GRAPE TRAINING AND PRUNING

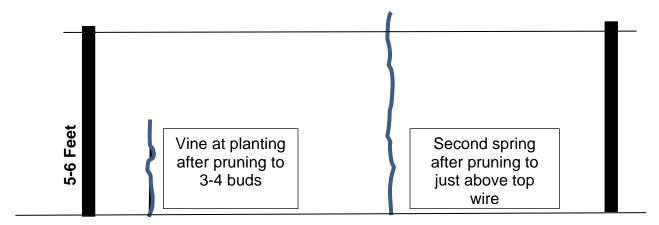
Overview

Pruning grapevines is a specialized task, sometimes called an "art" by those who are experts in this practice. Because grapevines grow quickly each summer season, they can reach 15 to 20 feet in length. All types of grapes need to be pruned in late fall or winter, after they produce their fruit, lose their leaves, and become dormant. The vines of the grape plant are often referred to as canes, and you must prune as many as 90% of all canes to ensure a bountiful harvest the next season.

Always remember:

- To cut diseased, unsightly, or dead canes to the main trunk of your grape vine after it has produced its fruit and lost its leaves. Make clean cuts with sharp clippers or loppers; do not leave any ragged edges on your cuts.
- Prune suckers (those that have no main trunk) all the way back to the ground. Do this during fall or winter when your vine is dormant. If your vine is grafted, do not cut below the grafted section of the trunk. Leave approximately six inches of the trunk above the grafted portion, which looks like a scar.

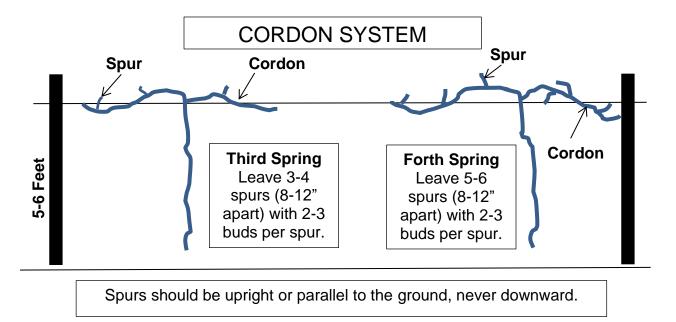
TRAINING: For the first two years all grapes are trained the same, at planting, cut back to two buds and let it grow freely for that year. After the first year of growth select the strongest cane, remove all the others, then prune the one you selected back to where there are there buds remaining. You are now entering the second year of growth.



During the second year of growth, select the strongest cane again and tie it to a vertical stake (8-10 inch spacing). At the time of your next pruning this vertical should be about 40 inches tall with a minimum diameter of ¼ inch (if diameter does not reach that minimum, you must prune back to the 3-4 buds and start the process over. This is an indicator that the root system has not developed enough to move forward, and will take an additional year). Once the cane has been properly pruned, it is time to develop the vine for the proper variety of grape.

There are two types of training: the Cordon System and the Head System. Although there are other methods of training these are the most efficient and productive for the home vineyard or garden environment.

CORDON SYSTEM: This method is used for all grapes with the exception of: Thompson Seedless, Tokay, Malaga, Muscat, and Zinfandel. After you have achieved proper size of the cane (from above), it is time to develop your Cordon arms (horizontal branching) by securing them to horizontal wires, fence, or desired trellis frame. The following year select five to six spurs (8-12" apart) on each arm and remove all the others. Prune all spurs to two or three buds per spur.



SPUR PRUNING: A spur is simply cutting a cane (vine or "branch" from last year's growth). For a cane with about a 1/3 inch diameter leave only one bud. For a ½ inch diameter cane you can leave 2 buds, and ¾ inch diameter cane you can leave 3 buds.

Once you have properly trained your grape vine (above), remove the weakest shoots along the horizontal branches at their bases, choosing the strongest side shoots spaced 6" to 10" apart. Cut these to 2 buds. Remove all shoots from the vertical trunk.

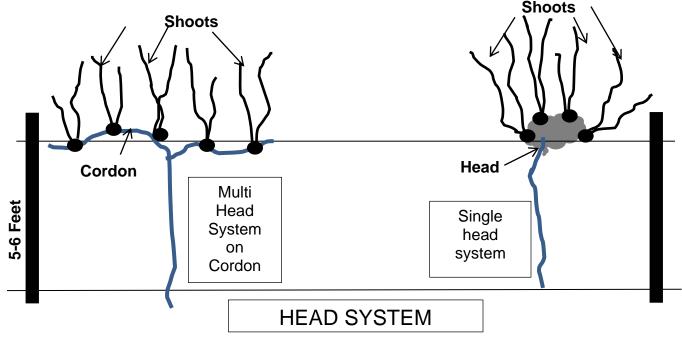
ANNUALLY: Every dormant season after this, each spur will have 2 shoots that fruited during the summer. Cut the strongest spurs to 2 or 3 buds, these will produce fruit-bearing shoots in summer. Remove any weak spurs. Keep the trunk free of growth. Repeat pruning procedure each year.

SPRAYING AND FERTILIZING: El Dorado Nursery has put together a Spray Schedule and Fertilizer Schedule in a calendar for you to take. Please refer to these schedules for further care of your grapes.

HELPFUL HINT: A suggestion for the production of larger grapes. After clusters have formed, cut each cluster in half. Then, cut back foliage by 1/3. This technique will put more energy and nutrients into the remaining grape clusters, therefore producing lager grapes.

HEAD SYSTEM: This method is best for large cluster producing grapes (such as Thompson Seedless, Tokay, Malaga, Muscat, and Zinfandel). They must be cane pruned (with a minimum of 10-12 buds per shoot), while the other varieties may be spur pruned. Concord (seeded and seedless) and other American varieties are either cane pruned or trained as Cordons and spur pruned (above).

The "Head" is developed by allowing only buds in the top 20 inches of the vertical vine to grow. All other growth is removed down to the ground. Once you have achieved recommended height, prune to 6-12 shoots with 10-12 buds per shoot. This is now the "Head" and all growth comes from this area. Prune back to this stage every year. (NOTE: Grape production hangs down. Do not form the head too low as the grapes will be difficult to harvest. It is suggested you form the head about 48 inches from the ground).



CANE PRUNING: Once you have properly trained your grape vine (above), remove shoots from the trunk. Cut the horizontal branches back so that 2 - 5 long shoots remain on each cordon or on a single head.

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