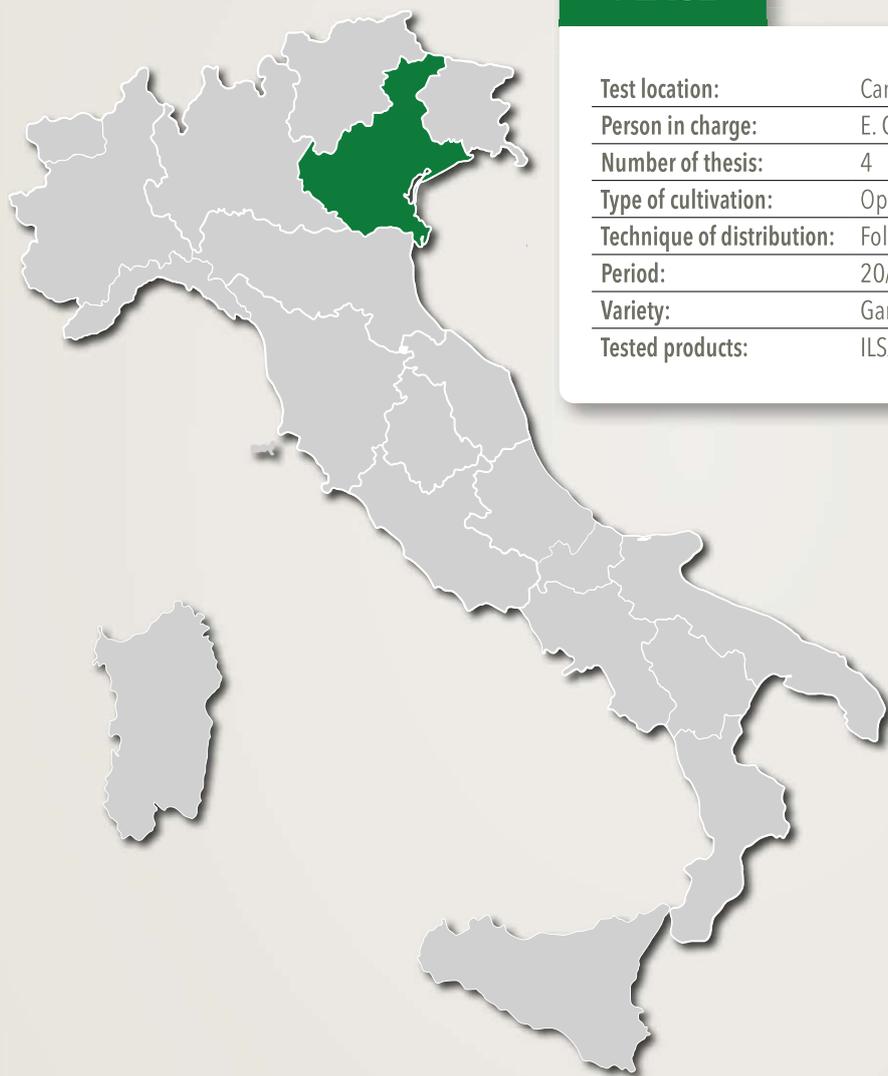


WINE GRAPES

Increase the degree of white grapes ripeness



PLACE



| | |
|----------------------------|--|
| Test location: | Cantina sociale di Custoza, Sommacampagna (VR) |
| Person in charge: | E. Giovanelli, M. Magnano |
| Number of thesis: | 4 |
| Type of cultivation: | Open field |
| Technique of distribution: | Foliar application |
| Period: | 20/05/2021 - 12/07/2021 |
| Variety: | Garganega |
| Tested products: | ILSAVEGETUS, ILSA-ON, SILIFORCE |



OBJECTIVE

To evaluate the efficacy of **ILSA** biostimulants in increasing the sugar content in vineyards subjected to abiotic stress.

GRAPE VINES



RESULTS ACHIEVED

The vineyard being tested is located in an area often characterised by very low temperatures, high temperature ranges in spring and very humid summers, factors that negatively affect the fruit setting stage and limit the achievement of the right degree of ripeness at harvest.

The test was divided into two different phases.

The foliar applications with IlsaVegetus, carried out around the time of flowering, allowed to have more homogeneous and less prolonged flowering, better preparing the formation of the cluster and reducing millerandage.

Starting from the post-setting stage, three applications were carried out using IlsaC-on and Siliforce, mixed together, in order to stimulate regular fruits swelling a uniform cluster structure. During this very delicate stage, the two biostimulants supported the plants, at a physiological level, to better manage the abiotic stresses typical of the vineyard, allowing them to reach a more advanced and uniform degree of ripening on the same plot during the veraison stage.

The results of the analysis of the harvested grapes confirmed, in terms of sugar content and ripeness, the efficacy of **ILSA** biostimulants used by foliar application.

TEST PROTOCOL

| STAGE | ILSA thesis | Untreated |
|-----------------------------|---|-----------|
| FOLIAR APPLICATIONS | | |
| At flowering (20/05/2021) | IlsaVegetus: 2 kg/ha | / |
| 30/05/2021 | IlsaVegetus: 2 kg/ha | / |
| Fruits setting (15/06/2021) | IlsaC-on: 2 kg/ha Siliforce: 0.3 kg/ha | / |
| 26/06/2021 | IlsaC-on: 2 kg/ha Siliforce: 0.3 kg/ha | / |
| 12/07/2021 | IlsaC-on: 2 kg/ha Siliforce: 0.3 kg/ha | / |

The other treatments, top dressing and plant protection, were similar for both thesis, as per company practice.

Volume of water per hectare per treatment: 800 litres



WINE GRAPES

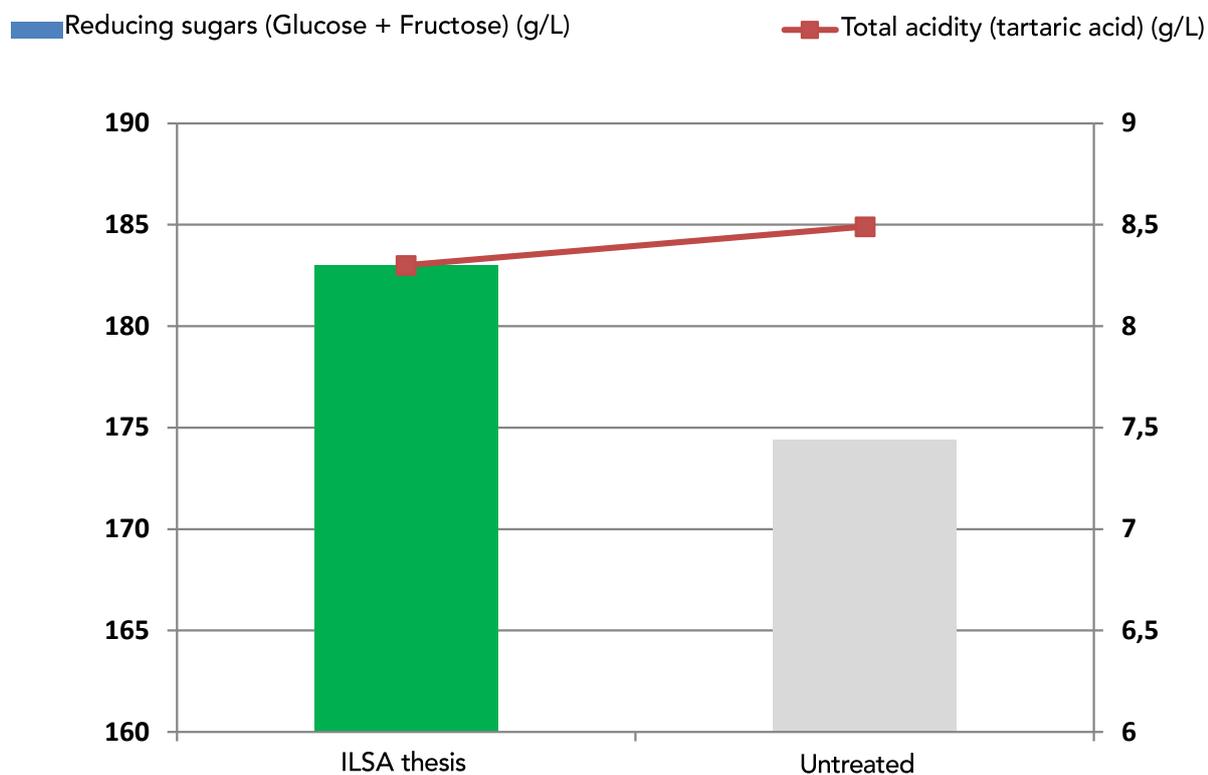
Increase the degree of white grapes ripeness



RESULTS ACHIEVED

| Must Analysis Results - 21/09/2019 | ILSA thesis | Untreated |
|--|----------------|-----------|
| Relative density (at 20 °C) | 1.07774 | 1.07388 |
| Maturity index (Godet) | 94 | 87 |
| Reducing sugars (Glucose + Fructose) (g/l) | 183.0 | 174.4 |
| Total acidity (tartaric acid) (g/l) | 8.30 | 8.49 |
| pH (at 20 °C) | 3.05 | 3.02 |
| Total malic acid (g/l) | 3.16 | 3.54 |
| RAN (Readily Assimilable Nitrogen) (mg/l) | 167 | 164 |
| Potassium (mg/l) | 970 | 860 |

The analyses were carried out at Vassanelli Lab srl in Bussolengo (VR)



GRAPE VINES

UNTREATED



ILSA THESIS



Clusters of Garganega during the pre-veraison stage (02 August 2021): the untreated shows symptoms of incorrect fruit setting and berry drop, compared to the **ILSA** thesis, in which the applications of IlsaVegetus limited the effects of abiotic stress.

