

PROCESSING WHITE WINE

The purpose of this particular presentation is to establish an outline or sequence of events that might unfold in the development of white wine production.

When the grapes are crushed or being crushed it is appropriate to add SO₂ to 25 - 50 ppm to protect the grapes from oxidation.

Pectic Enzyme is added to the fruit either after it has been crushed or at the very beginning of fermentation. It helps the juice to release from the pulp during pressing or during fermentation when fermenting on the skins. It is also effective in helping to eliminate hazes caused by fruit pectin cells. Pectin is a natural jell that holds the fruit fiber together. Once it has been broken down and liquefied, not only is more juice made available, but more of the fruits flavour and character is extracted from the pulp into the juice as well.

Some winemakers leave the juice on the skins for a period of time before adding the yeast, protected by the SO₂, to stimulate increased flavour and aroma, while others do not believe that it is a good practice. In any event, such exposure should be limited to a period of only 12 to 18 or 24 hours. This is often referred to as *Cold Soaking*.

It is best to test the must or juice early for the brix (or sugar content), as well as the acid levels, so that any modifications can be carried out early in the process. Sugars can be brought up to desired alcohol levels although, if large additions are required, it is sometimes better to add a bit at a time so as not to shock the yeast action. Acid can be added or reduced as well. Normally, our acid levels are high so some form of acid reduction is more probable. Calcium Carbonate can be added even before fermentation has begun but, if Acidex is to be used, this process should be commenced after fermentation has generated a CO₂ covering over the exposed juice.

When the juice is pressed off the skins, which are set aside for a Second Run or House wine – (see article on the A V V website), and the juice is permitted to settle for some time, perhaps a day or so, before it is racked off the sediment (which is then added to the second run). The juice may be fined using Bentonite to further clear up the juice. There has also been a

suggestion to use Gelatin as an added fining agent although it is not my practice.

The winemaker must first determine the type of wine wanted: Will it be finished as dry wine or, if a Geisenheim or Reisling, will it be a little sweeter in a Mosel style? If dry, do you want to emulate a Chardonnay by barrel fermenting with possibly malolactic fermentation or to maximize the fruity bouquet by keeping it free of malo and away from oak. If the latter, one might want to rehydrate a EC 1118 yeast, for example, which can handle higher than usual alcohol fermentations. Other options could be K1-V1116 which tends to express freshness to the white wine. For barrel fermentation or aged on the Lees, CY3079 is considered to be ideal.

The yeast selected should be rehydrated by placing the contents of the sachet into about 30ml of luke warm or tepid water for 15 minutes, after which it can be stirred before insertion in the juice. Many winemakers do not stir the yeast into the juice so that the colony will be able to multiply more readily. Consequently, it is a good idea to stir in the Go Ferm (or similar yeast nutrient) to add some nitrogen, before the yeast is added.

Fermaid K is added at 1/3 completion of fermentation to reboost the nitrogen content to assure a complete fermentation.

If one wants to do a barrel fermentation it may be entered in the barrel when fermentation commences or otherwise it continues in the carboy to completion. When complete the wine is racked off the sediment and lees with a small addition of SO₂. As soon as possible, the wine should be cold stabilized.

After cold stabilization, the wine should be refined with some fining of choice such as Super-Kleer K.C. which is a two part fining process using Kieselsol first, followed by Chitosan an hour later.

After a week or so the wine is again racked off the finings and may be ready for bottling or filtering, which ever is preferred by the winemaker. In either case, SO₂ is required to protect the wine from oxidizing.

With white wine it is considered best to process it to bottling as soon as possible in order to retain maximum fruity flavour, bouquet and aroma.