





### NATURAL SOLUTION AFTER HAIL

**LalVigne CICATRIX™** improves the recovery of vines and their productive potential, reducing the negative impact of the damage caused by hail on the plant, grapes, and wine.

In response to hail damage the vine will try to contain the injured area forming physical and chemical barriers (Harris, 1992), as these wounds provide new space and nutrients for insects and pathogens. Phenolic compounds will be an important part of this response of the plant, due to their antioxidant and antifungal activity as well as their function as precursors of other secondary metabolites such as lignin, a fundamental component of the plant cell wall. **LalVigne CICATRIX** will stimulate the synthesis of these compounds facilitating a faster recomposition of the leaf area for a faster and more effective vineyard recovery.



Saccharomyces cerevisiae yeast (Lallemand Group) © Getty Image

# WHY SHOULD I USE LALVIGNE CICATRIX?

Hailstorms can cause significant damage to grapevines. Depending on the intensity and the moment of the cycle in which it takes place it can cause serious injuries on shoots, leaves and bunches.

**LalVigne CICATRIX** is a natural treatment that accelerates the healing of wounds caused by hail. It will increase the physiological activity of the vine for a greater and faster recovery.

#### Solve hail problems with LalVigne CICATRIX





LalVigne CICATRIX will increase the yield by reducing the losses caused by hail. In previous experiences the increase in production recordered has been  $\geq$  10%.

Hailstorms can cause great damage to the vineyard affecting grape production and quality:



**LalVigne CICATRIX** will reduce the negative impact that hail damage will have on grape and wine quality, it will increase the homogeneity of the bunches, balancing their development and maturity level.

It will improve the balance in the grape components, impacting on a higher wine quality.















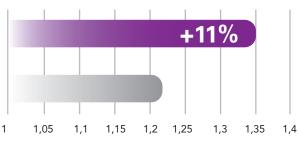


## BENEFITS

Increases yield, reducing losses caused by hail. In previous experiences increases  $\geq 10\%$ 

٢	Natural treatment that accelerates the recovery of vines that have suffered hail damages.
---	---

- Increases the physiological activity of the plant for a  $\bigcirc$ greater and faster recovery.
- Increases the homogeneity of the bunches,  $\bigcirc$ balancing their development and ripening level.
- Improves the balance in the grape components impacting on a higher wine quality.



Control LalVigne CICATRIX

#### Increase in yield (kg/vine) in a Tempranillo vineyard affected by hail. This trial was carried out by ItacvI in the frame of the Freshwines project, led by Lallemand Oenology, financed

by CDTI with ERDF (European Regional Development Fund) funds.



Hailstorms can cause damage that significantly reduces the yield of a vineyard and therefore the profitability for the winegrower.

#### WARNING

The information contained herein is true and accurate to the best of our knowledge. However, this document should not be considered a contract or warranty. On the other hand, the buyer and seller understand that the cultivation of vines is influenced by many circumstances. It is the buyer's responsibility to adapt the use of our products to such circumstances. There is no substitute for good wine growing and winemaking practices and permanent monitoring.

# **CHARACTERISTICS**

Product for foliar application.

#### Composition

Oenological yeast derivative (Saccharomyces cerevisiae) from Lallemand Oenology.

NO GMO.

#### Packaging

10 kg carton containing 10 bags of 1 kg.

#### Storage

Non-flammable product. Store in sealed original packaging. Store preferably in a cool and dry place. Avoid extreme storage conditions.

#### **Organic Agriculture**

Product suitable in organic farming according to Regulation (UE) 2018/848 and 2021/1165.

## **DOSE AND APPLICATION**

Effective from the first application.

Product for foliar application. Apply as soon as possible after hail damage.

#### Recommended dose by application on vines.

1 kg/ha.

1<sup>st</sup> application: after hail damage as long as there are enough leaves to receive the foliar application. In case the hail eliminates the entire leaf surface, make this first application once the new shoots present at least 3-4 leaves.

As a general recommendation 2 to 3 applications are advise in order to increase vine recovery and yield. Interval between applications around 14 days.

Dilute in water for its application (approximately 100 - 1000 I / ha; 10 - 110 gal / acre).

Follow the instructions on the application method and recommended crops.



March











LALLEMAND LALLEMAND OENOLOGY Original by culture