CROP : PLUM – *GOLDEN JAPAN*

Trial carried out in France in 2002

SITE DETAILS

TRIAL N° :	**D/F/PRU/02/06**	**Crop information**
82200 MOISSAC South West region		Variety : **Golden Japan** Root stock : Mirobolan Date of planting : 1990 Density of planting : 5 m between rows, 2,5 m on the row Height of the trees : 3,2 m Irrigation type : Drip irrigation

APPLICATION DETAILS

	Product	Dose rate	Application date	Crop stage at application	Volume of water	Remarks
Application N°1	AMINOFIT.Xtra	2,5 l/ha	14/03/02	Mid flowering	200 l/ha	AMINOFIT.Xtra applied in mixture with Topsin
Application N°2	AMINOFIT.Xtra	2,5 l/ha	30/04/02	Bud formation, diameter =1cm	200 l/ha	AMINOFIT.Xtra applied alone
Application N°3	AMINOFIT.Xtra	5 l/ha	03/06/02	Beginning of colouring	200 l/ha	AMINOFIT.Xtra applied alone
Application N°4	AMINOFIT.Xtra	5 l/ha	20/06/02	14 days before harvest	200 l/ha	AMINOFIT.Xtra applied alone

MATERIALS AND METHODS

Plot size : 2 rows with 19 trees per row
Trial design : 4 replicates
Application method : Foliar spray
Equipment used : Tractor towed mist-blower
Assessments : At harvest : size and weight of fruits,
Brix level,
Shelf life.

COMMENTS CONCLUSION

The trial was performed on a very homogeneous lot of prune trees. The 4 applications of AMINOFIT.Xtra that were realised from flowering stage until 15 days before harvest, have significantly increased the calibre of the fruit since 74 % of the fruit treated with AMINOFIT.Xtra were of calibre 55 and higher against 37 % for the control.

The average weight of the fruit was also largely augmented with an average difference of 9 gram per fruit in favour of AMINOFIT.Xtra.

The index of the refractometer shows a significant difference of + 0,4 point compared to the control.

The shelf life trials show that AMINOFIT.Xtra allows to prolong shelf life. 18 days after harvest, 75% of the prunes treated with AMINOFIT.Xtra are still fit for commercialisation against only 50% for the control.

This increase in calibre and average weight of the fruit has a direct consequence on the sales price of the harvest. On the one hand, the capacity per ton per hectare was increased; on the other hand, fruit of high calibre is sold more expensive than fruit of smaller calibre. The sugar content is not taken into account for commercialisation.

RESULTS

Date of assessment	04/07/02 = 14 days after the last application					
Crop stage	Maturity					
Type of record	% fruit of calibre 40	% fruit of calibre 45	% fruit of calibre 50	% fruit of calibre 55	Aver. weight / prune in gr	I.R. (% Brix)
AMINOFIT.Xtra	1 (a)	4,5 (b)	20,5 (b)	74 (a)	72,2 (a)	11,5 (a)
UNTREATED CONTROL	2,5 (a)	19 (a)	41,5 (a)	37 (b)	62,9 (a)	11,1 (b)

Date of assessment	22/07/02	26/07/02	30/07/02	02/08/02	06/08/02
Number of days after the harvest	18 days after harvest	22 days after harvest	26 days after harvest	29 days after harvest	33 days after harvest
Type of record	Cumulated % of prunes that are no longer fit for commercialisation (loss of firmness)				
AMINOFIT.Xtra	25	47,5	65	85	100
UNTREATED CONTROL	50	62,5	85	92,5	100

Remarks :
The calibre was measured on 50 plums per plot.
Brix was measured on a sample of 500 grams fruit per plot with a manual refractometer.
Shelf life was evaluated on a unique sample of 40 pieces of fruit per plot, conserved in the dark at 14°C. All damaged, withered, soft, waxy or spotted fruits were considered no longer fit for commercialisation and were withdrawn from the lot at every observation.

GRAPHS