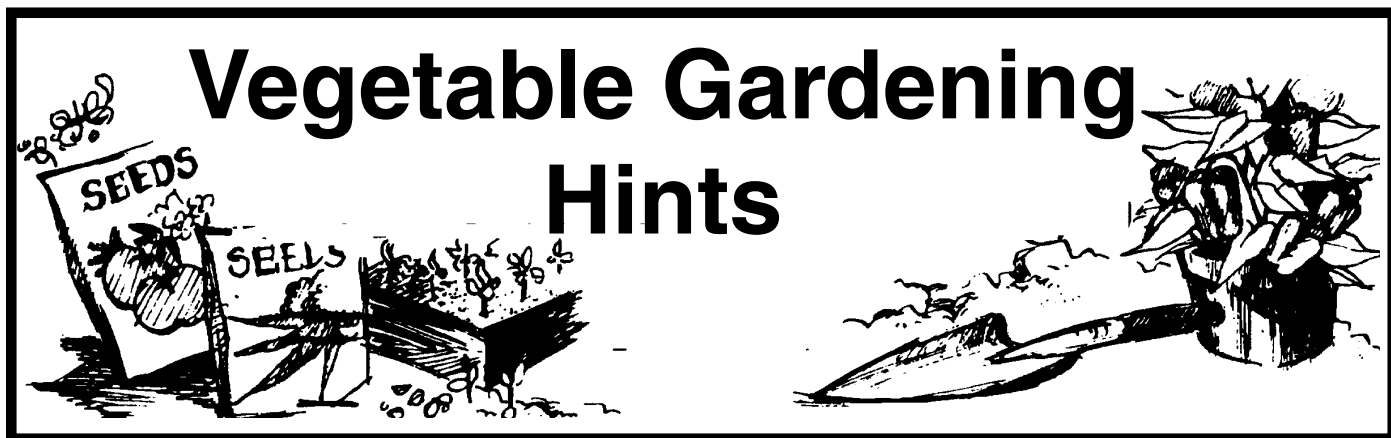




Vegetable Gardening Hints

Squash and Pumpkins in the Home Garden

Squash and pumpkins are among the most popular and productive warm season vegetables in Louisiana. In many cases, a few plants will supply enough for an entire family. Squash and pumpkins belong to the gourd family called the “cucurbits.” They are believed to have been native to Central America (especially pumpkins). Most are a good source of vitamin A, but they’re mostly desired for their flavor and texture.

These crops, as with most vine crops, thrive in warm weather. They will tolerate some low temperatures but are very frost sensitive. Seeds need a soil temperature of at least 60 degrees to germinate. Plant squash after the danger of frost has passed and the soil has begun to warm. In south Louisiana, this is about mid March. In north Louisiana, it will be three to four weeks later. Plantings can again be made throughout summer as needed if the vegetables have enough time to mature before frost.

Summer Squash

Summer squash generally make a bushy growth, and the fruit are eaten while still young and tender. They require 45 to 50 days from planting until harvest begins. If planted during the summer they mature in 35 to 40 days.

Summer squash for Louisiana include:

Yellow Crookneck – Most common type. The fruit have a slender crooked neck; skin may be smooth or warty. Crooknecks get tough quickly after reaching a useable size, so harvest young. Good varietal choices are Dixie, Goldie, Destiny II, Prelude II and Sundance.

Yellow Straightneck – The straightnecks are mostly smooth skinned and have a tendency to stay tender longer than the crooknecks after reaching a useable size. Highly recommended varieties are Lemondrop L and Supersett. Other good choices are Goldbar, Sunbar, Seneca Prolific and Yellow Straightneck.

Zucchini – Most have green skins, but several yellows and golds have been developed. Varieties recommended are Revenue, Dividend, Seneca, Declaration II, Independence II, Embassy, Spineless Beauty, Senator, Tigress, Gold Rush (AAS) and Eight Ball (AAS).

Scallop or Patty Pan – These thin-skinned summer squash are flat-topped, round and fluted. Peter Pan and Sunburst are AAS winners.

Winter Squash

Winter squash usually have a vining growth and their fruit are allowed to remain on the vine until fully matured as indicated by a hard rind (skin). They need about three to four months to mature and can be planted as soon as the soil warms. The term “winter squash” may be confusing, because they are grown in the summer. The best winter squash are those which mature in cool weather. The mature fruit stores well like a pumpkin, but has a finer-textured flesh. Winter squash are usually served baked but can be boiled, steamed or mashed. This class has numerous types with a variety of shapes, sizes and colors (Figure 1).

Some Types of Winter Squash

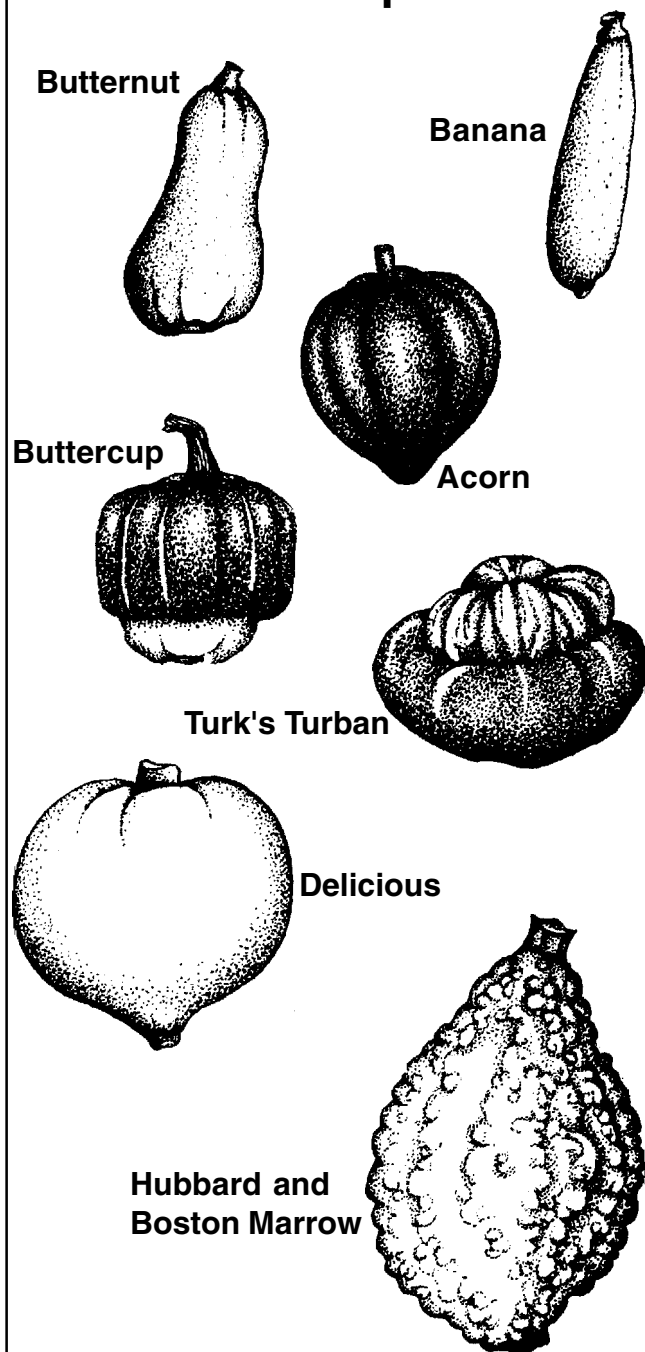


Figure 1

Recommended Winter Squash

Cream of Crop Acorn - AAS*
 Early Butternut - AAS
 Golden Delicious
 Golden Hubbard
 Honey Delight Buttercup
 Sweet Mama Buttercup*
 Table Queen*
 Table King - AAS*

Table Ace
 Tay Belle Acorn*
 Tivoli Spaghetti - AAS*
 Ultra Butternut
 Vegetable Spaghetti
 Waltham Butternut - AAS

Pumpkins

Pumpkins are much like winter squash, but the flesh is often coarser and stronger. For a small size, choose Orange Smoothie* (AAS), Spooktacular, Oz*, Small Sugar, Spookie or Baby Bear (AAS). Trick or Treat* or Triple Treat have edible, hull-less seeds

Good medium-sized pumpkins are Big Autumn, Jack-o-Lantern, Frosty*, Casper (white), Peek a Boo and the AAS winner, Autumn Gold. Good large or Jack-o-Lantern types are Howden, Spirit*-AAS, Gold Rush, Connecticut Field, Jumpin Jack and Aspen.*

For Halloween pumpkins, plant seed in early July. Cushaws are large, long-necked pumpkins that have a meaty and finer-textured flesh. Miniature pumpkins have been bred for ornamental use. Varieties available include Jack-Be-Little, Wee B Little* - AAS, Baby Bear - AAS and the white Baby Boo.

For a jumbo pumpkin, choose Prize Winner, Atlantic Giant or Big Moon. To produce jumbo pumpkins for show or fall fairs, plant seed 120 days before the show date (early to mid June). Allow plenty of space for the vines to run. Prune off the first few female flowers, then let only a few set to baseball size. Choose the best one, and remove all others. Turn the pumpkin several times to obtain a well-shaped fruit. Pumpkins normally mature in 70-99 days, producing several fruit per vine.

Culture

Squash may be transplanted to help obtain early production. Plant several seed in a peat pot or other container two to three weeks before you anticipate transplanting. Thin to one plant per pot after transplanting. The less you disturb the roots during transplanting, the more likely the squash will survive. Later in the season, there is little advantage to transplanting, so the seed may be direct seeded into the warm garden soil.

Squash need a sunny location and a well-drained soil. Build rows high to provide good drainage where drainage may be a problem. Squash respond to organic matter in the soil. To increase organic matter, work considerable amounts of leaf mold or compost into the row. Where compost is in short supply, place several handfuls of the compost directly beneath where the seed will be planted. Before planting the rows, apply four to six pounds of a complete fertilizer like 8-8-8 or 8-24-24 per 100 feet of row. This is best done a couple of weeks before planting.

Overfertilization, especially with nitrogen, can cause problems by forcing excessive vegetative growth. This will lead to delayed yields and a greater hazard of fruit rot and foliage disease.

Space summer squash about 2 to 3 feet apart within the row and at least 3 feet between rows. Pumpkins and many winter squash require a wider

*Denotes compact vines.

spacing of 4 to 5 feet between plants and 4 to 8 feet between rows. Vines of pumpkin and winter squash may be trained down the rows by moving the vines in the direction of the row so middles are kept open and can be cultivated for a longer period.

This group of plants responds to an additional sidedressing of nitrogen about the time the plants begin to vine or run. Summer squash should be sidedressed about two to three weeks after transplanting or about four weeks after seeding. To encourage a strong plant before fruit development, apply the sidedressing before fruiting begins.

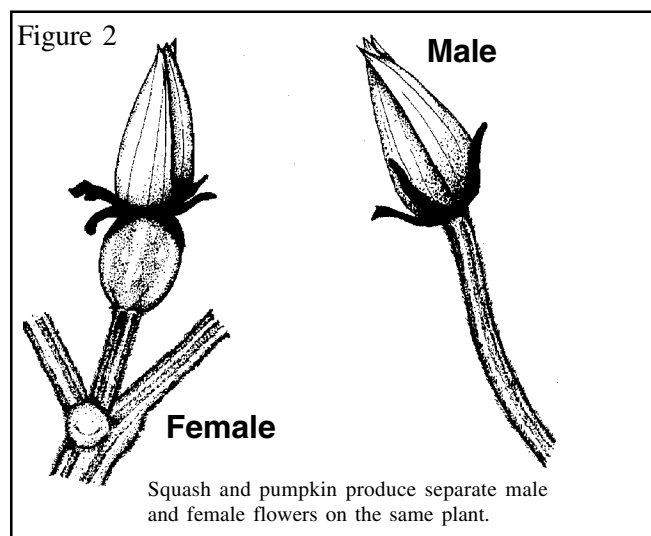
Black plastic mulch is beneficial with many spring vining crops. It conserves moisture and fertilizer, helps control weeds, reduces fruit rots and warms the soil early in the spring to stimulate early season growth and production.

Sufficient watering is important for good growth and fruit set. When the leaves begin to wilt, the blossoms will drop rather than set fruit. Even well-watered gardens can show some wilt during very hot, dry afternoons. When irrigating, a thorough soaking of the soil is much better than a light sprinkling. To accomplish this, dam up the ends of the rows, and flood the middles. You can also try the new drip or trickle irrigation technique. If you sprinkle overhead, do so in the late morning so the leaves will dry quickly in the sun.

Blossom-end rot can be a problem on young squash fruit, especially where the soil pH or the calcium content of the soil is low. This problem is characterized by a browning and shriveling of the blossom end of the fruit, especially when the plants are exposed to stressful conditions such as dry weather.

Pollination

Members of the squash family produce separate male and female flowers on the same plant (Fig. 2). Pollen must be transferred from the male to the



female flower to obtain fruit set and development. Pollen is transferred by bees, primarily honey bees. This is of concern to the home gardener for several reasons. The first flowers to develop in summer squash in early spring are all female, so no pollen is available to pollinate them. Thus the immature fruit shrivels up before reaching a useable size. After a few days, male flowers develop, making a supply of pollen available. Plantings made in late spring and summer produce male flowers first, but female flowers soon follow and set fruit.

Other members of this group produce male flowers first, so no fruit develops until the female flowers are produced. Since bees are necessary for pollination, it's best to apply pesticides late in the afternoon when bee activity is very low.

Harvesting

Squash and pumpkins are normally grown for their fruit, but their blossoms have long been eaten as a European delicacy. Blossoms may be dipped in batter and fried, or sauteed in butter.

Summer squash must be harvested while the fruit are still immature. The secret to delicious summer squash is to harvest the fruit before the skin begins to turn hard. You should be able to easily puncture the skin with your thumbnail. It's better to harvest the fruit a little too early than a little too late. Summer squash should be refrigerated and eaten within a week or two of harvesting. Continue to harvest to keep plants bearing vigorously. Overmature fruit that remain on the plant reduce total production.

Winter squash and pumpkins are harvested when fully mature. The skin color will have darkened and developed to the color for that variety. The skin will also have become tough and hard to puncture with the thumbnail, and the ground spot will turn to color. These types of squash keep well in storage and are frequently kept for several months under conditions of low temperatures and moderate humidity.

Harvest winter squash and pumpkins by cutting the mature fruit off the vine. Leave about 2 inches of stem on the fruit. This helps to prolong storage life.

Pest Problems

Dacthal and Prefar are preemergence herbicides that kill germinating weed seeds. These are applied just after planting to clean a plant bed. Poast or Roundup also can be used on growing weeds.

Squash and most of the vine crops suffer from insect and disease problems that rob these crops of being the easiest crops to grow. Perhaps the most widespread problem is the squash vine borer. This moth produces a larva which bores into the stems and leaf petioles of these crops. Once inside, it hollows out the stem and causes the plant to wilt and die. Although you may slice the stem and remove the larva (if you can find it), the best prevention is to protect the

plant from its initial entry by using insecticides frequently.

Several viruses affect squash and pumpkins. The symptoms vary with different strains of virus, but in general, the leaves and fruit take on a green and yellow mottling and may become distorted. The virus is spread by insects, especially aphids and whiteflies. Control is obtained by controlling insects. Hand pull infected plants as soon as you find them. Some varieties have virus resistance.

Read all labels before you apply pesticides. Using these materials properly will be beneficial to

you, your crop and the environment. Proper timing, application and the amounts used are essential for their safe use.

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Dr. Thomas J. Koske (Professor, Horticulture)

Pest	Control	Rate per gal. Water	Days Before Harvest	Application
Aphids	Malathion 57EC M-PEDE	2 tsp 3 T	1 0	As needed As needed.
Beetles	Sevin 10%D Sevin 80% S	— 2 T	0 0	When insects appear; then weekly as needed.
Worms, (gen.) Pickleworm, Vine Borer, Melon Worm	Sponosid Sevin 80% S Methoxychlor 50%WP <i>or</i> 25%EC BT	1/2 tsp 2T 5 tsp 7 tsp See Label	0 0 1 1	 See Label
Leafminers	Dimethoate 267	1 1/2 tsp	3	See label
Leaf Spot	Copper fungicides	See label	0	See label
Fruit rots, Anthracnose, Downy Mildew	Chlorothalonil* (see label) Copper fungicides Maneb 80W	1 T See label 1T	0 5	Treat at first bloom. 1st appearance, then 10-day intervals. Don't apply more than 3-4 times per season. 10-14 day intervals
Powdery Mildew	Copper fungicides	See label	0	See label

*Chlorothalonil is found as Fungi-gard, Broad Spectrum Fungicide and Ortho Disease Control.

T = Tablespoon; t = teaspoon and 3t = 1T

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