

## **THERE IS AN OLD SAYING TO BE A SUCCESSFUL GARDENER GROW PUMPKINS!**

With this truth, you truly need only one thing to grow pumpkins: seeds. Still, there will be questions so, here we go...

Pumpkins are a member of the cucurbitaceae (cu-cur-bi-ta-ce-ae) family, which also includes squash, cantaloupes, cucumbers, watermelons and gourds. The pumpkin is undoubtedly American in origin. Fragments of stems, seeds and fruits have been identified and recovered from the cliff dweller ruins of the southwestern U.S.

Current U.S. production of pumpkin is more than a billion pounds a year, grown throughout the northeastern U.S. Production tends to be concentrated near population centers and sold primarily for ornamental purposes, especially during the Halloween season.

I hope to change the “pumpkins as ornaments only” image today with some delightful savory pumpkin soup paired with moist pumpkin muffins and then a sweet pumpkin roll cake as part of our dessert.

### **PLANTING SITE AND SOIL:**

-Choose a warm sunny area that gets at least 6 hours of direct sun daily.

-Pumpkin should be grown on soils with good water filtration as well as good water holding capacity. They are 80-90% water and are always thirsty. If soil is sandy then irrigation is important to obtain optimum plant growth, uniform fruit set and development. A constant supply of moisture is required during the growing season so a good soaker hose is recommended.

-A “no-till” planting method is good for retaining soil moisture early in the season promoting good fruit production.

-Soil pH should be in the 5.8 - 6.6 range with minimum soil compaction.

-Soil calcium levels should be checked. If soils are testing low or low to medium and have not received any calcitic (calcium based) lime applications, apply gypsum to the planting area prior to planting your pumpkins. Gypsum will supply calcium to the soil without changing the soil pH.

-Pumpkins are heavy feeders so plant in rich soil. Fertilize based on soil tests results. In the absence of soil test results :

1. Recommended N-P-K application rates are 80-150-150 broadcast or 40-75-75 banded at planting.

2. Or simply use a good compost/aged manure combination or fish emulsion (1/4 cup to one gallon of water sprinkled every 3-4 weeks).

## **PLANTING PUMPKINS:**

-Pumpkins are sensitive to cold temperatures (below 50 degrees F). Plants and fruit will exhibit injury from even a slight frost. The best average temperature range for growing is 65 - 95 degrees F. Temperatures below 65 or above 95 will slow growth and maturity.

-Pumpkins are generally seeded in the field during the first couple of weeks of July but can also be grown as transplants. This warm season crop should not be seeded until the soil temperature reaches 60 degrees F. at 3 inches beneath the soil surface. Pumpkin seeded in cool soils may suffer from **seed corn maggot** injury.

-If seeding using a “no-till” method then be especially careful about soil temperature as the un-disturbed soil will tend to stay cooler longer than tilled soil. By mid to late June soil temperatures in a no-till field should be warm enough for rapid seed germination and growth but early July might be a safer bet if you are not taking soil temperatures.

-Plant when days consistently reach the low 70’s and spring rains have tapered off.

-Pumpkin is generally planted as single rows with 8 - 12 inches between plants and 8 - 12 feet between rows. Plant the seeds approximately 3 inches below the surface in loosely compacted rich soil.

### **POLLINATION:**

-Pumpkins have both a male and a female flower. Honey bees are important for proper, complete pollination and fruit set. As we all know, populations of pollinating insects may be adversely affected by insecticides applied to flowers or weeds in bloom so choose your weapons carefully! Insecticidal soaps are safe and reasonably effective.

### **PEST CONTROL: Weeds and Insects**

-Pumpkins can be competitive with weeds once they develop a mature canopy. In the meantime, a light mulching is helpful but do be sure to weed regularly until the canopy is established.

-Pumpkin plants are generally healthy and strong but can be bothered by: cucumber beetles, aphids, squash vine borer, seed corn maggot, squash bug and spider mites. Monitor insect populations through scouting to determine when to start or stop spraying and intervals between applications. Check, of course, under leaves too.

## **-DISEASES:**

-Several diseases can cause a reduction in pumpkin crop yields especially: bacterial wilt, powdery and downy mildew viruses and scab. A fungicidal program may have to be implemented to prevent leaf loss from mildews and enhance yields and fruit color.

## **FIELD CARE, HARVEST AND STORAGE:**

-Pumpkin vines can withstand pruning well. Wear long pants and gloves as the vines are prickly. Properly done pruning will strengthen the plant. Every pumpkin plant has a main vine and a secondary vine. Each of these produce shoots (tertiary vines) which can be selectively pruned. It's best to clip when these new side shoots begin to develop. The plant will weep a little but it seals over quickly. The amount of pruning will depend on the amount of garden space available. The fruit can also be pruned to leave more resources for the healthier fruit. Wait for pumpkins to reach grapefruit size before pruning.

-Board your pumpkins! When the fruit is well established (after the flower has dried and fallen off) it's time to manage the pumpkin's shape. With one hand gently lift the vine and stem and with the other hand gently move the pumpkin bottom (flower end) squarely on the ground. Place a board or tile underneath the pumpkin. This will reduce bottom rot and assure a nicely shaped pumpkin rather than one that is lop-sided.

-Pumpkins are hand-harvested when color and size are optimal. Leave several inches of stem to preserve freshness. Allow to cure in the sun for 10 days unless there is risk of frost. In that case the pumpkins should be covered at night.

-Store in a well ventilated, cool dry environment protected from frost. A basement, barn, garage, root cellar, etc. all work well. Pumpkins will retain good quality for 2 - 3 months or longer if properly stored. Temperatures of 50 - 55 degrees F. and relative humidity of 50 - 70%.

### **PUMPKIN SEEDS:**

-It is fun, exciting, and easy to grow seeds that have been saved from last year's harvest. Simply clean all the orange meat and slime from the seeds. Lie the seeds out on paper towels and allow to air dry. (Do not oven dry, of course).

-I place my pumpkin seeded paper towels on cookie sheets and leave in my root cellar until it's time to plant next year. For faster germination when planting time arrives you can soak your seeds overnight, although this is not necessary. It simply softens the shell for faster germination.

-Pumpkin seeds know which way is up so positioning in the hole makes little difference. Traditionally the seed is laid on its side with the narrow edge skyward (but that is totally unnecessary).

### **SUMMARY:**

“As natives to the American continent, pumpkins reflect the American spirit: generous, innovative, energetic and imposing their presence proudly wherever they grow”!

Hail to pumpkins; the plant that can make anyone a gardener (even me)!!!

