

Home Gardening Series
Winter Squash

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Vegetables

Environment

Light – sunny
Soil – well-drained
Fertility – medium-rich
pH – 6.0 to 7.2
Temperature – warm
Moisture – average

Culture

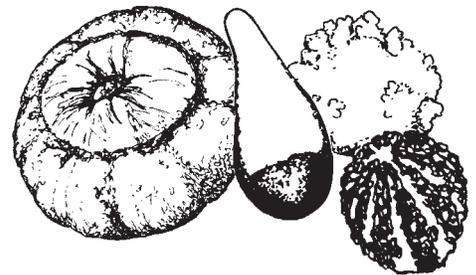
Planting – direct seed into warm soil
Spacing – 2-4 feet x 48 inches (2-3
plants per hill)
Hardiness – warm, frost sensitive
Fertilizer – medium

**Winter Squash – *Cucurbita*
*species***

The squash family is native to the New World. It is possible that squash was cultivated prior to the development of corn. For more than 6,000 years, squash and its relatives have been grown in the New World. Squash was taken to Europe by Spanish explorers and was grown there in the 16th century.

The word “squash” comes from a Massachusetts Indian word. Winter squash belongs to four different species of *Cucurbita*. *Cucurbita pepo* includes acorn and spaghetti squash. *Cucurbita maxima* includes hubbard, banana, buttercup, golden nugget and marblehead. *C. maschate* has the types butternut, ponca and waltham. All three of these species have members that we call pumpkins from Connecticut Field to Big Max and Golden Cushaw.

Spaghetti squash (also known as vegetable spaghetti) is related to pumpkin and resembles a small (8 to 10 inches long), yellowish squash. It may be planted and cared for in much the same manner as winter squash. Only two varieties of this novelty vegetable currently exist. Seed may be found in a few seed racks and in several garden seed catalogs.



Cultural Practices

Plant seeds 1 inch deep and 6 to 10 inches apart after danger of the last frost has passed. Allow 6 to 8 feet between rows. Thin seedlings to 24 inches apart. Control cucumber beetles and squash bugs with an approved insecticide.

Spaghetti squash is ready to harvest when the outside of the rind has turned a light tan to golden yellow. The surface will then be difficult to pierce with a thumbnail, and the fruit will weigh from 2 to 5 pounds. Cut the stem 1 to 2 inches from the fruit. Harvest all mature fruits before a hard frost and store in a dry location at temperatures between 55 and 60 degrees F. Fruits stored under these conditions will keep for several months.

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Cultivars

Crop	Variety	Days to Maturity	Seed/ 100 Ft of Row	Disease Resistance or Tolerance	Sources (see "Sources" paragraph below)	Remarks
Winter Squash	Butternut	90	2 oz		1, 2, 4, 5, 6, 10, 11, 12	Buff cylindrical fruit with bulbous base and orange flesh. All-American winner.
	Tay Belle	60	2 oz		2, 10, 32	Compact, very early acorn type, colors up early.
	Tay Belle PM	68	2 oz	Powdery Mildew	32	Tay Belle with moderate PM resistance.
	Table King	75	2 oz		10, 11	Compact, very early acorn type with orange flesh, excellent quality, stores well.
	Cream of the Crop	75	2 oz		16	AAS, white acorn type on bush plant. Stores well.
	Golden Delicious	100	2 oz		10	Top shaped, deep orange fruit, bright orange flesh, excellent quality, stores well.
	Tivoli	100	2 oz		1, 4, 11	Spaghetti type, for small area, bush-vine type, All-American Selection.
	Nicklow's Delight	78	2 oz	Black Rot	16, 27	Semi-bush butternut hybrid with huge yields. Stores well.
	Early Butternut Hybrid	85	2 oz		27	Sweet, nutty, tan fruits are earlier to mature on compact plants. Stores well.
	Bush Pink Banana	90	2 oz		5	12-16 lbs. banana squash with smooth, sweet, orange flesh on compact bushes. Great storage.
	Delicata	97	2 oz		5, 6, 16, 31	Very sweet fleshed pepo, cream colored skin with dark green stripes. Semi-bush.

Abbreviations: **AAS**: All American Selection

Sources

For a list of sources referred to by number, request FSA6106, *Seed Sources: Vegetable and Herb*, for current address, telephone and web site.

Frequently Asked Questions

Q. Will squash varieties cross-pollinate with one another or with pumpkins in the garden?

- A. Yes. Any squash or pumpkin within the same species will cross-pollinate, but cross-pollination will not affect this year's crop.

Q. Does squash make as good a pie as pumpkins?

- A. Yes. The fruit used for canned pumpkin pie actually looks like a large squash.

Q. Can I transplant squash?

- A. Yes. Squash can be transplanted when the plants are young (15 to 20 days old) and have been started in containers. None of the vine crops transplant well if the plants are very large. Many gardeners place two seeds in a 3- to 4-inch deep pot in late March and early April to start a few acorn or butternut squash plants for summer use.

Q. I have vine borers in my squash. Can I control them with insecticides?

- A. No. Once plants are infested, vine borers cannot be controlled effectively with insecticides. You can reduce potential damage the following season by disposing of infested plants. Protect plants with an insecticide before vine borers enter the vine.

Q. Is Turk's Turban an edible squash?

A. Yes, but it is more often grown for ornamental value than for cooking purposes.

Q. Each year my squash blooms profusely but seldom produces any squash to eat. What is wrong?

A. Squash plants produce male and female flowers. For fruit to set, pollen must be transferred from the male to the female flower by pollinating insects, mostly bees. When treating the garden for insects and diseases, spray or dust during the late afternoon to avoid killing bees. Nematode infestations can also cause this problem, so check roots for galls.

Q. Can seed be saved from this year's squash crop for planting in next year's garden?

A. Yes, but this is not a recommended practice. Squash has male and female blooms and needs bees for pollination. Seeds saved from this year's crop probably will not breed true when planted next year. This is especially true if you are growing more than one type of squash or a hybrid squash.

Q. My squash leaves are covered with a white, powdery substance. The plants die rapidly.

A. This is powdery mildew, a fungal disease that attacks squash and kills the plants. Some varieties tolerate this disease better than others. Powdery mildew is more of a problem in the fall than in the spring. The most effective fungicide control is benomyl or Benlate. Mildew occurs most often on old foliage of declining plants. Succession plantings of squash will provide vigorous, productive plants and allow removal of older, more susceptible plants.

Q. My fruit blooms and sets young fruit, yet quickly becomes covered with a black, whiskery fungal growth.

A. This is *Chaonephora* fruit rot, a soilborne disease which rots the young fruit and is particularly damaging during extended wet periods. It can be controlled with a combination of treatments which reduce relative humidity using raised beds and open foliage. This allows air movement to dry the soil and the foliage. Avoid planting squash on heavy, poorly drained soils, and apply fungicides during wet periods.

Q. My fruit, as it begins to develop, is covered with a white fungus.

A. This is *Phythium*, commonly called a water mold. Control by growing the plant on raised beds, planting in a well-drained area and improving air circulation around the plants. Some varieties produce their fruits in the upper part of the plant so the fruits do not come in contact with the wet soil.

Q. Each year my yellow squash plants do a peculiar thing. Toward early to midsummer the plants, which once produced yellow fruit, start producing green or often yellow and green fruit. This is generally accompanied by a twisting or mottling of the leaves. What could possibly be causing this problem?

A. Your plants have been affected by a virus disease, most often squash mosaic virus or cucumber mosaic virus. This virus is transmitted to your plants by insects which have been feeding on other virus-infected squash plants or perhaps some wild plant. Once the plant gets this disease, nothing can be done. Preventive measures include insect control and planting varieties which will mature early. This disease is more severe on late-planted squash or summer-planted squash. The green squash (which should be yellow) is still good to eat.

Q. Each year my squash plants wilt and die about the time they start producing. Some have a yellowish or greenish sawdust-like material all over the vines. What could possibly be wrong?

A. Your problem is probably squash vine borer, and if it is, the white, grub-like larvae can be found within the stem of the plant by cutting it open. The larvae hatch from eggs laid by a bright-colored, wasp-like moth on the foliage or stems. The eggs hatch and the larvae travel down the plant to the stem and literally "core it out." To prevent this problem, begin control measures about the time the plants start to bloom by applying Sevin (carbaryl) to the base of the plant. Once the grubs are inside the stem, it is almost impossible to control. During the fall growing season, begin treatment shortly after plant emergence.

Q. How do I keep squash bugs from literally destroying my plants?

A. Squash bugs are very difficult to control especially when the insects have reached a mature stage. For satisfactory control, apply insecticides early in the season while insects are small. Removing and destroying egg masses on the bottom of leaves aids in control.

Q. Will summer squash cross with winter squash?

A. Summer squash varieties will cross with one another, with acorn squash, with jack-o-lantern pumpkins and with some pumpkins. Cross-pollination will not be evident in the current crop, but the seed should not be sown the following year. Summer squash will not cross with melons and cucumbers.

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FSA6078-PD-1-03N

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