Dominique Delteil Consultant

Syrah Reserve USA Supermarket

$4-5 / bottle F.O.B.
Challenger of Australian Shiraz
48 month longevity

Note: this example is not the procedure used by Jacob's Creek. It is a procedure to reach the target style with conforming grapes from warm Okanagan area

= The action participates positively to the wine longevity

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General procedure

1. Harvest

2. Reception and pH adjustment

3. Crusher Destemmer Temperature adjustment

4. Maceration / Alcoholic fermentation

5. Pressing

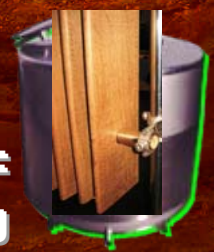
6. Static clarification during 12 hours

7. End of alcoholic fermentation

8. Post AF racking

9. MLF

10. Post MLF racking



11. Post MLF aging

4bis. Delestage

pH goal in bottle:
Syrah: 3.45-3.50

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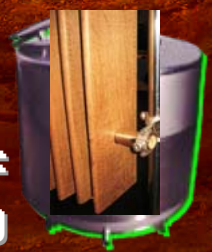

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Grape

The goal:
Get a sufficient potential in the material we are going to process

- Sound
- Enough sugar ripening: comes always before phenolic-aromatic-cellular-colloidal ripening
- Pulp: No herbaceous aromas. Ripe fruit aromas. Low acidity (relatively independent from pH). Pulp: easy to separate from skin
- Skin: easy to chew. No herbaceous aromas and ow acidity during the first 5-7 chewing. Fruity aromas
- Seeds: not really important if the rest in conforming: remember we are on the $4-5 FOB market!

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Reception

The goal:
Start to diffuse interesting compounds

- pH adjusted to 3.40
- SO2: 30 ppm
- Temperature: 20°C (65°F) ASAP (example: harvest at night)
- Maceration enzymes (example 2-3 g/hl Lallzyme EXV)

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Destemmer - Crusher

The goal:
Start to diffuse interesting compounds

- Destem
- Crush

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Maceration and fermentation (1)

The goal:
To diffuse interesting elements
Avoid the extraction of aggressive and green elements
Regular and continuous fermentation with a strain with adapted potential
Build the colloidal structure, express varietal potential

- **Temperature: 18°C**
- **Add chips (free in the grapes): 5 g/kg (French, toasted medium+)**
- **Choose the right strains (e.g.: 30% with D80, 30% with BM4x4, 40% with D21). Fermentations with pure strains; wines blended after MLF**
- **The right ADY dose: 25 g/hl if <23 Brix; 35 g/hl if >23 Brix**

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Maceration and fermentation (2)

- Right yeast protection during rehydration (e.g.: FortiFerm)
- Direct inoculation after temperature acclimation (10°C during 15 minute steps)
- Add 30 g/hl de OptiRed or BoosterRouge
- As soon as the cap is formed:
  - 2 delestages per day, eliminating the seeds that come out
  - Add 10 mg/L oxygen (macro-oxygenation) during each delestage
- After 2 days: go to 22-23°C (below the cap)

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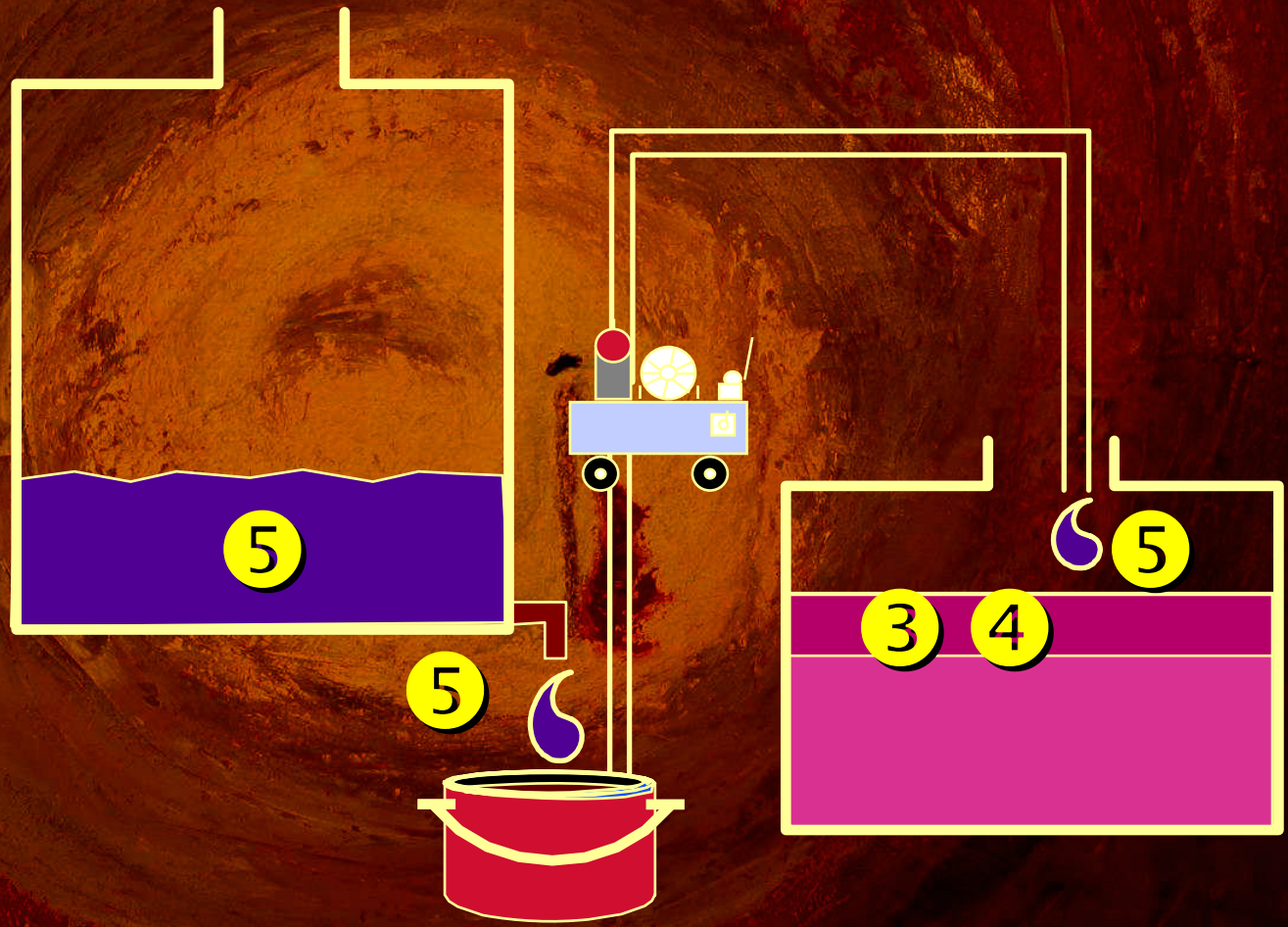
Délestage. Step #2

Complete draining of the cap achieves the diffusion goals : extracts the most interesting grape macromolecules. Complete aeration brings stabilisation, tannin « coating / enrobage » and sulphur off-flavour management



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Note

- In this example, the yeast protection and nutrition strategy is for a 14-14.5%vol potential.
- If the juice has a 15.0-15.5%vol potential, add 20 g/hl de Fermaid K in the fresh grapes immediately after the inoculation with yeast rehydrated with GoFerm Protect

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Maceration and fermentation (3)

- At one third of sugar depletion: add 30 g/hl Fermaid K
- Make regular juice agitation all through fermentation
- Avoid pure DAP addition and automatic copper fining if there are sulphur odours
- Drain after 5-8 days:
  - According to the colour and polyphenols diffusion rhythm
  - Before getting aggressive and dry taste: the goal is to get a fruity intense red with a good longevity. Not a “small great wine”

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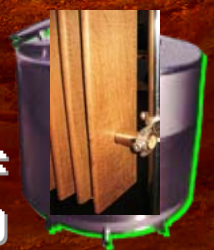

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Drain and press

The goal:
Go on building the colloidal matrix (pressings)
Avoid the development of sulphur odours (racking)

- **Press, until a 0,5-0,6 bar pressure**
- **Blend free run and press, if press juice conform**
- **Adjust pH at 3.40 and temperature at 18°C**
- **Add 1 g/L chips (French toasted medium +) in bags to keep sweet smoky aromas (Jacob's Creek style)**
- **Add 5 mg/L oxygen (macro-oxygenation) or start a continuous micro-oxygenation at 60 mg/L/month**
- **The day after: rack**

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End of alcoholic fermentation

The goal:
Go on building the colloidal matrix
Avoid the development of sulphur odours
Stabilize the polyphenolic / colloidal system

- **Chips follow the wine after the racking**
- **Keep temperature at 18°C**
- **Add 5 mg/L oxygen (macro-oxygenation) once a day or go on with a continuous micro-oxygenation at 60 mg/L/month**
- **One stirring per day**
- **If the fore-mouth volume is not sufficient, add 30 g/hl OptiRed**

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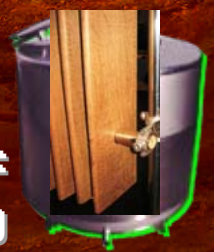

11. Post MLF aging

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End of alcoholic fermentation

The goal:
Go on building the colloidal matrix
Avoid the development of sulphur odours
Stabilize the polyphenolic / colloidal system

- **Right at sugar depletion, rack**
- **Keep temperature at 18°C**
- **Add 2 mg/L oxygen (macro-oxygenation) once a day or go on with a continuous micro-oxygenation at 30 mg/L/month**

- **24 hours later, rack into a tank with new staves ("50% surface" = 0,5 m^2/hl)**

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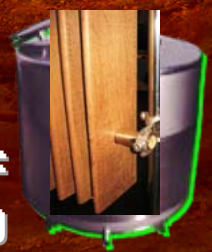

11. Post MLF aging

4bis. Delestage

pH goal in bottle:
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Malolactic Fermentation

The goal:
Go on building the colloidal matrix
Avoid the development of sulphur odours
Stabilize the polyphenolic / colloidal system

- **Keep temperature at 18°C**
- **Make a microbiological analysis of living *Brettanomyces*, *Pediococcus*, *Lactobacillus* & *Oenococcus***
- **Inoculate immediately (e.g.: VP41)**
- **Micro-oxygenation at 15 mg/l/month until 50% of malic depletion**
- **One stirring a day (mixer)**
- **Frequent control of MLF**

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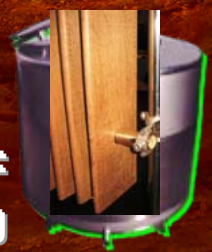

11. Post MLF aging

4bis. Delestage

pH goal in bottle:
Syrah: 3.45-3.50

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Aging: first steps

The goal:
Go on building the colloidal matrix
Avoid the development of sulphur odours
Stabilize the polyphenolic / colloidal system

- **First aging step starts in the MLF tank: immediately after the complete malic acid depletion.**
  - **Adjust pH to 3.40**
  - **Add 40 ppm SO2**
- **One stirring a day**
- **Micro-oxygenation at 2 mg/l/month**
- **After de 4-5 days: rack**

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Aging: first steps (2)

- Wash the staves with water
- Back in the tank with staves after 12-24 hours, if the microbiological control made 10 days ago is negative
- Adjust temperature to 14°C
- Micro-oxygenation at 2 mg/l/month
- Make a new microbiological analysis of living *Brettanomyces*, *Pediococcus*, *Lactobacillus* & *Oenococcus*
- Go on stirring (with mixer)

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Aging: next steps

- Keep pH conforming with the goal and 0.7-0.8 mg/L molecular SO2
- Stir regularly: start with 2 times a week and then slow sown the rhythm
- Micro-oxygenation at 1 mg/l/month
- Rack after 30-40 days. Always 24 after a stirring

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Aging. Last steps

- Get out of the tank with staves after 2-3 month
- Try OptiRed or BoosterRouge addition (30 g/hl) when fruit intensity goes down or if oak intensity is too high or if tannin sensation start to be too dry or if alcohol is too dominant
- Micro-oxygenation at 0.5-1 mg/l/month
- Keep temperature around 12-14°C until bottling

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