Cantaloupe (Muskmelon) in the Garden

Dan Drost and Rick Heflebower, Vegetable Specialists

Summary
Cantaloupes prefer a sunny location and fertile, well drained soils. Incorporate plenty of organic matter and a complete fertilizer into the area before planting. Plant 4-6 seeds, 1-2 inches deep, in mounds 4 feet apart when soils are 65°F. Thin the mounds after emergence to 2 plants. Transplant cantaloupe 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 infrequent. 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 cantaloupes when the fruits separate from the vine easily and the background color is creamy yellow.

Recommended Varieties
Ambrosia, Classic Hybrid, Hales Best, Mission, Rocky Sweet, and Summit Hybrid are excellent cantaloupe varieties.

How to Grow
Soils: Cantaloupes prefer organic, rich, well-drained, sandy soils for best growth. Most soils will grow cantaloupe 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.

Plants: Cantaloupe can be grown from seed or transplants. Seed should be planted 1-2 inches deep. Transplants should have 2-3 mature leaves and a well developed root system. Transplants mature about 2 weeks before seeded melons and should be used in short growing areas of Utah.

Planting and Spacing: Cantaloupe should be planted when soils are 65°F or after all frost danger has past. Plant 4-6 seeds in mounds 4 feet apart. After they have two leaves, thin to 2 plants per mound. Transplants should be planted 2 feet apart in row, with rows 4-6 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 the plastic, secure the edges with soil, and cut holes for the seeds or transplants. When using plastic mulches and row covers, seeds or plants can be set out about 2 week 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 enhance growth and early maturity. Covers need to be removed when plants start to flower or when temperatures exceed 90°F.

Water: Water deeply and infrequently, 1-2 inches per week. Use drip irrigation if possible. Mulch around the plant will conserve soil moisture and reduce weed growth. Irrigate so that moisture goes deeply into the soil. Reduce watering amount as the fruits ripen to improve flavor.
Fertilization: After the vines develop runners, side dress with a nitrogen fertilizer (21-0-0) using 1-2 tablespoons per plant or mound. Incorporate the fertilizer at least 6 inches away from the plants.

Problems

Weeds: Plastic and organic mulches effectively control weeds. Vigorous vine growth will also smother weeds.

Insects and Diseases:

<table>
<thead>
<tr>
<th>Insect</th>
<th>Identification</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphids</td>
<td>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.</td>
<td>Use insecticidal soaps or strong water stream to dislodge insects.</td>
</tr>
<tr>
<td>Cucumber Beetles</td>
<td>Adults have stripes or spots and feed on leaves and vines which reduces vigor. They transmit bacterial disease. Larvae bore into roots and stems causing plants to wilt and die.</td>
<td>Application of chemicals at first appearance is needed to control the pest.</td>
</tr>
</tbody>
</table>

Disease | Symptom                                                                 | Control |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Powdery Mildew</td>
<td>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.</td>
<td>Plant resistant varieties.</td>
</tr>
<tr>
<td>Wilt Diseases</td>
<td>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.</td>
<td>Identify causal disease. Treat disease as recommended once identified.</td>
</tr>
<tr>
<td>Virus</td>
<td>Leaves are light green, mottled, malformed, dwarfed and curled. Early infection affects fruit shape and flavor. An aphid transmitted disease.</td>
<td>Control aphids. Destroy severely infected plants.</td>
</tr>
</tbody>
</table>

Harvest and Storage

Cantaloupe requires 35-45 days to mature from flowering, depending on the temperature. Use the following guide to determine fruit maturity. The netting gets coarse and rough, the stem breaks (slips) away from the vine easily, and the background color of the fruit turns from green to yellow (see photo). Pick melons as they ripen. Cantaloupe will store for 1-2 weeks if held at 45-50°F.

Productivity

Plant 3-4 cantaloupe per person for fresh use and an additional 3-4 plants for juicing or freezing. Expect 100 fruits per 100 feet of row.

Nutrition

Cantaloupe are mostly water. A quarter of a melon has about 50 calories, is low in fat and is an excellent source of vitamin A and vitamin C.

Frequently Asked Questions

• Why do the first blossoms drop off my muskmelon plants? The first flowers to appear on the vines are male. The female flowers, which open later, have a swelling at the base that forms the fruit. After bees pollinate these female flowers, the fruit develops.

• What causes poor fruit set and low yields? The failure for female flowers to set and develop melons is due to a lack of proper pollination by bees, very hot weather or water stress.

• How can I grow muskmelons in a small garden? Cantaloupe plants can be trained to a fence or trellis or grown in a large pot. After the fruits begin to enlarge they will need support or the fruit weight may damage the vines.

• Do muskmelons cross-pollinate with other vine crops? No. Cantaloupe do not cross-pollinate with cucumbers, watermelons, squash or pumpkins. Different varieties of cantaloupe do cross-pollinate, but the effect of this cross-pollination is not evident unless the seeds are saved and planted the following year.