HOME HORTICULTURE

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MICHIGAN STATE UNIVERSITY EXTENSION

Information Packet was Compiled from the Michigan State University Home Horticulture Database.

Watermelon

The watermelon should only be grown in gardens with ample space. It requires a sunny location and a well-drained soil with sands, sandy loam and loamy sand preferred. Seed started indoors takes 4 weeks to produce suitable transplants. Plant outdoors in late May after the danger of frost has passed. Plant the seed 1 to 2-inches deep and space the plants or hills 72 to 96-inches apart. Rows are spaced 72 to 96-inches apart. If the entire garden was not fertilized, use 1 cup of 5-10-10 per 25 feet of row prior to planting. Make an additional application when the plants flower. Mulching is helpful when the plants begin to run. Water well, especially if dry weather occurs when the plants are vining and setting fruit. Decrease watering when the fruit are full size and ripening. Growing melons near other vine crops will not produce off flavor fruit.

Harvesting watermelons at the right time is difficult. The best that can be said is, practice makes perfect. A watermelon is supposed to be nearing ripeness when any of the following clues occur. When the spot where the melon was setting on the soil turns from white to yellow. When the tendril nearest the fruit stem turns brown. There is a small leaflet at the base of the stem called the spoon. When the spoon dries up the melon is supposed to be ripe. A ripe melon gives a dull sound when thumped with a finger.

Harvest melons with some stem attached.

Watermelons are not usually stored. They may be held at 40 to 50 degrees Fahrenheit for short periods of time. Chilling injury occurs at temperatures below 40 degrees Fahrenheit.

Watermelon Facts

Days to Maturity: 80 to 100 days
Approximate Yield/10 feet of row: 4 fruits
Per Person Requirements: Fresh: 2 to 4 hills
Weights: 1 average melon = 25 pounds

Watermelon Insects

Seed Corn Maggot

Legless maggots attack seeds before or shortly after germination.

Spotted Cucumber Beetle

Spotted cucumber beetle is yellow-green with 12 black spots on its back. The adults feed on young plants and larvae feed on the roots. High populations stunt or kill plants.

Striped Cucumber Beetle

Striped cucumber beetle is yellow with black stripes and is a carrier for bacterial wilt. Plants are infected when the beetles feed. The insects may dig for emerging sprouts.

Aphids

Dark bluish green aphids suck juices from the leaves. The leaves curl downward and plants are stunted. Aphids transmit cucumber mosaic.

Thrips

Thrips are small, cream to brownish insects, which rasp the undersides of leaves. The feeding causes deterioration of vines stressed from maturing the crop or by other factors. The damage is worse in dry seasons.

Mites

Mites are tiny insects causing yellow specks and fine webs on the leaves. Heavy infestations stunt plants.

Flea Beetles

These black or dark colored insects eat small holes in the leaves giving a shotholed effect.

Watermelon Diseases

Powdery Mildew

Powdery mildew causes a white powdery growth on the leaves. The crown leaves are affected first and may wither and die. High temperatures favor disease development.

Alternaria Leaf Spot

The first symptoms are small, circular, water-soaked leaf spots. These expand to 1/2-inch in diameter and have dark concentric circles. The spots grow together and affect large areas of the leaves. Defoliation starts with crown leaves. The disease overwinters in seed and diseased crop residues. The disease is easily spread with weak plants most susceptible.

Anthracnose

The first symptom is water soaked spots, which later turn black. Elongated dark spots with light centers form on petioles and stems causing death to plant parts beyond the infection. Young fruit may be killed. Sunken cankers with dark borders form on older fruit. A flesh colored ooze may come from the canker center. The disease overwinters in seed and in refuse from diseased plants. Humid weather and frequent rain enhance disease development.

Angular Leaf Spot

Angular, irregular leaf spots form, which are first water-soaked then become gray or tan. The centers drop out leaving holes in the leaves. The bacteria overwinters in diseased crop residues.

Fusarium Wilt

When seedlings are attacked, the disease is a damping off. Older plants are stunted and may wilt and die. The vascular tissue may be discolored and a white mold forms on dead vines. No chemical control is listed for this disease.

Muskmelon, Cantaloupe

Muskmelon needs a sunny location and a fair amount of room. Most of this type of melon matures in 80 to 90 days. Provide a well-drained soil with a pH not lower than 6.0. Seed started indoors takes 4 weeks to produce a suitable transplant. Set plants outside at the end of May when the danger of frost has passed. Plant the seed 1 to 2-inches deep and space plants 24 to 48-inches apart in rows 48 to 60-inches apart. If grown in hills, use 4 plants per hill. If the garden was not fertilized use 1 cup 5-10-10 per 50 feet of row. Give the same amount as a sidedress at flowering or use 1/2 to 1 cup per hill. Control weeds by hoeing until the vines run, then use a mulch. Melons need lots of water when the vines are running and fruiting. Decrease watering when the fruits are full size and ripening.

Harvest when the stem slips off the melon with little pressure. The background color of a ripe melon is golden yellow. Honey Dews, Crenshaws, Casabas and Persian melons are usually cut from the vine. Melons are not stored.

Muskmelon Facts

Availability: early August through September
Days to Maturity: 85 to 100 days
Approximate Yield/10 feet of row: 10 fruits
Per Person Requirements: Fresh: 3 to 5 hills

Muskmelon Insects

Seed Corn Maggot

Legless maggots attack seeds before or shortly after germination.

Spotted Cucumber Beetle

Spotted cucumber beetle is yellow-green with 12 black spots on its back. The adults feed on young plants and the larvae feed on roots. High populations stunt or kill plants.

Striped Cucumber Beetle

The striped cucumber beetle is yellow with black stripes and is a carrier of bacterial wilt. Plants become infected when the beetles feed. The insects may also dig into soil for emerging sprouts.

Aphids

Dark bluish green aphids suck juices from the leaves. The leaves curl downward and plants are stunted. The aphids transmit cucumber mosaic.

Thrips

Thrips are small cream to brownish insects, which rasp the undersides of leaves. Vines stressed from maturing the crop or by other factors deteriorate. The damage is worse in dry seasons.

Mites

Mites are tiny insects causing yellow specks and fine webs on the leaves. Plants may be stunted.

Flea Beetles

These dark colored insects eat small holes in the leaves giving a shotholed effect.

Cucumber, Muskmelon Diseases

Angular Leaf Spot

Angular, light brown spots form on the leaves. The center of the spot drops out leaving a ragged hole. On fruit, gray water-soaked spots form. The spots crack and produce a crusty, tan to white lesion. Often amber colored ooze comes from the spot. The disease is favored by humid weather, temperatures between 70 and 80 degrees Fahrenheit, and by mechanical or insect injury. Wind, splashing water and insects spread the bacteria.

Scab

Scab produces irregular spots on the leaves and stems. The spots have yellow margins and brown centers. The center drops out leaving a ragged hole. Water-soaked spots form on the fruit and amber colored ooze is seen on the spots. The fruit spots become dark gray to black and are sunken. Humid, wet weather and temperatures between 60 and 80 degrees Fahrenheit favor the disease. Tools, wind, splashing water and insects spread the disease.

Anthracnose

Round water soaked leaf spots go from yellow to brown and have red margins. The center drops out giving a shotholed appearance. Often defoliation occurs. On fruit, circular, dark brown to black sunken lesions form with pinkish-orange spore masses in the center. Humid, wet weather and temperatures between 60 to 80 degrees Fahrenheit favor the disease. Tools, wind, splashing water and insects spread the disease.

Alternaria Leaf Spot

Circular, tan spots with a concentric ring pattern form on the leaves. Defoliation will occur. Bright sunshine, frequent dews or showers and temperatures between 60 and 90 degrees Fahrenheit favor the disease. Tools, wind, splashing water and insects spread the disease.

Bacterial Wilt

Leaves turn dull green, then leaves, branches and finally the whole plant wilt and die. When the stem is cut and squeezed sticky, stringy ooze comes out. Cucumber beetles spread the disease. Cucumber beetle migration and feeding is favored by dry weather. Temperatures between 50 and 70 degrees Fahrenheit and frequent dews favor the disease. Prevent its occurrence by controlling the beetles.

Powdery Mildew

Powdery mildew causes a white powdery growth on leaves and stems. Infected parts turn yellow, shrivel and plants are defoliated prematurely. Yield is reduced and fruit quality is poor. The disease is favored by humid weather with frequent dew and temperatures between 70 and 90 degrees Fahrenheit.

Cucumber Mosaic

Mosaic causes mottled dark and light green, crinkled leaves. The disease is more noticeable on young leaves. Old leaves have V-shaped dead areas extending from the leaf margins to the middle vein. The fruit are mottled, warty and misshapen. The disease is favored by poor weed control, as many weeds act as a host to the virus. Aphids and cucumber beetles spread the disease.