Guide to Growing Grapes

Growing grapes or viticulture is one of the oldest cultivation practices in the world. The history of growing grapes goes back almost to the dawn of agriculture. Archaeological evidence shows evidence of wine production from around 4000 BC. The sheer versatility of growing grapes can help explain their importance, offering a wide variety of uses for the harvest. Grapes can be eaten fresh (table grapes) or processed into jam, jelly, juice, or wine. Professional growers and home gardeners are successfully growing grapes in an incredible variety of areas throughout the Unites States, from warm, dry environments with long growing seasons to cold, moist areas with short growing seasons. Growing grapes is simple provided you plant the right varieties for growing grapes in your particular area. To start growing grapes, all you need are a few basic requirements including a good planting site, hardy varieties (cultivars), and proper culture which includes, MegaGro, Algoflash, SoilSyrup and AquaRocks.

Plant Characteristics

Grapes are deciduous, woody vines that consist of a root system, trunk, and shoots or canes. Growing Grapes have extensive root systems. Most roots are in the upper 2 to 5 feet of the soil; however, roots grow to 25 to 40 feet in coarse, sandy soils. The trunk is the permanent stem of the plant that supports the fruit-bearing canes. Each year, shoots develop from dormant buds on the previous year’s growth. The woody shoots are then called canes, which are the important structures for growing grapes.

Planting

Grapevines can grow on a wide range of soil types. Choose deep, well-drained soils to avoid standing water in the spring and encourage early growth. Well-drained soils produce the best growth and yields. Avoid soils that are persistently wet during the growing season. Grapes need full sunlight and high temperatures to ripen, so plant on southern slopes, the south side of windbreaks, or the south sides of buildings. Avoid northern slopes and low ground since these will be cooler throughout the growing season, delaying ripening of the fruit.

Early spring is the best time to plant grapevines, as soon as the soil can be worked. Use healthy plants with well-developed root systems. Dig a hole large enough so you can spread the root system out without bending the roots. Spread the roots and cover them completely with soil. Plant vines at the same depth as in the nursery. Do not plant too deeply. It may also be beneficial to soak their roots in water for two or three hours before planting grapevines. After planting a grapevine, cut its strongest cane back to two or three strong buds; completely remove all other canes. Each bud will develop into a cane.

Fall planting is not recommended for growing grapes because plants are likely to be lost to heaving during the first winter.

Plant grapevines 6 to 8 feet apart within the row. Plant vigorous varieties, such as Concord, 8 feet apart. Less vigorous varieties may be planted 6 feet apart. Space rows at least 9 feet apart.

Soil and Weed Management

Growing grapes requires that you pay attention to the important cultivation practices of maintaining soil fertility, weed control, and soil moisture conservation. During the first year, the soil is prepared for planting, cultivars are selected, and vines are planted, mulched, and fertilized. Using products like SoilSyrup to help condition the soil and Algoflash will help keep your growing grapes well cared for.

During the first year, the vines are normally tied to a stake to keep them off the ground and prevent damage. If the season of planting is dry, supplemental watering is also necessary to keep the vines growing. When growing grapes, it is important to get as much first-year growth as possible.

Weeds compete with grapevines for moisture, nutrients, and sunlight. Keep the area directly under the trellis weed-free. For smaller gardens, AquaSpikes are a great way to prevent weeds by watering the roots of the growing grapes directly. For larger plots, it’s best to maintain a cover crop between rows. These cover crops help control weeds and prevent soil erosion. Grass is an excellent choice, as it doesn’t really compete with the growing grapes. You can use Lawn Honey to help establish the grass in between you grapevines and improve soil moisture. When you need to cut the grass, simply leave grass clippings on the area. Care of vines the second year is similar to that of the first year. However,
during the second season, a system for training the vines should be selected. Three years are normally required to establish a grape planting. During the third season, some harvest may be expected from the vines. The first full crop, however, will not be produced until about the fourth or fifth year. It takes a while to see the fruits of your labor when growing grapes, but it’s worth it. Make sure you continue these cultivation techniques not only through the third year, but in subsequent years as well.

**Fertilizer**

Growing grapes requires an adequate supply of essential plant nutrients. Apply about 8 ounces of fertilizer per plant seven days after planting. Increase the amount of fertilizer to 1 pound of fertilizer in the second year and 1.5 pounds per vine in the third and later years about 30 days before new growth begins in the spring. Don’t concentrate fertilizer at the base of the trunk. Keep fertilizer 6 to 12 inches from the trunk and spread evenly under the spread of the vine. Because too much nitrogen may promote excessive vegetative growth and delay vine and fruit maturity, use a balanced fertilizer like Algoflash. Be aware that if you fertilize your growing grapes in late spring or summer, it will encourage succulent, late season growth, which is more susceptible to winter damage. This can be undesirable if you live in the northern part of the country. Using SoilSyrup will help make your fertilizer more effective and help improve the health of growing grapes, so apply every time you water.

**Watering and Irrigation**

Water well. Growing Grapes require approximately 1 inch of water per week through the first growing season. Water plants every 7 to 10 days during dry weather. You can help keep your soil moist by using AquaRocks to help retain moisture in the soil.

**Fruit and Berry Set**

Naturally grown grapes tend to be very small and uneven ripening of the berries within a cluster is sometimes a problem. That's why commercial growers use a growth stimulator known as MegaGro when growing grapes. MegaGro is widely used as an aid for increasing yields as well as a bunch rot preventive tool and a thinning aid. The active ingredient in MegaGro, Gibberellic Acid (GA), is a plant growth regulator used by nearly all commercial grape growers to force grape production and to produce larger grapes. MegaGro should be used on grapes by spraying the bunches in two applications, the first application at the last blooming stage and the second should be applied one week after.

In most grapes, MegaGro is applied before bloom to “stretch” the cluster. This elongation provides more room for the berries to grow larger and makes for a looser cluster. A looser cluster allows for better air circulation, which in turn reduces disease incidence and improves berry growth and maturation. A second set of MegaGro applications is done at bloom time. This reduces the number of berries by causing some of the flowers to abscise or drop. With less competition, the remaining berries will grow larger. Finally, several "berry sizing" or fruit set sprays are made in the 10-15 days following berry set to promote berry growth and development. The end result of the Gibberellic acid regimen is a large, loose cluster, with large and uniformly sized berries that mature evenly. Using MegaGro is the professional's method of growing grapes.

Read our directions on using MegaGro for Growing Grapes. (PDF 103 kb)