



Hazelnuts: ECOMETHOD

Objective of the trial

In the Italian province of Viterbo, the annual soil fertilization of the hazelnut orchards produces a strong eutrophication of the nearby Lake of Vico. The local government wants to counter this by examining alternative methods of fertilization. This report shows the results of 2 years of trials in which only foliar nutrition was used.

General information

Conditions of the trial:

Trial location:	Italy – Lazio	Density:	500 trees/ha, 5 m x 4 m
Variety:	Tonda Gentile Romana	Soil type:	Sandy loam, acid
In cooperation with:	Università degli Studi della Tuscia		
Harvesting date:	Early September + Late September		

Treatments

2 modalities (plots of 5000 m²): identical fertilization during the 2 years

⇒ T0: Control (only soil fertilization)

	Product	Quantity	Timing
1	20-10-10	600 kg/ha	End of March

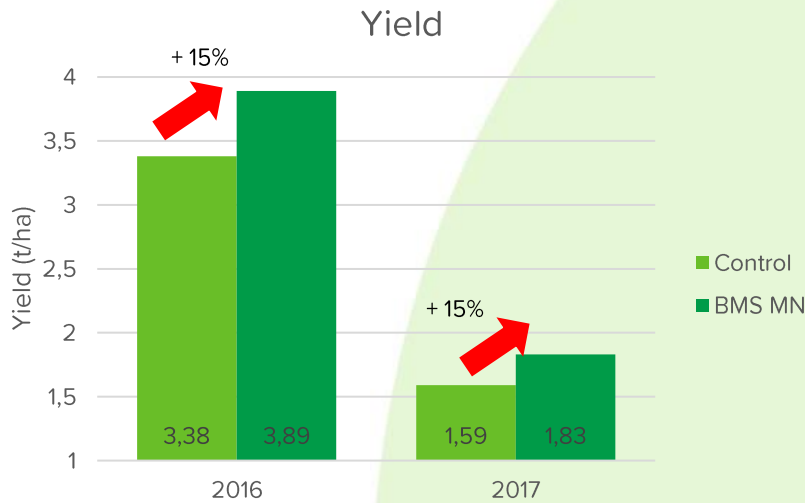
⇒ T1: Applications of the BMS MN program (without soil fertilization)

	Product	Quantity	Timing
1	Kappa M	5 kg/ha	End of April
2	Fructol NF	2.5 kg/ha	End of May
3	Fructol NF	2.5 kg/ha	Mid-June
4	Fructol NF	3 kg/ha	Early July



Results



Modality	Year	Hazelnut weight (g)	Seed weight (g)	Shell weight (g)	Ø (mm)	Seed weight/hazelnut weight (%)
BMS MN	2016	2,14	0,96	1,18	12,37	44,40
	2017	2,39	1,10	1,29	14,32	45,63
	Mean	2,26	1,03	1,24	13,35	44,71
Control	2016	2,44	1,13	1,31	13,78	45,53
	2017	2,09	0,89	1,20	13,23	42,45
	Mean	2,27	1,01	1,25	13,50	43,99



⇒ **Conclusion:** With the BMS MN applications, a yield gain of **15%** was obtained each time for 2 consecutive years compared to the control.

Calculation of the carbon footprint of Ecomethod

Calculation for 1 ha and for 1 year.

Quantity CO ₂ eq. ECOMETHOD	Quantity CO ₂ eq. TRADITIONAL FERTILIZATION (CONTROL)
	
31,8 kg/ha	749,2 kg/ha



CO₂	717,4	The reduction of CO ₂ eq. expressed in kg/ha
%CO₂	95,8%	The saving percentage of CO ₂ eq.