



# Vegetables: Growing Cucumbers in Home Gardens

WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS096E

## Crop at a Glance

**Growing season:** Summer

**Time of planting:** When soil temperatures reach 65°F

**Spacing:** 4 to 5 seeds or 2 to 5 seedlings per hill, spaced 4 to 5 feet between hills

**Days to harvest:** 50 to 70 days

**Average yield:** Slicing cucumbers, 10 to 15 per vine; pickling cucumbers, 20 per vine

**Common starting method:** Direct seed or transplant seedlings

## Introduction

Cucumbers are easy to grow in the home garden and very versatile in their form, use, and preparation. Vines bear both pollen bearing (male) and fruit bearing (female) blossoms. The first flowers to bloom are generally male, and will drop from the vine before fruit sets. This is normal occurrence. The following flowers will be both male and female, and pollination, followed by fruit set will occur.

## Selecting Types to Plant

Pick varieties that appeal to both your taste and culinary use. Slicing cucumbers are primarily used for fresh eating and in salads. Pickling cucumbers, which form small fruit about 3 to 6 inches long, are suitable for pickling. These may also be eaten fresh, although it's best to peel them first. There are also novelty types, such as the yellow, round lemon cucumber, or the foot-long Asian.

Be sure to select a variety that matures within the growing season of your geographic area. Most cucumbers require 50 to 70 days from planting to first harvest; and this may require a longer growing season than some areas in Wash-

ington allow. For western Washington gardens, select early maturing varieties.

## Choosing a Planting Site

Cucumbers require full-sun exposure, and will grow best when planted in fertile, well-drained soils that contain a high level of organic matter. The plants need ample space, as the vines can reach three to five feet in length before setting fruit. Some gardeners grow cucumbers on a fence or trellis to save space and to keep the fruit off the ground. Trellising cucumbers can increase yields 2 to 3 times, due to better disease control (increased airflow reduces foliar diseases), less damage to vines during harvest, and more thorough harvesting. Cucumbers have moderate to high water needs, particularly during the heat of summer.

## Planting Guidelines

Purchase seed from catalogs and garden centers. It is not recommended to plant cucumber seed that have been saved from the previous year, as they are unlikely to produce the same variety. When sowing seeds outdoors, germination is best when the soil temperature is at least 55 °F. Seeds can be planted in mid- to late-May, 4 to 5 seeds per hill (mounds of soil) at a depth of 1-inch. Space the hills 4 to 5 feet apart. When the plants develop two to three leaves, thin the plants to three well-spaced plants per hill. Cucumbers grow best when temperatures are between 70 and 95 °F. Cucumbers are frost-tender vegetables, meaning frost will kill the plants.

Cucumber plants may be started indoors (in the home or greenhouse) four to five weeks prior to transplanting in the garden. Plant seeds in 4-inch pots made of paper, compressed peat soil pellets (such as Jiffy-7's), or even egg cartons. Transplant cucumber plants outdoors after the danger of frost has passed.

## Plant Maintenance

The first few weeks after planting are the most critical to the survival and productivity of the cucumber plant. If

*This fact sheet is part of the WSU Extension Home Garden Series.*

seeds fail to germinate or germinate unevenly, gardeners should investigate the cause in order to prevent the same problem occurring the next year. Common causes include seeds planted too deep, cold soil, old seed, pest-damaged seed, and the like. Gardeners should be familiar with the appearance of normal, healthy plants, and periodically observe the plants for any signs of stress or pests. This should be done two to three times per week.

The most common sign of stress is leaf wilting which is associated with under- or over-watering the plant. The moisture level of the soil near the root zone of the affected cucumber plant should be moist and pliable, not dry and crumbly, or wet and dripping. Gardeners need to watch for stunted plants with pale leaves, which is a sign of low fertility soil; or vigorous plants that fail to bloom or set fruit, which indicates soil with excessive fertility.

Another key period for plant maintenance is during bloom. Most cucumber varieties have male and female flowers (distinguished by the small round growth at the base of the flower) on the same plant. The blooms depend on bees and insects to transfer the male pollen to the female flower. Take precautions to minimize insecticide use during flower bloom and encourage bee and insect access and visitation in your garden. Inadequately pollinated female cucumber flowers will die and fall off the vine before fruit develops.

## Pest Management

**Diseases.** Plant diseases can affect cucumber yield in home gardens. To reduce disease, avoid overhead watering to prevent water from splashing onto cucumber foliage. If plants are not growing properly, dig them out and discard them (do not compost). Gardeners should investigate problems with weak plants and why they failed to grow. The best strategy to combat plant disease is to avoid planting susceptible plants in an infected area, or by planting cucumber varieties bred for resistance to specific diseases.

**Insects.** When a gardener plants a few rows of cucumbers each year and rotates the plants within the garden from year to year, insect pest problems are few and rarely affect fruit quality. Healthy vines tolerate pest damage, while stressed (often water stressed) vines may attract insect pests. By periodically scouting cucumber plants for insect presence or signs of damage (leaf discoloration, insect feeding damage on leaves, vine tip dieback, surface marking on fruit), gardeners may anticipate problems and control pests before they jeopardize the health of the plant or quality of the fruit. Learn to recognize the beneficial insects, especially insect predators, and encourage their presence in your home landscape. Contact your local WSU Master Gardener program to assist you in identifying pests and beneficial insects.

\*For a list of products available for home garden pests, consult the WSU Hortsense at <http://pep.wsu.edu/hortsense>.

## Common Problems

### Powdery Mildew

A fungal problem common in eastern Washington.

Photo: R.S. Byther



**Symptoms:** Powdery white patches on leaves. Russet-like brown and dead areas on leaves.

**Corrective Action:** Promote good air circulation within plant canopy. Plant disease resistant varieties. Destroy infested material. Fungicides are not recommended.

### Angular Leaf Spot

A bacterial problem frequently encountered in western Washington.

Photo: R.S. Byther



**Symptoms:** Leaves, stems, and fruit with water-soaked angular spots. Leaf lesions dry out and drop, leaving irregular holes.

**Corrective Action:** Avoid overhead watering. Plant disease resistant varieties. Rotate crops; do not plant cucumbers in consecutive years. There are few pesticides available to homeowners.

### Spider Mites

A common problem in dry, hot areas, such as eastern Washington (or in greenhouses).

Photo: L.K. Tanigoshi



**Symptoms:** Whitish yellow stippling along leaf midrib. Leaves turn yellow, then bronze, and then die. Mites and webbing can be found on the underside of leaves.

**Corrective Action:** Wash aphids from plants with a strong stream of water. Drought stressed plants are susceptible to mites; water properly. There are insecticides labeled for use on cucumber to control these mites.\* Avoid broad-spectrum insecticides that kill beneficial predators like ladybeetles, lacewings, and predatory mites.

### Aphids

Photo: A.L. Antonelli



**Symptoms:** Infested leaves will become curled all around the aphids. Aphids excrete honeydew—a sticky, shiny substance—that coats leaves.

**Corrective Action:** Wash aphids from plants with a strong stream of water. There are insecticides labeled for use on cucumber to control aphids. Avoid broad-spectrum insecticides that kill beneficial predators such as ladybeetles, lacewings, and predatory mites.

## Western Spotted Cucumber Beetle

Photo: K. Grey



**Symptoms:** Adult beetles are about ¼ inch long, with black bodies and yellow wing covers with black spots. Adults feed on leaves of plants. Larvae may also feed on roots.

**Corrective Action:** Handpick and destroy eggs and bugs. Clean up vegetative debris in autumn to discourage overwintering beetles. There are insecticides labeled for use on cucumber to control these beetles.\*

## Bitterness

**Symptoms:** Cucumbers taste bitter.

**Corrective Action:** This is a temporary problem caused by plant stress, for example, temperatures below 60°F or above 90°F, drought conditions, or poor plant nutrition. The bitter flavor can be reduced by peeling the cucumbers to remove cucurbitacin; a compound in the peel that causes bitterness.

## Harvest and Storage

Harvest by size depending on intended use. Do not allow cucumbers to reach the yellowish stage as they become soft and bitter, and overall plant yield will be reduced. Frequent picking of cucumbers is essential to encourage new fruit. Harvest by cutting the stem ¼ inch above the fruit. Do not trample the vines any more than necessary to harvest the crop. After the final harvest, remove and compost remaining plant debris. Alternatively, turn under the remaining plant material in the fall to help replenish nutrients and contribute to the organic matter in the soil.

## End Uses

Fresh eating cucumbers: Choose young cucumbers with tender skin. Wash and cut in desired slices or segments.

Pickling cucumbers: For pickling information visit the National Center for Home Food Preservation's website at <http://www.uga.edu/nchfp>.

## Further Reading

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Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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