

OLIVE TREES

Increase oil content



PLACE

Test location:	Azienda Agricola Cittadino Salvatore, Lamezia Terme (CZ)
Person in charge:	V. De Martino, A. Cifarelli
Number of thesis:	2
Type of cultivation:	Open field
Technique of distribution:	Foliar application
Period:	10/05/2021 - 25/10/2021
Variety:	Carolea
Tested products:	ILSAC-on, ILSAMIN BORO, ILSAMIN CALCIO, ETIXAMIN BIO-K



OBJECTIVE

To evaluate the efficacy of **ILSA** biostimulants and special formulations on the increase of oil yield in Carolea varieties, with a dual-purpose, in organic olive groves.



OLIVE TREES

RESULTS ACHIEVED

Foliar applications during the pre-flowering stage, with IlsaC-on and Ilsamin Boro, and during the post-setting stage, with IlsaC-on and Ilsamin Calcio, promoted, first of all, a slight increase in the production capacity and, above all, a more uniform olive yield per plant. The average yield for the **ILSA** thesis was, indeed, about 90 kg/plant and all the plants had a very similar quantity of olives, unlike the company thesis which, apart from an average yield of 75 kg/plant, showed great unevenness among plants, with some very full and others with less than 40 kg/plant.

The main objective of the trial field was to increase the oil yield, a decisive factor for this high-productivity variety, during the high-production year. Foliar applications, from mid-August to early October, with IlsaC-on and Etixamin Bio-K, were aimed at stimulating higher oil production in olives, during the crucial oil formation stage, that is, during the hardening of the stone, when amino acids, potassium and substances with a biostimulating effect promote both an increase in oil yield and a perfect balance between fatty acids, sterols, tocopherols and polyphenols.

Despite a very dry summer and the non-irrigated management of the olive grove, during the oil formation stage the plants of the **ILSA** thesis were very green, with well extended leaves and olives that showed no signs of "wrinkling", indicating a more intense photosynthetic activity and greater tolerance to thermal and water stress. The final result, in terms of oil yield at the oil mill, proved that the **ILSA** methodology was better, with a 17% yield by 20 October compared to 16% for the company sample, an important increase for a high-productivity variety like Carolea. Considering also the increase in olive yield, the amount of oil obtained from the **ILSA** thesis was more than 6 quintals higher than the oil obtained from the company thesis.

TEST PROTOCOL

STAGE	ILSA thesis	Company thesis
SOIL APPLICATIONS		
Flowering / Pre-Flowering (10/05/2021)	IlsaC-on: 1.5 kg/ha Ilsamin Boro: 1.5 kg/ha	/
Post-setting (16/06/2021)	IlsaC-on: 1.5 kg/ha Ilsamin Calcio: 3 kg/ha	Product based on organic N and free amino acids: 3 kg/ha
Fruit Swelling / Oil Formation (1st intervention: 16/08/2021) (2nd intervention: 08/09/2021) (3rd intervention: 01/10/2021)	IlsaC-on: 1.5 kg/ha Etixamin Bio-K: 3 kg/ha	Product based on organic N and free amino acids: 3 kg/ha

Other fertilisation, based on macro- and micro-nutrients and phytosanitary defence treatments, were similar for both samples, as per company practice.



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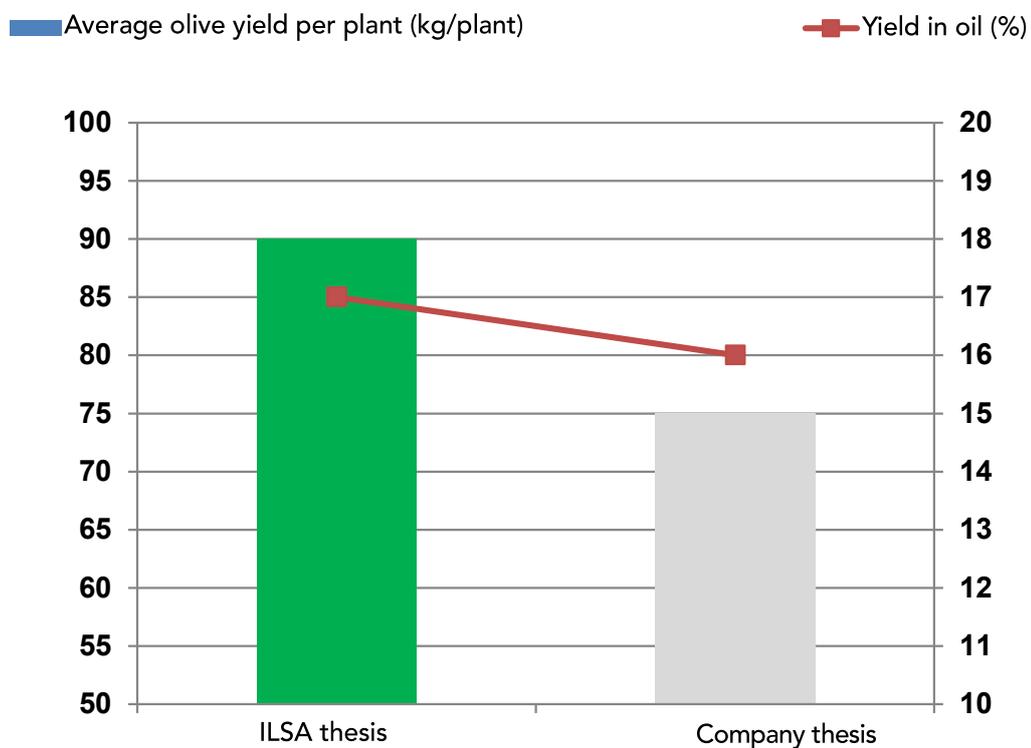
ILSA TOP

ILSA TEC



RESULTS ACHIEVED

	ILSA thesis	Company thesis
Average olive yield per plant (kg/plant)	90	75
Yield in oil (%)	17	16
Production increase in oil per hectare (q/ha)	6.6	/



OLIVE TREES

ILSA THESIS



COMPANY THESIS



Comparison between a plant of the **ILSA** thesis (photo on the left) and one of the company thesis (photo on the right). In addition to the higher olive load, the better vegetative state of the **ILSA** thesis is evident.