



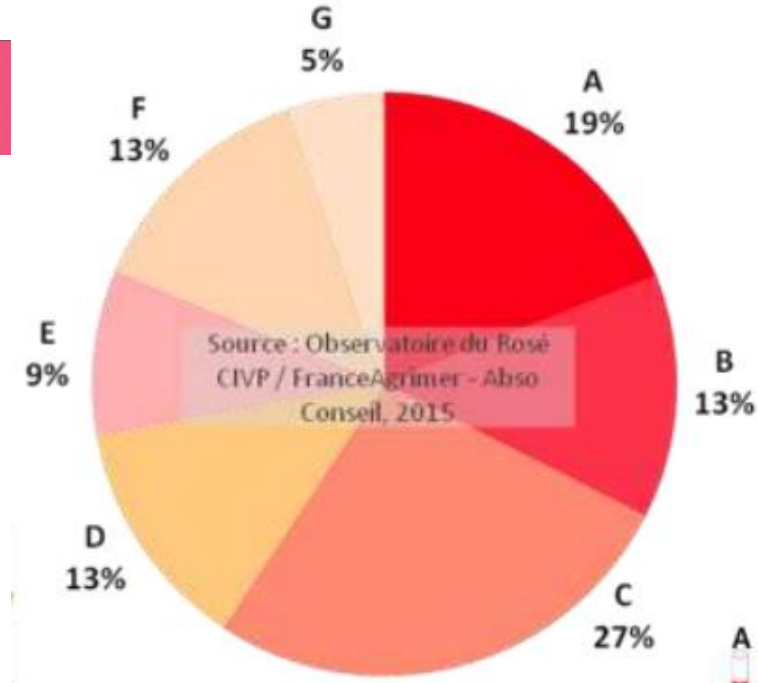
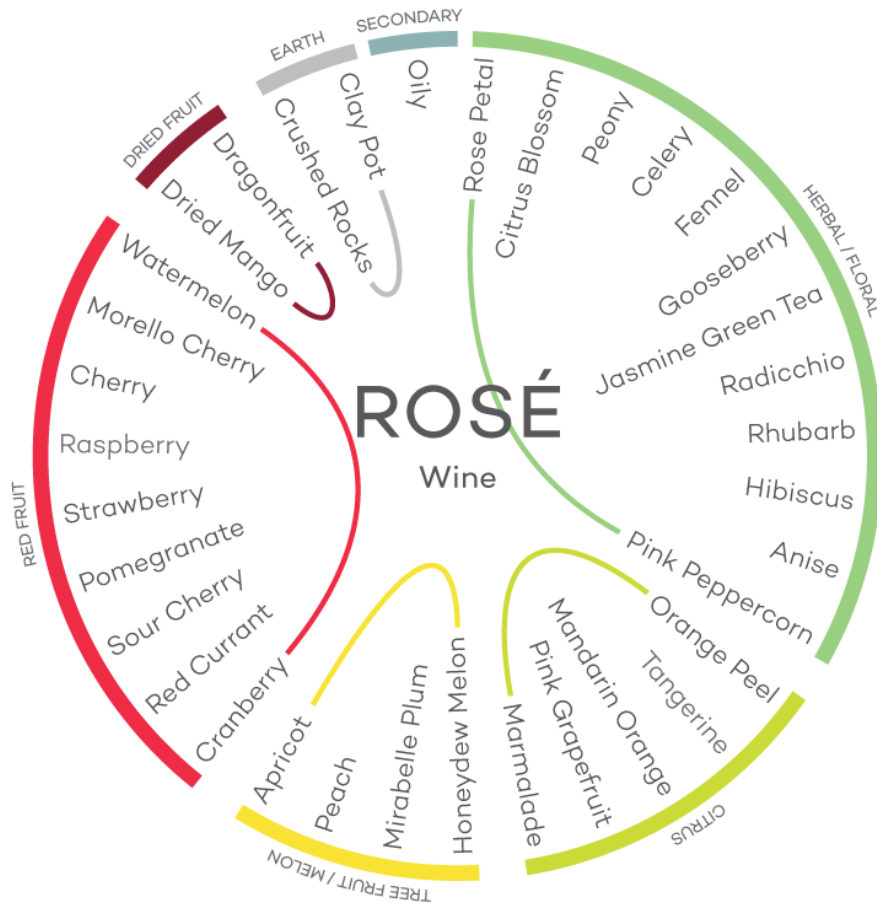
KEY STEPS OF ROSE WINEMAKING

Eglantine Chauffour, Enartis USA





ROSE: WHAT DO YOU EXPECT?





ROSÉ WINEMAKING PROCESS

ROSÉ WINE PRODUCTION

SAIGNÉE

Method where a small amount of juice is bled off during the early stages of red wine production. Rosé made this way yields a richer color and fuller body with darker berry flavors.



DIRECT PRESS

Grapes are grown, harvested, and fermented solely to produce a Rosé wine. Short maceration time results in a paler light pink or copper color and more delicate strawberry and grapefruit flavors.

GRAB A RED & WHITE



BLEND EM TOGETHER



Mix the white with a splash of red

BOOM! ROSÉ!





SPECIFICITIES OF ROSÉ WINEMAKING

PRE FERMENTATION STEPS
OXYGEN MANAGEMENT
AROMA PRODUCTION
BALANCE MOUTHFEEL
READY IN 1 YEAR



HARVEST = ESSENTIAL STEP FOR QUALITY

Think Rosé from the vineyard

Harvest Indicators?

- Brix
- pH, TA, **Malic acid**
- Sensory, Extractability

Requirements:

- Fast process from picking to fermentation
- Cold

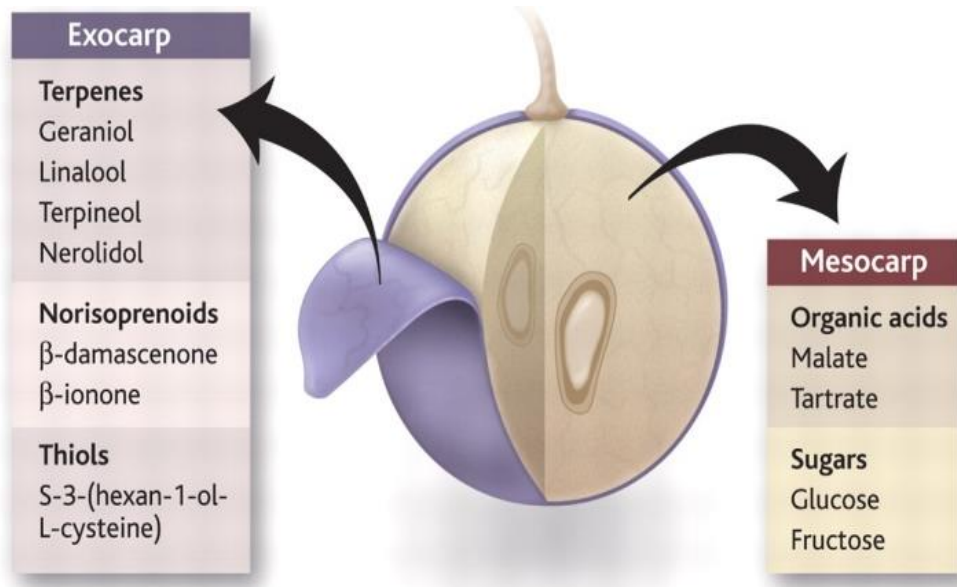
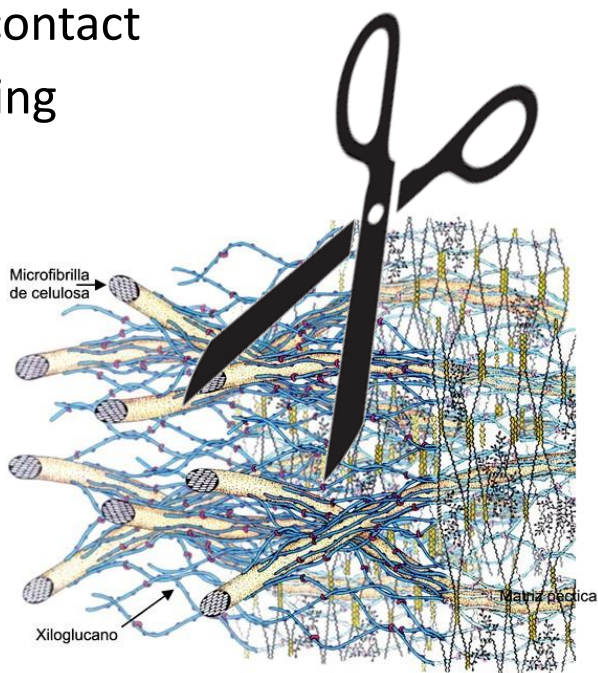


EXTRACTION : BUILD WINE POTENTIAL

What to extract?

How to extract?

- Enzymes
- Skin contact
- Pressing





OTHER BENEFITS OF ENZYMES

+ Yield at press
(+ 6-9%)

- Pressure
required

+ Tannins &
polysaccharides

+ Aromatic



+ Balance

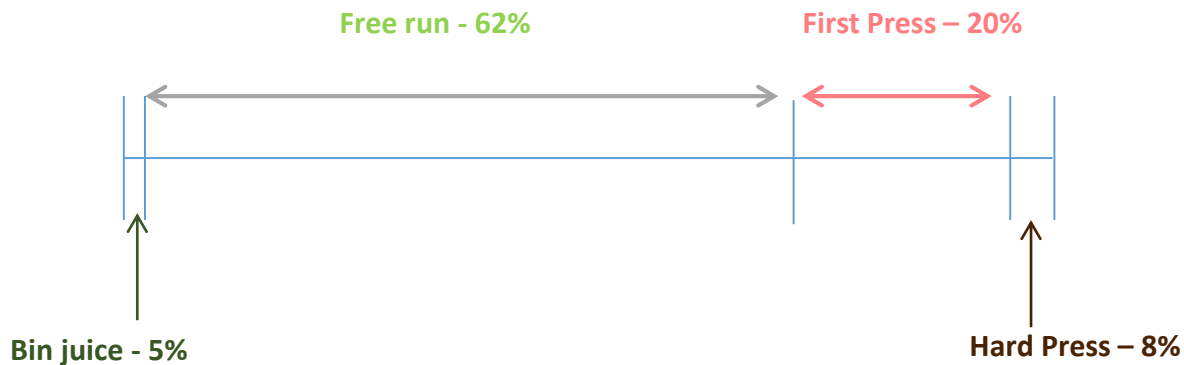
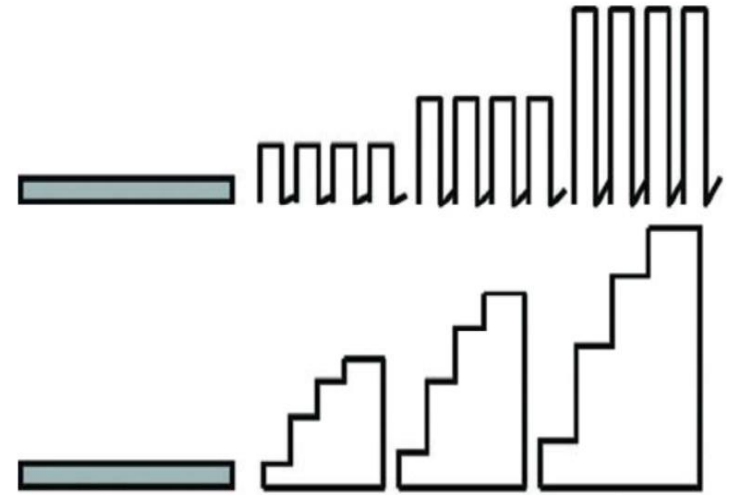
+ complexity
and quality

+ Filterability

- Bentonite
fining

Press cycle

- Gentle
- Limit rotations
- Separate juices





JUICE CLARIFICATION

Objectives:

Clean juice
Turbidity ~ **100-200 NTU**
Reduce settling time

Actions

Cold settling or Flotation
Enzyme
Fining agent



Fining agent

CLARIL HM

PROTOCLAR
CLARIL SP

ENOBLOCK PERLAGE



FERMENTATION: AROMAS PRODUCTION

YEAST NUTRITION

WHICH PARAMETERS?

- Choice of the yeast

Precursors inodorous **YEAST – ENZYMATIC ACTIVITY** → Free aromas

- Yeast nutrition

- Turbidity

- <50 NTU = too low, need to adjust with lees
- <100 NTU = esters production
- 100-400 NTU = varietal aromas



- Temperature range

- <65°F => esters production.
- 77-80°F => more fruity, complex

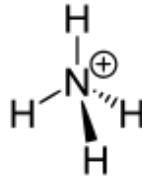
YEAST NUTRITIVE NEEDS

	Biochemical function		Enological effet
	NITROGEN	Protein synthesis	- Stimulate yeast multiplication - Prevent H₂S production - Stimulate aromas production
	STEROLS FATTY ACIDS	Components of yeast cell membrane	- Maintain yeast membrane activity - Increase yeast resistance - Reduce off flavors production
	THIAMINE	Co-enzyme	- Stimulate yeast growth - Improve fermentation completion - Reduce production of SO₂ binding compounds
	Mg-Zn	Co-enzyme	- Maintain yeast metabolism active - Regulate yeast growth

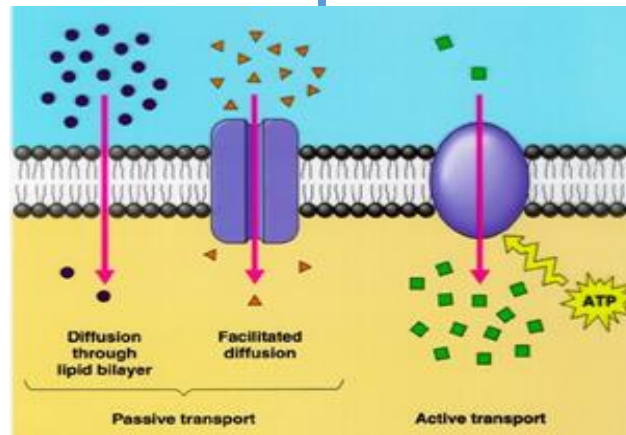
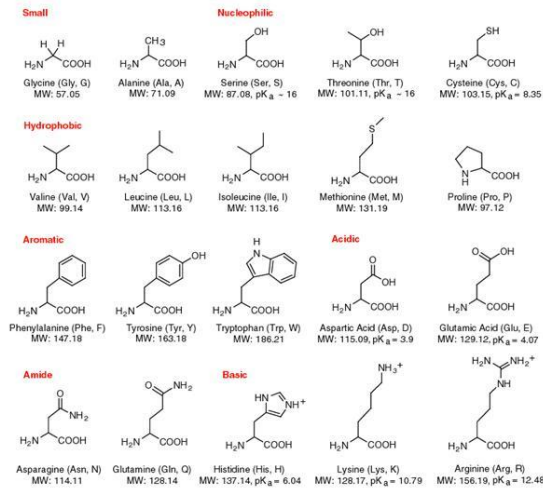
Oxygen: 5-10 mg/L during AF



Inorganic: ammonia



Organic : Amino acids





FOCUS OXYGEN MANAGEMENT

ENZYMATIC OXIDATIONS

Biochemical reactions = 10-15 mins

Co-enzyme = Cu^{2+} , Fe^{2+} , Al^{3+}



Reactions:

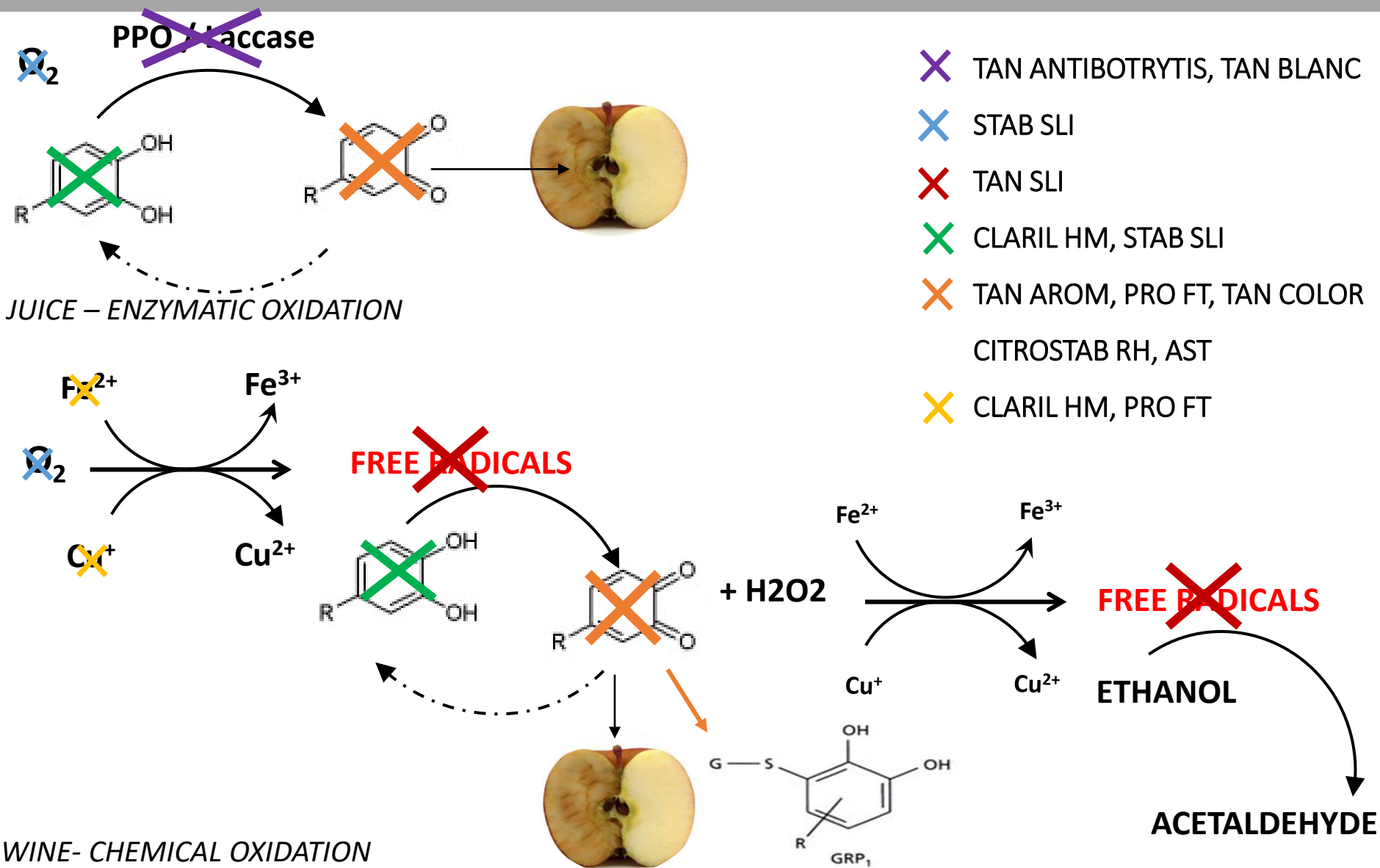
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|--------------------------|---|--------------------------|
| -Phenols & Polyphenols | $\xrightarrow{\text{PPO, laccase}}$ | browning & loss of color |
| -Lipids & linoleic acids | $\xrightarrow{\text{Acyl hydrolase, lipoxygenase}}$ | bitterness & veggie hint |



How to protect?

1. Inhibit enzymes
2. Remove substrates
3. Block further reactions

MECHANISM OF OXIDO-REDUCTION REACTIONS





POST FERMENTATION

AGEING
STABILISATION
BOTTLING

Protein stability

- Work during full process
- Bentonite during AF



Tartaric stability

- Cold stabilization
- CMC : Cellogum L
- Arabic gum : Citro gum



ARABIC GUM



CMC



BOTTLING: LAST RISKY STEP

Prepare the wine

- Dissolved CO₂
- Dissolved O₂
- Filtration

Adapt bottling to the future life of wine

Protect oxidation



ROSE STYLES

	FRUIT DRIVEN	FLORAL	PROVENCAL/ THIOLIC	'RESERVE'/ RICH
Grapes varieties recommended	Syrah, Zinfandel, Malbec, Petite Syrah, Tempranillo, Cabernet Sauvignon, Merlot	Pinot noir, Nebbiolo, Grenache, Cinsault, Carignan, Merlot	Grenache, Mourvèdre, Syrah, Sangiovese, Cabernet Sauvignon	
Crusher	AST			
	ZYM AROM MP			
Maceration	<i>medium - saignée</i>	<i>short</i>	<i>short</i>	<i>medium</i>
Clarification	CLARIL SP			
Temperature	<i>13-15°C (55-59°F)</i>	<i>16-17°C (60-62°F)</i>	<i>16-17°C (60-62°F)</i>	<i>16-17°C (60-62°F)</i>
Inoculation	FERM RED FRUIT	FERM ES FLORAL	FERM Q CITRUS	FERM PERLAGE
	NUTRIFERM AROM PLUS	NUTRIFERM AROM	NUTRIFERM AROM	NUTRIFERM AROM
	TAN RED FRUIT	TAN ELEGANCE	TAN CITRUS	INCANTO NC WHITE
1/3 fermentation	ENARTIS PRO R	ENARTIS PRO FT	ENARTIS PRO FT	ENARTIS PRO UNO
	NUTRIFERM ADVANCE			



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THANK YOU FOR YOUR
ATTENTION!