

Growing Grapes

Grapes are a great addition to any garden. Remember, grapes are no one-night stand. Grape vines are long-term plants than can grow between 50 and 100 years. I've found that grapes grow well here in my yard in Garland—however, it is important to amend the soil. Grapevines thrive in sloped and hilly areas that have plenty of drainage and sunlight. Ideally, plant them on a downward slope on a south-facing hill. Grapes prefer a soil pH just above 7. Don't fertilize heavily as grapes don't thrive in extremely rich soil.

If you can afford it, I recommend that you purchase at least one mature potted grape vine from a reputable nursery. In 2013 I purchased two potted vines from Bruce Miller's nursery in late August. I can't remember if they were one or two years old, but, being the end of the season, they looked raggedy. I bought them for about \$15 each as I recall. In 2014 these two vines produced about 30 pounds of delicious grapes. The photo above is from one of several harvests from my vines. At an average of \$3 a pound, the dollar value of these grapes is \$90. However, the taste is priceless.

- 1. **Select the area to plant your grapes**. A sunny southern exposure with good drainage is ideal.
- 2. **Prepare the soil.** Drainage is important. Grapevine roots require oxygen they obtain from air spaces between soil particles. Use a lot of vermiculite to fluff up the soil. Amend the soil to a depth of at least 30 inches. Grapevines do not require a fertile soil. They like a sandy loam that is slightly rocky. In fact, they do not do well in a rich, heavily fertilized soil.

3. Prepare a trellis for your vines.

Get fancy and build an arched arbor for your grapevines if you like. Or you can construct a more traditional trellis as found in vineyards. One thing to keep in mind regarding arbors: If you use wood to build the arbor, your grapevine will likely long outlast the arbor. I would us rebar and PVC pipe, or perhaps galvanized wire fencing to fashion the arbor. Depending upon your age, your grapevine may outlast you.

4. Plant the vines.

WHEN: If you purchased the grapevines as potted plants, you can plant them anytime you wish, although I don't recommend to plant them in the heat of the day.

Most of the literature tells gardeners to wait until a frost-free day in late winter or early spring. This is not necessary if you have a mature plant that is already in a pot. As I mentioned, I planted my two vines last August 2013 here in Garland Texas and they are great performers their first year out.

WHERE: In addition to that sunny southern slope you selected, most vines are planted 6 to 10 feet apart. Muscadines, however, require 16 feet.

Water the plants well after planting. Thereafter, water your grapevine on a regular basis in small amounts.

5. Prune the grapevines in late winter—otherwise the plant will bleed sap and lose vigor.

The first year if you grow the grapes from cuttings, they should not be allowed to produce fruit as it can damage the young vines with the weight. When you prune in late winter, cut back all vines except the strongest that branch from the cane.

6. **Harvesting Grapes:** Pick when ripe. Grapes, unlike other fruit, do not ripen after picking.

GROWING GRAPES FROM CUTTINGS

This is done in late winter/early spring. You will use the vines that you've pruned off the plant.

- 1. Make sure each cutting (8 to 10 inches long) has at least three nodes (bumps along the vine)
- 2. Cut one end of the each cutting at a 45-degree angle to allow for better water absorption. Cut the other end straight across. The diagonal cut end will be the part of the cutting that goes into the soil.
- 3. Cut all buds off the vine except the top two.
- 4. Dip the angled end in root stimulant for a few seconds (optional).
- 5. Place cuttings in a glass or bottle with just enough tepid distilled water to completely cover the angled cut'/

- 6. Change and replenish with fresh water about twice a week for about 5 weeks.
- 6. Leave the grapevine cuttings in water until they develop numerous 1-inch roots.
- 7. After the roots appear, plant in a deep one-gallon container filled with three parts coarse sand or vermiculite and one part sphagnum peat moss.
- 8. Water as needed but keep soil barely moist. Watering frequently keeps roots cool which limits root development.
- 9. Plant outdoors in April or May.

Grapevines can thrive, even in urban areas such as Garland Texas. Below is a photo of the two grapevines in my front yard. (*The flowers in the foreground to the right are a few carrot plants that I'm letting go to seed for new plants. The orange flower in the left foreground is a tropical milkweed—a favorite for monarchs in the fall as it blooms from July to the end of October. Although an annual, it self-seeds. Plant one and you can expect many the next year. Your neighbors may even get a few.*)



So, what is the value of grapes as a food source? Why eat them?

- Grapes are rich in resveratrol. Resveratrol is a powerful anti-oxidant, which
 plays a protective role against cancers of colon and prostate, coronary heart
 disease (CHD), degenerative nerve disease, Alzheimer's disease and viral/fungal
 infections.
- **Anthocyanins** are another class of polyphenol anti-oxidants present abundantly in the red grapes. These phyto-chemicals have been found to have an antiallergic, anti-inflammatory, anti-microbial, as well as anti-cancer activity.
- Grapes are low in calories. 100 g fresh grapes just provide 69 calories.
- The color of grapes is due to their poly-phenolic pigments. Red or purple berries are rich in anthocyanins while white-green berries contain more tannins, especially, catechin. Catechin is a flavonoid that according to Wiki:

"... is reported to induce longevity in the nematode worm *Caenorhabditis elegans*. ^[40] Transcriptomic studies shows that catechin reduces atherosclerotic lesion development in apo E-deficient mice. ^[41] (+)- and (-)-catechin seem to have stereospecific opposite effects on glycogen metabolism in isolated rat hepatocytes. ^[42] (+)-Catechin inhibits intestinal tumor formation in mice. ^[43] (+)-Catechin inhibits the oxidation of low-density lipoprotein. ^[44]

So what species of grape should I plant?

The three main species of grapes grown around the world are: European (*Vitis vinifera*), North American (*Vitis labrusca* and *Vitis rotundifolia*), and French hybrids.

Popular Varieties:

Green Grapes: Thompson Seedless, Sugarone, and Calmeria **Red Grapes:** Emperor, Red Globe, Cardinal and Flame Seedless

Blue Grapes: Concord, Zinfandel and Mars

More on the variety of grape that I have grown: MARS – a blue variety

'Mars' (Plant patent 5680), a release from the University of Arkansas, is a vigorous, blue seedless grape that tolerates hot, summer areas. 'Mars'Seedless 'withstands powdery mildew & black rot!

If I had read this before selecting my grape plants, I might not have been brave enough to plant grapes. Sometimes it pays to not listen to the "experts."

"... Grapes are high maintenance plants that require regular chemical spraying and pruning ... "[Note: I've not sprayed my grape vine once, nor do I intend to unless perhaps with a mixture of Ivory soap and water or cayenne pepper spray. As for being "high maintenance": my grapes have been the most maintenance free of all my crops thus far.]

"Grapes are susceptible to a large number of diseases, particularly in humid summer climates including anthracnose, black rot, downy and powdery mildew, crown gall and botrytis bunch rot. Pests include phylloxera, grape berry moth, Japanese beetle, leaf hooper, leaf foler, mealy bugs and flea beetles..."

Yet, it is comforting to note that "Mars" has been recommended in Arkansas as a home garden grape with a Concord-like flavor that is disease resistant. Its blue fruit keeps well and the plant is very productive. (I can attest to that.) Hardiness has been very good.

If I plant more vines in my yard, I'll stick with Mars as I like to eat them and they have required very little attention from me in order to flourish here in Garland.

Being an adventuresome gardener, I might plant one of the more exotic grape vines in

my garden. However, I will not plant it close to the existing Mars grape vine—just in case the "experts" are right and I was just lucky to have selected a Mars variety.