

CROP : APPLE – *GRANNY SMITH*

Trial carried out in France in 2002

SITE DETAILS

TRIAL N° :	D/F/POM/02/57	Crop information
81500 LAVAUUR South West region		Variety : Granny Smith Date of planting : 1980 Density of planting : 3,5 m between rows, 1,2 m on the row Height of the trees : 3 m Irrigation type : micro jets Over head hail protecting nets

APPLICATION DETAILS

	Product	Dose rate	Date of spraying	Crop stage at application	Volume of water	Remarks
Application N°1	AMINOFIT.Xtra	2,5 l/ha	29/03/02	Early flowering	200 l/ha	Mixed with fungicides
Application N°2	AMINOFIT.Xtra	2,5 l/ha	05/04/02	Mid flowering	200 l/ha	Mixed with fungicides
Application N°3	AMINOFIT.Xtra	5 l/ha	06/05/02	Fruits 15 to 17 mm diameter	200 l/ha	Mixed with fungicides
Application N°4	AMINOFIT.Xtra	5 l/ha	12/07/02	Fruits 52 mm diameter	200 l/ha	AMINOFIT.Xtra applied alone
Application N°5	AMINOFIT.Xtra	5 l/ha	14/08/02	Fruits 66 mm diameter	200 l/ha	AMINOFIT.Xtra applied alone

MATERIALS AND METHODS

Plot size : 1 hectare

Trial design : 4 replicates, assessments carried out on 3 consecutive trees per plot

Application method : Foliar spray

Equipment used : Tractor towed mist-blower

Assessments : At harvest, size and weight of fruits were measured on 100 fruits sampled at random on 3 consecutive trees, Brix level and firmness were measured on 20 fruits per plot
Fruits were stored in a dark store at 6 to 10°C. The assessments were carried out on 20 fruits per plot.

COMMENTS CONCLUSION

The climate conditions were good for fruit maturation. The last application as made 49 days pre harvest instead of 21 days as scheduled in the protocol.

Fruit numbers were equal in both the treated and the control plots.

No significant effect was recorded at harvest date on the calibre, the firmness or the sugar content.

After a period of 5 months of storage, the treated fruits achieved a higher brix level (+0,8 point), and a better density (+ 0,4 kg/cm²).

RESULTS

Date of assessment	02/10/02 = 49 days after last application		
Crop stage	Maturity		
Type of record	% fruit of calibre < 70	% fruit of calibre 70 to 80	% fruit of calibre > 80
AMINOFIT.Xtra	5 (a)	84 (a)	11 (a)
UNTREATED CONTROL	4 (a)	79 (a)	17 (a)
% of the control	+ 0.3	+ 6.3	- 35.3

Date of assessment	02/10/02 = 49 days after last application		
Crop stage	Maturity		
Type of record	Average weight of the fruits calibre < 70	Average weight of the fruits calibre 70 to 80	Average weight of the fruits calibre > 80
AMINOFIT.Xtra	105	162	232
UNTREATED CONTROL	109	161	238
% of the control	- 3.6	+ 0.6	+ 2.5

Date of assessment	02/10/02 = 49 days after last application		01/03/03	
Crop stage	Maturity		150 days after harvest	
Type of record	Refractometer index	Firmness in kg/cm ²	Refractometer index	Firmness in kg/cm ²
AMINOFIT.Xtra	10.3 (a)	8.44 (a)	11.2 (a)	5.4 (a)
UNTREATED CONTROL	10.2 (a)	8.39 (a)	10.4 (b)	5,0 (b)
% of the control	+ 0.98	+ 0.6	+ 7.7	+ 8

GRAPHS

