



Reducing cracking of melons with Chelal Omnical and Landamine BMO

Aim of the trial

The aim of this trial was to reduce the percentage of cracked fruits in the production of Piel de Sapo melons in Spain. For this we used the products Chelal Omnical and Landamine BMO. It is known that Ca and B play an important role in the strength and elasticity of the cell wall. This test was set up at two locations.

General information

Conditions of the trial:

Trial location: Spain – Almeria
Variety: Piel de Sapo

Density: 2 x 0.5 m (1 plant/m²)

Experimental design:

Trial without replicates, on large surfaces:

Location 1: Control: 4000 m²
BMS MN: 4000 m²
Location 2: Control: 4750 m²
BMS MN: 6000 m²

Treatments

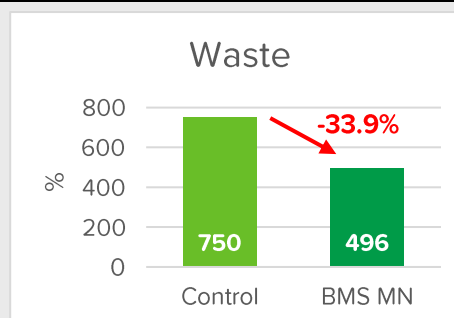
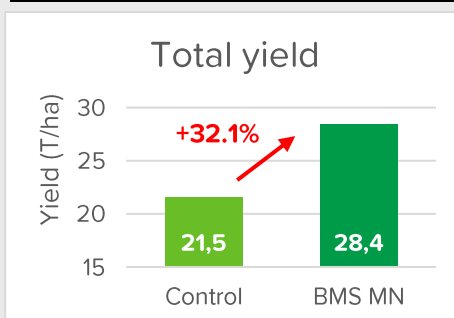
2 modalities (identical for the 2 locations):

- **Control:** untreated
- **BMS MN (via fertigation):**
 - o Before placing the bee hive:
 - 2 x Chelal Omnical at 1.5 L/ha
 - 2 x Landamine BMO at 3 L/ha
 - o After removing the bee hive:
 - 1 x Chelal Omnical at 1.5 L/ha



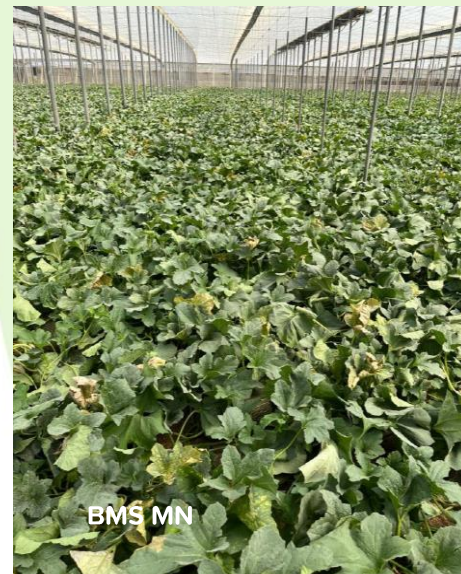
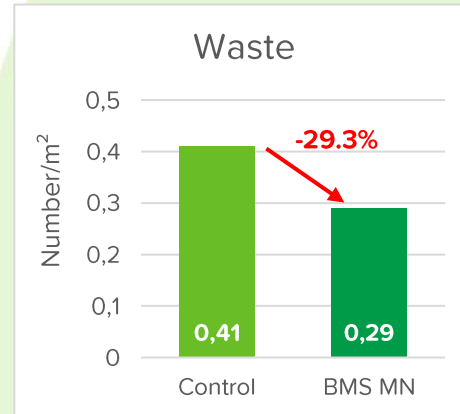
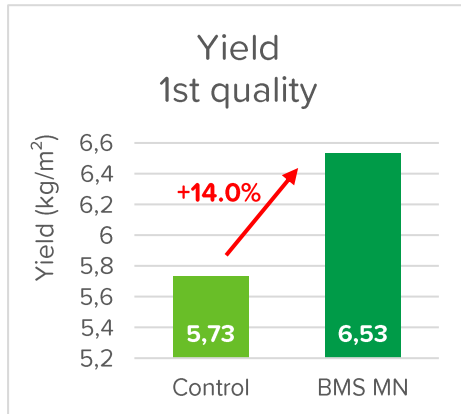
Results

LOCATION 1:	Control	BMS MN
Mean weight/melon (kg)	2.927	3.536 (+20.8%)
Number of melons (on 4000 m ²)	7350	8027
Total yield (ton)	21.5	28.4 (+32.1%)
Waste (number of melons)	750	496 (-33.9%)
% waste	10.4	6.2





LOCATION 2:	Control	BMS MN
Yield 1 st quality (kg/m ²)	5.73	6.53 (+14.0%)
Yield 2 nd quality (kg/m ²)	1.0	0.7
Waste (number/m ²)	0.41	0.29 (-29.3%)
Cracked fruits (number/m ²)	0.13	0.11 (-15.4%)



Conclusions:

- At both locations we observed a **better retention of the vegetation** in the BMS MN modality during warmer and drier periods. The plant's turgor maintained a longer time and that tells us that the plant was less time under stress, that the water cycle within the plant was maintained for longer and that the plant had less water and energy losses. This is also clearly visible in the 2 pictures above. Furthermore, we can suppose that because there is more shade due to better plant coverage, the soil lost less water and remained more moist.
- In the BMS MN modality we note **better fruit set, more uniform and larger melons** compared to the untreated control. In addition, the **proportion of waste and cracked melons is significantly reduced** by the treatments.