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# Honeydew and Other Winter Melons in the Garden

Dan Drost Vegetable Specialist

## Summary

Winter melons grow best in sunny locations and in fertile, well-drained soils. Incorporate organic matter and a complete fertilizer into the area before planting. Plant 4-6 seeds directly in the garden when soils are 65°F. Seeds should be planted  $1-1\frac{1}{2}$ inches deep, in mounds 4 feet apart. Thin the mounds after emergence to two plants. Transplant melons 2 feet apart through black plastic for early maturity. Use row covers or hot caps 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; however, do not apply organic mulches until soils have warmed to 75°F. Control insects and diseases throughout the year. The winter muskmelons include types like the honeydew, Crenshaw, casaba, Juan Canary, and Santa Claus. Unlike the cantaloupes, when the fruits are ripe, the stem of the winter melon does not separate (abscise) from the vine, so other methods of determining maturity are required.

# Varieties

Winter melons include the well-known honeydew melon but also lesser known melons like casaba, Crenshaw, Juan Canary, and Santa Claus types. Cantaloupe and winter melons come from the same genus and species (*Cucumis melo*), but different groups. Winter melons are in group Inodorus (little aroma). The winter melons do not have netting, do not abscise from the vine when ripe, are less aromatic, and have a longer storage life than the Cantaloupensis (cantaloupe) group. There are many excellent varieties and all will be productive in Utah provided the growing season is long enough



Figure 1. Juan Canary melon.

## How to Grow

**Soil:** Winter melons prefer organic, rich, welldrained, sandy soils for best growth. Most soils are suitable provided they are well-drained.

**Soil Preparation:** Choose a site that receives full sun. Before planting, determine fertilizer needs with a soil test, then follow the recommendations given with the test report. If fertilizer applications are warranted, work the fertilizer into the top 6 inches of soil. If you fertilize with compost, apply no more than 1 inch of well-composted organic matter per 100 square feet of garden area.

**Plants:** Honeydews and other winter melons can be grown from seed or transplants. Seed should be planted 1-1½ inches deep. Transplants should have 2-3 mature leaves and a well-developed root system. Allow 6 weeks to grow transplants. Transplants mature about 2 weeks before seeded melons. Winter melons commonly require a 2-4 week longer growing season than cantaloupe, so using transplants rather than seed is recommended.



Figure 2. Winter melons: Crenshaw (top left), casaba (top right), honey dew (bottom left), Santa Claus (bottom right).

**Planting and Spacing:** Winter melons 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 two plants per mound. Transplants should be planted 2 feet apart in row, with rows 4-6 feet apart. Avoid damaging the roots when transplanting, which slows establishment and growth.

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

**Row Covers:** Row covers enhance growth and earliness. Hotcaps, plastic tunnels, fabric covers, and other devices help protect seedlings and transplants from cool air temperatures. Use a thermometer to help determine the temperature under row covers. Plants grown under row covers require ventilation when air temperatures exceed 80°F. Covers need to be removed when plants start to flower or when temperatures exceed 90°F. Remove covers when weather has stabilized.

**Irrigation:** Water all winter melons deeply and infrequently, 1-2 inches per week. Use drip irrigation if possible. Mulch around the plants will help 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.

**Fertilizer:** After the vines develop runners, side dress each plant with 3-4 tablespoons of a nitrogen fertilizer (21-0-0), sprinkled around the plant, then water in the fertilizer.

#### **Problems**

**Weeds:** Plastic and organic mulches effectively control weeds. Healthy vigorous vine growth by melons will also smother weeds.

**Insects and Diseases:** For more detailed information on insect and diseases visit the Utah Pests website (<u>www.utahpests.usu.edu</u>).

Insect	Identification	Control
Aphids	Green or black soft-bodies 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. They 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 whole plant. The foliage often 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**

Honeydew and other winter melon fruits require 45 or more days to mature from flowering, depending on the temperature and type. Use the following guide to help determine fruit maturity for each type. As the honeydew fruits ripen, the rind color turns from a lighter to darker color, the fruits do not abscise from the vine and the waxes on the rind feel sticky. Casaba melons fruits do not abscise, are darker in color, and the rind hardens. Crenshaw melons may show a little stem separation (abscission) from the fruit, turn from green to yellow, and feel waxy as they mature. Juan Canary fruits do not abscise, but the rind feels quite waxy and the skin turns a dark yellow. Santa Claus fruits do not abscise and the rind turns from greenish to yellow. Generally the winter melons have little aroma but all develop small micro-cracks near the blossom end of the fruit as they mature. Pick melons as they ripen. Winter melons store much better than cantaloupe and can last for 3-6 weeks if held at 45-50°F.

## Productivity

Plant 3-4 winter melons per person for fresh use and an additional 3-4 plants for juicing or freezing. Expect 50-75 fruits per 100 feet of row.

## Nutrition

Like cantaloupe, winter melons are mostly water. A quarter of a melon has about 50 calories, is low in fat and is an excellent source of vitamins A and C.

# Frequently Asked Questions

*Why do the first blossoms drop off my melon 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.

**Do muskmelons and winter melons cross-pollinate with other?** YES. Cantaloupe do cross-pollinate with honeydew, casaba, Crenshaw, Juan Canary or Santa Claus melons. They all belong to the genus, *Cucumis* and the species *melo*, but are different subgroups. Cross-pollination does not affect fruit flavor but if you save seeds and plant them out, different melon types will show up next year. This project is funded in part by USDA-Risk Management Agency and the Utah Department of Agriculture and Foods Specialty Crops Block Grant (SCBG 161039) under a cooperative agreement. The information reflects the views of the author(s) and not USDA-RMA or UDAF.

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