



Seriously Rosé



**LAFFORT**

*l'œnologie par nature*

## How can you perform Stabulation

Christophe Rossi  
USA  
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# Rosé, what is it ?

- G. Masson's definition (director of the research and experimentation center of rosé wine):

« A wine which is produced through the fermentation of a must, obtained after **the well managed** prefermentative **pellicular maceration** of red grapes. »

- Managed all steps from the harvest until pressing

# Rosé what is it?

So, can we make rosé with every red grapes ?

- Cinsault, Zinfandel
- Grenache, Mourvèdre
- Carignan, Syrah, Malbec
- Cabernet franc, Merlot



And white grapes? Vermentino, Sauvignon,...

# Harvest

- Harvest machine or hand picked ?



Keywords:

The well managed maceration

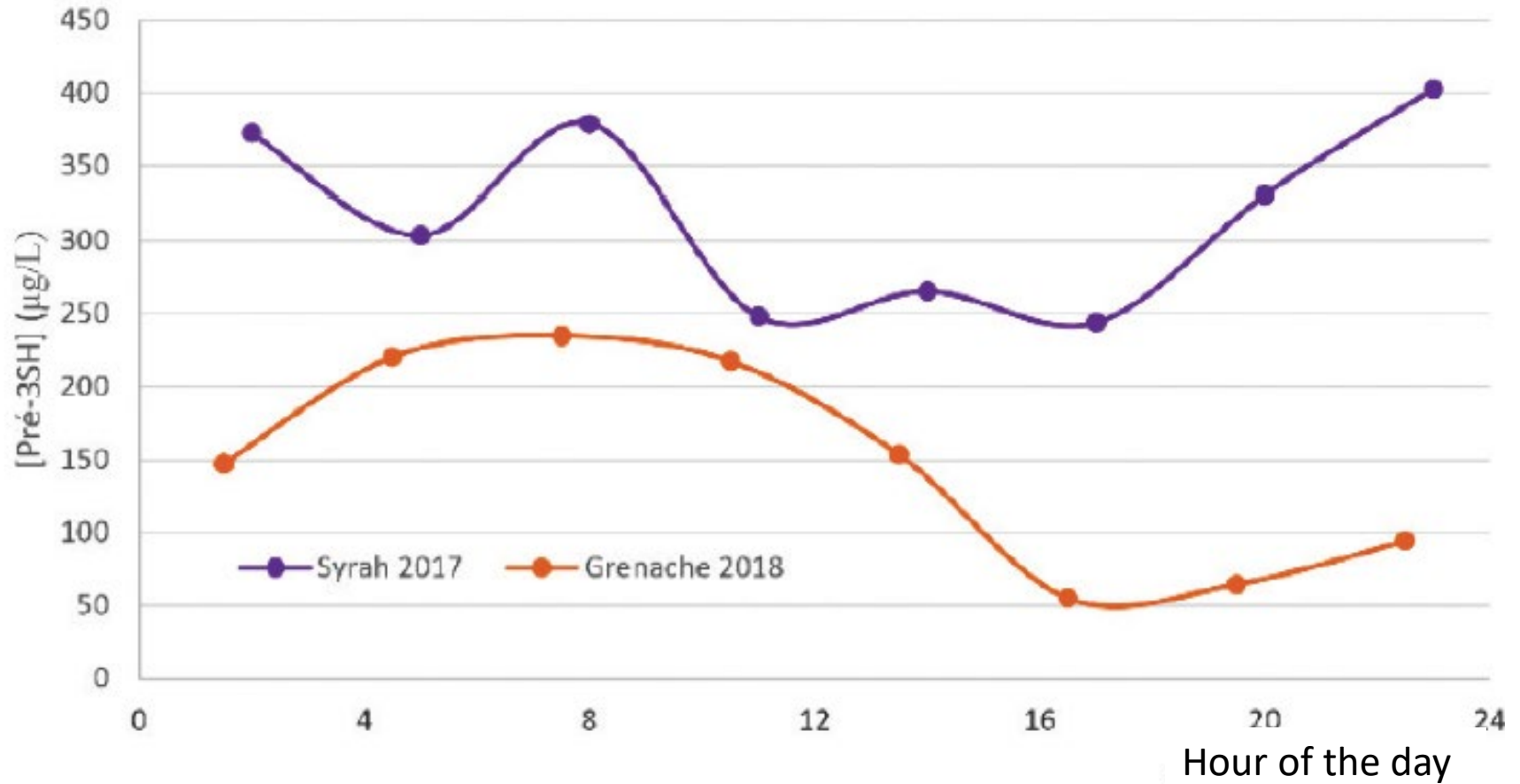
<b>Faster</b>	<b>Slower</b>
<b>W with cooler T°</b>	<b>Hot T°</b>
<b>More mashing</b>	<b>Whole cluster</b>
<b>More liquid phase</b>	<b>No liquid phase</b>
<b>Cheaper</b>	<b>Expensive</b>

Enzymatic reaction

Maceration

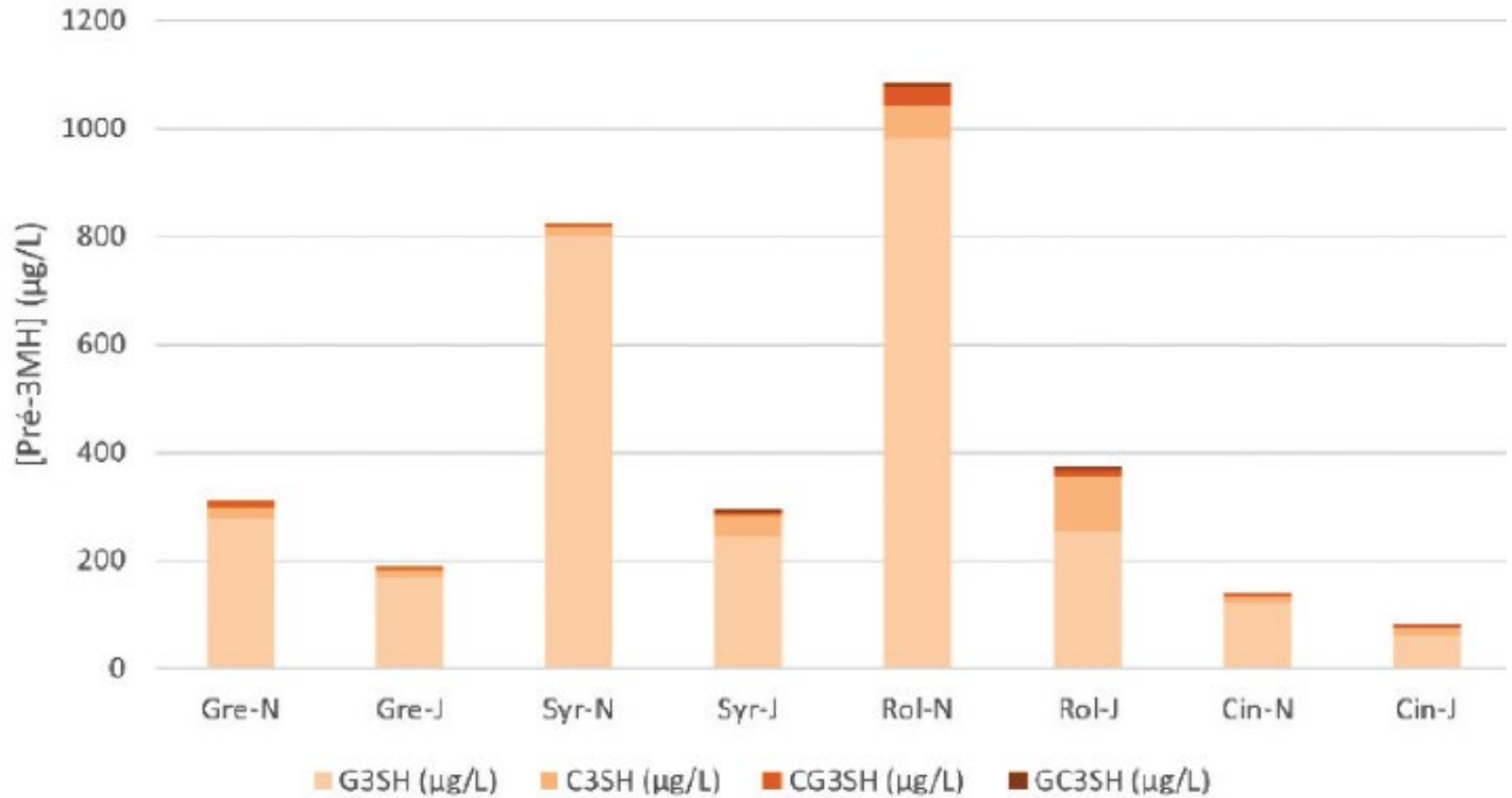
# Harvest

Evolution of total G3SH+C3SH on a day



# Harvest

Total thiols precursors on an Harvest Day / Night 2019



# Transport

- Transport of the harvest by machine
  - Juice + grapes = maceration
    - Draining trailer
  - Protection against oxidation
    - CO2 / Bioprotection
  - Avoid sulfitic maceration





Simonneau







Sthik, Amos,...



Double-Fonds - "Egouttage-Stockage"

*Evite l'oxydation & la macération des jus pendant le transport  
La vendange mécanique est stabilisée dans la caisse*



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# Transport

- Transport of the hand picked harvest
  - Draining bins
  - Decrease enzymatic reaction (cooler storage or harvest by night)



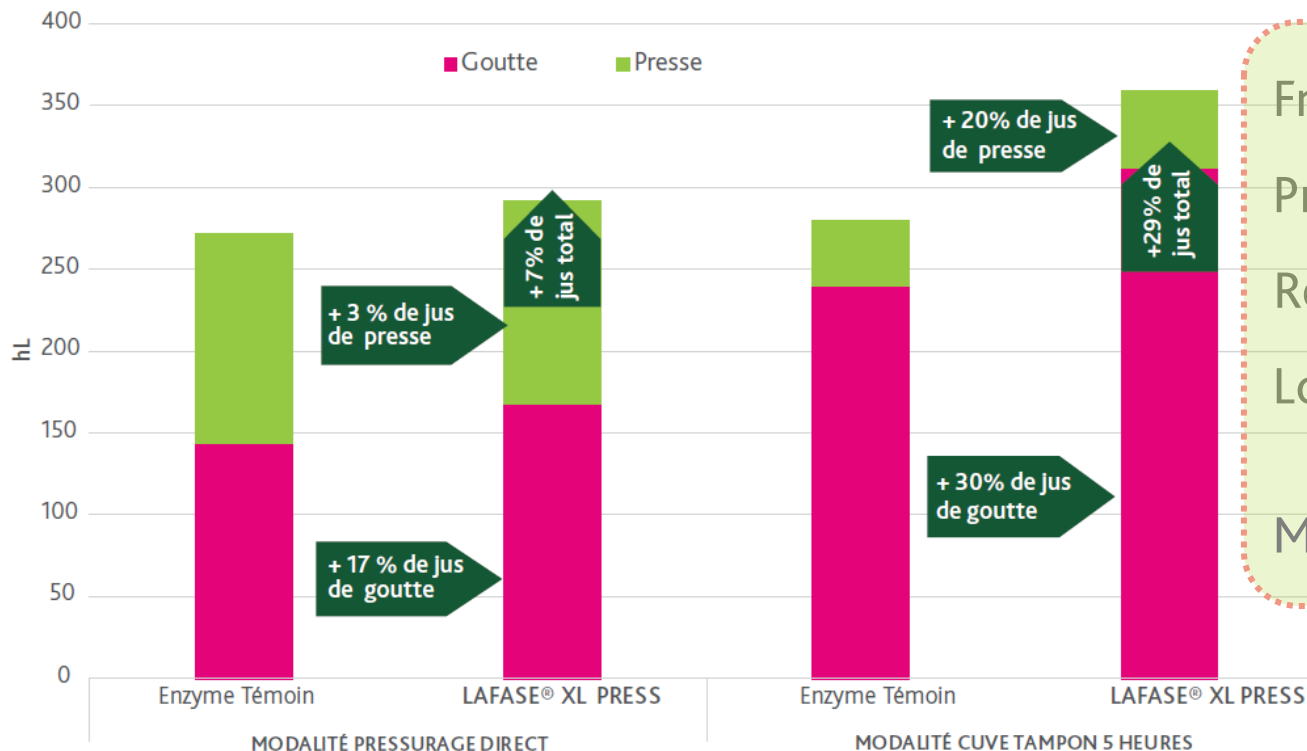
# From the trailer to the pump

- Separate juice transportation
  - Enzymes and micro-organisms
  - Low color but very instable
- Destemmer or whole cluster?
  - Oxidation
  - Volume
- Crusher or no crusher?
  - SO<sub>2</sub>
  - Pressing enzyme: Lafazym XL Press

# Fill up the press tank

- Pressing enzyme

Rendements d'extraction de jus de Muscat avec différentes enzymes  
(4 mL/hL) et temps de contact - pressoir pneumatique.



Free run juice enhancement  
Pressing optimization  
Reduces fruit mashing  
Lowers turbidity  
More thiols aromas

# Fill up the press tank

- Maceration tank and/or press
- Inert during filling of the press : Dry ice
  - Directly in the trailer
  - During grape pumping
  - By the top of the press
    - Rosé wine volume (hl) x 2 x 0,06 = dry ice (kg)

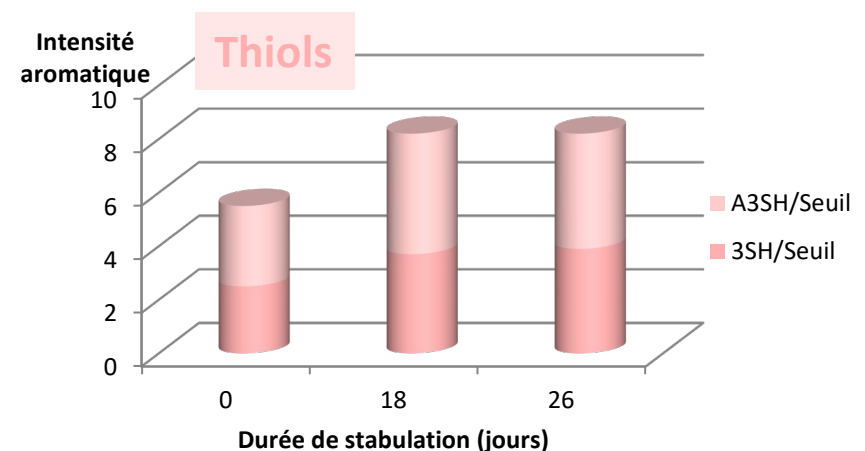
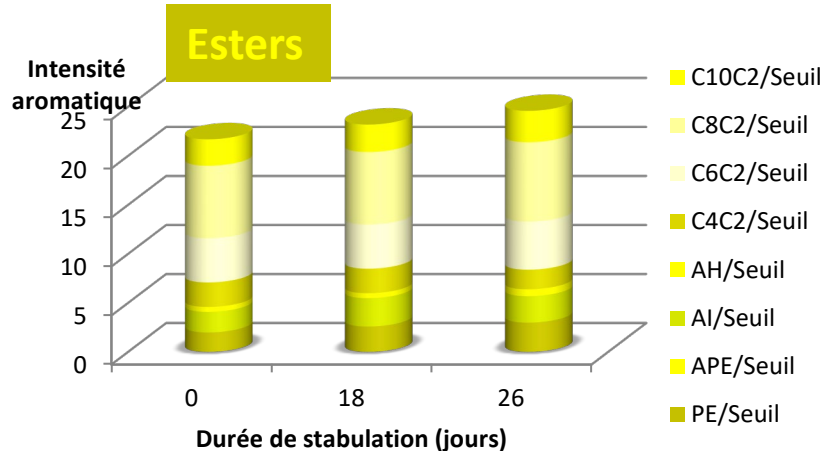
# Stabulation, Why ?

- Settling lees Stabulation

Keep the whole juice  
Enhance the contact with  
gross lees



Increase aroma  
compounds  
Raise mouthfill  
Augment sweet sensation



# Stabulation, what you need for?

- Steer clear of oxygen
  - ✓ dryice/CO2 from the beginning of filling
  - ✓ Adjust SO2 (presses)
  - ✓ Acidity management
  - ✓ Slow pumping, no gravity transfert
  - ✓ Bioprotection Zymaflore Khio
- Avoid indigenous fermentation
  - ✓ Cool down temperature
  - ✓ Bioprotection Zymaflore Khio
- Prepare the settling by adding Lafazym 600XL Ice



# Stabulation, How to?

Stabulation time	Product	Temp
1 to 3 weeks	2,5 g/hL ZYMAFLORE® KHIO	0 to 2°C (32°F)



- Agitation of gross lees every 4 hours
  - ✓ Dry ice
  - ✓ CO<sub>2</sub> sparge
  - ✓ in-mount tank mixer
- Prepare settling
  - ✓ Let increase temperature



# Settling

- If it's impossible to go lower than 32°F

## – Passive settling lees

Settling time	Product	Temp
48 h to 5 days	5g/hl ZYMAFLORE® EGIDE/KHIO	6 - 8 °C (45°F)
24 to 48 Hours	5ml/hl LAFAZYM® THIOLS <sup>+</sup> +ZYMAFLORE® EGIDE	10 - 12 °C (50°F)

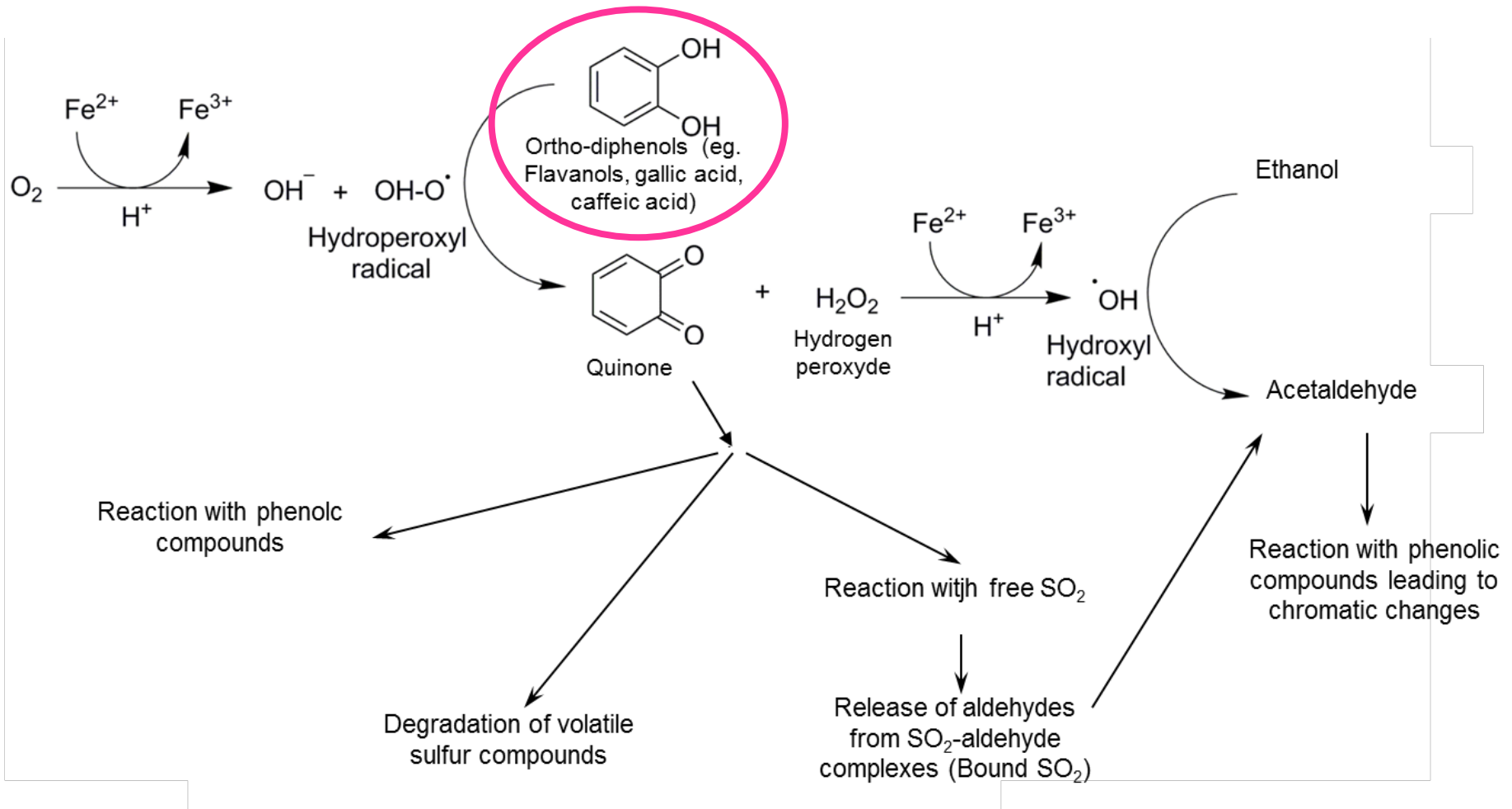
- Agitation: Dry Ice, CO<sub>2</sub>
- Raise temperature, Enzyme addition



## – Flottation

# The purpose of fining

## Oxidative Pathways in Juice/Wine



# Moment of fining

- Fining on must ?

## Highs

Early efficiency on phenolics content

Better sedimentation

Residual fining agent can act during fermentation

## Lows

Difficulty to mix up / Risk of oxidation

Un-used product

Filtered juice lees is less interesting

Do a stabilization

## ⇒ Which juice

### Fining on must

Oxydative juices (trailer, drained juice,...)

Juices with huge amount of phenolics (needs carbon)

### Fining during fermentation

All well protected and qualitative juices

# Racking



- Racking at 100 - 200 NTU
  - By adding fine lees from the top
- Settling lees filtration then re-integration
  - Rotative vacuum filter (less qualitative)
  - Impermeable filter press
  - Lees cross-flow filter
- Inert gas for tank and transfer lines.

# Different ways to manage freshness

- Acidification

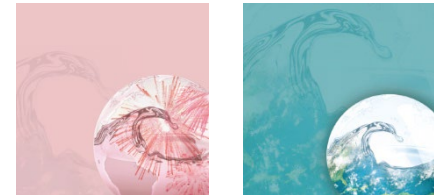
- Tartaric Acid: majority acid in grapes
- Malic Acid: secondary acid

Tips:

2/3 Tartaric

1/3 Malic

- Yeast preserving acidity, Xarom, Klima



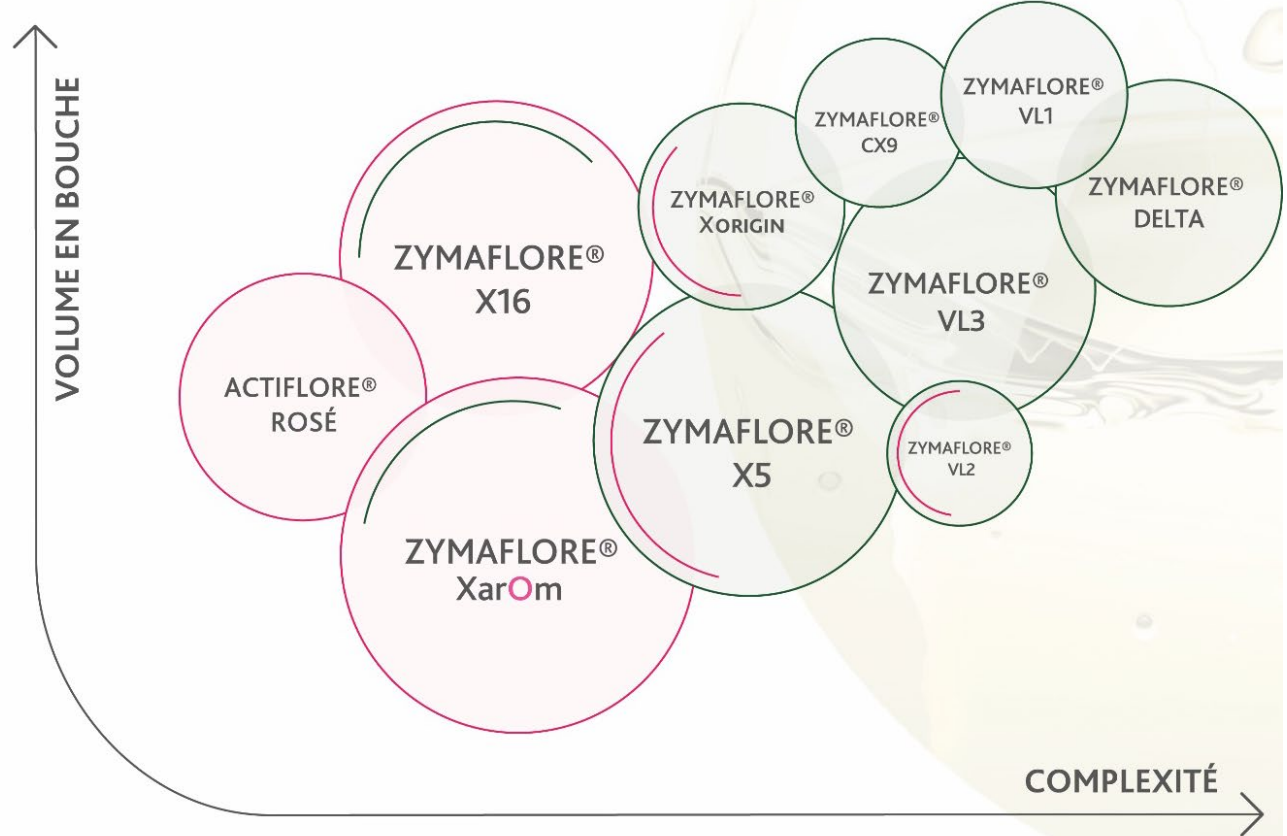
- Acidifying yeast, Zymaflore Omega



- Fumaric Acid: after AF, avoid MLF

To start the fermentation

# The yeast



INTENSITÉ AROMATIQUE + ○ ○ ○ +++

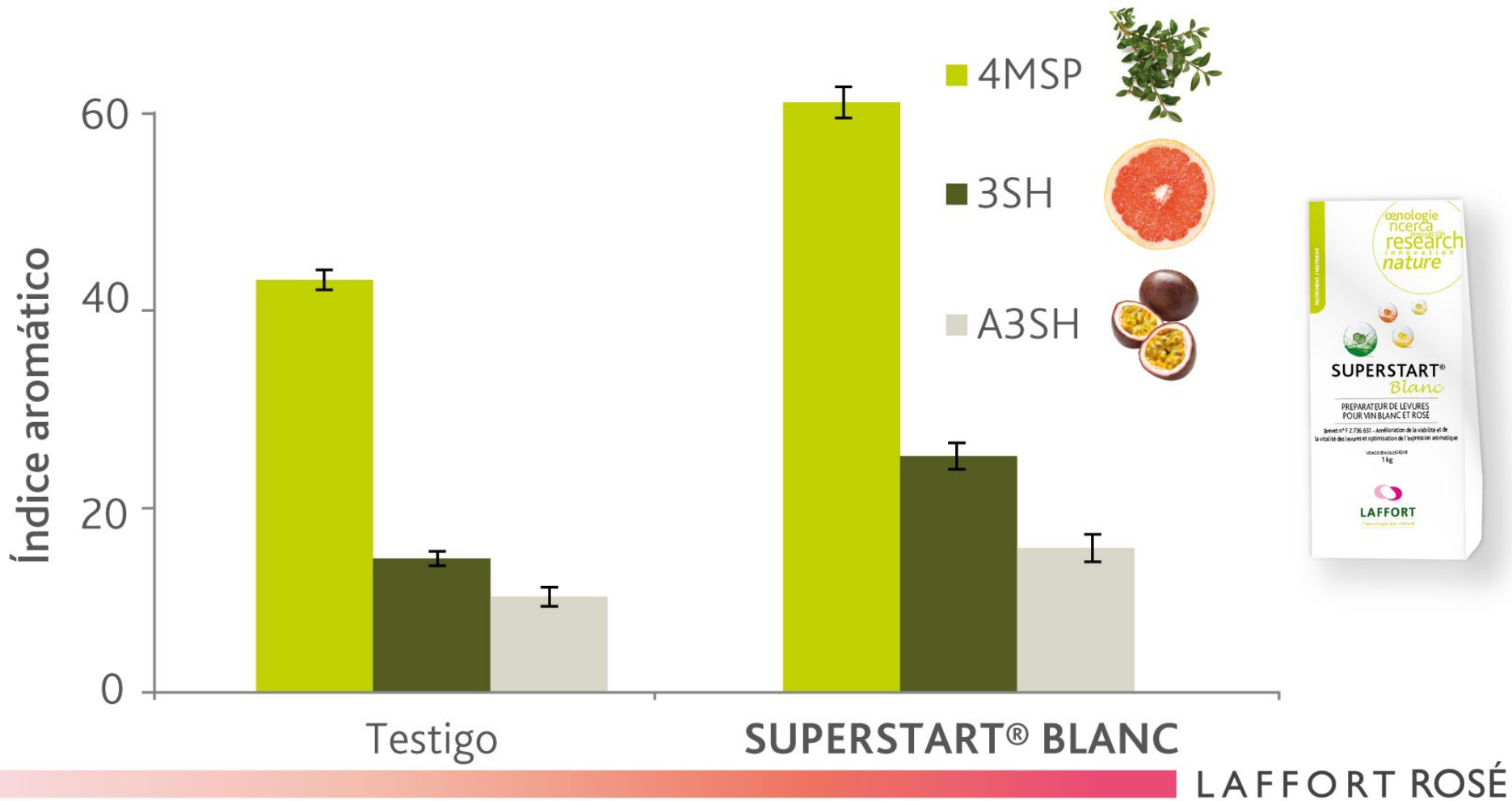
EXPRESSION FERMENTAIRE

EXPRESSION VARIÉTALE

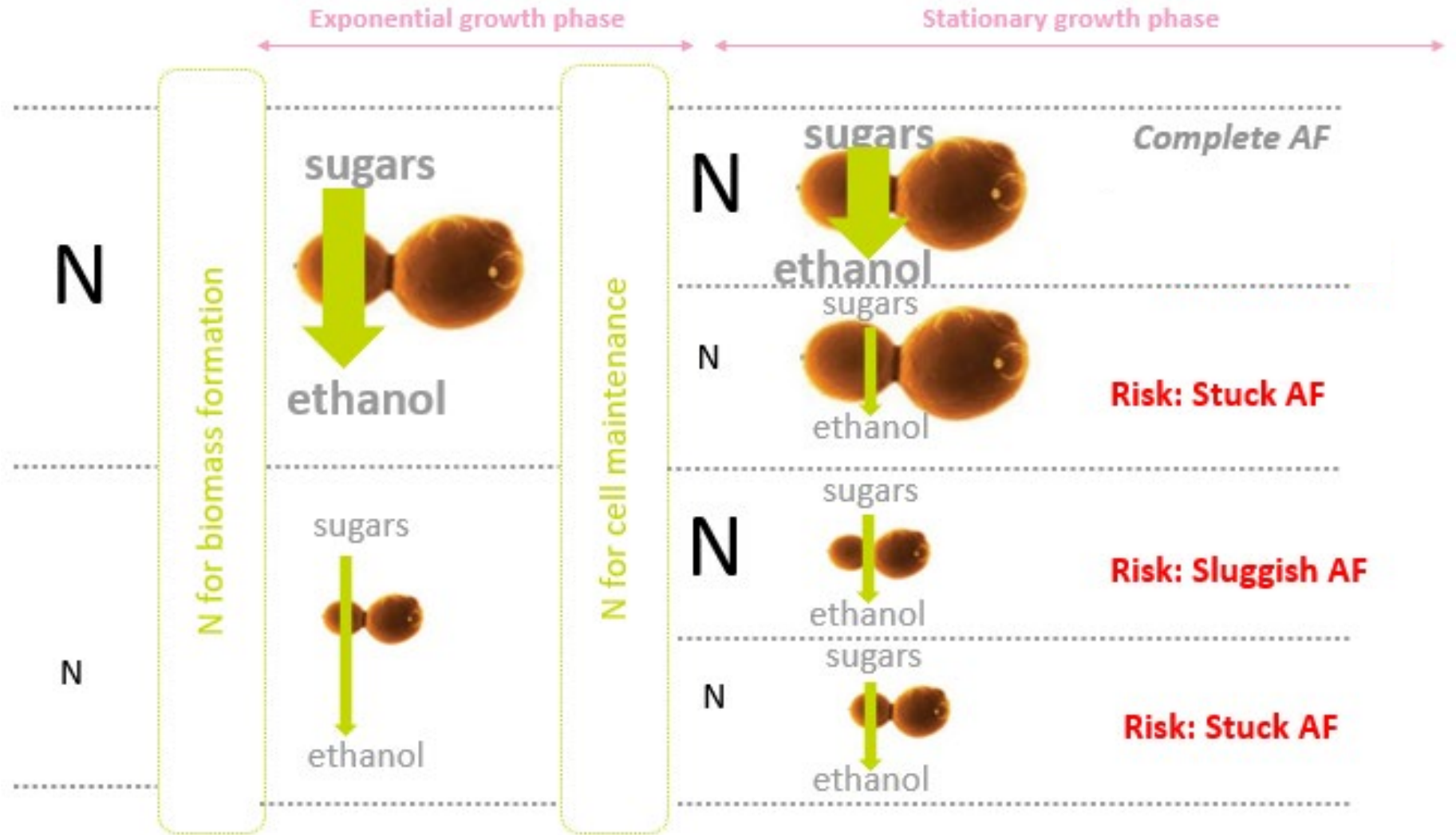
# Rehydration yeast

To start the fermentation

- Conditioning the yeast



# Nutrition and Biomass





# Nutrition

- Two addition moments: With the yeast and at the end of the first third part of AF (Use Decision Making Tool on [laffort.com](http://laffort.com))
- Follow the nature:  $\frac{3}{4}$  of organic nitrogen et  $\frac{1}{4}$  mineral nitrogen

**NUTRISTART® AROM**

14 mg N/L (which is 65 % Org.)

Complex Nutriment (Organic, Mineral) aimed at developing the **aromatic complexity** of white and rosé wines and **protect** it over time (GSH).



**Nutrystart® Org**

10 mg N/L

**DAP/THIAZOTE®**

21 mg N/L

# Fining

Refine wines and  
control colour intensity



## Natural origin

### VEGEMUST® / VEGEFLOT®

*Vegetable proteins (patatins, pea).*  
Effective clarification. Reduction  
of the phenolic content.

### OENOFINE® PINK

*Inactivated yeast, vegetable protein (patatin),  
activated charcoal, sodium bentonite.*  
Reduction in hue, elimination  
of phenolic compounds

### OENOFINE® NATURE

*Inactivated yeasts, vegetable proteins  
(patatin, pea), calcium bentonite.*  
Elimination of oxidisable and oxidised  
phenolic compounds.

### VEGEFINE®

*Vegetable proteins (patatins).*  
Significant action on  
oxidisable polyphenol.

## Synergistic formulations

### POLYMUST® BLANC

*Vegetable protein (pea), PVPP.*  
Eliminates oxidisable phenolic compounds.

### POLYMUST® ROSÉ

*PVPP, vegetable protein (patatin).*  
Stabilises hue, reduces phenol acids.

### POLYLACT®

*PVPP, potassium caseinate.*  
Inhibits browning.

Controlling oxidation

## Tips:

Add bentonite 24h  
later the collage to  
remove protein and  
help fining agent to  
settle down

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# Thanks for your attention



N°	Vin
1	<p><i>Secret rosé 2023</i> <b>Comptoir des vins de Flassans – Côtes de Provence</b> Grenache / Cinsault / Mourvedre 7,5€</p>
2	<p><i>Classic Blanc 2023</i> <b>Château Pigoudet – Côteaux d’Aix</b> Vermentinu / Ugni Blanc 13€</p>
3	<p><i>Rose bonbon 2023</i> <b>Domaine des diables – Côtes de Provence</b> Grenache / Syrah 15€</p>