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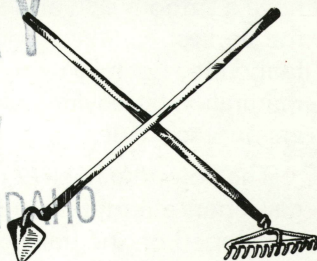
Cooperative Extension Service
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Current Information Series No. 799

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AUG 1 1987

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Vegetable Gardening

Growing Melons

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Melons such as muskmelons and watermelons are grown in many home gardens in Idaho for their fine flavor and high dessert quality. Eating a tender, vine-ripened melon from your vegetable garden is one of life's pleasurable moments.

All melons need plenty of space, water, warm temperatures and sunshine to produce sweet and flavorful fruit. Some new varieties of muskmelons and watermelons will produce well in limited space, but the other cultural requirements are still the same. Melons need about 3 to 4 months of temperatures between 55 and 80°F. In areas of Idaho that have cool summers and short frost-free growing seasons, this is difficult to achieve. Most Idahoans can have fresh, vine-ripened melons, however, by choosing early varieties and using season-lengthening techniques such as transplanting. Several muskmelon varieties mature within 75 to 80 days, and these are the best bets for most of our state.

Muskmelons are so named because of the musk or aroma of the ripe fruit. They are also known as cantaloupes. Technically, cantaloupes are only those

melons with a rough, warty surface, pronounced ribs and a hard rind. Over the years, netted skinned melons have also become known as cantaloupes.

Watermelons have many sizes, shapes and colors because of varietal differences. Most watermelon varieties are best suited to large gardens where the vining plants have plenty of growing space. If garden space is a problem or your growing season is short, select one of the "ice box" melon varieties such as Sugar Baby which produces 7- to 9-pound, round melons that can be stored whole in the refrigerator. Watermelons vary from round to oblong in shape and can range from light green to almost black in color with solid, striped or marbled skin. The edible flesh can be white, yellow, pink or red in color. High quality watermelons have a high sugar content.

Seedless watermelons are now available because of genetic research which has resulted in sterile triploid types. Seedless hybrid types require another variety, such as Sugar Baby, for cross-pollination. Seed of seedless watermelon must be produced each year from specially maintained parental lines.



Crenshaw, Casaba, Honeydew and Persians are sometimes referred to as "winter melons." This name is a misnomer since the true winter melon is a Chinese vegetable. The cultural requirements of winter melons are similar to those of other melons. Winter melons are late-maturing varieties of muskmelon which require a long growing season. Usually they have a smooth skin and lack a distinctive odor. Even the earliest varieties grown in the warmest areas of Idaho may not fully ripen. You can help assure proper maturation by leaving only two or three melons to ripen on each vine.

The flowering habit of melons is important to home gardeners attempting to grow them. The first flowers developed on the trailing stems or vines are male or pollen-bearing flowers. These flowers have no potential to produce melons and consequently wither and drop from the plants. This is normal. Subsequently, both male and female flowers develop on the runners. You can tell the blossoms apart because the female flowers have a tiny swelling at their base. After pollination and fertilization, the female flowers bear the melon crop.

Contrary to popular opinion, muskmelons do not cross-pollinate with other vine crops such as cucumber, pumpkin, squash or watermelon. Different muskmelon varieties will cross with each other if grown in close proximity, however. If you save seed from the cross-pollinated melons, the melons produced the following year will be different.

Seedbed Preparation

Melons are adapted to a variety of soils but grow best in a fertile, sandy-loam soil that is well-drained and rich in humus. Seedbed preparation should begin in the spring when the soil has sufficient moisture to form a soil ball that will crumble into medium-sized fragments when touched. Cultivate or rototill crop residue and other organic matter into the top 7 to 8 inches of soil. Cultivation should destroy current weed growth and provide a fine granular soil bed for transplanting. Too much cultivation can destroy soil structure, causing a soil to become powdery with a tendency to crust. The ideal pH for melon growth is from 6.0 to 7.5, but they do well in southeastern Idaho soils where pH ranges from 7.0 to 8.0.

Direct Seeding

The best time to seed melons is 2 weeks after the last killing frost when soil temperatures are 65°F or above and night temperatures average above 55°F. The variety of melon selected should have an early maturity date and should be developed for weather conditions in the area planted.

Transplanting Melons

To gain growing time, melon plants can be started indoors in 3- or 4-inch pots around the last frost date.

If you plan to use a black plastic mulch with some form of clear plastic row covers, plants could be started 1 to 2 weeks earlier than the last frost date. Plant two or three seeds per pot and keep the pots at 70°F or above. After emergence, select a single healthy plant per pot by snipping off unwanted seedlings at the soil line. Successive plantings could be made to stretch the growing season as much as possible and to provide "insurance" plants in case you get caught by a frost. Normally, the plants are ready to go into the garden when they reach the 2 true-leaf stage or when the first roots show at the bottom of the pot. Remember that larger plants don't take transplanting well.

For best results, plants must be hardened-off before transplanting by gradually exposing them to outdoor temperatures and direct sunlight. Letting the soil dry out somewhat will aid in the hardening-off process, but you must be careful to avoid plant damage.

Fertilizer

A preplant fertilizer of 0.2 pound of nitrogen for each 100 square feet is recommended. You may use complete fertilizers containing nitrogen, phosphorus and potassium, but the amount you apply should be based on the nitrogen content of the fertilizer. Adding aged manure or compost is also desirable. Between the time runners are 12 to 18 inches long and 1 week after blossoming begins, sidedress with 1.5 ounces of ammonium sulfate per 10 feet of row.

The amount of fertilizer you add may be increased or decreased based on a current soil test report. In general, soil nitrate levels should not exceed 20 to 25 ppm before blooming. Higher nitrate levels will promote vegetative growth which results in delayed maturity, reduced plant productivity and lower fruit quality. Additional fertilizer may be required after fruit begins developing.

Plant Spacing

Watermelon plants should be spaced 12 to 24 inches within the row and 72 to 84 inches between rows. Muskmelon plants should be spaced 36 to 72 inches within the row and 60 to 72 inches between rows.

Cultivation

Because melons are shallow-rooted plants, cultivation to remove weed competition should be shallow, no deeper than 1 inch. Deep cultivation near melon plants will destroy much of the root system and reduce yield and quality.

Watering

Good water management is essential for optimum production of melons. In general, they do best with regular watering and require good drainage. Watermelons can withstand some drought, but the quality and quantity of fruit will suffer. Avoid overwatering

muskmelons just before and during the ripening period. Excessive water at ripening time often results in split fruit. Soil moisture levels should fall between 60 and 95 percent of field capacity during the growing season and not higher than 80 to 85 percent field capacity as the melons approach maturity.

Insects

Aphids, cabbage loopers, cucumber beetles, leafhoppers, spider mites, squash bugs and wireworms may be a problem on melons. Control recommendations are listed in the current *Pacific Northwest (PNW) Insect Control Handbook*. Your local University of Idaho Extension Office has a copy.

Diseases

Cantaloupe diseases include Fusarium wilt, Verticillium wilt, leaf blight, curly top and powdery mildew. Watermelon diseases include mosaic, curly top, leaf spot, Verticillium wilt, Fusarium wilt and powdery mildew. Plant disease-resistant varieties when available and practice crop rotation to reduce the possibility of disease. Control recommendations are listed in the *PNW Disease Control Handbook*, also available at University of Idaho Extension Offices.

Weed Control

Hand weeding is effective weed control in most gardens. For chemical control, refer to the vine crop section of the *PNW Weed Control Handbook* at the local Extension Office.

Harvesting Muskmelons

Muskmelons are ready for harvest in 75 to 100 days from planting, depending upon the variety grown. If weather is cooler than normal or your growing area is not in warmer areas of Idaho such as the Boise Valley, days until harvest will be longer than indicated on the seed packet.

Muskmelons do not attain their best quality unless harvested close to full maturity. Sugar content must

be high for best flavor, and they do not increase in sugar content after harvest. Consequently, fruit harvested before maturity never will develop high quality.

Maturity of muskmelons is indicated by a change of background color under the netting from green to yellow, by softening of the blossom end, a strong sweet musky smell and easy removal of the fruit from the vine. A firm melon with a greenish-yellow color and a strong aroma will usually have the best flavor.

Harvesting Watermelons

Watermelons are ready for harvest in 110 to 130 days from seeding depending upon the variety grown. Some of the "ice box" varieties may be ready in 85 to 95 days if growing conditions are favorable. Learning when a watermelon is ripe requires some experience. Use a combination of these indicators:

1. The light-green, curly tendrils on the stem near the melon will turn brown and shrivel when the melon is ripe.
2. The powdery or slick top surface texture of the skin turns dull.
3. The bottom of the melon, where it lies on the ground, changes from a pale white to a creamy yellow.

These indicators are much more reliable than "thumping" the melon with a knuckle. Supposedly, as watermelon mature, the sound when thumped is a muffled dull sound rather than a ringing sound. Many watermelons do not emit the proverbial "dull thud" when ripe, however, and a dull sound can also be the sign of overripeness.

Harvesting Other Melons

Casaba, Crenshaw, Honeydew and Persian varieties do not develop an abscission layer at the stem. Stems will have to be cut rather than easily broken away from the melon. These melons are harvested when the fruits turn yellow and the blossom end feels slightly soft when pressed.

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Other College of Agriculture publications you will want to get on home gardening are:

CIS 226	Garden Vegetable Insect Control	35 cents
CIS 427	Gardening — Vegetables for Freezing or Canning . .	35 cents
CIS 446	Onions, Leeks, Shallots, Chives and Garlic for the Home Garden	35 cents
CIS 658	Gardening — Growing Beans and Peas	25 cents
CIS 659	Gardening — Growing Peppers	25 cents
CIS 660	Gardening — Beets, Carrots, Radishes and Other Root Crops	35 cents
CIS 661	Gardening — Growing Cole Crops	25 cents
CIS 662	Gardening — Growing Sweet Corn	35 cents
CIS 667	Gardening — Tomatoes for the Home Garden	35 cents
CIS 686	Gardening — Growing Garlic	25 cents
CIS 691	Gardening — Growing Lettuce, Spinach and Swiss Chard	35 cents
CIS 700	Gardening — Preventing and Controlling Diseases .	35 cents
CIS 719	Gardening — Growing Rhubarb	35 cents
CIS 723	Gardening — Growing Squash and Pumpkin	35 cents
CIS 755	Vegetable Gardening — Planning and Preparing the Site	35 cents
CIS 756	Gardening — Growing Cucumbers	35 cents
CIS 794	Roses: Types, Selection and Environmental Requirements	35 cents
CIS 795	Roses: Buying and Planting	35 cents
CIS 796	Roses: Care After Planting	35 cents
CIS 800	Growing Vegetable Seedlings for Transplanting	35 cents
CIS 803	Vegetable Gardening — Growing Asparagus	35 cents
EXT 617	When to Harvest Vegetables	50 cents

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