LEES Must Plus Line

LEES Must Plus THY & LEES Must Plus TRP

Enzyme kit for stabulation on must lees

⇢ TECHNICAL DESCRIPTION

Today, the presence of a distinctive and intense aromatic profile plays a key role in determining the value of white and rosé wines. To achieve this goal, a technique that can support winemakers and wineries is stabulation on cold must lees derived from grape pressing. These lees are rich in colloids and macromolecules that trap aromatic precursors, compounds that can contribute to flavor persistence if properly broken down. It has also been shown that amino acids responsible for varietal aroma expression are often not present in the must but remain in the lees. This technique ensures their release into solution.

The **stabulation on cold must lees (macération sur bourbes)** involves keeping the must in contact with its lees for several days (up to 8–10), with periodic resuspension. Afterward, conventional clarification and alcoholic fermentation follow.

Normally, the stabulation process focuses on the untapped aromatic potential within the must lees, promoting its release. It is crucial to monitor the process to avoid the development of vegetal or reductive notes, which may compromise the final result. Another critical factor is the sanitary condition of the grapes; even slight contamination can negatively affect the final product. In particular, the presence of moulds at this stage could trigger oxidative processes, which, instead of amplifying the aromatic picture could compromise it, and, in the worst cases, lead to the emergence of smells or odours attributable to them.

It is also clear that stabulation on cold must lees goes through an ideal must management at an ideal pre-fermentation stage, without starting fermentation. It is a technique that relies on of leaving the must turbid in contact with the lees, removing only the really coarse ones, which often have skin and grape-seed residues (in this context, it helps in the cellar to have a a wide-meshed strainer). The lees are left in contact with the must for a period of 5 to 12 days in the most extreme cases, at a temperature that clearly excludes the triggering of fermentation and ensuring that no major oxidation processes take place. For this purpose, calibrated doses of antioxidant products can be used. Clarification or flotation is then carried out, being aware that - after this procedure - the volume of lees can be quite large.

An interesting **alternative to sulphitation is bioprotection with PRIMAFLORA VB and GALLOVIN**, which allows for greater action of the enzyme pool and at the same time very complex and interesting aromas. In order to avoid the formation of oxidising compounds when the grapes are received, the use of inert gases can help protect the must in another form.

In this context, daily or twice-daily resuspension of the lees is essential to prevent settling, in order to facilitate the release of the desired compounds into the must and prevent them from compacting on the bottom, losing the benefits of the stabulation. Finally, it will be possible to proceed with alcoholic fermentation, which will be carried out according to the techniques chosen by the oenologist for the grape variety or wine profile to be obtained.

AEB's enzyme complex supports lees stabulation by simplifying key technological parameters. It enables the same results of an 8-day stabulation in just 2 days at 6–8°C. This is because the direct addition of enzyme activity does not require its development in the lees, or in any case does not require chemical factors to perform this function.

Reference: LEES_MUST_PLUS_TDS_EN_0190525_South_Africa

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LEES Must Plus THY & LEES Must Plus TRP

⇢ COMPOSITION AND TECHNICAL CHARACTERISTICS

The **LEES Must Plus line** includes two enzyme kits: **LEES Must Plus THY** - for varieties rich in thiolic aromatic precursors and **LEES Must Plus TRP** – for terpene-rich aromatic precursors.

LEES Must Plus THY enzymatic kit
ENDOZYM Elevage 2.0
ENDOZYM Glucalyse 2.0
ENDOZYM Velluto
ENDOZYM Thiol

LEES Must Plus TRP enzymatic kit
ENDOZYM Elevage 2.0
ENDOZYM Glucalyse 2.0
ENDOZYM Velluto
ENDOZYM ß-Split

ENDOZYM Elevage 2.0: provides protease activity that enhances the beta-glucanase effect as a booster. The breakdown of colloids supports the release of aroma compounds into the medium.

ENDOZYM Glucalyse 2.0: through beta-glucanase activity, it promotes the breakdown of macromolecules, aiding aromatic extraction—one of the main goals of stabulation. It also supports arabinosidase action to release polysaccharides naturally present in must lees.

ENDOZYM Velluto: its new arabinosidase activity enables the release of polysaccharides from galacturonic acid chains, enriching the must with compounds that give volume and smoothness to the wine.

The two **LEES Must Plus THY / TRP** kits differ in the specific activities related to the release of the aromatic compound.

For wines whose aromatic base is of thiolic origin, ENDOZYM Thiol is used, which, thanks to its activity related to the release of cysteine and glutathione, promotes the revelation of thiolic aromas during alcoholic fermentation.
For wines whose aromatic base is of terpenic origin, ENDOZYM ß-Split is used, which, thanks to its beta-glucosidase activity, promotes the release of terpenes, which are naturally present in grapes in a bound form (glycosylated), and therefore non-odorous.
Glycosylated aromas are bound to a disaccharide composed of glucose, directly linked to the aglycone, and to an additional sugar (xylose, arabinose, etc.). In this way, the aroma is made olfactively available.

AEB's two enzyme kits also allow only coarse lees to be processed, those that precipitate after a few hours when cold. First, however, these lees must be subjected to scouring or separation of the very coarse parts. Moreover, in this case, it is necessary to intervene with an addition of ELLAGITAN in doses of 5 g/hL.
IMPORTANT: the lees must not derive from static clarification processes using enzyme or flotation.

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⇢ DOSAGE

LEES Must Plus THY

One kit for the treatment of 800 hL of must includes:
ENDOZYM Elevage 2.0
ENDOZYM Glucalyse 2.0
ENDOZYM Velluto
ENDOZYM Thiol

LEES Must Plus TRP

One kit for the treatment of 800 hL of must includes:
ENDOZYM Elevage 2.0
ENDOZYM Glucalyse 2.0
ENDOZYM Velluto
ENDOZYM ß-Split

⇢ INSTRUCTIONS FOR USE

Dilute directly in 10 parts unsulfited must or demineralised water. The purpose of dilution is to homogenise the dosage. Use at the beginning or when filling tanks.

⇢ STORAGE AND PACKAGING

Store in the original sealed packaging, away from light, in a cool, dry, odor-free place below 20°C. Do not freeze. Respect the expiration date on the label. After opening, use by the end of the harvest.

Enzyme kits for 800 hL of must:

LEES Must Plus THY	Contents
ENDOZYM Elevage L	n. 1 bottle of 1 kg net
ENDOZYM Glucalyse 2.0	n. 2 bottles of 0.250 kg net
ENDOZYM Velluto	n. 2 bottles of 0.250 kg net
ENDOZYM Thiol	n. 2 bottles of 0.250 kg net

LEES Must Plus TRP	Contents
ENDOZYM Elevage L	n. 1 bottle of 1 kg net
ENDOZYM Glucalyse 2.0	n. 2 bottles of 0.250 kg net
ENDOZYM Velluto	n. 2 bottles of 0.250 kg net
ENDOZYM ß-Split	n. 1 jar of 0.500 kg net

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