How to Reduce Oxidase in an Oxidized Wine

by Roy Ellis (Source: AWOnews, November 1997, Newsletter No. 7)

In the event that you have an oxidized wine, the fault may lie in one of two places:

a) carelessness on your part when you left it open to the air by either a loose, or dry, airlock and not keeping the SO2 content in the wine up to the required level with respect to the pH of the wine; or

b) the juice was oxidized to start with and went undetected.

In either cases the oxidase can be reduced, or eliminated, by the use of powdered skim milk. The procedure is as follows:

1. Calculate the amount of wine to be treated, in litres, and for each litre of wine measure out 0.5 gm of powdered skim milk into five (5) mL of cold water. Stir into a solution making sure all the skim milk is dissolved. NOTE: It is important that you use POWDERED skim milk, not de-creamed whole milk.

2. Now bring the SO2 level of the wine up to the required amount with respect to the pH of the wine.

3. Stir the wine vigorously and while it is swirling, add the skim milk solution by making sure that it enters well below the surface of the wine. There may be a bit of foaming, but it will dissipate. Continue to stir the wine to ensure all the skim milk is well distributed. It is important that the skim milk solution enters well below the surface. If you pour it on the surface, little, or nothing, will happen. OBSERVATION: Once the skim milk is fully distributed, brown curds will develop in the wine and will ultimately settle out.

4. Replace the airlock and allow the wine to settle for two to three days. Meanwhile, prepare a fining agent for fining the wine. I use Bentonite, but you may prefer some other agent.

5. After two to three days, rack the wine off the oxidase curds into a clean carboy and stir in the fining agent. Allow this to settle for about ten days, then rack the wine off the lees. Add an airlock. The wine should now be quite potable. Filter and bottle.

NOTE: the above was based on actual experience when I started with an oxidized juice (Chardonnay), which I purchased from a winery. The end product was quite acceptable, although it would not have won any prizes in an AWO competition.