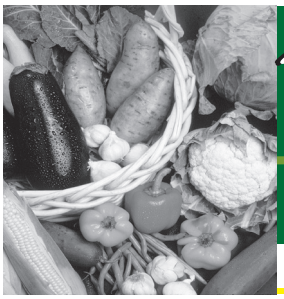

Vegetable Gardening Tips

Growing Information for the Home Gardener Series

LSU AgCenter
Research · Extension · Teaching

Watermelon

Watermelons are a sweet, delicious treat grown in the spring and summer. Follow these planting tips for a successful harvest.

Planting Dates — Direct-Seeding and Transplanting

Watermelons can easily be grown from seed. Purchase fresh seed from a local nursery or order from online garden suppliers or garden magazines. Fresh seed is always best. Discounted seed is usually old and may have poor germination rates.

Either wait and plant the seed directly in the ground after danger of a frost has passed or start seed indoors using germination media. Typically, watermelons are not planted in Louisiana until mid-March to early April in south Louisiana or early to late April in north Louisiana.

Some spring seasons remain cold for longer periods, so watch the weather and plant when all danger of frost has past. Another option is to plant the seeds in seedling trays and transplant into the garden as small seedlings. If starting your own seedlings, plant the seeds no more than three weeks before the date you want to set transplants in the ground.

Growing Watermelon Seedlings

Fill clean containers with a germination soil mix. Germination mixes are mostly composed of peat moss and are very dry to the touch. To combat dryness, slowly add water to the media and mix by hand until a uniform moisture level is reached. Fill a container or tray with the moistened germination mix and plant seeds. Plant seeds two to three times as deep as the seed is wide and water after planting. Seedlings should emerge about one week after planting. Although not necessary, a heat mat set at 80 to 85 degrees Fahrenheit will help with uniform germination. Remove or turn the heat mat off after 48 hours.

NOTE: It is highly recommended to plant triploid (seedless) watermelon seeds into media and later plant seedlings in the garden.

Site Selection — Transplanting

If watermelon transplants have been grown in a greenhouse, it is a good idea to acclimate the seedlings to outdoor temperatures, wind pressure and weather for one week before setting the seedlings into the garden. This practice is termed "hardening off" the plants.

Choose a well-drained, sunny planting site. Watermelon vines need full sun to develop fruit (six to eight hours of direct sunlight each day). A single watermelon vine can easily grow 8 to 10 feet, so make sure you have a wide area for them to sprawl. Think about row spacing before you plant.

- Plant a row, then skip one to two rows. Set transplants (or plant hills) 3 to 4 feet between one another on the row.
- If you plant every row side by side in the garden, plant transplants (or hills) 5 to 6 feet between one another on the row.

HINT: A hill of melons is a group of three to six seeds planted together. Once the seedlings emerge, growers usually thin the vines to one or two vines per hill.

For smaller home gardens, one or two watermelon vines can be planted at the edge of raised beds and allowed to grow in the area immediately outside of the bed.

General Maintenance

Fertilization

Before planting, apply a preplant fertilizer, such as 13-13-13, at a rate of 500 pounds per acre.

For example:

- One 100-foot row of watermelon will require 4 pounds per row (8 cups of 13-13-13).
- One 10-foot row of watermelon will require half (.5) of a pound of fertilizer per row (1 cup 13-13-13).

Fertilize again right before the melons begin to run (spread out). Calcium nitrate and potassium nitrate are excellent fertilizer sources for side dressing. Using 1 to 2 tablespoons per plant of side-dress fertilizer, such as calcium or potassium nitrate, is plenty. It's important to thoroughly mix in the fertilizer so the watermelon transplants are not burned. Fertilizer burn can happen if fertilizer grains are broadcast too close to the stem of the plant. Always keep fertilizer a few inches away from the main stem and water in immediately or apply right before a rain event.

Irrigation

Although water is in the name "watermelon," water is not as critical for these vines as other crops. Critical irrigation periods are:

- Immediately after seeding or transplanting for two weeks.
- When the vines begin to bloom.

In general, 1 inch of water is needed per week to set a good crop. If irrigating, try to use soaker hoses or drip irrigation to avoid wetting the foliage. This will help prevent diseases from spreading.

Pollination

Watermelons produce male and female flowers, and it's not uncommon for male flowers to open and then fall off the vine. The male flowers generally appear first to draw bees to the plants so that when the female flowers open they can be pollinated. Eventually you'll have both male and female flowers. Try and attract pollinators, such as bees, wasps, flies and birds, to the garden. Plant flowers in and around the garden. It usually takes 10 to 15 visits to each flower to set enough pollen to make a fruit. If needed, only use insecticides that are nontoxic to pollinators in the early to late evening at dusk when the majority of bees are back in their hives.

Pest Management

Cucumber beetles are a common pest in cucurbit crops. They look like green ladybeetles and will either have spots or stripes on their backs. They can be managed by applying insecticides containing pyrethroid, bifenthrin or imidacloprid as the active ingredient. Caution: Do not apply when bees are active.

Aphids are tiny insects that live on the new growth of leaves. Look for aphids on the backsides of foliage. Aphids suck chlorophyll out of the leaves, leaving a wrinkled or stippled look. They can be treated with a horticultural soap or an insecticide containing imidacloprid or bifenthrin as the active ingredient.

Ripening watermelons attract wildlife, such as deer, coyotes and raccoons. Decoys, flashing lights and repellents can all be used in the home garden. Trapping and relocation measures can also be followed, but please contact the Louisiana Department of Wildlife and Fisheries for proper protocol.

Disease Management

Anthracnose is a fungal disease that can occur on leaves, petioles, stems and fruit. Lesions on leaves appear brown to black with irregular margins often restricted by leaf veins. Lesions on petioles are sunken and elongated. Masses of pink spores also may be observed in the lesions during favorable environmental conditions.

Gummy stem blight is a fungal disease that exhibits circular, tan-to-brown lesions on leaves. As the disease develops, lesions appear water-soaked or greasy and often develop from the leaf margins inwards. Stem cankers usually have a brown, gummy exudate associated with them. Tiny black structures (pycnidia) are often visible within the lesions.

Powdery mildew is a disease that is prevalent in cucurbit crops. It is a fungal disease that occurs in hot and humid locations and is spread by the wind. Powdery mildew will make the leaves have a white, powdery appearance on the upper sides of the leaf surface.

Downy mildew is caused by a fungus-like microorganism that attacks all cucurbits. The upper side of the foliage will appear blotchy with yellow spots. The underside of the leaf will have a slightly oily residue look to it.

Integrated disease management strategies in home gardens include good agricultural practices that may provide successful disease management and reduce yield losses. Start with healthy seeds or seedlings and plant in well-drained, fertile soils. Follow a proper fertilization program. Avoid watering late in the evening and reduce extended periods of leaf wetness. Scout for diseases on regular basis. Remove severely symptomatic plants and discard them properly. Once harvesting is finished, remove all crop debris. Diseases can be managed by spraying preventative fungicides on plants. In the home garden, fungicides with active ingredients such as captan, chlorothalonil, copper, mancozeb, myclobutanil, and mono- and dipotassium salts of phosphorous acid are labeled for use on watermelon vines. Some biopesticides are also

labeled for use on watermelon vines. Generally, fungicides are applied every 10 to 14 days. After symptoms appear it is very hard to control diseases, and fungicides will only slow — not stop — the growth of diseases.

Harvest Procedures

Watermelons are ready for harvest when these criteria have been met:

- The bottom of the melon has a small yellow patch. This is the spot where the melon has been resting on the ground. If it is white, leave it on the vine a few more days to continue ripening.
- The tendril closest to the top the fruit has turned brown.

Recommended Varieties

Red: Jubilee II (OP), Sangria, Crimson Sweet (OP), Starbrite, Summer Flavor 720, Royal Star, Royal Sweet.

Yellow: Amarillo, Buttercup, Desert King, Gold Strike, Tendergold (ANT), Tendersweet.

Seedless: Cooperstown (ANT), Gypsy (ANT), Imagination, Liberty, Millennium (ANT), Millionaire (ANT), Revolution.

Icebox type: Mickey Lee (ANT), Sugar Baby, Vanessa.

OP = open pollinated

ANT = anthracnose resistant

Authors:

Kathryn Fontenot, Associate Professor, School of Plant, Environmental and Soil Sciences

Mary Sexton, Extension Associate, School of Plant, Environmental and Soil Sciences

Dennis Ring, Extension Entomologist, Department of Entomology

Sebe Brown, Northeast Region Assistant Area Agent

Raj Singh, Associate Professor, Department of Plant Pathology and Crop Physiology

Visit our website: www.LSUAgCenter.com

William B. Richardson, LSU Vice President for Agriculture, Louisiana State University Agricultural Center
Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service
LSU College of Agriculture

Pub. 3643 (online only) 11/18