

Vegetable Gardening Hints



Growing Sweet Potatoes in the Home Garden

Sweet potatoes (or yams) are a popular vegetable in the South. Many home gardeners in Louisiana plant this crop successfully. It requires plenty of room for the vines to run, a relatively light-textured soil and only a moderate amount of fertilizer.

Sweet potatoes are susceptible to several diseases that affect primarily the roots. The sweet potato weevil can be a problem, too. Most of these problems can be overcome by good sanitation and cultural practices. These include the use of disease- and weevil-free seed potatoes for transplants, rotation of the crop from year to year, the use of vine cuttings (without root systems) to transplant and possibly the use of chemicals to treat the seed potatoes.

The most common problems encountered in growing sweet potatoes are soil insects such as white grubs, sweet potato weevils and wire worms; overfertilization; poor soil drainage and low rows; and too much shade. Gardeners who are aware of these potential problems and who plan around them should be able to produce a bushel of sweet potatoes on 25 to 30 feet of row. Higher yields are possible with good production practices.

Varieties

Beauregard is the predominant variety now grown in Louisiana, and it is the most commonly available seed or plants. Seed or plants of the older varieties such as Porto Rico, Heart-O-Gold, Centennial and Jewel often are difficult to find. Beauregard will produce satisfactory yields over a wide range of soil types. The Hernandez and Jewel varieties produce best on sandy soils. A few foundation virus-tested seed are made available each year at the LSU AgCenter's Sweet Potato Research Station in Chase, La. Orders for seed are placed through LSU AgCenter parish offices in December. Seeds are then allocated by the amount of seed produced and the number of orders received.

Porto Rico and Heart-O-Gold are considered by many to be the best-tasting varieties when baked. When handled properly, however, all of the above varieties have excellent baking qualities. The older varieties have less resistance to disease and lower yields.

Growing Sweet Potatoes

You can often buy sweet potato transplants from garden supply and seed stores in the spring, but you can produce your own transplants by bedding "seed" potatoes you bought

or saved from last year's crop. If you saved them from last year's crop, be very selective as to flesh, skin color, shape and freedom from disease and insects. Potatoes about 1 1/2 inches to 3 inches in diameter are suitable for bedding to produce transplants. One seed potato should produce 10-20 plants from several cuttings. A bushel of seed potatoes should produce 500 to 1,000 plants.



Wait until the soil temperature reaches 65 to 70 degrees F before bedding seed potatoes. In south Louisiana, begin in mid to late March and, in north Louisiana, in late March to early April.

To produce transplants, build up the row or bed in which the seed potatoes are to be bedded to provide good drainage. Fertilize the plant bed with 3 to 4 pounds of complete fertilizer, such as 8-24-24 or 6-24-24 per 100 feet. Lay the potatoes side by side in the bed, and cover them with about 2 inches of soil. Cover the row with clear or black plastic to warm the soil and encourage earlier sprout production. Remove the plastic after the plants begin to push up against it. Keep the bed moist, but not wet, to encourage sprouting. Plants suitable for transplanting (12 to 14 inches tall) should be ready six to eight weeks from bedding.

Transplant sweet potatoes beginning in late April in south Louisiana and from the first of May through June in north Louisiana. An ideal transplant is 12-14 inches long with five or six leaves and a strong stem.

Cut plants from the bed about 2 inches above the soil. Using cut plants, rather than pulled plants with a root system, helps to ensure against the transfer of several diseases from the plant bed to the garden. It also helps prevent the transfer of the sweet potato weevil. Although the cuttings don't have roots, they will develop quickly if planted in warm soil and watered. Place each transplant about 4 inches deep. Be careful to leave the terminal buds above ground. Space the plants 12 to 14 inches apart in the row, and space rows at least 3 to 4 feet apart. Build a fairly high bed on which to transplant.

Soils of low to medium fertility will require 2 to 4 pounds of a complete fertilizer such as 6-24-24 or 8-24-24 or

similar per 100 feet of row. Apply the fertilizer several days before transplanting. Soils high in organic matter or highly fertile will probably need no fertilizer. Place the fertilizer in a band in a row 5 to 6 inches deep, or broadcast it over the row and work it in. Overfertilization, especially with nitrogen, causes the plants to produce an abundance of vines and few sweet potatoes. A sidedressing of fertilizer is generally not necessary for this crop unless it is grown on extremely sandy soils.

Keep the soil moist in the early part of the season to encourage establishment of a good fibrous root system. Storage roots should begin to "set" or develop 25-30 days after transplanting. After the roots have "set," keep the soil moist by irrigating during dry periods. This helps to increase the size of the roots that have set. Be careful not to keep the soil too wet, since this can lead to rotting of the roots.

As the plants grow, work the soil up to the plant. This will encourage better production and help reduce the sweet potato weevil problem. Shallow cultivations for weed control may be needed before the vines cover the rows. Usually, after the vines cover the middles, they will shade out most of the weeds and grasses. The herbicide Dacthal can help to control weeds in sweet potatoes. Granular formulations are easy to use. Follow label instructions.

Sweet potatoes can be harvested any time after the hills have produced usable potatoes, usually 90-120 days after transplanting varieties. If the potatoes are allowed to remain in the soil, they will continue to grow and increase in size. A periodic check after about 80 days by digging around a hill will help to determine when the potatoes are ready to harvest. Most of the sizing takes place in the last two to three weeks, so keep close check on the size to schedule harvest before the potatoes become too large. If the soil is extremely dry at harvest, a light irrigation will help digging and reduce skinning. Too much soil moisture at this time, however, may cause root rotting before harvest or cracking open of potatoes after harvest.

At harvest, try to minimize skinning and bruising the roots. Undamaged potatoes will have a longer storage life. Select potatoes that are to be used for seed to produce plants for next year's crop. Keep only those that have a good skin and flesh color and are free of diseases and weevils. Also save seed from hills that have a good "set," that is, a large number of uniform potatoes. The smaller roots (1 1/2 to 2 1/2 inches in diameter) make the best seed potatoes, because you can get more of them in a given space and get the maximum number of plants from the space.

Don't allow the potatoes to be exposed to the sun for more than an hour. A good practice is to cover the potatoes with vines after placing them in crates or boxes until they can be brought in. Harvest before frost kills the vines. If the crop remains in the garden for an extended period after a frost, the roots may begin to decay.

Curing and Storage

Sweet potatoes are not very sweet or moist when first dug. It will take six to eight weeks before they will have the sweet, moist taste and texture desired when baked. Freshly harvested potatoes don't bake well, but they can be candied or used in pies or casseroles.

After the potatoes are dug, they should be cured to heal the cuts and bruises. Cure by storing in a warm, humid room for five to 10 days. A temperature of 80 to 90 degrees F and a relative humidity of 80% to 90% are ideal. These exact conditions will be hard to establish around the home, so select a site that comes close to these conditions. After curing, store potatoes at 55 to 60 degrees F. Exposure to low temperatures for several days will cause the potatoes to develop a hard center and reduce their quality.

When the potatoes are stored at a high temperature for a long time, they begin to sprout, shrivel and become stringy and pithy.

Potatoes held over for use as seed potatoes the next year should be dusted with 2 to 4 ounces of 5% Imidan per bushel to help control the sweet potato weevil.

Caution

Sweet potatoes are a regulated crop in Louisiana. It is illegal to move sweet potato roots or plants grown in the southern part of the state, generally Alexandria and south, into the northern part of the state. This includes the new ornamental sweet potatoes sold at nurseries for ornamental purposes. The reason for the regulation is to restrict the movement of the sweet potato weevil from the southern part of the state to the northern parishes that are generally considered to be relatively weevil free. In the northern parishes, the Louisiana Department of Agriculture and Forestry monitors sweet potato plantings in home gardens with pheromone traps to detect the presence of weevils. Likewise, nurseries that produce ornamental sweet potatoes are monitored with pheromone traps to detect the presence of weevils. Ornamental sweet potatoes pose as great a threat to the spread of sweet potato weevil as do home gardens. The main purpose of the regulations is to try to keep the commercial sweet potato industry in the northern part of the state free of weevil infestations.

If you are not familiar with what the sweet potato weevil and the damage it causes looks like, check with your local extension office for a publication on weevils. Also, you can access the LSU AgCenter Sweet Potato Research Station home page on the Internet and view weevils and weevil damage.

Visit our website:
www.lsuagcenter.com



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