

WINEMAKING WITH SUNBURNED GRAPES

Possible problems associated with sunburned grapes:

- Uneven ripening – possibly smaller berries
- More susceptible to rot
- Higher risk of browning and bitter characters as well as herbaceousness in both reds and whites
- Red grapes can have decreased anthocyanin content which can result in reduced berry color and flavor
- pH and acid imbalances

General Recommendations:

- Sort the berries as thoroughly as possible. Removing as much of the damaged and unripe fruit as you can.
- Assess the fruit quality. If there is any rot present please be sure to follow the rot protocols on our website (www.scottlab.com). Note if you have underripe fruit along with rot, select a yeast strain that has a low to moderate nutrient demand and that can help reduce vegetal characters (Rhône 4600, Cross Evolution, ICV GRE, or BDX).
- A well-managed nutrient strategy is essential.
- If doing a malolactic fermentation, choose strains noted for mouthfeel enhancement such as MBR VP41 or Alpha. Rehydrate with Acti-ML or use in conjunction with Opti'Malo Plus nutrient. 1-Step strains like 1-Step VP41 or 1-Step Alpha work very well and may improve success.

Recommendations for Sunburned White Grapes

- Additions of gallic tannins to the fruit can help protect against further oxidation. Small additions of FT Blanc or FT Blanc Soft of 5-15 g/hL are recommended at grape reception.
- Destem and crush the grapes. Use a skin macerating enzyme such as Cinn-Free or Cuvée Blanc to increase press yields without having to use higher pressures.
- Pressing at too high a pressure is a contributing factor to harsh extraction from burned grapes. The burned portion of the grape is brown and already rich in oxidized compounds. Press at the lowest possible pressure (no more than 1 bar).
- Use a settling aid that can remove bitter components (Polycel, Bentolact S, Viniprotect, etc.).
- Yeast derivative products such as OPTI-White, Booster Blanc and Noblesse can be used to build the colloidal matrix which can be deficient due to oxidation and uneven ripeness.
- Cooler fermentation temperatures promote fruit driven aromas; keep juice 61-64°F.
- If bitter and/or oxidized characters persist after fermentation, run bench trials with Caseine Soluble, Polycacel, Polycel, Viniprotect and Colle Perle.
- Treatments with tannins such as FT Blanc Soft, Tannin Riche and Tannin Riche Extra can minimize bitter characters and help balance mouthfeel.
- Yeast derivatives or gum arabic products can also contribute to mouthfeel so if all else fails try Noblesse or Flashgum R Liquide.

Recommendations for Sunburned Red Grapes

- If the fruit contains rot a small addition of gallic tannins at grape reception can protect against further oxidation (FT Blanc at 50 g/ton).
- Use enzymes such as Color Pro or Lallzyme EX to promote gentle pigment extraction.

- Fermentation tannins such as FT Rouge or FT Rouge Soft help inhibit laccase, reduce vegetal characters and build the tannin matrix. Use Uva'Tan or Uva'Tan Soft to compensate for grape tannin deficiencies.
- Yeast derivative products such as OPTI-Red, Booster Rouge and Noblesse can be used to build the colloidal matrix which can be deficient due to oxidation as well as uneven ripeness. They can also help stabilize color when added early on in the fermentation.
- Warmer fermentation temperatures increase harsh extraction. Keep the must at 75°F maximum to promote fruit driven aromas, avoid harsh extraction and maintain healthy yeast.
- Shorten skin/seed contact during fermentation to 4 days instead of 6-8 days.
- Rack and return with seed removal as soon as possible. Alcohol is a solvent that extracts the seed tannins. Over extraction will lead to increased bitterness.
- If bitter and/or oxidized characters persist after fermentation run bench trials with Caseine Soluble and Colle Perle.
- Treatments with tannins such as Tannin Estate, Tannin Complex, Tannin Riche or Tannin Riche Extra can minimize bitter characters and help balance tannins and mouthfeel.
- Yeast derivatives or gum arabic products can also contribute to mouthfeel so if all else fails try Noblesse or Flashgum R Liquide.

For more information on winemaking with grapes with rot or underripe fruit please visit our website at www.scottlab.com

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