## Squash, Pumpkin, & Zucchini Growing Guide

Cucurbita spp.

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https://www.southernexposure.com/squash-pumpkin-zucchini-growing-guide/

Refer to the Species Guide below. Species are indicated at the beginning of each variety description.

Please note that pumpkins are a type of winter squash and zucchini are a type of summer squash.

**How to Grow:** Culture of squash and pumpkins is similar to that of cantaloupe and cucumber, which are also members of the squash family. Squash and pumpkins require warm days and warm nights to mature properly. Sow seeds 1/2 to 1 in. deep. Bush varieties should be spaced 18-30 in. apart in rows 4 ft. apart, or 6-8 seeds per hill, in hills 4 ft. apart. Vining varieties are planted in rows or hills 6-8' apart. Keep soil moisture high by mulching.

**Seed Watering Notes:** Be careful not to overwater germinating seeds or they may rot. It's best to soak the ground or the potting soil heavily when first planting, then avoid watering again if possible until seedlings emerge. (For seeds in potting soil, keep them warm but out of direct sunlight so that they don't dry out so fast.) Cucumber seeds emerge in 5+ days; very lightly water ground or potting soil around day 3 or 4 to keep soil from crusting so that seeds can emerge more easily.

**Transplants:** Sow seeds 1/2 in. deep, 2-3 seeds per pot. Cut off weak seedlings at the base to avoid disturbing roots. Seeds germinate best at 85-90 degrees F (29-32 degrees C). Maintain seedlings at 75 degrees F or higher. Harden plants before setting out, and take care not to disturb fragile roots when transplanting. Since cucumber transplants are fussy, hold back a few seedlings for filling in any gaps in the row as they appear.

**Fruit Set:** Flowers may not set fruit in exceptionally hot weather. Plant out winter squash early enough so that fruit will already be forming when high heat arrives.

**Harvesting Summer Squash:** Harvest crooknecks and zucchini when 6-8 in. long. Zucchinis will grow large enough to become "attack zucchinis" if you don't keep them harvested. Yellow squash are the easiest to find when harvesting!

**Harvesting Winter Squash (and Pumpkins):** Winter squash is ready for harvest when the rind loses its shiny luster, becomes duller, can no longer be dented by a fingernail, and when stems have dried. Harvest by cutting stems 1 in. above the fruit (leave stems on, squash will store better). Do not allow fruits to become frosted. Store at 45-60 degrees F and maintain good air circulation.

**Diseases:** In the mid-Atlantic, squash may be affected by downy mildew, powdery mildew, bacterial wilt, and blossom end rot. Powdery mildew occurs during hot, dry spells. Bacterial wilt causes sudden dramatic wilting and death of the vines. Use resistant or tolerant varieties, practice good sanitation and crop rotation, and pay attention to proper growth requirements. To prevent blossom-end rot, maintain an even supply of moisture.

**Insect Pests:** See Cucumber section for notes on cucumber beetles. For vine borers, mix charcoal into soil just before planting to reduce their numbers. For small varieties another strategy is to pinch growing tip(s) when vines are 1-2 ft. long. This creates multiple vines, increasing odds of escaping borer damage. Use pyrethrum or sabadilla to control cucumber beetles and squash bugs. Destroy eggs of squash bug by hand, or deposit eggs in a jar of soapy water. To trap squash bugs, place boards around base of plants. Squash bugs will hide under the boards at night and can be collected in the morning. Vine borers can be cut out of stems by making a cut along the length of the stem and removing larvae of the borers. Keeping plants under row cover until flowering extends plant survival. For non-resistant varieties of squash a succession of plantings may be required. Use resistant varieties, like Tromboncino, where possible, or substitute edible gourds.

**Seed Savers:** There are 4 species of pumpkins and squash. Species is listed in parentheses beside the name of each variety. Crossing occurs easily within a species and rarely between species. Isolate varieties of the same species by a minimum of 1/8 mile if you save seed for home use. Pure seed requires hand pollination or a minimum isolation of 1/4 to 1 mile, depending on planting size.

## **Species Guide**

Curcurbita pepo: Most zucchini and summer squash are of this species. Winter squash varieties do not store well and are best eaten within a few months of harvest, but also need less time curing to sweeten up. Best planted in monthly successions throughout the summer due to vine borer susceptibility. If you have trouble growing these squash, try luffa gourds or Tromboncino summer squash as a substitute for zucchini.

*C. maxima*: Often quite large-growing, this species generally keeps well in storage, from a few months to a year or more, depending on the variety. Fine-textured flesh and very good flavor. May be tender and sensitive to wilt, as well as vine borers and other insect pests. These are the a good choice where nights are cool.

*C. moschata*: Excellent keepers, with flavorful, sweet flesh that is often fragrant. Well-suited for pies and cakes, though they are often just baked or boiled. Good resistance to vine borers and cucumber beetles once the plants are beyond the seedling stage. During the growing season, these plants need night temperatures above 60degrees F to grow well.

*C. mixta*: (Also know as C. argyrosperma) A traditional Southern crop, though their popularity has diminished. The somewhat coarse flesh is typically not as sweet as maximas and moschatas, though it is well-suited to savory dishes or may be sweetened. Many are grown for the large, flavorful seeds, perfect for roasting. Like moschatas, they have good resistance to vine borers and cucumber beetles. Excellent drought tolerance.

A note on pumpkins: Pumpkin is the word used to describe a pumpkin-shaped squash, but there are many colors, sizes, and types of pumpkins in the different squash species. Generally, Halloween pumpkins for carving are pepo types. The best-flavored pumpkins are maxima and moschata types. The most bug-resistant pumpkins are moschata types.