UMass Extension
CENTER FOR AGRICULTURE

Melons

Melons, which include muskmelons, (*Cucumis melo*) and watermelons (*Citrullis vulgaris*), are vine crops which require a long growing season and plenty of space to grow.

Soil Preparation
Melons grow best in a well drained, sandy loam soil where they will receive a maximum amount of sunlight. If the soil is heavy (clay), add sand and organic matter such as rotted manure or compost to improve the soil's drainage.

Lime and Fertilizing
A soil pH range of 6.2 to 6.8 is preferred for melons. Have your soil tested by the UMass Soil and Tissue Testing Lab (www.umass.edu/soiltest) and follow the recommendations given. Strongly acid soils should be limed according to test results. Lime (if needed) is most effective when mixed thoroughly with the soil in the fall.

Apply three to four pounds of 10-10-10 fertilizer per 100 square feet prior to planting melons in the spring. Fertilizer should be broadcast evenly and worked into the top two to three inches of soil.

Just before the runners start to spread, sidedress each plant with a total of one half cup of 10-10-10 fertilizer. This is especially important on light sandy soils. Apply the fertilizer six to eight inches away from plants along each side. Water your melon plants after fertilizing them.

Note: If plastic mulch is used, there is usually no need to sidedress with fertilizer during the growing season.

Natural Fertilizers
Natural fertilizers can be very effective when the right choice is made from the many types available.

Planting
Since melons require a long, warm growing season, seeds should be started indoors four to five weeks prior to planting outdoors.

Melons should not be transplanted outdoors until all danger of frost is past.

The following steps may be used for planting melons:

- In the fall, apply two to three bushels of well rotted manure or compost per 100 square feet.
- Apply recommended amounts of lime.
- Rototill into the soil.
- In the spring, broadcast recommended amounts of fertilizer prior to planting and work it into the soil.
- Mulch the soil with 30 inch wide strip of black agricultural plastic. Cover all edges of the mulch strip with soil; otherwise the wind will blow the mulch loose. Also, be sure there is

ample soil moisture before laying the plastic down. Black plastic will warm the soil for good melon growth.
- Punch holes in the plastic with a trowel at two to three foot intervals for muskmelon transplants; six feet intervals for watermelons. Allow six to seven feet of spacing between rows.
- In resetting melon transplants in the field, it is very important that you do not disturb the soil around the roots and that the plants are not set deeper than they were in their original containers.

Weed Control
Cultivation should be shallow when the weeds are small so you avoid damaging the melon's shallow roots.

In addition to warming the soil, a black plastic mulch will help keep weeds down, will maintain soil moisture and will reduce leaching of nutrients. Other mulch materials such as straw or compost can be used and should be applied around transplants when the soil is warm and moist.

Watering
Melons need about one inch of water per week. They especially need water in early stages of growth and during fruit set. If there is not enough rainfall, water once a week early in the morning until the soil is moistened 8 to 10 inches deep.

Pests
The principal insect pests are aphids, cucumber beetles, squash bugs and squash vine borers. Common diseases include lead spots and powdery mildew.

Other Problems

Problem: Lots of flowers and little fruit development.
Cause: A large portion of the blossoms are male and cannot produce fruit; only the female blossoms produce fruit.

Problem: Muskmelon flavor is not very sweet.
Cause: Too much or too little water; under ripe or overripe.

Harvesting
Muskmelons generally produce two to three fruits per plant and watermelons produce only one to two melons per vine depending on the variety.

Muskmelons are ready for harvest when the green color changes to buff yellow and when mild thumb pressure at the base of the stem causes the melon to separate from the vine. If left on the vine too long, muskmelons will lost sugar and become flat tasting. It is suggested that you let muskmelon ripen one day off the vine before eating.

It is a little more difficult to determine when watermelon is ripe. One method is when the tendril nearest the point on the vine where the fruit stem attaches is dead. Another method is to thump the melon with your fingers. The immature green fruit gives off a metallic ring when thumped and more muffled, deader sound when mature.

Muskmelons will keep for one to two weeks at 32 to 34°F with 75 to 80 percent relative humidity. Watermelons will keep for several weeks refrigerated at 36 to 40°F with a 75 to 85 percent relative humidity.

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