NEW MEXICO VINE & WINE SOCIETY GRAPEVINE

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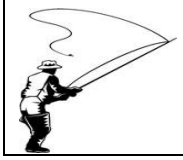
President's Message-Fall 2011



Dear Vine and Wine Society,

Any grapes that escaped last February's deep freeze and the May frost should be harvested by now. All of my vines in Lemitar froze to the ground and have sent up many shoots with no grapes so I am re-training and hoping that they recover enough to get a crop next year. I hope other folks vines fared better than mine.
The NM State Fair display has been taken down and the medals and ribbons have been mailed to the winemakers. Entries were down a little this year but the quality of the wines was quite good overall resulting in about 75% of the entries winning medals. Many thanks to the judges and those who helped with the logistics of pouring and serving the wines. The medal winners list is posted on the web site for those of you who want to purchase some of the medal wines.

The election results are listed in this Grapevine for the Board of Directors. Congratulations to new President Randy Sanches, new Vice-President Sean Sheehan, new Treasurer Les Olsen and new directors Bettie Evans, Susan Sanches and Tosh Williams. Jeanine Eden was re-elected Secretary and Rex Franklin Membership Secretary. Thanks to Bernd Maier, Ian Norrish and Bill Buss for their long and helpful service.
I am stepping down as President and will still be on the Board as 'Past-President'. The eight years or so that I served as President went by quickly but I am happy to pass the gavel on to Randy and look forward to further the mission of the Vine and Wine Society.

Carl Popp

Wine Chemistry

Wine chemistry explains the flavor, balance, color, stability that was once only possible through subjective description. Understanding the principles of wine chemistry will open your eyes to a new level of wine appreciation.

The Chemical Components of Wine

Wine chemistry can be as simple or complex as you want. There is always another level of depth, from the chemical components of wine in taste perception, to the balance of various phenols, acids and sugars. This balance is:

> **Sweet Taste (sugars + alcohols) <= => Acid Taste (acids) + Bitter Taste (phenols)**

Phenols

Phenols are a class of molecules that account for the taste, smell, medical benefits and diversity of wine. Because wine is 95% water and alcohol, the differences found in wine are derived from that 5%. Phenols give wines their distinguishing characteristics; and are broken down into flavanoids and nonflavanoids.

Acidity

Flavanoids and non-flavanoids are wine chemicals that have a profound impact on quality, color and flavor. These molecules are largely influenced by acidity, and interact with acids to form complicated, yet important molecules. Acidity may be the most important aspect of wine chemistry.

Alcohol & Sugar

The majority of these acids are produced naturally by the vines, but their relative levels are adjusted based on a multitude of factors. One of them is the alcohol content, which is an indication of the sugar in wine. Sugar is converted to alcohol by fermentation; thus the sugars present and their relative concentrations in the grapes are important for the overall character of the wine's chemistry.

Varietal Aromas

Balance in wine allows the fruit flavors of the varietal to show through. The chemical nature of varietal aromas gives insight into why are certain wines taste the way they do. The wine chemistry explains why you love a certain varietal, and don't care for others.

Grape Growing

Climate

The most important aspects of wine grape growing are the annual lifecycle of the vine, climate, terrain, vineyard management, pests and diseases, terroir, and planting grapes. Of these factors, climate is one of the most important. Vineyards thrive in moderate ones that are usually between 20 and 50 degrees Latitude on both sides of the Equator.

Terrain

California has many different terrains suited to a large number of varietals. It refers to the soil type as well as the local topography. The composition, fertility and slope of the soil in a vineyard all affect wine grape growing.

Planting Grapes

When planting grapes, the grower must determine which grape varietal to plant based on the characteristics of the land. In California, rootstocks and clones need to be chosen with the great care, because wine grape growing is affected my many different factors.

Vineyard Management

Not all aspects of the grape growing process are left to nature. Vineyard management also has a profound impact on the finished product. Successful managers are in sync with the physical aspects of their property, and make grape growing decisions accordingly.

Pests and Diseases

Grape growers constantly need to be on guard against pests and diseases. There are many strategies that are used to minimize these threats. For example, phylloxera can be controlled through grafting Vitis vinifera cuttings onto Native American rootstocks.

Terroir

Throughout Europe, specific varietals have been grown in certain regions for centuries. After growing grapes in the same place for many years, managers became aware of the aspects of their land that make it unique. Grape vines particularly respond to localized features that are inherent in the vineyard. This complicated notion is known as terroir.

The Annual Life Cycle of the Vine

The annual life cycle of the vine lasts from early spring to late fall. Several wine grape growing regions in California Wine Country have very long growing seasons, especially AVAs in San Luis Obispo and Santa Barbara Counties.

The Effect of Grape Yield and Size on Quality

The Matthews Laboratory at the UC Davis Department of Viticulture and Enology released an interesting graphic on the effect of grape yield and berry size on quality. Conventional wisdom asserts that the smaller the berries and yields, the higher quality. But the Matthews Laboratory declared,

"It's not the destination, but the journey that matters."

According to the study, vineyard management techniques and physical phenomena are the true reasons for quality levels; not simply berry and yield size. The graph illustrates the "sensory or fruit attribute payoffs" that results from the "journey" that grapes take during the growing season.

For example, small berries that develop in a well-shaded environment will have less color and less tannin. Without treatment, grapes will have more color and slightly more tannin. Grapes that are grown in a water deficient vineyard will have more color and more tannin.

Low yielding vines that are grown in a water deficient environment have less veggie and more fruit flavors. Cluster thinning in this situation has no effect on the grapes' flavor profile. What I found most interesting was that low yielding vines that are pruned will have more veggie and less fruit flavors according to the graph.

This is a bit counterintuitive as I was under the impression that there was a more or less proportional relationship between pruning and quality. The data from the Matthews Laboratory suggests this is an overly simplistic view.

Pruning Grapevines | Ed Hellman | Texas AgriLife Extension

Dormant pruning is a critical component of the grape production system, providing the mechanism to maintain the training system, to select the fruiting wood, and to manipulate the potential quantity of fruit produced. Annual dormant pruning removes the previous year's fruiting canes or spurs (now two years old) and excess one-year-old canes. The fruiting habit of grapevines dictates a pruning practice that encourages the annual development of new fruiting wood. Fruit is only produced on shoots growing from one-year-old canes. Therefore, healthy new canes must be produced every year to maintain annual production of fruit.

The training system is designed to encourage the production of new fruiting canes at specific positions on the vine - the arms. Pruning is used to selectively remove unsuitable or extraneous canes, retaining a small number of good canes. –Continued-

Canes are carefully selected to serve two functions: 1) produce fruitful shoots in the coming season, and 2) produce healthy shoots from which a good fruiting cane can be selected in the next dormant season. At each arm, these functions can be divided between two canes: a fruiting cane or fruiting spur, (depending on the training/pruning system) and a renewal spur. Alternatively, a single fruiting cane or spur can be used at each arm, and one of the basal fruitful shoots is subsequently retained as a fruiting cane for the next season.

Timing

Dormant pruning of grapevines can be done at any time between leaf drops in the fall to bud break in the spring. However, the logistics of completing the job in a specific time period and the availability of labor often influence the timing of pruning. There also are vine health considerations that enter into the decision of when to prune. Pruning in the fall may increase vine susceptibility to freeze injury compared to later pruning (Wolf and Poling, 1995). Therefore, in regions where there is a significant risk of cold injury, it can be advantageous to postpone pruning until after winter's coldest temperatures. Postponing pruning also enables an assessment of cold injury and adjustment of pruning levels to compensate for injury losses. Later pruning commonly causes the vines to "bleed" sap from the pruning cuts, but this is not harmful to the vine.

Pruning Level

In addition to maintaining the vine's training system, pruning reduces crop production by removing fruitful buds. Varying the extent of dormant pruning is one method to influence cropping level. The term bud count (also node count or node number) is used to describe the number of dormant buds retained at pruning. Generally, bud count considers only the buds having clearly defined internodes in both directions (Wolf and Poling, 1995), thus basal buds are not included in the count. Basal buds, sometimes referred to as non-count buds, are not included in bud counts because frequently they do not produce shoots, and if they produce a shoot it is often unfruitful.

Grape growers often prune vines with the intent to achieve a balance between fruit production and adequate, but not excessive, shoot growth. Increasing the bud count increases the number of shoots, which, if excessive, can lead to a crowded canopy and increased shading. Cropping levels are also increased when bud count increases, and the vine may not be capable of fully ripening high crop levels despite the increased shoot number. At very high bud counts the vine compensates for the large number of shoots with shorter shoot growth and fewer clusters per shoot (Coombe and Dry, 1992).

Excessive pruning - retaining too few buds - leads to an under-cropping situation. Removal of fruitful buds reduces crop, but it also eliminates primary shoots. When there are too few shoots in relation to the vine's growth capacity, the vine compensates for the deficit by stimulation of shoot growth from secondary, tertiary, or latent buds, increased vigor of shoots, and more extensive lateral shoot growth. The consequence is often an excessively shaded canopy that provides a poor fruit-ripening environment.

Because pruning directly influences the number of shoots and the potential crop level, it is often the most significant annual management practice affecting vine balance. Consequently, the concept of vine balance is the basis of most pruning strategies. In some winegrowing regions, balanced pruning formulas are used to guide growers' decisions on the number of buds to retain. The bud count is based on an estimate of the weight of extraneous canes removed by pruning - the pruning weight. For example, the formula [20 + 10] indicates that 20 buds should be retained for the first pound of pruning weight and another 10 buds for each additional pound. Thus a vine with a 3-pound pruning weight would retain [20 + 10 + 10 = 40] buds. Wolf and Poling (1995) recommend a [20 + 20] pruning formula for Chardonnay, Riesling, Cabernet Sauvignon, and Cabernet Franc in the mid-Atlantic region of the United States. Balanced pruning formulas may not be reliable, however, when summer trimming of shoots is done as part of canopy management. Development of balanced pruning formulas requires pruning research on the specific varieties and growing conditions of a region, and such work has not been done in Texas.

Another pruning strategy that utilizes the vine balance concept is to adjust pruning levels based on a visual accounting and assessment of cane growth from buds retained in the previous year. A balanced vine will have strong, but not over-vigorous, cane growth from all retained buds. If some canes are weak, correspondingly fewer buds should be retained for the next season. However, this may not fix the problem and other vineyard factors should be investigated as possible contributors to low vigor.

If some canes were excessively vigorous, that is an indication that the vine's canopy may have been too large, perhaps because too few buds were retained the previous year. Again, other vineyard circumstances must also be considered, such as having vine spacing too close for the soil type or excessive application of fertilizer.

The situation might be remedied by retaining a corresponding number of additional buds to accommodate the excess vigor, if there is adequate space on the trellis. If a crowded canopy is likely to be a problem, another solution will be necessary. See our webpage on Canopy Management for recommendations on dealing with a crowded canopy.

Pruning Practices

Pruning Cuts. All pruning operations should be conducted with well-maintained, sharp pruning tools. Pruning cuts on canes or spurs should be made at least one inch beyond the last retained bud. For cane pruning, it is common to make the cut directly through the next node beyond the last retained bud. Cutting through the extra node prevents it from producing a shoot, but the enlarged nodal region helps keep the tying material from slipping off the end of the cane. Ideally, cuts should be made at approximately a 45 degree angle, preferably with the lower end of the cut angled away from the bud.

Cane Pruning. The first step in pruning is to identify the fruiting canes for next year. Desirable fruiting canes develop under conditions of good sunlight exposure, which is a function of the training system and last season's pruning level, and canopy management practices. Good sunlight exposure promotes bud fertility and wood maturity. Fruiting canes and renewal spurs should be selected from positions close to the trunk head to prevent the arms from becoming too long, which will cause a nonproductive gap in the canopy above the head. The characteristics of desirable fruiting canes are:

1. Firm wood with brown periderm nearly to the tip; a sufficient number of healthy, fruitful buds; and without mechanical damage or visible disease infections.

2. Round in cross-section with relatively short internodes (3 to 4 inches) and moderate diameter (1/4 to ½ inch).

3. Well positioned on the arm (i.e., arising close to the trunk).

Following selection of good fruiting canes (either one or two depending on the training system and vine spacing), another good, well-positioned cane is selected as a renewal spur and pruned back to one or two buds. Periodically, it may be useful to retain a water sprout (during shoot thinning) that is closer to the trunk than the current renewal spur. At the next dormant pruning, the water sprout cane becomes the renewal spur. This practice keeps arm length from becoming excessively long.

An alternate method does not retain a separate renewal spur. Instead, it is assumed that in the next dormant season, a good basal cane from last season's fruiting cane can be selected as the new fruiting cane. The remainder of last year's fruiting wood and all other extraneous canes, including suckers and water sprouts, are removed. Suckers should be traced back to their source and cut back completely to remove all their basal buds. Fruiting canes are trimmed to a length that retains the desired number of dormant buds. The pruning cut is made through the next node (bud) beyond the retained buds, so that the enlarged portion of the node prevents the tie from slipping off. Next, all tendrils and laterals are removed, the cane is bent up onto the fruiting wire, wound once around it, and tied at the end.

Spur Pruning. Cordon-trained vines are typically spur-pruned. Just as with cane-pruning, the arm positions of cordons are established by the training process and all fruiting and renewal spurs arise from this area. The arms should be evenly spaced along the cordon, and oriented in the proper direction (up or down depending on the training system). Select suitable canes for the new fruiting spur and renewal spur using the same criteria described for cane pruning. Remove the old fruiting wood from the previous season. The selected fruiting cane is shortened to create a fruiting spur containing 2-4 buds, depending on the fruitfulness of basal buds and the desired cropping level. The renewal spur cane is cut back to one bud. Similar to cane-pruning, selection of canes for spurs should take into consideration the position of the cane on the arm. Select canes to maintain as compact an arm as possible and to maintain the desired spacing between arms.

References

Coombe, B.G. and P.R. Dry. 1992. Viticulture Volume 2 Practices. Winetitles. Adelaide, Australia.

Wolf, T.K. and E.B. Poling, 1995. The Mid-Atlantic Winegrape Grower's Guide. North Carolina Cooperative Extension Service.

Interesting Web Link on Pruning:

http://connect.ag.vt.edu/westover1/

2011 ELECTION RESULTS FOR

STATE OFFICERS, BOARD of DIRECTORS, and CHAPTER OFFICERS

State Officers for 2011-2012

President- Randy Sanches

Vice President- Sean Sheehan

Treasure- Les Olsen

Secretary- Jeanine Eden

Membership Secretary- Rex Franklin

****New State Officers and Directors need to be ratified by the Board of Directors at the Oct. 15, 2011 BOD meeting

Board of Directors for 2011-2012

Bettie Evans

Susan Sanches

Tosh Williams

***Bill Stone and Jeremiah Baumgartel have one more year to serve as directors

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Tularosa Basin Chapter Officers
President- Jim Dann
Vice President-Les Olsen
Treasurer- Peter Bjerke
Secretary- Anita Bjerke
News Editor- Beth Ann Gordon

Middle Rio Grande Chapter
President- Chris Carpenter
Vice President- Ron Howes
Treasurer-Carol Heald
Secretary-Andrew Sanchez

2011 New Mexico State Fair Display

-Special thanks to Carl and Barbara Popp for setting up the medals display over at the State Fair Agruculture building this year. A special thanks to Jerry Heald MRGV&W for providing photos of the displays.

COOKING WITH WINE

Blue Cheese Crusted Filet Mignon with Port Wine Sauce

Ingredients

- 1 tablespoon butter
- 1/2 cup minced white onion
- 3 cloves garlic, minced
- 1 tablespoon chopped fresh thyme
- 3/4 cup low-sodium beef broth
- 1/2 cup port wine
- 1 tablespoon vegetable oil
- 4 filet mignon steaks (1 1/2 inch thick)
- 3/4 cup crumbled blue cheese
- 1/4 cup PANKO bread crumbs

Directions

1. Melt butter in a skillet over medium heat. Add the onion, garlic and thyme. Cook, stirring constantly, until onion is tender. Stir in the beef broth, scraping any onion bits from the bottom of the pan, then stir in the port wine. Bring to a boil, and cook until the mixture has reduced to about 1/2 cup. Set aside. This may also be made ahead of time, and reheated.

2. Preheat the oven to 350 degrees F (175 degrees C). Heat oil in a cast-iron or other oven-safe skillet over high heat. Sear steaks quickly on both sides until brown, then place the whole pan into the oven.

3. Roast steaks in the oven for about 15 minutes for medium rare - with an internal temperature of 145 degrees F (63 degrees C). You may adjust this time to allow the steaks to finish just below your desired degree of doneness if medium is not what you prefer. Remove from the oven, and place on a baking sheet. Stir together the PANKO crumbs and blue cheese. Top each steak with a layer of this mixture.

4. Preheat the oven's broiler. Place steaks under the preheated broiler until the cheese topping is browned and bubbly. 3 to 4 minutes. Remove from the oven, and let stand for at least 15 minutes before serving. Serve with warm port wine sauce.