



Time and Hints to Take Home

Grapes

Many great kinds of Grapes grow well in our area. Most are good table or jelly Grapes; none are suitable for fine wine although most will make a tolerable wine. Grapes can be used to screen fencing, providing both cover and fruit. They are vigorous vines that need sturdy support. This handout goes over basic needs for good fruit production. If you want more information, we can recommend some good literature on Grapes.

Site Selection and Soil: Grapes are more affected by various site factors than many small fruits. When you select a site, consider elevation, air drainage and prevailing winds. Higher sites with good cold air drainage offer some frost protection by allowing cold air to drain to lower areas. Wind direction can have an effect on air drainage if the prevailing winds are blocked. Prevailing wind direction is also important for disease control. Grapes have a large leaf surface area and are very susceptible to a host of fungal diseases. Planting parallel to prevailing winds increases air circulation and can help prevent fungal problems. If possible, planting rows in a north/south direction offers the best sun exposure. A sunny site on the top of a slight incline with north/south prevailing winds is ideal. If you are planting Grapes as an ornamental vine, you do not need to be as concerned with these site selection requirements but choose a sunny site for good growth.

Many of the world's most famous vineyards are located in some of the world's worst soils. The highly regarded vineyards of France are in poor and rocky soil that is also alkaline. Rich soil is not a requirement for Grapes; in fact, it can be harmful. Grapes prefer sandy loam with some gravel content for good drainage. They tolerate a wide range of soil pH, from 6.0 to 7.5.

Support & Pruning: Grape vines need training and pruning to remain productive and manageable. If they are allowed to grow rampant they will produce far too much foliage and small fruit. If you are growing

Grapes for cover or ornamental value, do not worry about specific training or pruning instructions.

Anyone who has ever toured a winery knows there are a number of support systems for vines. They are referred to as 'trellis systems' and take some effort to construct. There are also a number of pruning/training systems. This handout will cover just the basics. If you are interested in learning more, we can direct you to books that would be useful. In the case of training and pruning Grapes, a picture really is worth a thousand words.

Grapes require some sort of support to grow on. This can be as simple as planting them next to a fence they can sprawl on or you can make a trellis system for them. Grapes produce heavy vines and require good sturdy support. If you are planting for fruit production, we recommend using heavy fencepost and heavy galvanized wire. An 8' fence post, 3' in the ground and 5' above ground, will support the heavy vines. The number of wires you will run between posts depends on the training system you use for your vine. For the average homeowner, a trellis system of fence posts with two wires strung between is adequate. The top wire is set at 4' off the ground and the lower wire is at 18". Do not make the length between fence posts greater than 10'. Wire strung longer will not support the grape vine's weight especially as it grows to full size.

Grapes send out tendrils they attach to whatever they can reach. Typically, you would encourage the vines to grow horizontally along the wires in both directions from the trunk. With a trellis system, this means you will plant your vines in the center of the posts so you can train vines in both directions.

Pruning is done in late winter to early spring and is performed to maintain the vigor of the producing wood on the vine and establish the vine's shape and form. Here are the very basic facts for good fruit production. At Planting: Prune the vine back to about 1'. Position it so vines can grow out to both sides on the support.

Tie the vine up so the trunk begins to grow straight up. Remove any Grape clusters that appear.

Year One: The following spring, while the grape vine is still dormant, cut the vine back so it has only 3-4 buds to encourage growth. Choose upward facing buds. Once the buds have reached about 8", choose the healthiest one to serve as the trunk. Cut off all but one of the others. The one you are leaving is your 'insurance' bud just in case your first choice is damaged. Prune this 'insurance' bud back to 2 buds so most of the effort goes into the main bud you picked. Tie the main bud up to the bottom wire. This will become the trunk of your grape vine. Through the growing season, cut off any buds that appear but let the leaves stay to nourish the plant. Keep this trunk tied up and going as straight as possible. When the stem has gone at least 1' beyond the top trellis wire, cut it back to the height of the wire. Try to cut through a bud. This is what will keep the vine from growing taller. At this point, you are ready to train your vine into 'arms' that will produce fruit. If your Grape is vigorous early in the season, you can move on to the Year Two directions and start your training this first year. Remove any Grape clusters that appear.

Year Two: The method we will describe is 'Cordon Training'. Again, in early spring while the Grape vine is dormant, choose 2 lateral shoots growing in opposite directions to serve as fruit bearing arms. Pick strong healthy looking shoots about 6" below each wire. These are the 'cordons'. Pick 2 more shoots below these to serve as insurance again. Cut off all other shoots. Let these cordons grow and when they are 1-2' long, tie and wrap them loosely around the wire. Do not tie too tight and use soft twine. Remove any grape clusters that appear.

Year Three and subsequent years: In early spring, while the vine is dormant, cut back any new growth on the cordons that is less than 3/8" thick. Once bud growth starts in spring, remove any buds that face the wrong direction. Keep 6-8 buds per cordon. As the cordons grow, cut off a little of one or the other to keep them the same length. Depending on the variety you may want to thin any fruit clusters that appear but keep at least one to three per cordon. Grapes fruit on one-year-old wood. As you learn to recognize this type of wood, you will refine your pruning techniques each year. As your Grapes grow over the years, general

pruning is for maximum sun exposure and air circulation to encourage good production.

Planting: Plant Land sells container grown grape vines. Plant them as soon as possible after purchasing. Dig a hole twice as wide and half again as deep as the container the vines come in. Do not amend the soil; too much nitrogen can cause problems. If the soil is excessively rocky, remove any rocks larger than a golf ball. Water the vine in well and keep the soil moist at all times.

Pests and Disease: Grapes are hosts to a large number of pests and diseases, particularly fungal problems. Prompt identification and treatment is necessary. A copper fungicide mixture is the most commonly used product for Grapes. The staff at Plant Land can help you diagnose and treat problems. Bring in a generous sample of the affected area in a plastic bag so we can be sure what the problem is.

General Culture: Do not apply heavy applications of fertilizer to your Grapes. A yearly application of 20-20-20 or top dressing with compost in spring is enough. Water is far more important. Fruiting Grapes may need to be watered deeply every day during hot weather. A soaker hose or drip system is ideal. Good weed control is also very important. We strongly recommend mulching your Grapes with small wood chips for weed suppression. Mulch also helps retain moisture especially during hot weather.

Varieties we recommend for our area:

Reliance Red Seedless: A red seedless table grape that is excellent for fresh eating, wine or juice. Zone 4.

Valiant: A very hardy blue-black grape, it was developed in South Dakota. Zone 3.

All Grapes are \$14.99 each

The staff at Plant Land can answer any other questions you may have.