

*Ageing and maturation*

# **WINE FINING : WHEN INNOVATION MEETS TRADITION**

# 3 good reasons for fining evolution



- Crazy cow and vegans (gelatin, fish, albumin, casein)



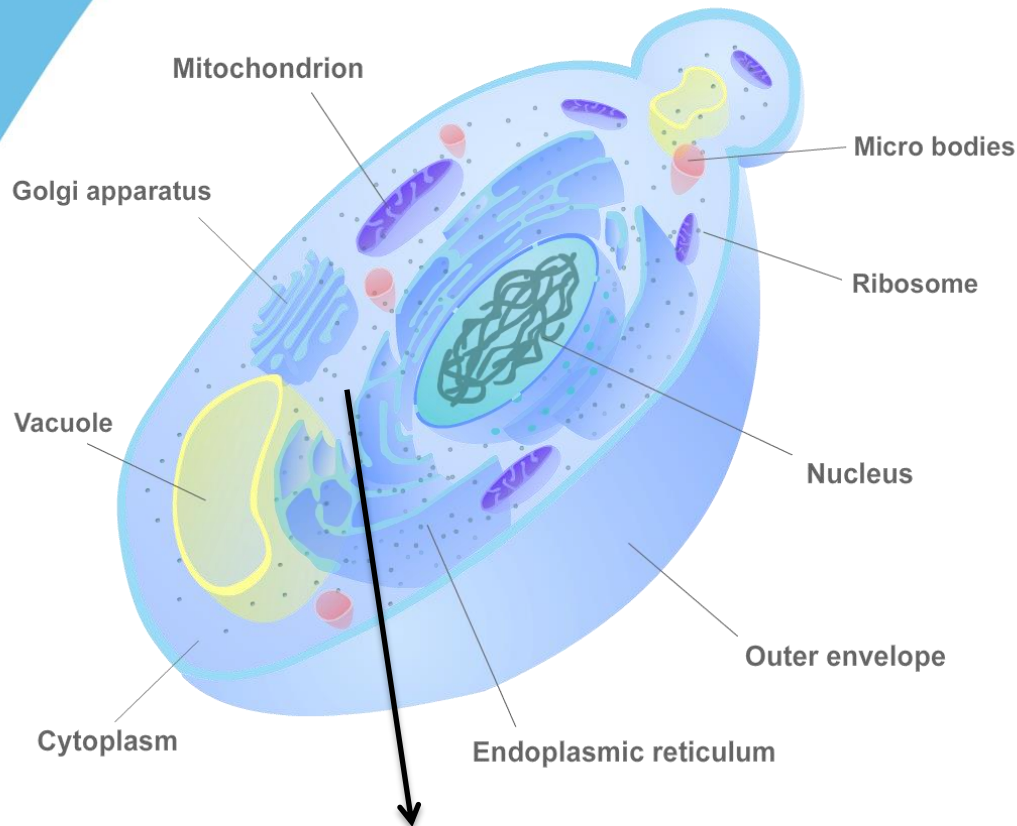
- Allergies (albumin, casein...)



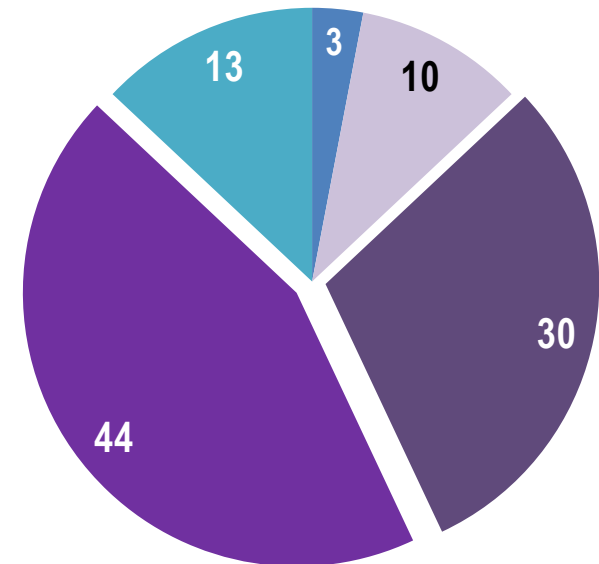
- Synthetic products (PVPP...)



# Yeast protein extracts: the origin



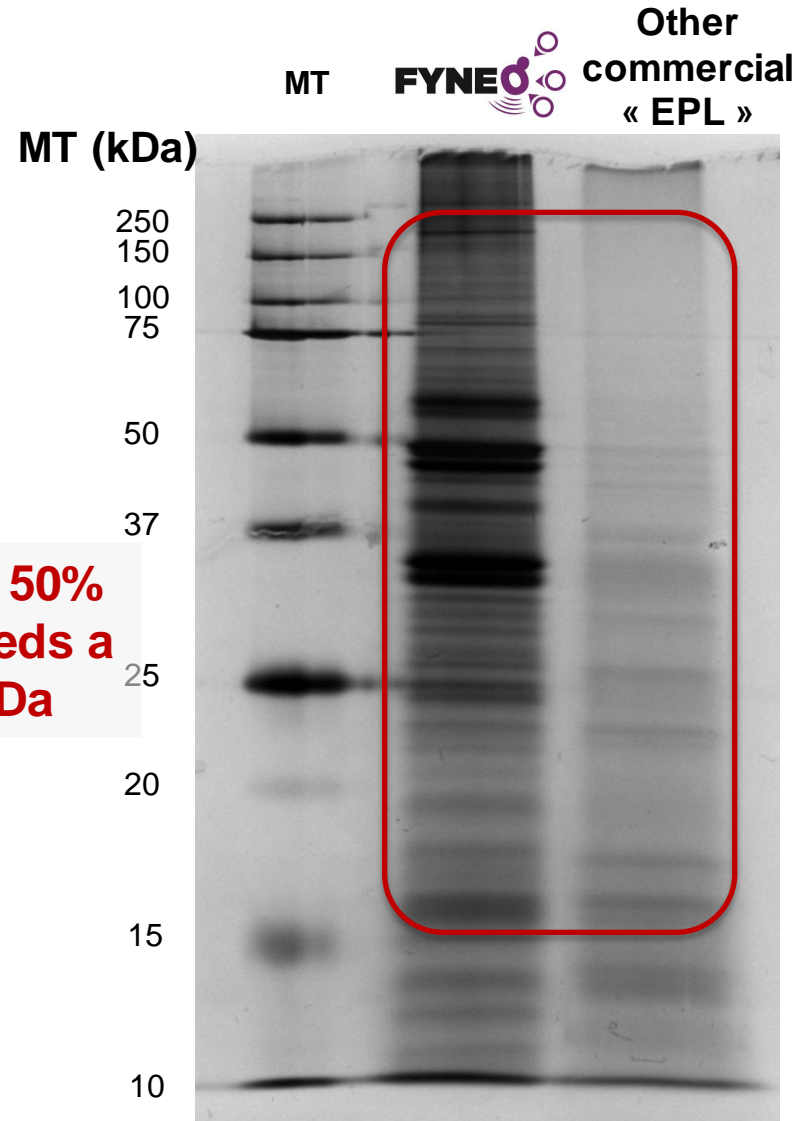
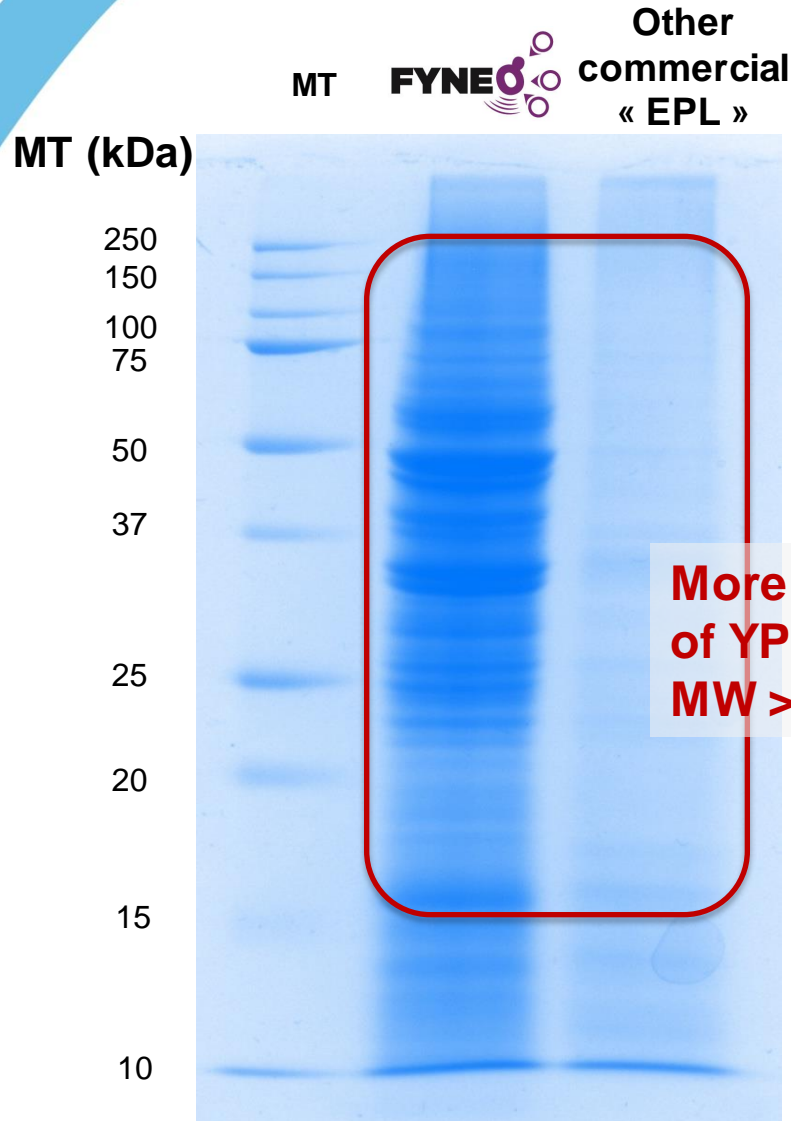
**YPE**



■ Extracellular  
■ Membrane  
■ Nucleus  
■ Cytoplasm  
■ Others

Origin and proportions (%) of proteins from

# Conformity ?

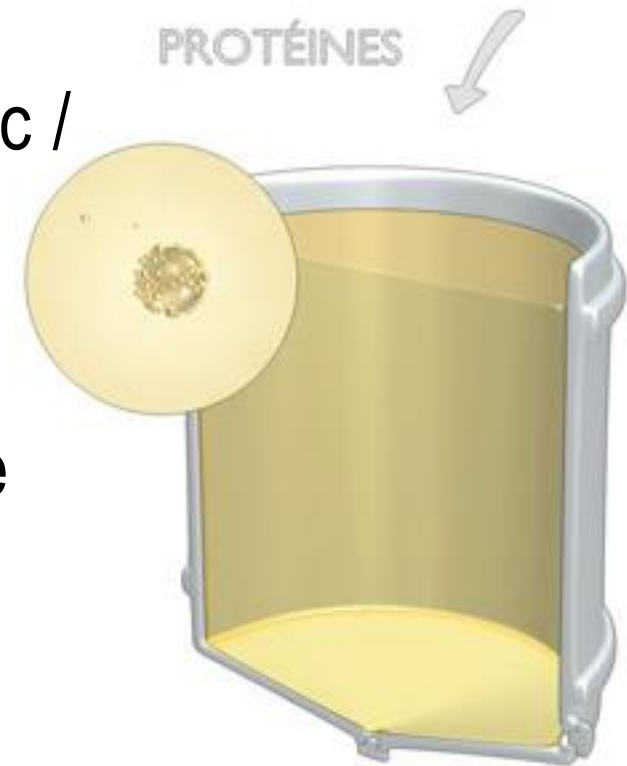




# **PERFORMANCES TO CLARIFY WINES**

# Yeast: a fining agent?

- Yeast=traditional winemaking and ageing agent / natural / non allergenic / non animal
  - Some proteins released by yeast during ageing may contribute to wine fining.
- Innovation: extract and purify these active proteins, optimize their behavior and aspect.



# Processes & know-how

*Yeast strain*

*Growth conditions*

**Yeast cream**

*Grinding conditions*

*Thermic treatments*

*Separation methods*

**Liquid YPE**

*Drying methods*

**Powder YPE**

*Granulation methods*

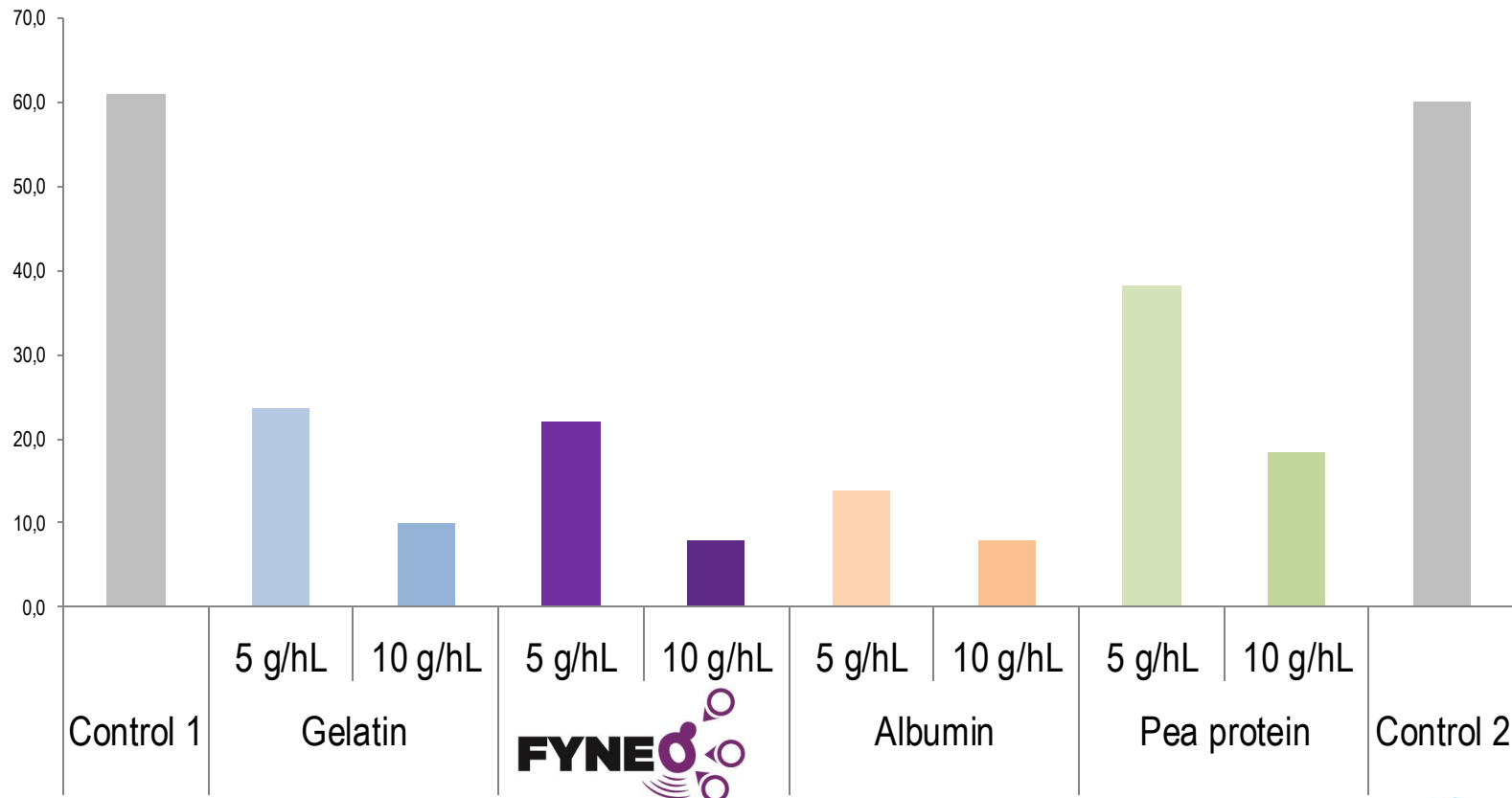
**Granulated YPE**



# Clarification

## Red wine from thermovinification (merlot)

Analysis of turbidity (NTU) after fining of 14 days at room temperature in the laboratory

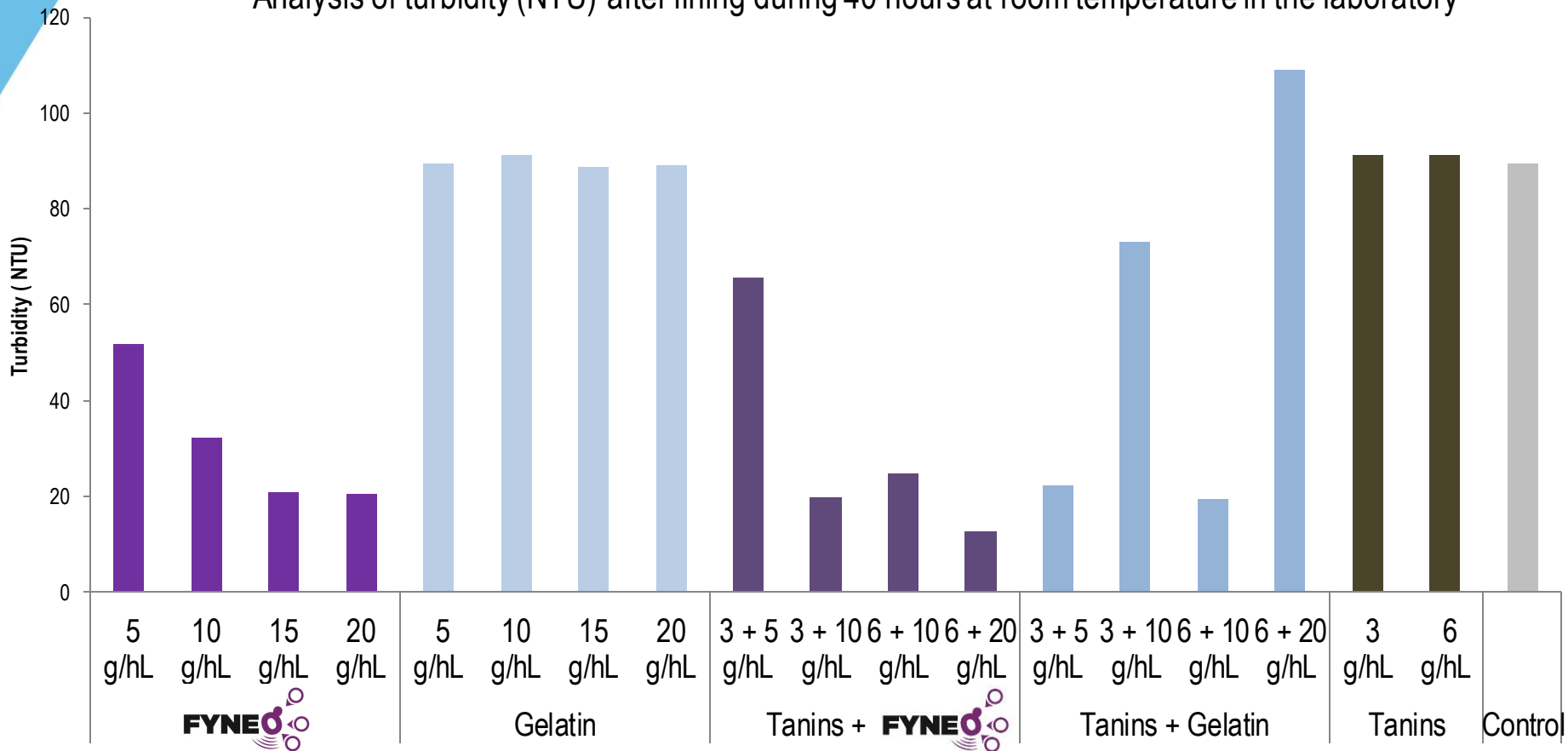




# Clarification

## Base wine (pinot noir)

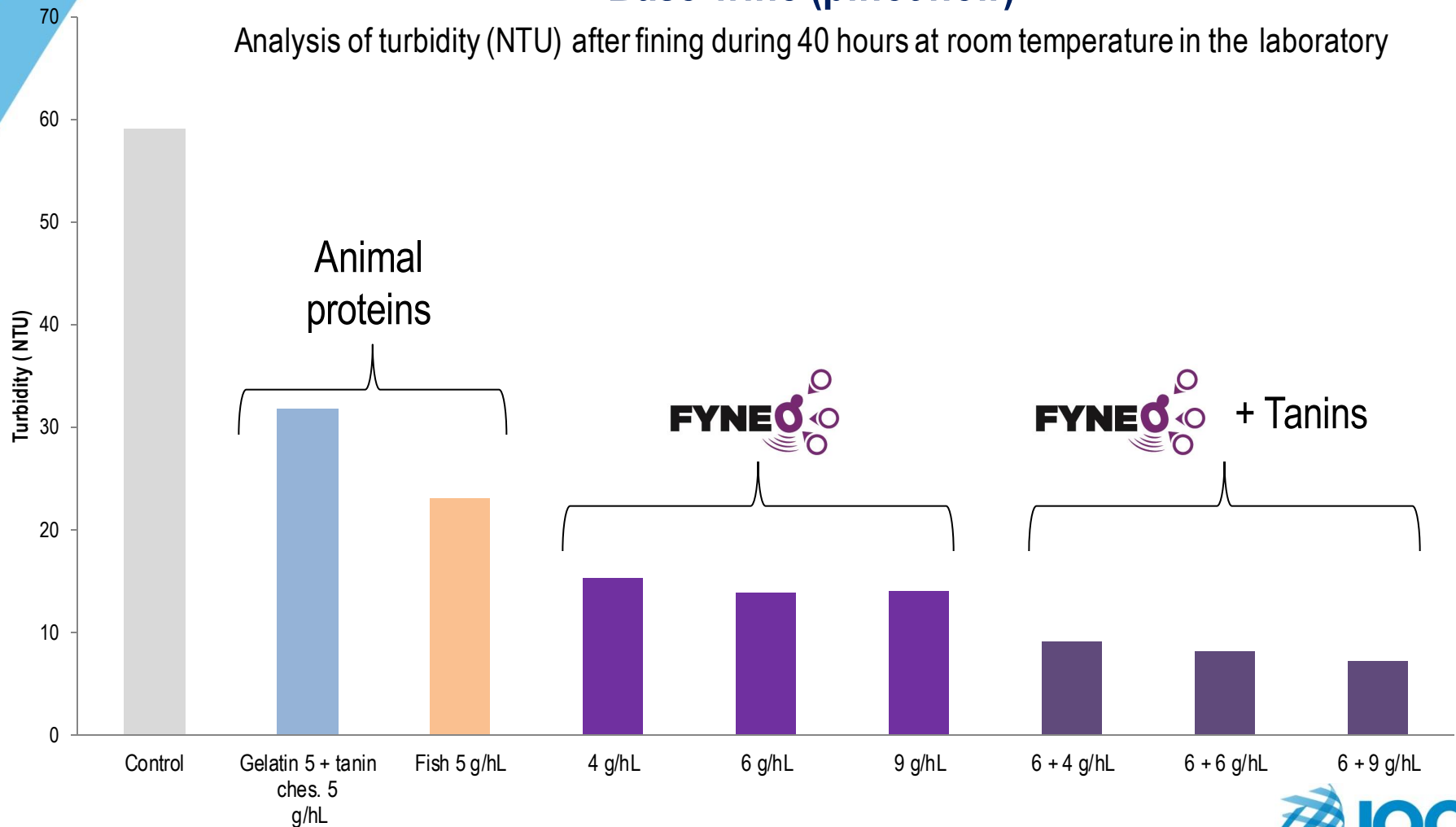
Analysis of turbidity (NTU) after fining during 40 hours at room temperature in the laboratory



# Clarification

## Base wine (pinot noir)

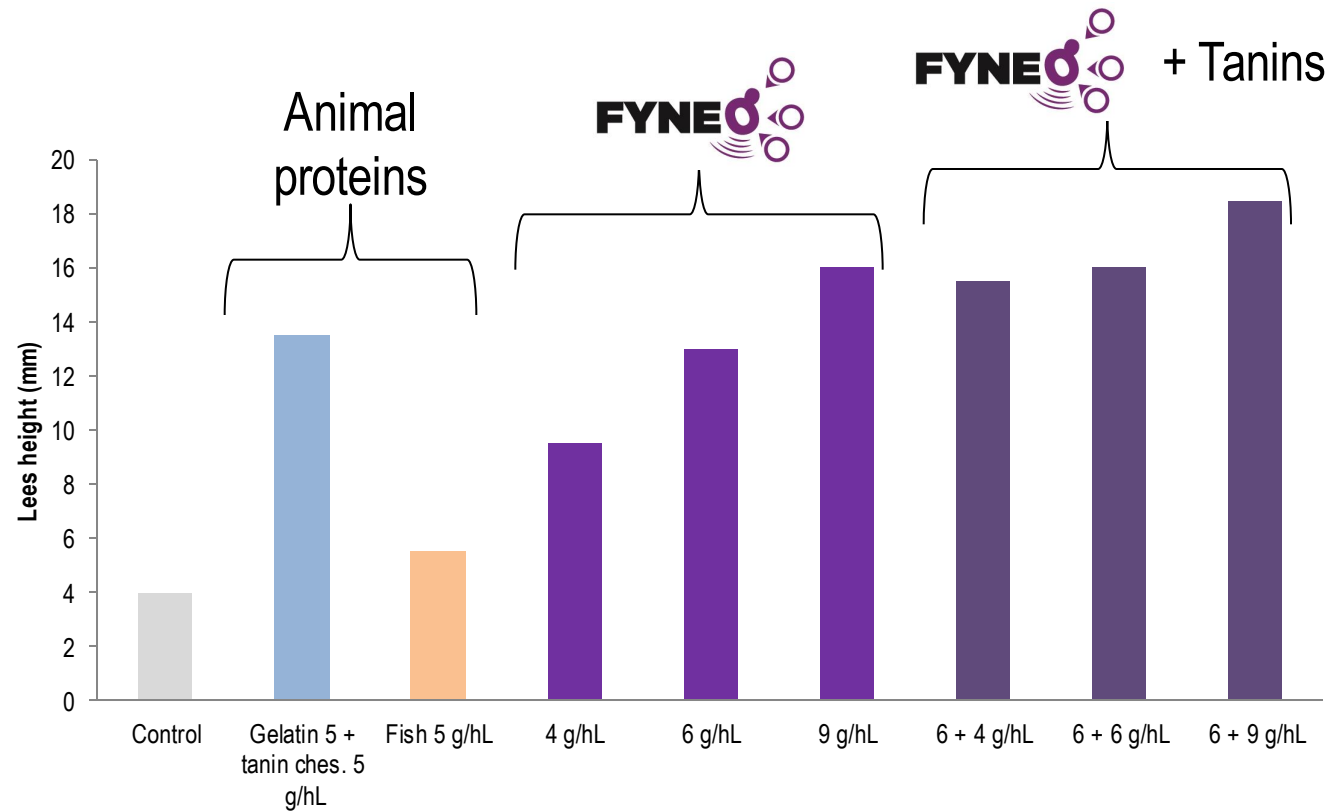
Analysis of turbidity (NTU) after fining during 40 hours at room temperature in the laboratory



# Clarification

## Base wine (pinot noir)

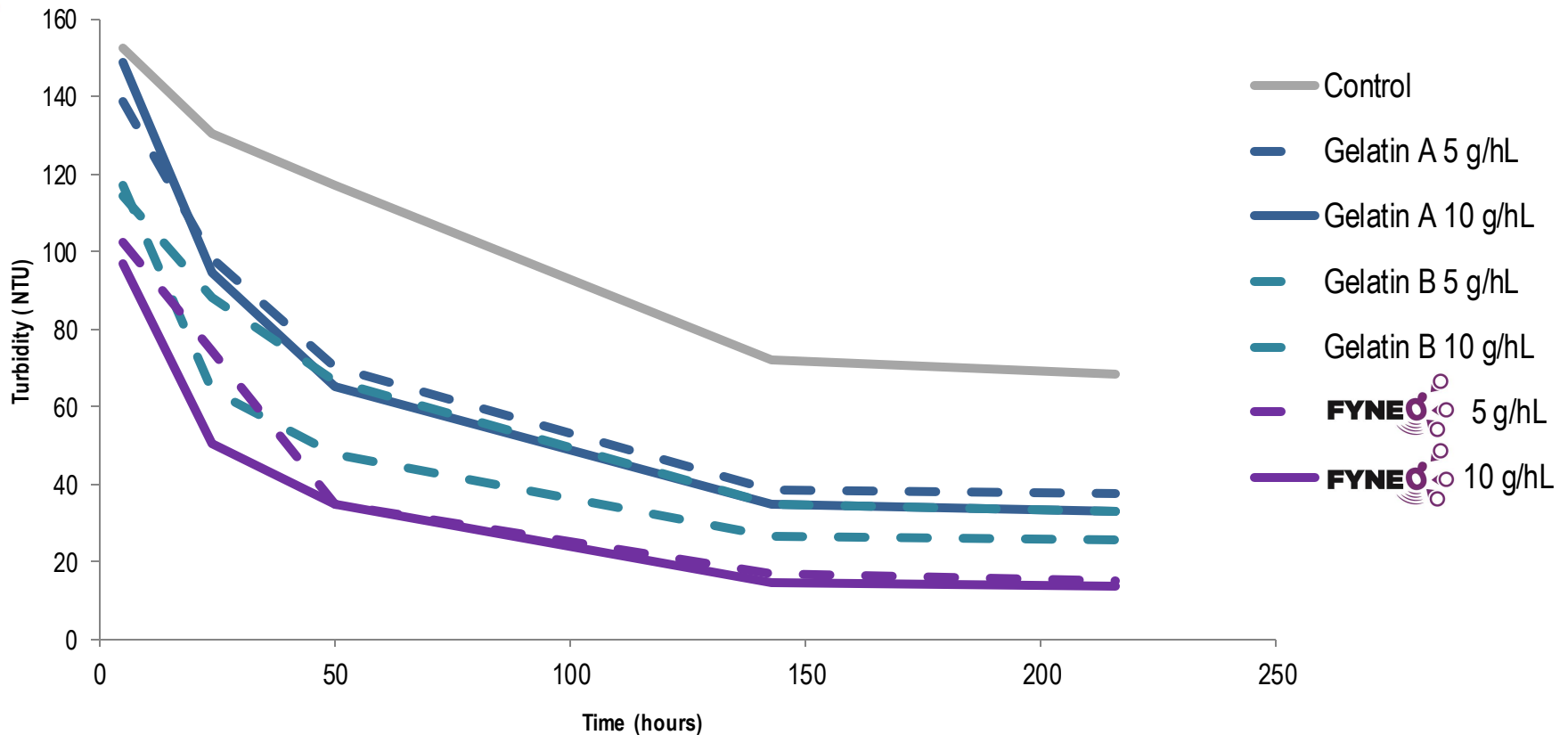
Lies heights in fined wines



# Clarification

## Red wine – Côtes du Rhône 2012

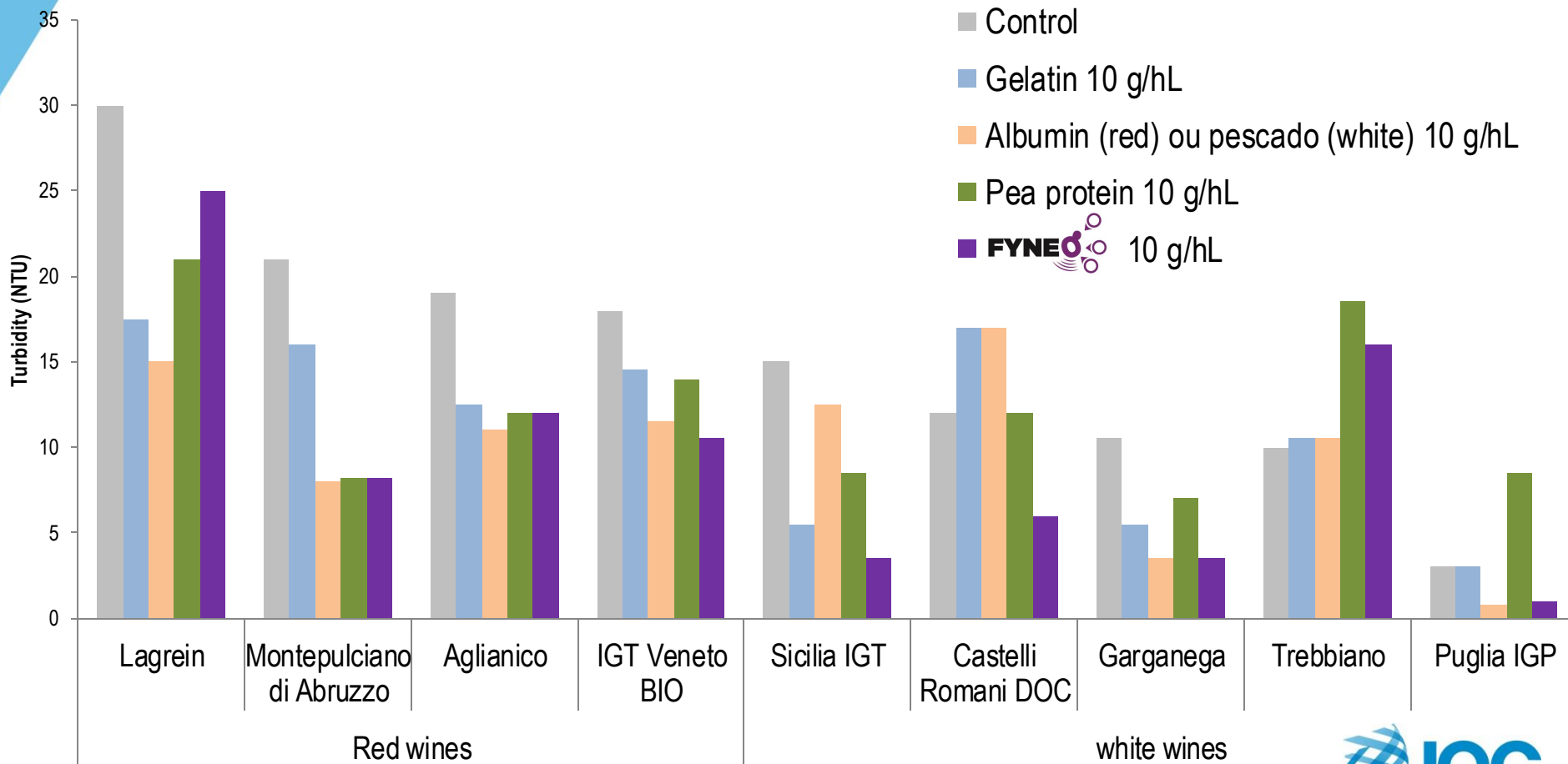
Monitoring of turbidity (NTU) after fining



# Clarification

## Red and white wines - Italy

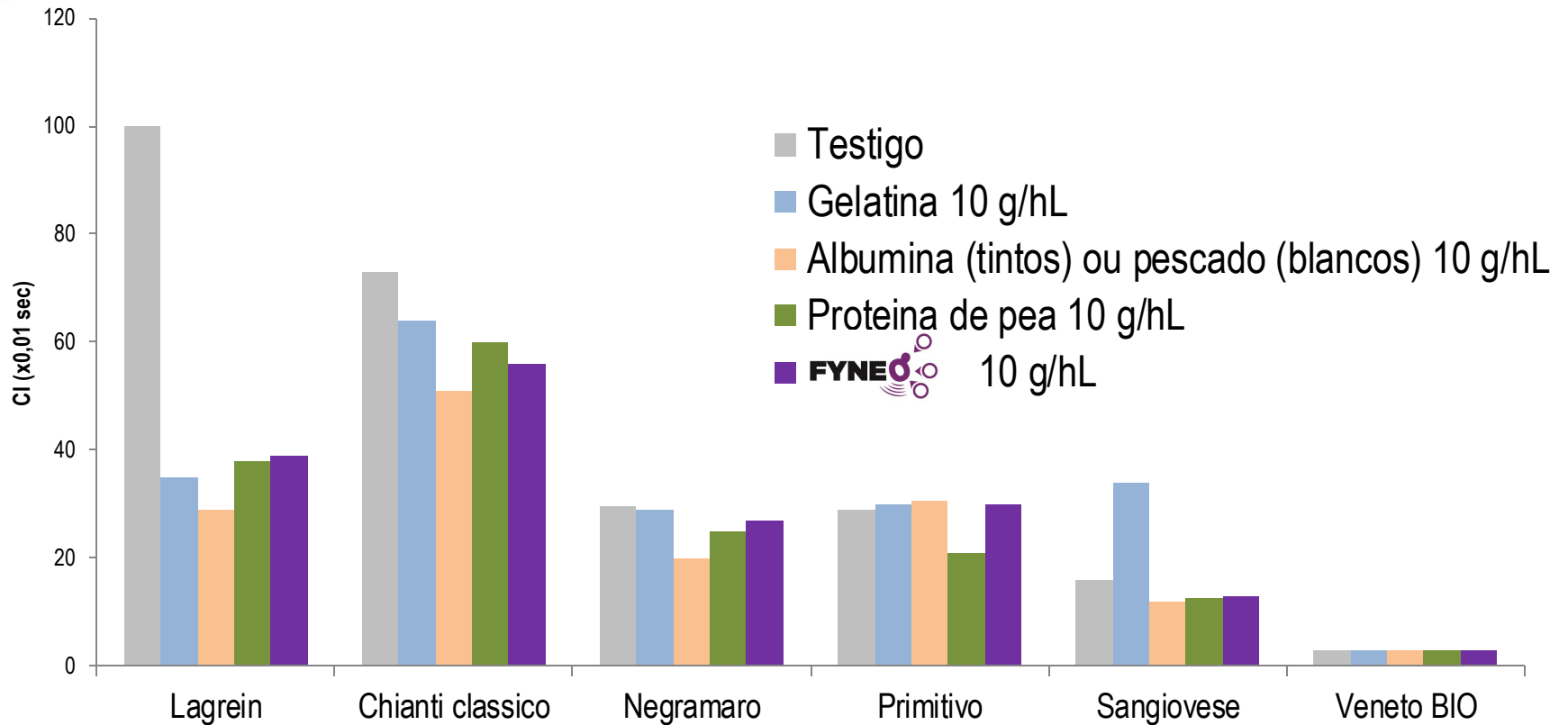
Monitoring of turbidity (NTU) after fining

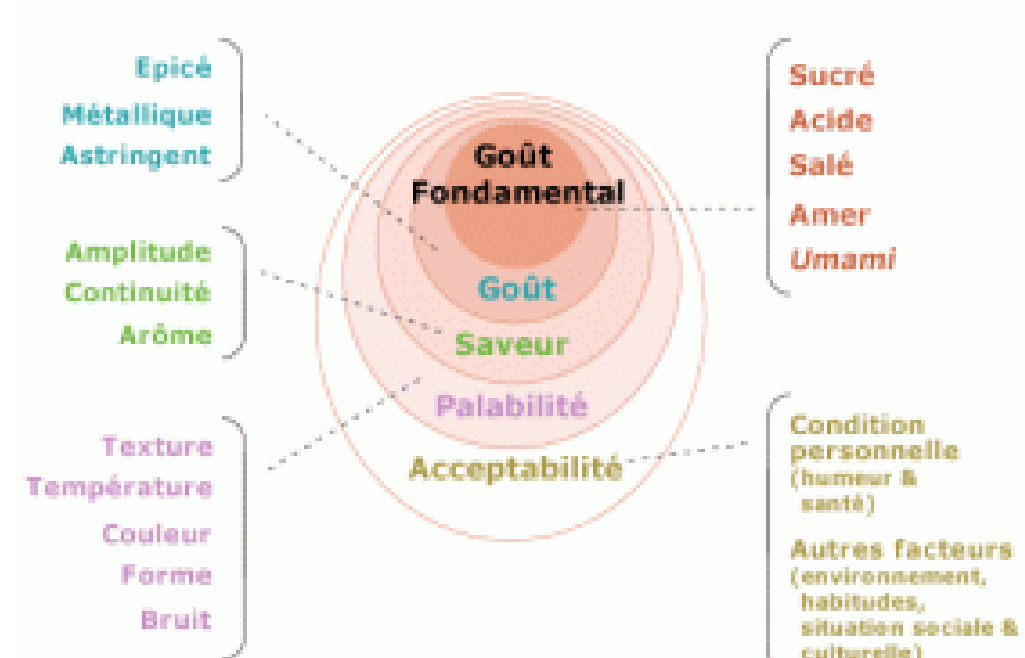


# Filterability

## Red wines - Italy

Clogging indices after fining



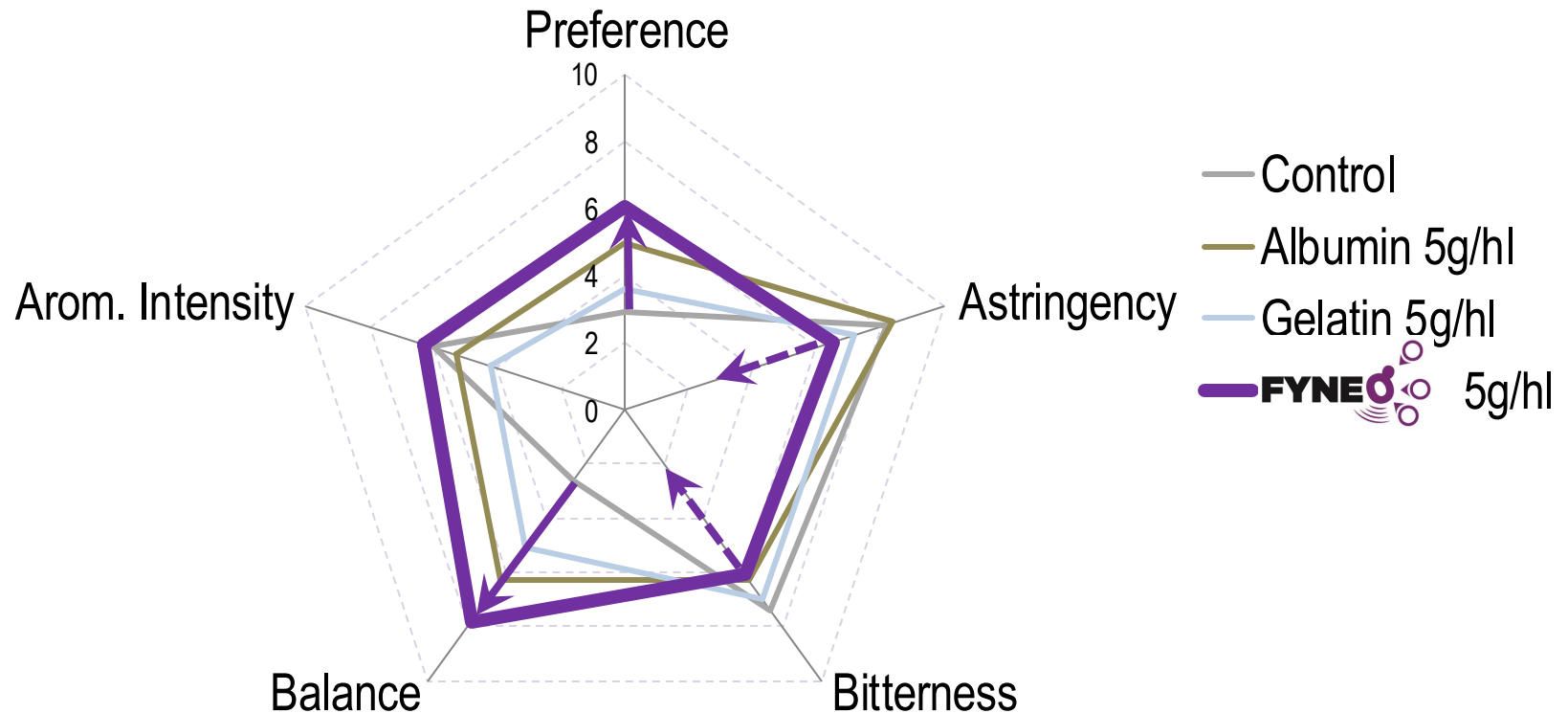


# SENSORY IMPACT

# Sensory impact

## Red wine from thermovinification (merlot)

Results from sensory analysis (6 tasters)

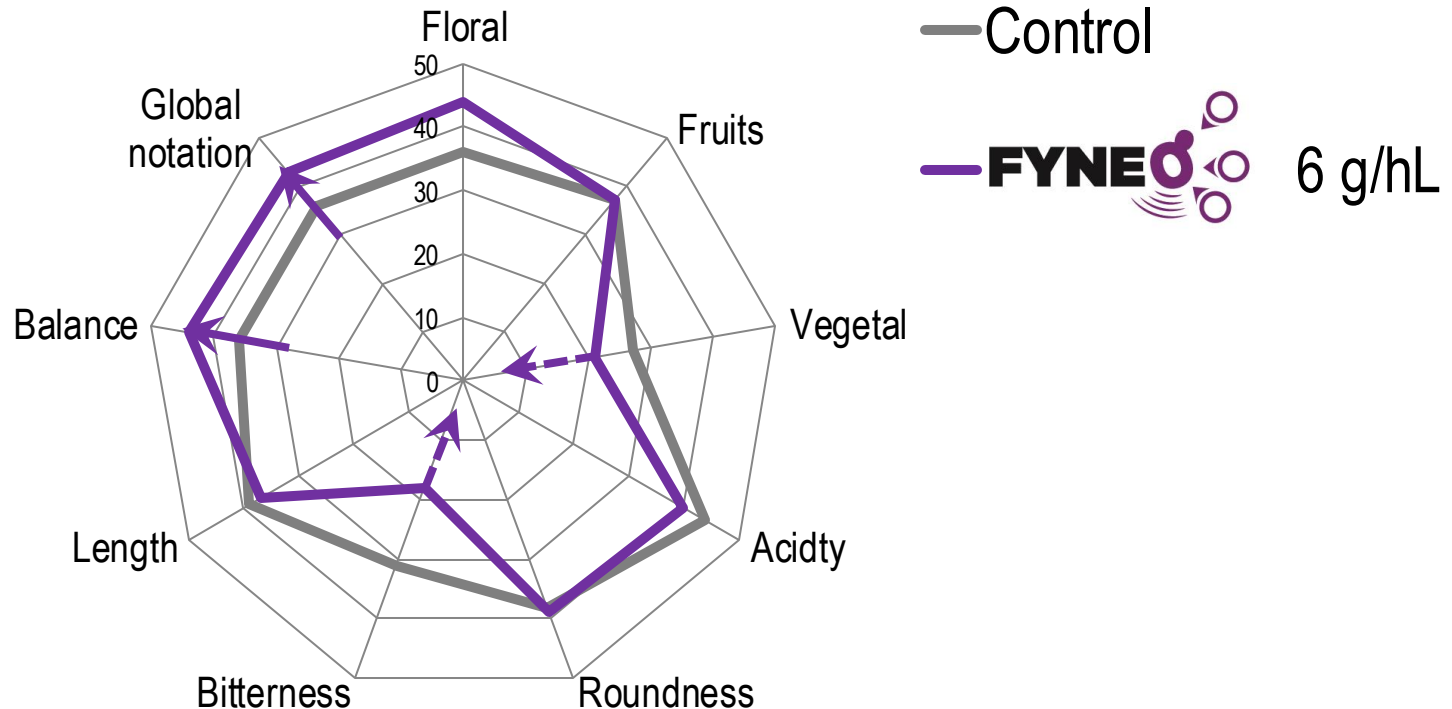




# Sensory impact

## Base wine (pinot meunier)

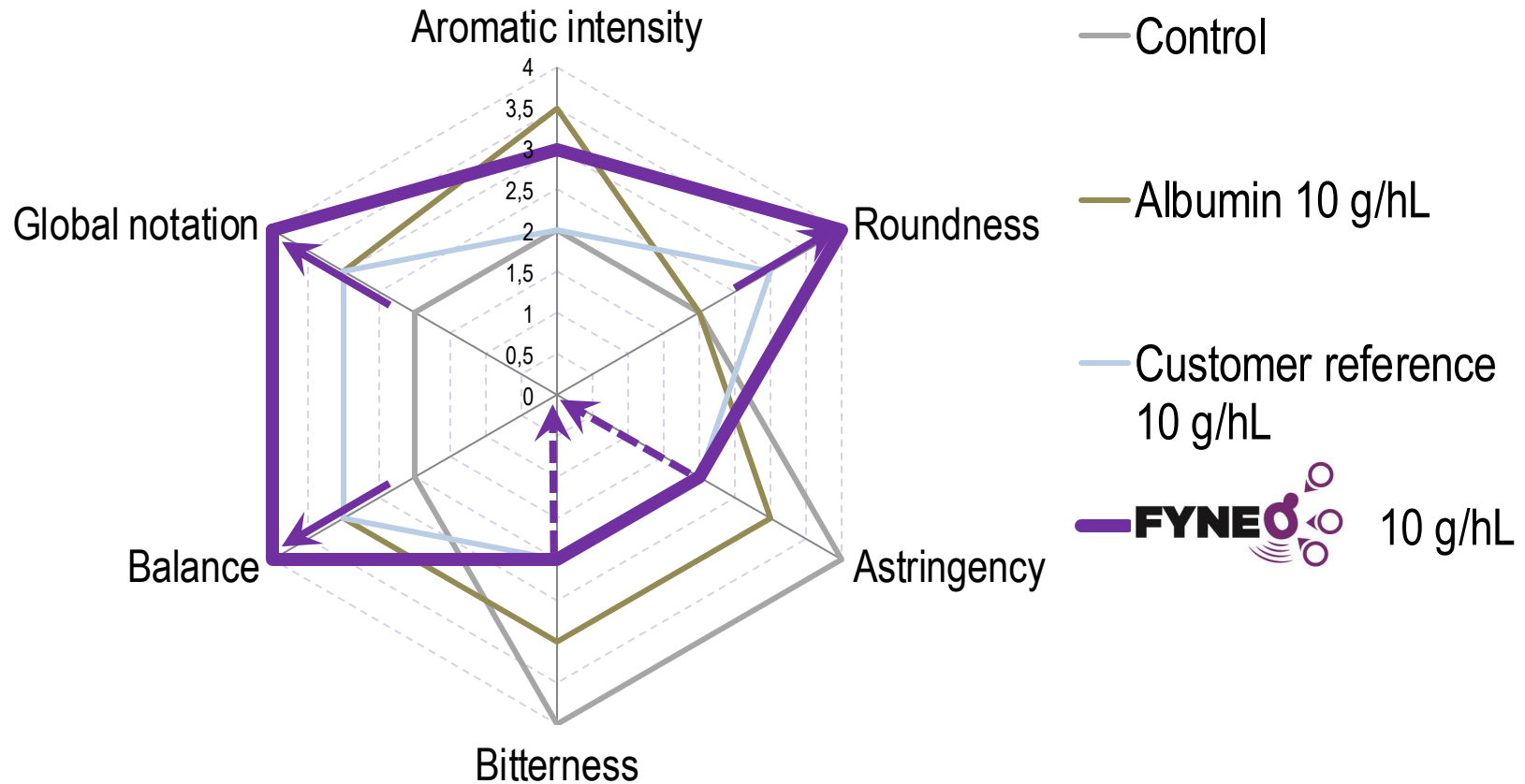
Results from sensory analysis (7 tasters)



# Sensory impact

## Red wine Italy (primitivo)

Results from sensory analysis



# Sensory impact



## Red wines (grenache/carignan/shiraz and merlot)

Results from sensory analysis

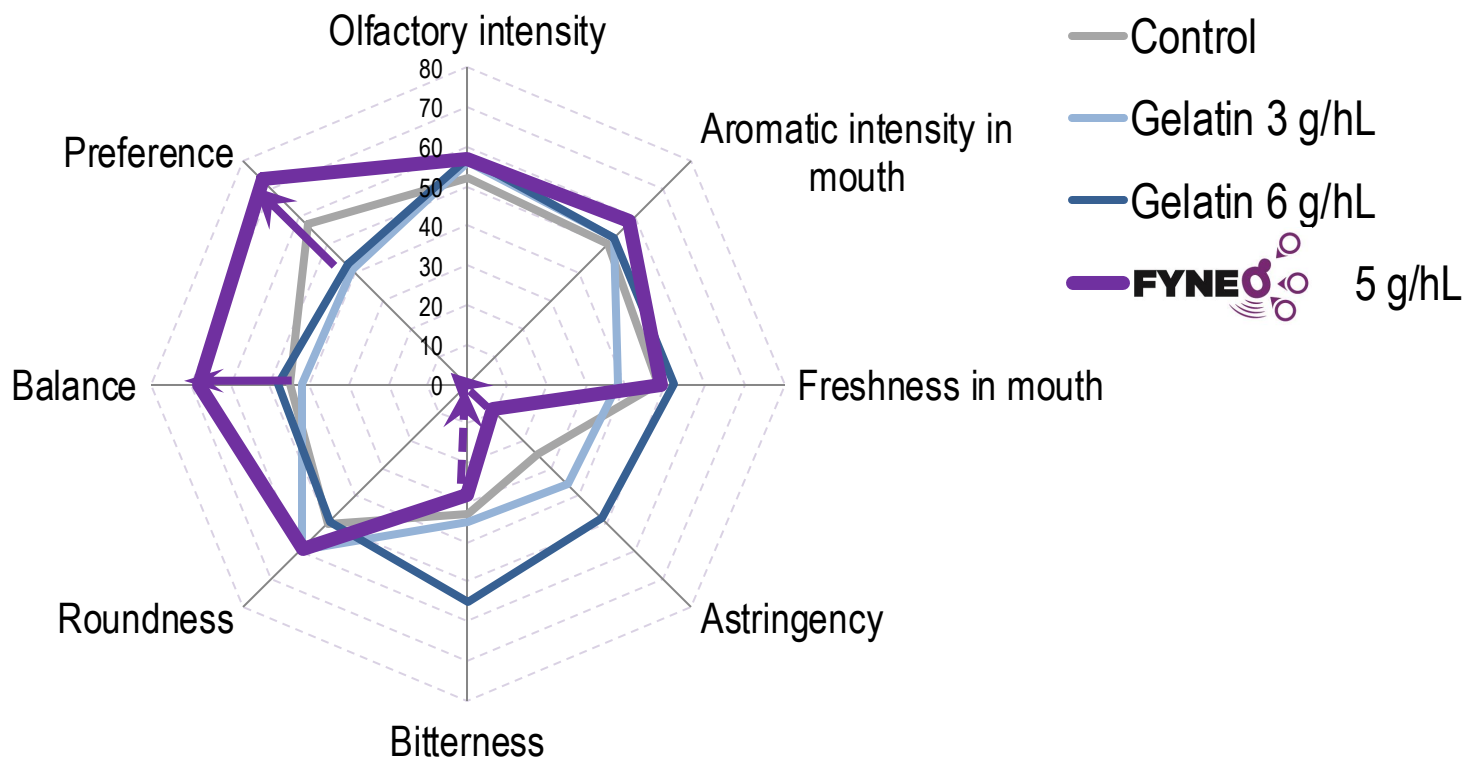
- Triangular and descriptive tests:
  - FYNEO / other commercial « YPE » :
    - Grenache / carignan / syrah: no significant difference
    - Merlot: significant difference : FYNEO preferred by 2/3 of tasters.
  - FYNEO / Albumin:
    - Grenache / carignan / syrah: no significant difference
    - Merlot: no significant difference
  - FYNEO / Gelatin:
    - Grenache / carignan / syrah: better mouthfeel with FYNEO
    - Merlot: less astringency with FYNEO

# Sensory impact



## Rosé wine CDR 2014

Results from sensory analysis (9 tasters)

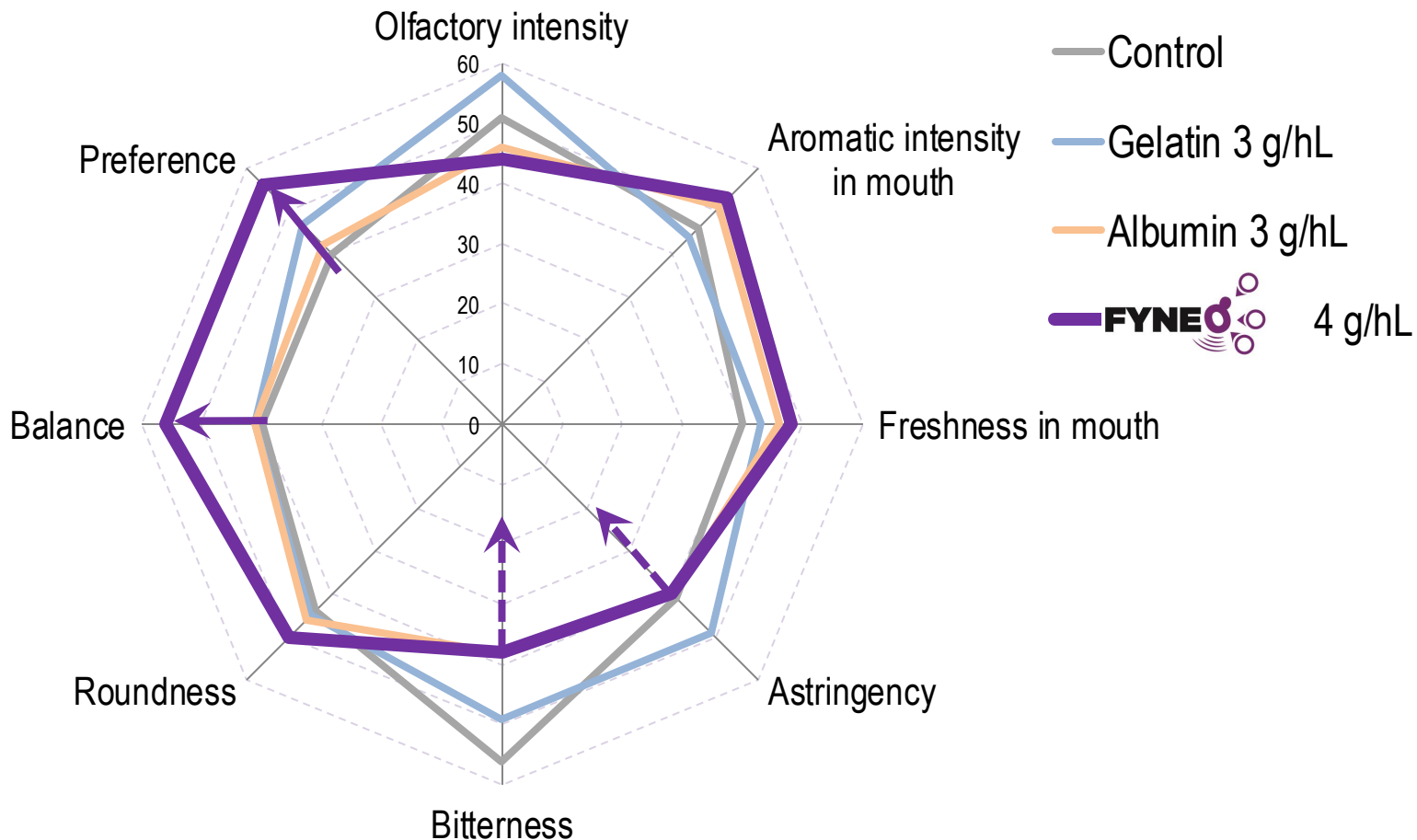


# Sensory impact



## Red wine CDR 2014

Results from sensory analysis (9 tasters)





# Sensory impact Italy

1. On **Barolo** (Nebbiolo grapes) 2010, barrel: 20 g/hl of Fyneo vs albumin and the results is fantastic : **fruity, good body, less astringency.**
2. On **red wine** from Sicily 2014, 10 g/hl of Fyneo: **less astringency.**
3. **Red wine** from Umbria on variety very astringency: final result is very good, **more body** than albumin and good results in terms of **astringency.**
4. On **white wine** at 10 g/hl very good results: **aromas fresher** than gelatin.

# Sensory impact

On the few tests carried out, FYNEO always is in the finalists. In red wine, at a dose of 30 g/hl, FYNEO provides

**roundness** in attack and **sweetness**. Particularly interesting on wines with harsh tanins.



Laure Vatin  
Aera manager  
Enological products

**euràlis**  
NOURRIR VOTRE CONFIANCE



# Conclusion

- New natural tool for fining, part of the inherent tradition of winemaking. Non-allergenic, non-animal.
- Advanced technologies for purification and optimization of FYNEO.
- Competitive results vs conventional fining agents.
- Preliminary fining tests in lab remain essential to check the result and choose the best dosage.