

25 STEPS TO GROWING GIANT PUMPKINS

SEEDS

1. Start by finding a great seed. GIANT pumpkins don't grow from regular seeds. There are a wide variety of GIANT pumpkin seeds available on the internet on sites like bigpumpkins.com, worldclassgardening.com, and even on eBay. Pick a seed that isn't too old (less than 3 years is best) and has good genes. At a site like pumpkinfanatic.com you can research the seed's history as well as any seeds that have been grown from that seed.
2. It's best to start the seed indoors around April 10. Use a growing medium to plant the seed in. They need a loose mix to germinate and pop up. Many growers use a mix of peat, vermiculite, and perlite. The mixture should have mycorrhizae sprinkled into it (available on Amazon) Myco, for short, is a fungus that greatly assists in the root's absorption of nutrients. It can be purchased online from a variety of sources. Use a container such as a 1.5 quart round ice cream container. Cut out the solid bottom and use that as the top of your growing container. The bottom, which was the top, can then be pulled off when transplanting to allow the plant to slide easily out of the container.
3. Many growers lightly sand the edges of the seed. This should be done very lightly, taking care to just sand enough to rough up that edge. Usually 3-4 swipes on each side is enough. This makes it easier to absorb water while germinating and for the sides to open up as the leaves push out. Don't sand the tip. That's where the root starts. Some growers leave out this sanding step.
4. The seed should be soaked in warm water for 4-6 hours prior to placing it into the growing medium. Use a pie tin, put a paper towel on the pie tin, and place the seeds onto the paper towel. If you are doing more than one seed take care to number them in some manner so you remember which seed is which. Put another paper towel over the top of the seeds so now you have a seed "sandwich". Most growers use a seed starting liquid or seaweed powder mixed into the water. Pour this over the seed "sandwich" so that it is completely covered. Warm, but not hot, water is best. Let it sit for 4-6 hours.
5. The seed should be planted pointed end down about ½ inch into the growing medium. The growing medium should have been thoroughly wetted prior to placing the seed into it. It should not take much watering after that. Mix Myco into the growing medium.
6. The seed needs heat in the area of 85-90 degrees minimum to germinate. Over 95 can be too hot and you risk baking the seed. You can use an ice chest. Put a heating mat on the bottom of the ice chest and put your growing pots on top of that. Put a thermometer into it somewhere to monitor temps. You can also use a cold frame or grow light kit. What the seeds need now is heat. Light comes after they sprout from the growing containers. One

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method is to put the growing containers in a large baking tin or ice chest in the back seat of your car. Park your car outside in the sun during daylight hours. The heat in the car should germinate your plants in just a few days.

SOIL

7. Pumpkins need a well-drained loamy soil. The PH should be close to 7. You can, and should, have your soil tested at some point well prior to planting. Several labs can be found on the internet that do this type of soil testing. Westernlaboratories.com is one favored by many growers. They will tell you all that is in your soil as well as what you need to add or subtract to reach optimum levels. The tests run around \$35-50.
8. Once you have the soil ready it is time to put your plants in the ground. Soil temperature should be at least 60 degrees. Hopefully they have sprouted well and are leafing out. The direction the 4th leaf points is the direction the plant will send out its main vine. Hopefully your plants have grown up out of the growing container by 3-4 inches. If they are “leggy” not to worry. You will just plant them a bit deeper into the ground.
9. Dig your hole about 2’ around and about 12-14 inches deep. Mix Myco into the soil in the recommended quantities. Most growers also add other nutrients at this time to the entire hole and all the soil you are putting back into the soil. Several growers, such as Joel Holland (hollandsgiants.com) and Ron Wallace (wallacewow.com) have recommended fertilizers to add at this time. Holland sells a product called “Pumpkin Power” which is a 9-3-4 + 3% calcium mix. Wallace sells a product called “Pumpkin Pro” which combines myco with other nutrients. Both websites have recommendations as to how and when to apply these additives.

PLANTING

10. Pumpkin plants in these containers grow a lot of roots very quickly. The key to transplanting is to not disturb those roots in the root ball. Slide the root ball out of the container carefully. A little tip is to plant the root ball at an angle to vertical up and down with the 4th leaf pointing in the direction you want the main vine to travel. Planting at an angle seems to help the roots grow better. Fill the hole so that soil reaches the bottom of the leaf structure. Don’t leave more than 1 inch of stem out of the ground or the plant is susceptible to breaking off. Using warm water (not hot, just lukewarm) water to settle the soil around the plant. Congratulations! You have just planted a GIANT pumpkin plant.

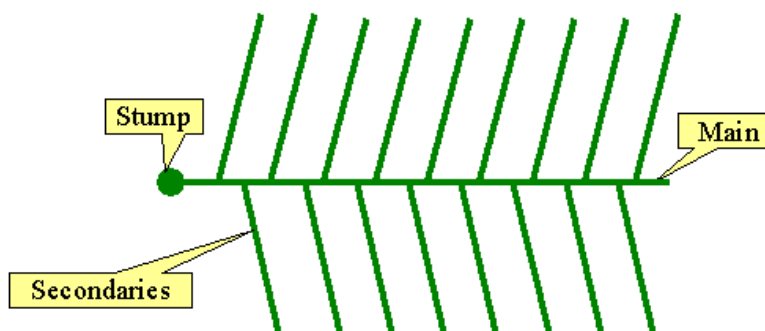
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WATERING

11. Hand watering is the best at this early stage. It will take the plant a week or two to become acclimated and begin its growing journey. Many growers will put a windbreak around the plants or use a cold frame over it at this stage to help keep the plant safe from wind and to warm it up. You can make a cold frame out of ½ inch PVC pipe and clear plastic. It should give the plant plenty of room to begin growing. A 5' x 10' cold frame structure will usually suffice at this stage. Keep the soil watered but not soaking. It should loosely ball in your hand but not be compacted. Usually watering once a day and maybe twice if its hot out will do.

PLANT GROWTH

12. As the main vine begins to grow it is advantageous to bury the main vine. Everywhere a leaf goes up roots will grow into the soil. By burying the vine you allow for that root growth. Add myco and other nutrients as recommended by Holland and Wallace to the trench as you bury the vine. It only needs to be just covered, not deeper in the ground than 2 inches. You want the warmth of the sun to reach the root area. Again you can go to the websites mentioned above for further tips on what nutrients to add to the trench as you bury the vines. You want the plant to grow in the manner depicted here:



13. The secondaries also get buried in the same manner as the main vine. The plant will grow what are called tertiary vines (third vines) off the secondaries. You should nip those off as soon as you see them. You really just want the main and the secondaries feeding the pumpkin. Too much vine growth makes the plant disorganized and detracts from the growth of the pumpkin.

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- The secondaries usually run about 10'-12' from the main vine on each side of the main vine. Nip them off and bury them at that length. The main vine should be buried out to about 10' from the stump. After 10' is where you will look for the female flowers.

POLLINATION

- The plant will put out male flowers first. The female flowers will follow. How to tell the difference? The male flowers have an anther, a pointed stalk in the middle of the flower. The female flower has lobes in the middle of the flower and usually a small globe just under the petals. This will become your GIANT pumpkin.



MALE



FEMALE

- In the female flower look for at least 4 well-shaped lobes or even 5 in some instances. Three lobes usually leads to a smaller pumpkin so don't use those. Most growers will put a lunch size paper bag over the flowers just before the petals open up so as to prevent bees and other flying critters to gain access to the flower. You can tell by looking when the flower is about ready to open up.
- Look for a female 4 lobe flower about 12-15 feet from the stump. Then harvest a male flower. This can be from another plant you have to cross pollinate or it can be from the same plant. This is called "self" pollination when the flowers are from the same plant. Many growers don't like to do this, favoring cross pollination with another pumpkin plant. The results are mixed!
- On the male flower peel off the petals so that the anther is alone. If it has been protected it should have a yellow powder all over it. This is the pollen. Gently shake or rub the anther on the stigma (lobes) of the female flower. This should be done on the inside of the lobes as that is where the magic occurs. After pollinating, put the bag back loosely over the female flower so that bees and other critters can't get to the flower. In a few days the globe on the female flower should begin to swell. Congratulations! You have pollinated your pumpkin. You can do this on multiple female flowers so you have several options for a GIANT pumpkin.
- When the pumpkins get to basketball size is the time to choose which pumpkin you want to continue with. You can leave multiple pumpkins on a plant if you just want a bunch of

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smaller pumpkins. But if you are growing for that GIANT only one pumpkin per plant. You want all that leaf area to be supporting the growth of the one pumpkin. The pumpkin should be 10-15' from the stump, on the main vine, and the vine should have room to rise as the pumpkin grows taller. There should be 3' or so on each side of the pumpkin where the main vine is above ground so that it can rise with the pumpkin. You may need to support the vine with blocks so the vine doesn't break or split. The main vine can be curved away from the pumpkin so that the pumpkin is growing on the outside of that curve. This allows plenty of room for the pumpkin to grow without interfering with the main vine.

20. At this point the pumpkin needs a very flat and smooth surface upon which to spread its base. You can purchase a special pumpkin mat at Holland's website or by Googling "pumpkin growing mat". This mat prevent critters from coming up under the pumpkin and provide a smooth base for the pumpkin to grow upon. If the ground is uneven or has lumps or rocks the pumpkin will be affected and may fold or lump over the obstacle.

FERTILIZING

21. This is where growers differ widely in what they do to fertilize. It is generally accepted that pumpkin plants need a higher nitrogen content in the early fertilization up to the point that the pumpkin is showing flowers beginning to grow. At this point many growers switch to a more phosphorous based fertilizer to assist with blooming. Both the Holland and Wallace websites have specific fertilizers they recommend for these purposes.
22. Once the pumpkin is pollinated and begins to grow many growers switch fertilizers again to a higher potassium formula mixed with calcium. The potassium and calcium assist in stem wall strength and growth for the pumpkin. Many growers use a liquid calcium coupled with liquid seaweed or kelp in the water mix.

WATERING

23. As the plant vines out and you are burying the main and secondary vines you need to keep fertilizing and watering. Watering 3-5 feet ahead of the pumpkin promotes root growth. You can use drip watering with drip tape (available online by Googling "drip tape") or regular drip irrigation found at Home Depot or Lowe's. You can also use overhead watering though regular sprinklers but you want the water to be closer to mist than to a hard stream. Big drops or hard water streams can damage the leaves. Most growers use a compost tea (again available through the two pumpkin websites mentioned) or some type of seaweed/kelp mix in a tank from which the water flows through the irrigation. Other

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nutrients, such as calcium and humic acid can also be added into the water if they are water soluble.

PROTECTING THE PUMPKIN

24. Pumpkins generally take 90-120 days to maturity from the day of pollination. So you want the fruit to grow well and not too slow or too fast. Direct sunshine causes the pumpkin to ripen quicker. The solution is to have some type of shade over just the pumpkin. Most growers build something similar to your cold frame that is tall enough and wide enough to shade the pumpkin and allow room for it to grow within the shade structure. You don't want to use clear plastic here as it will heat up the pumpkin. A blue or green outdoor tarp is usually the key. You can use the same type of PVC structure you used for your cold frame but use a tarp to provide shade for the pumpkin. Anchor it down well so a stray wind can't blow it into your pumpkin, maybe causing damage.
25. Keep watch for anything like powdery mildew (a grey fungus that forms on the leaves) or any sign of pests. There are numerous fungicides and insecticides available depending on your problem.

HARVESTING YOUR GIANT

Hopefully, by the first week of October, you're looking at a GIANT pumpkin. Gather all your family and friends to harvest it. You can use a pumpkin tarp (available at the Holland and Wallace websites) to place under it. You need about 1 person for every 100 lbs of estimated weight. Or someone with a tractor who can help you lift it. Using something like a cargo net to place around it to distribute the weight evenly as it lifts is critical so you don't split it. Check your local area for pumpkin weigh-offs sponsored by the Great Pumpkin Commonwealth (GPC). Then get ready for next year!!!

ADDITIONAL RESOURCES

Numerous sites have growing information where you can learn, ask questions, and share problems or issues with other growers. They are:

Bigpumpkins.com; Pumpkinfanatic.com; YouTube and Facebook have many videos if you search "growing giant pumpkins".

Don Langevin's *How-To-Grow World Class Pumpkins I, II, III* available at amazon.com

CONGRATULATIONS ON YOUR GIANT PUMPKIN!