

GETTING READY FOR CRUSH

by
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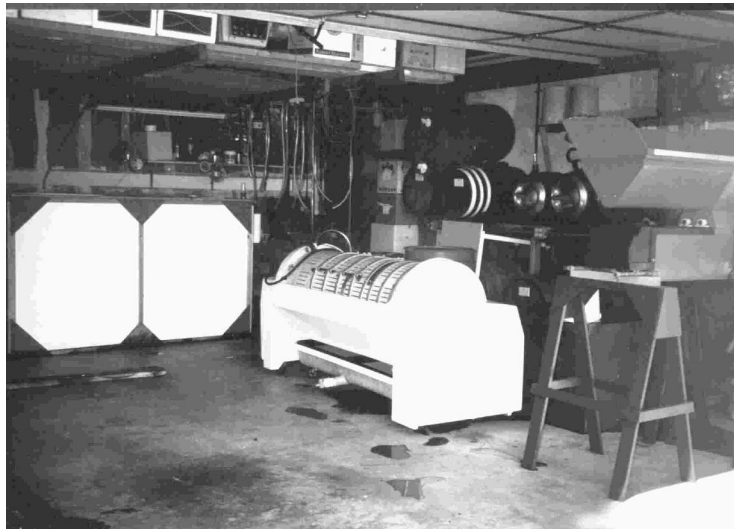
Decisions made quickly during the hectic crush session can adversely influence the quality of wine, so professional winemakers develop a “crush plan” each session specifically to minimize these hasty decisions. Home winemakers also benefit by developing a crush plan early in the season and then following the plan until the new wines have been put down.

Fruit

The first step in developing a crush plan is to decide what styles and quantities of wine will be produced, and these decisions should be made early in the season. Then winemaker can select the varieties and quantities of grapes needed. When purchasing outside fruit, careful consideration should be given to harvest criteria, picking, cost of the fruit, transportation, etc. Precise harvest schedules are not possible because picking times are determined by grape varieties, vineyard location, the weather, irrigation schedules and many other factors. Consequently, conscientious winemakers follow fruit development carefully, so they will be ready when harvest time finally arrives.

Equipment

Before the first grapes of the season are picked, all of the winemaking equipment should be assembled and carefully inspected. Any needed repairs should be made, and then the equipment should be completely scrubbed down with chlorinated TSP. Then the equipment should be carefully rinsed (three times) and drained completely. Tanks and containers should be checked for leaks and then carefully cleaned. Special attention will be needed when barrels have been stored empty. Arrangements for borrowing or



renting winemaking equipment should be made **several weeks ahead** of the actual crush session. The winemaker should continue to keep in touch with the supplier after the arrangements have been made. This way, last minute surprises about the equipment availability can often be avoided.

Supplies

Supplies such as tartaric acid, citric acid, yeast, ML culture, sulfite, calcium carbonate, bentonite, gelatin, Sparkoloid, other finning materials, TSP, Clorox, filter materials and laboratory chemicals should be checked, and any missing materials should be ordered. The minimum supplies needed for starting a small fermentation is TSP, Clorox, sulfite, tartaric acid and wine yeast. Home winemakers often get together and order their winemaking supplies in large quantities, and large quantity purchases can result in significant savings. For example, a 500-gram package of "Prise de Mousse" yeast sells for about \$8.50. A 5-gram envelope sells for

\$0.75. Obviously, 5-gram envelopes of yeast are expensive if very much wine is made. Orders for supplies should be placed early because suppliers are very busy just before and throughout the crush session.

Grapes are Perishable

When the fruit has been picked, the winemaker should start processing as quickly as possible. Oxidation and biological changes start as soon as the grapes are off the vine and a few hours can make a difference. One exception to the above rule might occur when grapes are picked late on a warm day. Hot fermentations are often disastrous, so in this situation letting the fruit sit overnight to cool down may be the lesser of two evils. Always try to avoid warm fruit. Talk to the grower about your needs. If the grower continues to provide warm fruit year after year, find another supplier. However, be realistic, sometimes picking grapes late in the day is unavoidable.

Juice Processing

Plan to test the fruit as soon as it is crushed so any needed pre fermentation adjustments can be made. Pre fermentation acid adjustments should be made using tartaric acid (not acid blend). Sugar adjustments should be made with ordinary white, household sugar. If sugar additions are needed, the fruit is not ripe and immature grapes produce poor quality, "green" tasting wine. Add a level teaspoon of sulfite powder for a 100 pounds of fruit. Dissolve the sulfite powder in a small amount of water and add it to the grapes as they are being crushed. If the fruit is hot or contains very much bunch rot then use twice as much sulfite. Plan your activities in advance. Experienced winemakers let **cool** white juice settle overnight. In the morning, the clear juice is racked off the solids and then the yeast is added. This method helps produce the clean, slow fermentations necessary to produce high quality white wines.

Fermentation Temperatures

Fruity, white wines like Riesling or Chenin Blanc are fermented in the temperature range of 55 to 65 degrees. Barrel fermented white wine such as Chardonnay is fermented in the 60 to 75 degree temperature range. Red wines are best fermented at temperatures ranging from 70 to 85 degrees. Have a realistic fermentation plan. Attempting to make a light fruity white wine when your expected fermentation temperature is 80 degrees will produce little more than disappointment. Home winemakers are advised to limit their production to red wines if fermentation temperatures cannot be kept below 70 degrees or so.

Cap Management

Red wine production will require some sort of cap management and a plan for handling the cap should be developed. The usual procedure for smaller fermentations is to "punch down" the cap by hand. A minimum of two punch downs per day is required. However, frequent punching down often extracts more color, tannin and flavors. Some winemakers punch down ever few hours when they are making full-bodied red wine. Part of the winemaking art includes determining



exactly when to press red fermentations. Light fruity red wines are usually pressed at 5 to 10 Brix. Full-bodied reds are normally pressed at zero Brix. Under most conditions, pressing too early is better than pressing too late when the wine has developed excessive bitter astringency.

Plan to Change Your Plan

Lots of things can and do go wrong during a crush season. Make a plan but be prepared to reevaluate and make any necessary changes if the grapes are not suitable for the planned style of wine. Trying to make a big red wine from under ripe grapes is unrealistic. In such an unhappy situation, some changes in the crush plan are needed. A better alternative would be to use the under ripe fruit to make a blush wine. The low alcohol and the high acid level content should make a pleasant blush wine. A good approach is to go into the crush season with a well-thought out plan, but always have a back up plan.

Summary

Hasty decisions made during the hectic crush session can adversely influence wine quality. So, both professional and home winemakers develop a "crush plan" each session to try and minimize the number of quick decisions. Even so, lots of things can and will go wrong during crush each year. The best approach is to make a plan, but be prepared to reevaluate the plan and make changes as needed.