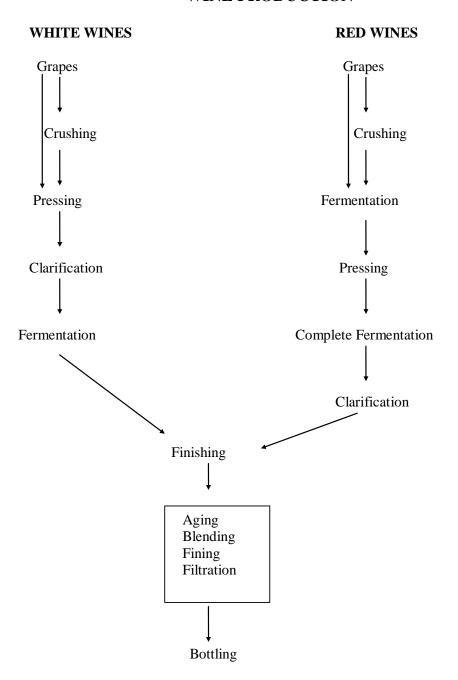
Winery in Armenia- 6,000 years ago



WINE PRODUCTION



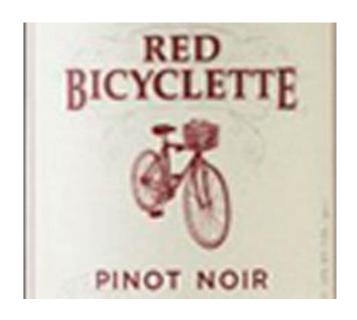
Three categories of winemaking risk

Risk of misleading or deceiving consumers

Risk of harming consumers

• Risk to wine "quality"

Risk of consumer deception





French wine growers sell fake Pinot Noir to E & J Gallo

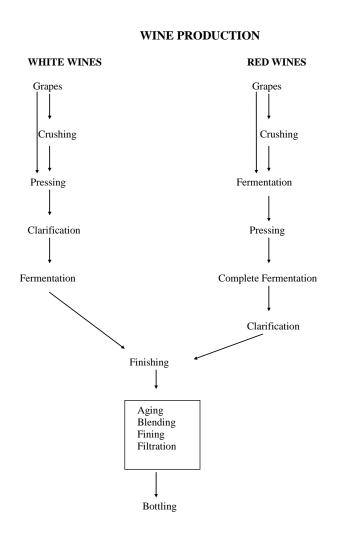
Feb 23rd, 2010 | By Jozef Schildermans | Category: Lead Story



A court in the southern French city of Carcassonne sentenced twelve wine growers from the Languedoc to suspended prison terms and effective fines. They sold 18 million bottles of fake Pinot Noir to U.S. wine giant Ernest and Julio Gallo. The unsuspecting company sold the adulterated wine in the U.S. market under the brand name Red Bicyclette. The twelve convicts sold to Gallo between 2006 and 2008 130,000 hectoliters inferior Vin de Pays d'Oc as Pinot Noir to negotiate a higher price. That way they could double their sales to four million euro. The amount of Pinot Noir that they sold to Gallo, however, was higher than the entire Pinot Noir production of the Languedoc. This led French Customs to discover the fraud. Some of the growers even cultivated no Pinot Noir. The cooperative Sieur d'Arques in Limoux was fined the highest penalty, 180,000 euro. The U.S. wine magazine Wine Spectator awarded the Red Bicyclette Pinot Noir 2006 83 points. The taster of service did not notice that his bottle contained no Pinot Noir. The wine is sold in the U.S. for about \$ 11. Bottles of adulterated Red Bicyclette Pinot Noir are still scattered throughout the U.S. market.

Tags: Fraude

Risk Management



- Traceability
- Records throughout winemaking process
- Australia conducts 300 annual audits of these records
- In 2010 one Australian company fined nearly \$500,000
- Role for import inspection systems?

Risk of harming consumers

Microbiological

 no human pathogens can flourish in wine environment Sugita-Konishi et al, Japanese Society for Bioscience, Biotechnology and Biochemistry, 65(4) 954-957 2001



Chemical



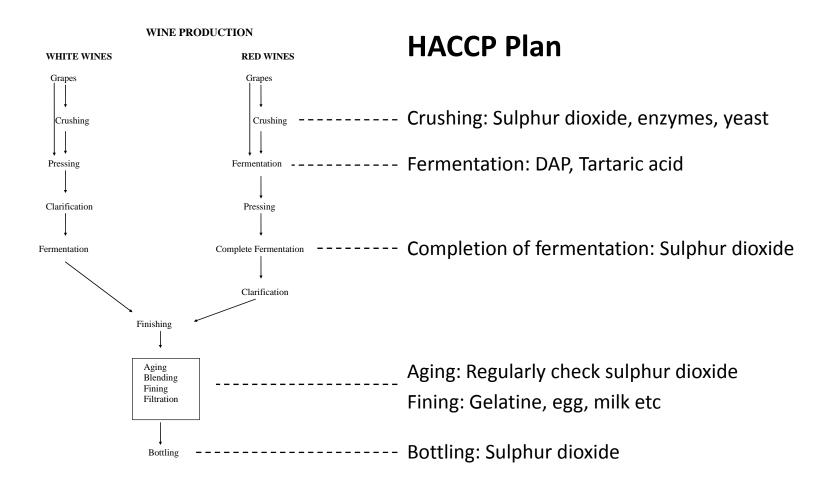


Risk of harming consumers-case study

- Product recall-Lidl supermarkets, Europe 2002
- Extremely high level of sulphur dioxide in small proportion of the batch
- Australian wine, bottled in Germany, poor quality control procedures



Risk Management



Risk Management

- Establish limits
 - Max and min specification
 - Desired accuracy of analysis
- Monitor control
 - Where in the process and by whom?
 - How often?
- Establish corrective action procedures
- Verify effectiveness

Where to from here?

- Are there any parameters that need to be routinely tested and certified?
 - Sulphur dioxide, Methanol, Heavy metals?
- If so, Why? Is there evidence that wine poses a threat?
- For each identified parameter, determine a commonly accepted test methodology and competent laboratories.