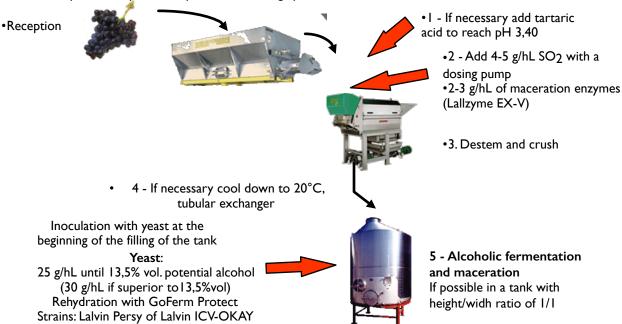
# Winemaking protocol for grapes altered by Botrytis cinerea (I)

Example of a Cabernet Sauvignon in the Popular Premium range (2,5-4€/bottle)

Jonathan DELTEIL, DIWC Consultant

This protocol is a recommendation for one of our consulting client. Thy have applied this protocol for many years obtaining conforming results on their markets. Our good practices are based on experimentation experiences and consulting experiences in many different winemaking and vineyard-management contexts i many different countries.

For this protocol to yield the expected results, the grapes should contain no more than 10-15% altered berries.



# Working instructions on the alcoholic and malolactic fermentations and the maceration

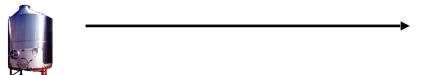
- At the start of the filling of the maceration tank
- Add 200 g/hL of chips of French oak with toasting medium Plus. The oak with this level of toasting helps stabilise the color and limit earthy, herbaceous and fungus-like aromas. Non-toasted oak goes against these working objectives: it amplifies those negatives aromas while adding very dying tannins.
- Fill the tank with grapes at a temperature close to 20°C, simultaneously add the well-rehydrated yeast (25 g/hL) with GoFerm Protect (30 g/hL), 30 g/hL Booster Rouge (or Optired) and 30 g/hL of nutrient Stimula Sauvignon.
- When the tank is full make a remontage to homogenise.
- When the cap is starting to form inoculate with ML Prime (co-inoculation) directly after its rehydration.
- Once the cap is formed maintain temperature at 20°C for 2 days. Do a delestage a day, removing the heavy lees when racking from the buffer tank. Add 3-4 mg/L of oxygen in the must while in the buffer tank. It is fundamental to remove all of the heavy lees and more particularly the sticky agglomerates ('jellyfishes').
- After 2 days at 20°C and 2 delestages, raise it to 22-24°C (temperature measured 50 cm under the cap) and keep on with a rhythm of a delestage a day. Keep fermenting and macerating for another 2-3 days maximum.
- When around density 1060 add 20 g/hL of Fermaid O.
- Maintain the pH at 3,50 maximum
- Empty and press after 4 to 6 days of maceration with fermentation adding 2g/hL of Reduless. You might want to drain earlier according to you smelling earthy of fungus aromas and/or tasting burning and harsh tannins. The best scenario is reaching the maximum of easily-extractable colour with no appearance of those negative aromas. Before draining make an oxidasic breakdown test
- Each time you smell sulphur off-aromas or pharmaceutical aromas during maceration, add I g/hL Reduces during a delestage.



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## 6 - Maceration tank. Draining





7. Press

Do NOT blend the pressings with the wine planned for the Popular Premium segment  $(2,5 - 4 \in /bottle)$ 

#### 12-24 hours in this tank

8 - Racking 12-24 hours after the draining. [Racking #1]

This racking takes place even if the fermenting must still contains sugars. With the right addition of enzymes at the beginning, the heavy lees separates very well. Before racking make a oxidasic breakdown test.

9 - End of alcoholic fermentation at 20°C with a movement of agitation each day. Analyse the malic acid to check that ML Prime has finished its action.

Add 200 g/hL of staves of French oak with toasting medium Plus. If there are sulphur-like or pharmaceutical aromas, add Ig/hL reduless. Do not use macro or micro oxygenation of this type of grapes.

When the sugars are consumed, check that ML Prime has consumed all the malic acid, add I g/hL Reduless, adjust the pH to 3,50 if necessary, add 4 g/hL SO2.

The next day rack the wine with protection from the oxygen [Racking #2]

Before racking, make an oxidasic breakdown test. Wash the staves they follow the wine.

### 10-15 days in this tank

•10 - Cool down the wine to 10-12°C. Add 10 g/hL Noblesse and 1 g/hL Reduless. Maintain the temperature at 10-12°C, the Molecular SO2 at 0,7 mg/L for 10-15 days, without oxygen. Make a oxidasic breakdown test and rack again [Racking #3. Wash the staves they follow the wine.



•10bis - Centrifugate the wine.

#### 15-20 days in this tank

•11 - Maintain the temperature at 10-12°C, the pH under 3,50, the Molecular SO2 at 0,7 mg/L. Add 10 g/hL Noblesse and 1 g/hL Reduless. Let the wine as is for 15-20 days. After that, make an oxidasic breakdown test and prepare a tangential filtration: normally at this point the laces is mostly deactivated and has done no discernible damage to the wine.



• 12 - Tangential filtration

Normally, using grapes that are conforming to the Popular Premium level, with this protocol, there shouldn't be major difficulties to filtrate. Should there be difficulties, treat the wine with an enzyme such as Lallzyme Process Glucan.



•13 - After the filtration, add 20 g/hL Noblesse, I g/hL Reduless, I00 g/hL of new staves (French oak, toasting medium +), maintain the temperature at I0-I2°C and the Molecular SO2 at 0,7 mg/L, one agitation a month. Check with an oxidasic breakdown test that the laces is completely deactivated.

•From this point on the wine can be blended with wines made from sane grapes.



