Good Practices for Rosé winemaking
Global market requirement

• Clean fruity aromas with balanced mouthfeel
• Maybe “minerality”, but not sulfur off-odors nor metallic after taste
• The right longevity and stability… sometimes for months in white glass on a neon illuminated shelf, 10000km from the cellar door
• To give the best value for the price (…keeping margin to keep on investing, so: good cost management)
• If not:
  – Niche market needing huge communication investment
  – Hundreds of competitors ready to take your shelf space with conforming wines
Special conditions in grape must. The yeast “vision” (I)

- Very high osmotic shock
- Very few nutrients, when needed: nitrogen, fatty acids, sterols
- Much sugar to be fermented: much work to do in extremely stressing conditions
- Much alcohol: the more the yeast works the more difficult the ecological conditions
- High pH: easy growing conditions for Lactic Acid Bacteria that compete for nutrients
- One can understand that yeast go on strike from time to time!
Special conditions in grape must. The yeast “vision” (II)

- These extreme internal juice conditions amplify the impact of other external factors:
  - Temperature
  - Insufficient oxygenations
  - Insufficient stirring of the fermenting juice
  - High and narrow tanks
  - SO₂
Alcoholic fermentation key points, in their order of importance

(Maximum temperature in the pomace cap)

1. Natural selected yeast and its adaptation to Mediterranean must
2. The health of the young yeast population (this will condition its health all through its life)
3. To keep favorable condition for the adult population
4. To keep favorable condition for the old yeast population
N°1. Natural selected yeast and its adaptation to Mediterranean must

- Resistance to the osmotic shock
- Resistance to indigenous microflora
- Low production of SO₂ and acetaldehyde
- Resistance to disturbance of nitrogen and sulfur metabolism
- Resistance to alcohol
- Adaptation to the stylistic and longevity goals: sensory integration of ethanol, added tartaric acid, oak, high tannin concentration (natural or added)
- (Positive interaction with natural selected Lactic Acid Bacteria)
Rosé General procedure

1. Hand picking
2. Reception
3. Destemming and crushing. Temperature adjustment
4. Pulp and skin maceration
5. Turbid juice reception and segmentation
6. Juice static clarification
7. Alcoholic fermentation
8. Aging 1
9. Aging 2

pH goal in the bottle: 3.25-3.30
Protect the grape color, aroma and mouthfeel potential

pH goal in the bottle: 3.25-3.30

Molecular SO₂ between 0.9 & 1.1 mg/L

30 ppm. Homogenous

50 ppm. Homogenous

10 ppm.
Manage risks and develop longevity

- Right protection
- Right yeast
- Right nutrition

Right enzymes

NTU: <100
Yeast nutrition strategy

- When oxygen & temperature GP are applied
- Determine the nutrition risk
- Varying answer according to the risk level
- Balance nutrition:
  - Not only nitrogen
  - Amino acid from Fermaid are 5-6 times more efficient than DAP as nitrogen
  - Classical “nitrogen needs” may be revisited when sterol/fatty acids/vitamin + oxygen + temperature management is applied
NNR with South of France grapes, with an adapted yeast strain. 337 grapes, 5 vintages (1999 to 2003)

Medium NNR: 19%
High NNR: 30%
Very High NNR: 51%

From: D. Delteil, RFOE, 2004
Fermentation strategy to manage Medium Nitrogen Nutritional Risks. Rosés

- Staves, 50 g/hl, French, Convection toasted, 210°
- OptimumWhite 20 g/hl
- Fermaid Blanc 20 g/hl
- Oxigen: 6 mg/L x 2 times
- Agitation
- PVPP? Bentonite
- No pure mineral nitrogen
- Tartaric SO2 Ascorbic
- Brix
- Rack with CO2 or N2
- ICV-GRE o QA23, o Cross Evolution, at 20 g/hl
- Inoculate immediately after juice clarification
- 1 semana
- Noblesse 10-20 g/hl?
Fermentation strategy to manage High Nitrogen Nutritional Risks. Rosés

Staves, 50 g/hl, French, Convection toasted, 210°

OptimumWhite 20 g/hl (BoosterBlanc with ICV-D21 o QA23)

Fermaid O 20 g/hl

Fermaid Blanc 20 g/hl

PVPP? Bentonite

Oxigen: 6 mg/L x 2 times

Agitation

Agitation

No pure mineral nitrogen

Tartaric SO2 Ascorbic

Rack with CO2 or N2

Brix

Fermaid O 20 g/hl

Noblesse 10-20 g/hl ?

GoFerm Protect 30 g/hl

ICV-GRE o Cross Evolution, o ICV-D21, o QA23 a 30 g/hl

Staves, 50 g/hl, French, Convection toasted, 210°
Fermentation strategy to manage Extreme Nitrogen Nutritional Risks. Rosés

- Staves, 50 g/hl, French, Convection toasted, 210°
- GoFerm Protect 35 g/hl
- Cross Evolution, o ICV-D21 a 35 g/hl
- OptimumWhite 30 g/hl (BoosterBlanc with ICV-D21)
- Fermaid O 20 g/hl
- Fermaid Blanc 20 g/hl
- Fermaid O 10 g/hl
- Noblesse 10-20 g/hl
- Oxigen: 6 mg/L x 2 times
- Agitation
- Agitation
- Agitation
- Tartaric SO2
- Ascorbic
- Brix
- Rack with CO2 or N2
- No pure mineral nitrogen
To protect the aromatic and mouthfeel potential, to build longevity

Turbidity: <150 NTU. If flotation: only bentonite, no gelatin or other fining agents. If vacuum filtration, add more OptiWhite at inoculation and add at least 20% of juice with sedimentation or flotation.
Summary of protection and nutrition and detoxification

Protection

Nutrition

Detoxification

Nutrition

Detoxification

Sterols synthesis

No pure mineral nitrogen

Densidad
Aging strategy (no malo)

30 g/hl Staves, French, CT, 210°

Temperature: below 12°C

Noblesse 10 g/hl

Agitations

1 week

Noblesse 10 g/hl

Second rackings

Racking again to a tank without staves

Note: with the Noblesse / agitation / ascorbic program, such oak action is to stabilize the fruity - mineral profile, not to add vanilla or classical oak impact.

Temperature: below 12°C

30 g/hl Staves, French, CT, 210°