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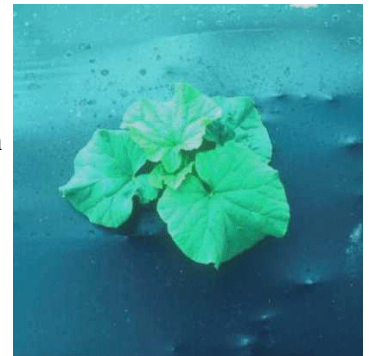
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# Cucumbers in the Garden

*Dan Drost and Rick Hefelbower, Vegetable Specialists*

## Summary

Cucumbers prefer a sunny location and fertile, well drained soils. Incorporate plenty of organic matter and a complete fertilizer into the area before planting. Plant multiple seeds 1 inch deep, 12-18 inches apart in rows 4 feet apart when soils are 65°F. Thin after emergence to two plants per location. Transplant cucumber 2 feet apart through black plastic for early maturity. Use row covers to protect the plants when planting before the frost-free period. After the vines develop runners, side dress with additional nitrogen fertilizer. Irrigation should be deep and frequent. Plastic and organic mulches help conserve water and reduce weeding. Do not apply organic mulches until soils have warmed to 75°F. Control insect and diseases throughout the year. Harvest cucumbers when fruits are young and tender.



## Recommended Varieties

Marketmore, Spacemaster, Sweet Success, SMR58, Armenian, and Boston Pickling are excellent cucumber varieties. Most varieties will grow in Utah so check for availability with your local garden center or seed catalog.

## How to Grow

**Soils:** Cucumbers prefer organic rich, well-drained, sandy soils for best growth. Most Utah soils will grow cucumbers provided they are well drained.

**Soil Preparation:** Before planting, incorporate up to 4 inches of well-composted organic matter. Apply 4-6 cups of all-purpose fertilizer (16-16-8 or 10-10-10) per 100 square feet before planting. Work these into the top 6 inches of soil

**Plants:** Cucumbers can be grown from seed or transplants. Seed should be planted 1 inch deep. Transplants should have 2-3 mature leaves and a well-developed root system before moving into the garden. Seeds germinate in 5-10 days at temperatures between 65-85°F.

**Planting and Spacing:** Cucumbers should be planted when soils are 65°F or after all frost danger has past. Plant 4-6 seeds every 12-18 inches in rows 4 feet apart. After they have two leaves, thin to two plants per location. Transplants should be planted 2 feet apart in row, with rows 4 feet apart. Avoid damaging the roots when planting which slows establishment and growth.

**Mulches:** Black plastic mulch warms the soil, conserves water and helps control weeds. Plastic mulches allow earlier planting and maturity, especially with transplants. Lay down the plastic, secure the edges with soil, and cut holes for the seeds or transplants. When using plastic mulch and row covers, seeds or plants can be set out about 2 weeks before the last frost date. Do not apply organic mulches until soils are warmer than 75°F. Grass clippings, straw, newspapers, etc., also conserve water and control weeds.

**Row covers:** Hotcaps, plastic tunnels and fabric covers protect seedlings and transplants from cool air temperatures. Row covers stimulate growth and earliness. Covers need to be removed when plants start to flower or when temperatures under the covers exceeds 90°F. Hot temperatures will reduce fruit set and affect fruit quality.

**Water:** Water deeply applying 1-2 inches per week depending on plant size. Use drip irrigation if possible. Organic or plastic mulch around the plant will conserve soil moisture and reduce weed growth. Irrigate so the plants do not experience stress as this causes the fruits to be bitter, have pointed ends, and be misshapen.

**Fertilization:** After the vines develop runners, side dress with a nitrogen fertilizer (34-0-0) using 1/4 cup per 10 feet of row. Side dress before the plant starts to flower.

## Problems

**Weeds:** Plastic and organic mulches effectively control weeds. Heavy vine growth by cucumber will also smother weeds. Be sure to control weeds when plants are small and do not damage roots when cultivating.

**Insects and Diseases:**

Insect	Identification	Control
Aphids	Green or black soft-bodied insects that feed on underside of leaves. Leaves become crinkled and curled. May transmit virus diseases. Secreted honeydew makes plants appear shiny, wet, or sticky.	Use insecticidal soaps or strong water stream to dislodge insects.
Cucumber Beetles	Adults have stripes or spots and feed on leaves and vines which reduces vigor. May transmit bacterial disease. Larvae bore into roots and stems causing plants to wilt and die.	Application of chemicals at first appearance is needed to control this pest.
Disease	Symptom	Control
Powdery Mildew	White fungal patches start on older leaves. The disease eventually spreads to all plant parts. The foliage dies, exposing fruits to the sun, which causes premature ripening.	Plant resistant varieties.
Wilt Diseases	Leaves wilt on one or more vines. Plants often die. Streaking, slime formation, or gummy exudates visible on stems. Diseases are caused by different pathogens.	Identify causal disease. Treat disease as recommended once identified.
Virus	Leaves are light green, mottled, malformed, dwarfed and curled. Early infection affects fruit shape and flavor. An aphid transmitted disease.	Control aphids. Destroy severely infected plants.

## Harvest and Storage

Cucumbers are ready to harvest 5-7 days after flowering. Do not let fruits get too large as flavor decreases with age, seeds begin to mature and the skin get tough. Handle carefully as fruits bruise easily. Pick regularly to encourage continual production. Cucumbers can be stored for 10-14 days at 55°F. If held in the refrigerator, fruits will break down rapidly and will yellow if stored near apples.

## Productivity

Plant 2-3 cucumbers per person for fresh use and an additional 3-5 plants for canning or pickling. Expect 100 lbs of fruit per 100 feet of row.

## Nutrition

Cucumbers are mostly water. They do contain a small amount of beta carotene, and are low in fat, protein and carbohydrates.

## Frequently Asked Questions

● **Some of my small cucumbers are badly misshapen. Will they develop into normal cucumbers?** No. They should be removed from the vines. Misshapen cucumbers may result from poor pollination, low soil moisture or soil fertility. Side-dress with a complete fertilizer and keep the soil uniformly moist.

● **Is there really a “burpless” cucumber?** Yes. Burpless cucumbers are no longer considered novelties and are offered in most garden catalogs. They are mild, sweet and crisp when fresh. The skin is tender and free of bitterness, although many people peel it off. Most varieties are 10 to 12 inches long and curved, unless grown on a trellis. Armenian is considered a burpless type.

● **How far away from melons should I plant my cucumbers to avoid cross pollination?** Contrary to popular belief, cucumbers do not cross-pollinate with cantaloupe, squash or watermelons and cause them to become bitter, tasteless or off-flavored. Cucumbers and melons do require considerable space to grow so plant the rows far enough apart for good vine growth without overlapping.

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