation during the developmental stages is best. The herbicide Daethyl is cleared for cucumbers and will control annual grasses and some annual broadleaf species. Your county agent has more specific information on other materials and their use.

Angular leaf spot is a bacterial disease that attacks leaves, stems and fruit during warm, wet periods of weather. Small water-soaked spots first appear on the underside of the leaves. These develop into straw-, tan- or brown-colored spots with angular shapes bounded by the leaf veins. These spots may be surrounded by a yellow halo. Often, the centers of the spots fall out giving the leaf a tattered appearance. Small circular spots on the fruit will crack open and turn white. The disease is mechanically spread by insects, hand or splashing rain. Fixed copper sprays can retard its spread. Stay out of the garden while foliage is wet, and plant our recommended resistant varieties. General Lee is not resistant.

Downy mildew occurs during periods of moderate to warm, wet weather. Leaves show small, angular yellow spots on the upper surface and often produce a visible grayish, moldy growth on the lower surface, especially during periods of high humidity.
The anthracnose fungus attacks older leaves in warm, wet weather, producing large, red-brown, circular spots. These spots eventually lose their centers. Streaks may develop on stems or pinkish, oozing lesions may develop on the fruit. Use recommended fungicides to control downy mildew and anthracnose.

Bacterial wilt is usually brought in by the cucumber beetle. Infected vines suddenly wilt and die. To control this wilt, control the beetles.

Clean up debris at the end of the season to discourage carryover of insects and diseases.

### Diseases

<table>
<thead>
<tr>
<th>Pest</th>
<th>Control</th>
<th>Rate per Gal.</th>
<th>Days to Harvest (PHI*)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose</td>
<td>Chlorothalonil</td>
<td>Mfg. label</td>
<td>0</td>
<td>Every 7-10 days.</td>
</tr>
<tr>
<td>Downy mildew</td>
<td>Copper fungicides</td>
<td>Mfg. label</td>
<td>1</td>
<td>Every 7-10 days.</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>Mancozeb</td>
<td>Mfg. label</td>
<td>5</td>
<td>Every 7-10 days.</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>Maneb</td>
<td>Mfg. label</td>
<td>5</td>
<td>Every 7-10 days.</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>Neem oil</td>
<td>Mfg. label</td>
<td>0</td>
<td>Every 7-14 days.</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>Potassium bicarbonate</td>
<td>Mfg. label</td>
<td>0</td>
<td>Every 5-14 days; for powdery mildew only.</td>
</tr>
<tr>
<td>Angular leaf spot</td>
<td>Copper fungicides</td>
<td>Mfg. label</td>
<td>1</td>
<td>Every 7-10 days.</td>
</tr>
<tr>
<td>Fruit rot (belly rot)</td>
<td>Chlorothalonil</td>
<td>Mfg. label</td>
<td>0</td>
<td>Apply to soil as vines begin to run.</td>
</tr>
</tbody>
</table>

### Insects

<table>
<thead>
<tr>
<th>Pest</th>
<th>Control</th>
<th>Rate per Gal.</th>
<th>Days to Harvest (PHI*)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beetles, Pickleworms, Squash bugs</td>
<td>Permethrin</td>
<td>Mfg. label</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endosulfan (Thiodan)</td>
<td>Mfg. label</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbaryl (Sevin)</td>
<td>Mfg. label</td>
<td>3</td>
<td>Apply late afternoon.</td>
</tr>
<tr>
<td></td>
<td>Bifenthrin</td>
<td>Mfg. label</td>
<td>3</td>
<td>Weekly as needed.</td>
</tr>
<tr>
<td></td>
<td>Malathion</td>
<td>Mfg. label</td>
<td>1</td>
<td>Weekly as needed.</td>
</tr>
<tr>
<td>Mites</td>
<td>Ultra fine horticultural oil or insecticidal soap</td>
<td>Mfg. label</td>
<td>0</td>
<td>As needed.</td>
</tr>
<tr>
<td>Leaf Miner</td>
<td>Spinosad</td>
<td>Mfg. label</td>
<td>1</td>
<td>As needed.</td>
</tr>
</tbody>
</table>

*Pre-harvest Interval
T=Tablespoon  t=teaspoon
Dusts may be substituted for sprays. Apply as directed on the label.
Acknowledgments

The author express appreciation to Drs. Donald Ferrin, Alan Morgan and James Boudreaux (professors in Plant Pathology, Entomology and Horticulture, respectively) for their suggestions and information about insect and disease control practices and varieties.

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