

Strawberry: Chelal Si and Chelal Omnical

Aim of the trial

The aim of this trial is to improve the quality of the strawberries.

General information

Conditions of the trial:

Trial location: Spain – Huelva
Variety: RedSayra
Cultivation method: Soil, under plastic tunnels
Date of planting: 08/10/2024
Density: 15 cm x 100 cm
In cooperation with: Agricultura y Ensayo S.L.



Experimental design:

Official GEP test (good experimental practices) according to the Randomized Complete Block Design; 4 replicates. Area of an elementary plot: 2 m x 10 m = 20 m²

Treatments

3 modalities:

Modality	Product	Dose*	Application
1	Untreated control	-	-
2	Chelal Si	0.5 L/ha	AC: foliar application BD: via drip irrigation
3	Chelal Si Chelal Omnical	0.5 L/ha 1.0 L/ha	AC: foliar application BD: via drip irrigation

* The dose was the same for the 4 applications (A, B, C and D).

	A	B	C	D
Date	23/12/2024	02/01/2025	20/01/2025	03/02/2025
BBCH	85-89	85-89	85-89	85-89
Water quantity	600 L/ha	5000 L/ha	900 L/ha	5000 L/ha

Results

Per plot, 20 fruits were harvested 7 days after the last treatment. The fruits were stored at a temperature of 5°C. At harvest and at 4 times during storage, the firmness and weight loss were determined and at the same time a score was given for rot.

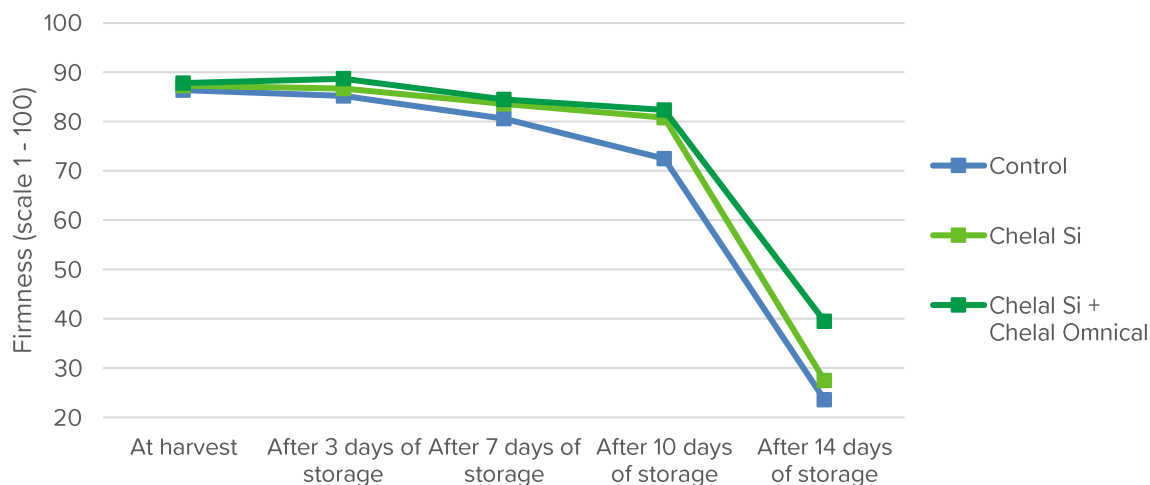
The firmness was determined with the 100 Field Agrostia penetrometer, which uses a scale of 1 to 100, with higher values corresponding to a higher firmness. Since the firmness determinations were carried out in a non-destructive way, the firmness could be determined on the same fruits each time.

Firmness during storage:

	At harvest		After 3 days of storage		After 7 days of storage		After 10 days of storage		After 14 days of storage	
Control	86.4	a	85.2	a	80.6	a	72.5	c	23.6	b
Chelal Si	87.3	a	86.7	a	83.6	a	80.8	b	27.5	b
Chelal Si + Chelal Omnical	87.8	a	88.7	a	84.5	a	82.4	a	39.5	a



Evolution of the firmness during storage



% weight loss during storage:

	After 3 days of storage		After 7 days of storage		After 10 days of storage		After 14 days of storage	
Control	5.48	a	12.87	a	15.96	a	30.28	a
Chelal Si	5.31	a	10.46	a	13.00	b	24.97	b
Chelal Si + Chelal Omnical	4.50	a	9.30	a	11.67	b	21.64	b

% fruits without rot during storage:

	After 10 days of storage		After 14 days of storage	
Control	97.5	a	20.0	a
Chelal Si	98.8	a	20.0	a
Chelal Si + Chelal Omnical	100.0	a	25.0	a

Calcium content in the fruits:

