

Mango: increased fruit set and fruit weight

Objective of the trial

The goal of this trial was to improve flower induction and thus increase fruit set rate, fruit weight and total yield using a BMS MN foliar nutrition program.

General information

Conditions of the trial:

Trial location:	Brazil	Harvest:	Early July 2018
Variety:	Palmer	Flowering:	Mid to end of March 2018
In cooperation with:	Seiva do Vale		

Treatments

2 modalities:

	BMS MN	Control
15/01/2018	Chelal B 1 L/ha	/
23/01/2018	Chelal B 0,5 L/ha + Chelal Zn 0,5 L/ha	AZII 1 kg/ha
31/01/2018	Chelal B 0,5 L/ha + Chelal Zn 0,5 L/ha	AZII 1 kg/ha
Interval	Landamine Zn 1 L/ha	Fetrilon Comb 1 kg/ha
07/02/2018	Chelal Hydro 0,75 kg/ha	Kalibor
21/02/2018	Chelal Hydro 0,75 kg/ha	Kalibor
27/02/2018	/	Kalibor



Kalibor = foliar B product. AZII and Fetrilon Comb are trace element mixes (EDTA chelated Fe, Mn, Zn, Cu + B and Mo).

Timing of applications:

January is about 6 months before the harvest, this is the moment the flower induction happens, when the dormancy is broken with the $\text{Ca}(\text{NO}_3)_2$ and/or KNO_3 applications.

Results

Cal 6, Cal 12, Cal 14: indicates how many fruits fit in one box, so the higher the number, the smaller the fruits. Cal 6 and Cal 12 are the most valued calibres. One box = 14 kg.

	Calibre 6 to 12	Calibre 14	Total yield
BMS MN	53662 kg	12670 kg	66332 kg
Control	27104 kg	24850 kg	51954 kg

⇒ **Conclusion:** With the foliar nutrition program of BMS MN, the fruit set rate was increased (more fruits per tree) and also the fruit weight was increased. This resulted in an overall yield gain of 27.7% and a yield gain of the commercial most interesting calibres of 98.0%.

