

WINE GRAPES

Early and uniform
ripening and
increase in grape quality



PLACE

Test location:	Edmund Mach Foundation, San Michele all'Adige (TN)
Person in charge:	D. Porro, M. Magnano, A. Tedesco
Number of thesis:	6
Type of cultivation:	Open field
Technique of distribution:	Foliar application
Period:	16/06/2021 - 28/07/2021
Variety:	Pinot Noir (Clone 828/SO4)
Tested products:	ILSAC-on



OBJECTIVE

To evaluate the efficacy of the biostimulant IlsaC-on, applied by foliar application on Pinot Noir grapes, on the anticipation and uniformity of the veraison and ripening stages and on the increase in the organoleptic qualities of the grapes.

GRAPE VINES



RESULTS ACHIEVED

In cooperation with the Edmund Mach Foundation of San Michele all'Adige (TN), a test was carried out on Pinot Noir grapes (year 2018, grown in Guyot, with 6,250 plants per hectare), to evaluate the action of the enzymatic hydrolysate of Fabaceae on the uniformity of grape ripening. Applied every two weeks during the berry development stage, IlsaC-on made the veraison stage more uniform and regulated all the ripening stages, leading to an improvement in grape quality, especially parameters such as sugar content and polyphenol potential. The latter parameter, measured both in the laboratory (expressed in mg/kg) and using the Caeleno polyphenolic meter (expressed as PMI, Polyphenolic Meter Index), showed a significant increase, a very important factor for red grapes, as polyphenols give greater structure and colour to the wine. There was also an interesting increase in terms of the compressive strength of the berries at harvest, which indicates greater integrity and less susceptibility to cracking and rotting (shelf-life).

TEST PROTOCOL

STAGE	ILSA thesis	Untreated
FOLIAR APPLICATIONS		
Fruits setting (16/06/2021)	IlsaC-on: 2 kg/ha	/
30/06/2021	IlsaC-on: 2 kg/ha	/
19/07/2021	IlsaC-on: 2 kg/ha	/
28/07/2021	IlsaC-on: 2 kg/ha	/

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

RESULTS ACHIEVED

Degree of veraison (%) (analysis carried out on 72 plants)	ILSA thesis	Untreated
04/08/2021	28.7 a	19.55 b
10/08/2021	60.6 a	50.4 b
18/08/2021	90.1 a	81.7 b



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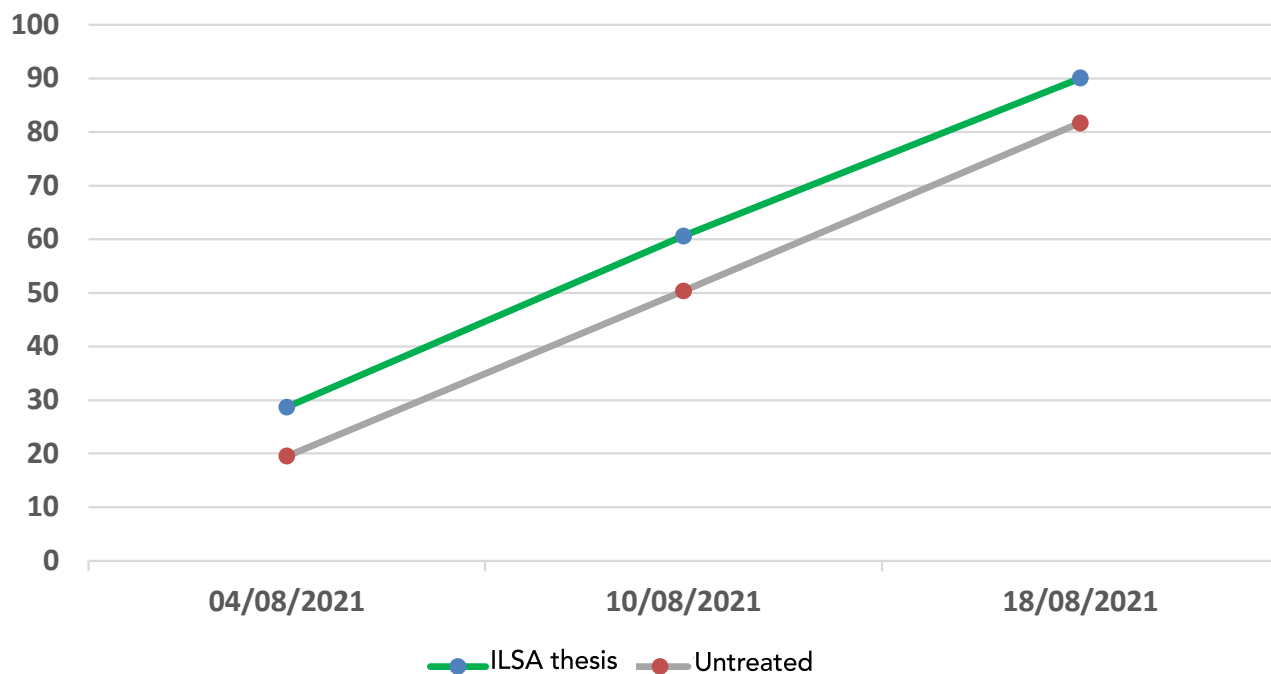


Stages of grape veraison survey during the grape veraison.

RESULTS ACHIEVED

Must Analysis Results – 01/09/2021	ILSA thesis	Untreated
Average cluster weight (g)	130.7	124.9
Grapes compression (g)	715.7	699.5
Sugars (°Brix)	23.68	22.85
Total acidity (g/l)	5.97	6.23
pH	3.39	3.37
Malic acid (g/l)	3.54	3.92
Tartaric acid (g/l)	6.06	5.99
RAN (mg/l)	183	179
PMI (polyphenolic meter index)	188.5	180.7
Total polyphenols (mg/kg)	1,223	1,125

Degree of veraison (%)



The part of the vineyard in which IlsaC-on was applied always maintained a more advanced degree of grape colouring compared to the company's thesis, leading to a higher sugar content at harvest. In order to achieve this result, foliar applications with IlsaC-on must be carried out during the grape development stage, up to the pre-veraison stage.



Detail of the **ILSA** thesis in mid-August 2021, when the grapes were reaching a good uniformity of ripening.