



Growing the Great Pumpkin

(as well as Summer Squash, Winter Squash or Gourds!)

When you hear the word pumpkin, visions of jack-o-lanterns and pies probably jump into your mind. Although pumpkins have become indispensable to American fall activities, they offer more than just traditional uses. Tender, young pumpkin leaves can become tasty steamed or boiled greens. The edible flowers are beautiful as a garnish and can also be stuffed and fried as a delicious side dish.

Immature pumpkins can add a pleasant crunch to salads and stir-fries. Mature pumpkins can be used for many wonderful dishes, and the hollowed out shells make creative serving bowls and cooking pots. If you do decide to make a jack-o-lantern or two, save the seeds to roast for a healthy, crunchy snack. Pumpkins are versatility personified.

When planning your vegetable garden, however, don't limit yourself to growing only pumpkins. The Cucurbita family has a many tasty, unusual and decorative members besides the big orange one. Other winter squash include acorn, banana, butternut, delicata, hubbard, and spaghetti among others. They mature in the fall and can be eaten fresh from the garden or cured and stored for later use. Summer squash are thin-skinned, harvested small, mature throughout the summer, and include zucchini, patty pan, summer crookneck and others. Gourds are the non-edible member of the family and come in numerous fanciful shapes which are great for decorating and crafts. The follow tips on pumpkin planting and care can be used for all these Curcubita species with any exceptions noted.

planning your pumpkin patch

In order to grow well, pumpkins need a warm, well-drained spot that receives full sun and has good air circulation. To reduce the risk of pest and disease problems, plant pumpkins in soil that has not been used to grow cucurbits (squash, cucumbers, gourds, melons) for the past two years. All garden debris from the previous year must be thoroughly cleaned up and removed.

Pumpkins thrive in soil that is high in organic material. Prepare your soil by working in plenty of compost or fully composted manure. Good soil will create healthy vines that are less susceptible to pest and disease problems. Plant your seeds outdoors **once the soil has warmed to 70° - June to mid-June is best.** Seeds can be sown in the following ways:

- Hills - A hill is a mound of soil a few inches tall and 2-3 feet in diameter. Hills for standard pumpkin varieties should be spaced 8-10 feet apart. Compact varieties can be spaced 4-6 feet apart. Place 3 or 4 seeds about 1 inch deep in a shallow depression at the center of the hill. When the seedlings are about 2 inches in height, pull or pinch all but the strongest in each hill. Planting in this manner improves drainage and helps the soil to warm more rapidly in the spring.
- Wells - Inverted hills, or wells, are created by removing soil from the center of a circle and heaping it around the rim. Once the well is created, plant as you would in a hill. Planting in wells is particularly useful in dry climates as it collects and retains moisture.
- Rows - A row is basically a long, continuous hill. Seeds should be planted 12 inches apart in a series of wells along the center of the row. For standard varieties rows should be placed 8 feet apart. Compact varieties can be placed 5 feet apart. When plants are 4-6 inches tall, thin to 1 plant every 2 to 5 feet.
- Intensive Beds and Square Foot Gardens - Because the vines are so large, pumpkins are not usually grown in this manner. If this method is used, compact varieties should be grown. Space seeds 30 inches apart in a zigzag pattern. You can grow up to 12 vines in a 4x20 foot bed. Growing on a trellis is also recommended in intensive bed gardening.

seeds: out in the garden or indoors?

- The soil in your garden **must** be sufficiently warm for your *curcurbit* seeds. To circumvent cool, wet soils, you may wish to start seeds indoors and set them out as transplants June 1st – 15th instead. Starting your seeds indoors can give you a jump on the growing season and will also help protect seedlings when they are most vulnerable to insect damage.
- Allow yourself 3-4 weeks before your anticipated transplant date for your seeds to grow indoors. We suggest using 4” peat pots since all *curcurbits* dislike having their roots disturbed. Fill containers with moist seed-starting mix and bury two seeds 1”-1 ½” deep in each. Place in a warm area - cucurbits germinate best at soil temperatures between 65-85°.
- The cotyledons (embryonic leaves) should emerge in 5-10 days. In about a week the roots will reach the bottom of the container. They are ready to transplant outside around the time the first true leaves appear.
- Harden off transplants outdoors for about five days by gradually extending the time spent in the wind and sun.
- Be very careful when handling your transplants as both the stems and roots are very fragile at this stage.

the care, feeding, and storage of the great pumpkin

- Pumpkins need large quantities of food and water to grow big! They need 15-20” of water during the growing season which translates to over an inch of water per week. Either water early in the morning or use a slow soaker hose left on for several hours which will keep water off the leaves. Wet leaves can foster the growth and transmission of fungus and disease.
- When growing **other** winter squash the focus is not so much about water as sun, heat and good drainage.
- In addition to beds enriched with compost, add Garden-tone 3-4-4 to hills when sowing or transplanting, and either water with Nature’s Source 10-4-3 every three to four weeks or side-dress with more Garden-tone when plants begin to bear.
- If space is at a premium, runners of standard-sized vines can be cut back after the fruits begin to grow, or choose bush or semi-bush varieties. Trellising is another option with varieties that set small to mid-sized fruit. Further support can be added by fashioning a sling of soft material.
- To attempt a champion pumpkin, remove all but one pumpkin on each vine and any flowers that appear, so all energy is directed towards it. Turn occasionally to keep symmetrical and set it on a board to protect from rot and boring insects.
- A pumpkin’s shell will harden and changes color slightly as harvest time approaches. When you can’t puncture the shell with your thumbnail it is sufficiently hardened for harvest and storage. Cut the squash from the vine with a sharp knife or shears. Handle it carefully; any scratching or bruising could shorten its storage life. Pumpkins, hubbards and butternuts should be cured in a warm (80-85°) dry space out of direct sunlight for 10-14 days. Store at 50-60° in an airy, dry place.
- A word about seed-saving: cucurbits of the same species will cross-pollinate *within ½ a mile!* If you grow different squash you’ll have cross-pollinated seeds and should buy new seed each season – another excuse to roast your pumpkin seeds!

protecting your pumpkins from devious enemies

Aphids, vine borers, cucumber beetles, and squash bugs can blemish your fruit and diminish your vines. More importantly, they spread diseases such as bacterial wilt and cucumber mosaic virus that can stunt or kill your vines. Be pro-active:

- Use a 2-3 year rotation for the entire *Curcurbita* family: squash, cucumbers, gourds, melons
- Plant resistant varieties – look for the letters after the cultivar name, i.e. “CMV” = resistance to Cucumber Mosaic virus.
- Use row covers to keep out pests, removing when flowers appear (for pollinators to enter) or when vines outgrow them.
- To insure pollination, inter-plant with flowering plants that will attract pollinators as well as predatory beneficial insects.
- When your plants begin to spread, bury the vines where the leaf nodes touch the soil to keep squash-vine borers from laying eggs in the stems. This will also encourage further root growth and help to stabilize plants.
- Inspect your plants early and often. Hand pick harmful insects, eggs, and larvae and keep an eye out for disease symptoms.
- Regular applications of systemic Neem Oil on a 7-14 day schedule will combat both insects and fungal diseases.
- Lastly, an “Insider’s Tip” from Mac Condill of Homestead Seeds: Turban squash is the cucumber beetle’s favorite squash – plant one as a trap plant and the beetles will leave your other cucurbits alone! Pull out the plant that is covered with insects and put it in a plastic bag, not in the compost pile.