



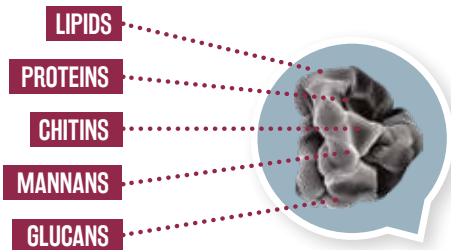
# Systemic Resistance Inducer to fight against **FUNGAL ATTACKS**





**Systemic resistance inducer against foliar fungal diseases.**

Romeo is a Systemic Resistance Inducer (SRI) that acts preventively. Its active ingredient (**CEREVISANE – cell walls of *Saccharomyces cerevisiae* strain LAS117**) strongly induces plant defense mechanisms, and so prepares the plant to defend itself against fungal attacks. It is labeled for a variety of row and specialty crops.



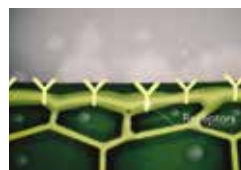
Cerevisane® structure, microscopic picture (SEM), source: Agrauxine by Lesaffre Plant Care

Plant protection against broad spectrum fungal diseases

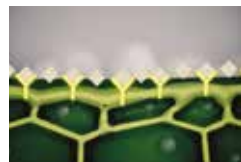


MODE OF ACTION

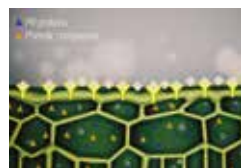
Mimics a microbial attack perception by the plant



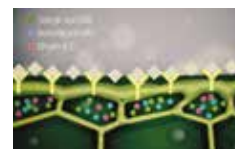
Activation of cell signaling cascade



Induction of defense genes



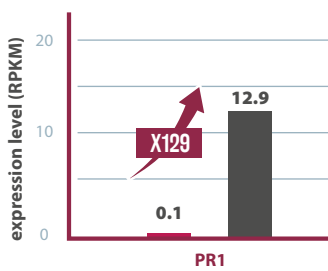
Metabolic changes = effective defenses



Expression level of PR1 gene (RPKM) 1 day after application of Romeo

UTC ROMEO

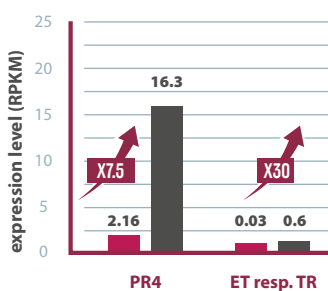
PR1 is a marker gene of the defense pathway dependent on Salicylic Acid (SA)



Expression level of PR4 and ET resp. TR genes (RPKM) 1 day after application of Romeo

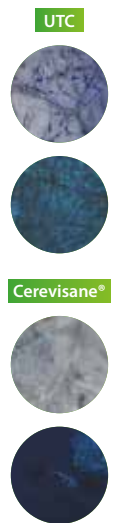
UTC ROMEO

PR4/ET resp. TR are marker genes of the defense pathway dependent on Jasmonic Acid (JA) and Ethylene (ET)



- Composition**  
94.1% a.i. Cerevisane® patented by Lesaffre R&D in 2006
- Non living**, can be easy use in tank mix with chemicals
- Compatible with **organic farming and conventional**
- Formulation :** Wettable Powder (WP)
- Resistance Management**
- Preventive Foliar application**
- Approval EU on the 4/23/2015 for **15 years**. Listed in annex of Regulation 540/2011 as a low risk substance. EPA approval since 10/9/2018
- No **Maximum Residue Levels** (UE Annex IV of Regulation EC 396/2005) **MRL** exemption for USA (Federal Register /Vol. 83, No. 154 / Thursday, August 9, 2018)
- Application** at low dose rate  
Re-Entry Interval = 4h  
Pre-Harvest Interval = 0h

- Preventive, foliar spray
- Effective 1 day after application



Internal colonisation of *Erysiphe necator* (powdery mildew)

Internal colonisation of *Plasmopara viticola* (downy mildew) 7 days after inoculation

Source : INRA Dijon (France)

frac - code P 06 microbial elicitors - Resistance not known