BMS MICRO-NUTRIENTS
CHELATED MICRO-NUTRIENTS & FOLIAR FERTILIZERS

The Netherlands

Pear: Chelal Co NF against internal browning

Aim of the trial

Studying the effect of applications with the product Chelal Co NF on the incidence of internal browning during storage of Cepuna pears.

General information

Conditions of the trial:

Trial location:	The Netherlands - Gelderland	Variety:	Cepuna (Migo®)
Rootstock:	Q-Eline	Protection:	Anti-hail net
Flowering date:	19/04/2023	Planting distance:	3.5 m x 1.1 m
Harvesting dates:	11/09/2023 and 18/09/2023	Planting year:	2015
Cool store:	RA + 1-MCP treatment	Spray volume:	300 L/ha
In cooperation with:	Proeftuin Randwijk - FruitMasters		

Experimental design:
Randomized trial with microplots; 3 replicates. 6 trees per replicate.

Treatments

3 modalities:

Modality	Product	21/08/23 (BBCH 78)	04/09/23 (BBCH 81)
1	Untreated control	-	-
2	Chelal Co NF	1.33 L/ha	1.33 L/ha
3	Chelal Co NF	0.67 L/ha	0.67 L/ha

Results

25 fruits per replicate per harvesting date have been assessed on each of the 2 observation moments (1/11/23 and 5/01/24).

Modality	**1st assessment (browning index)**		**2nd assessment (browning index)**	
	Harvest 1	Harvest 2	Harvest 1	Harvest 2
Control	20.0% (a)	18.7% (a)	45.8% (a)	43.7% (a)
Chelal Co NF 1.33 L	9.2% (b)	8.0% (b)	35.4% (ab)	24.3% (b)
Chelal Co NF 0.67 L	17.0% (a)	12.9% (ab)	27.5% (b)	29.4% (ab)

Conclusion:
Cepuna pears are sensitive to internal browning after a medium storage period. In sensitive years it even occurs after a few weeks of storage. The results show that Chelal Co NF at the highest dose performs always better than the control, and in 3 out of 4 observations significantly better.

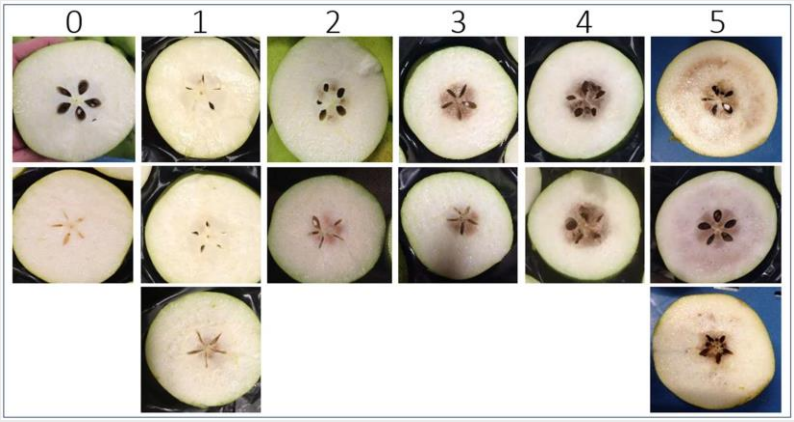

Figure 1. Scorecard with images of horizontally cut Cepuna pears that are used as a reference for assessing the pears of the current trial. (0 = no brown, 1 = light brown, 2 = moderate brown, 3 = medium brown, 4 = strong brown, 5 = extreme brown).

Browning Index (%)

$$= \frac{\sum(\text{Score} * \text{Fruits with this score})}{\text{Highest score} * \text{total number of fruits}} * 100\%$$

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