

# AMINOFIT.Xtra, SOME TEST RESULTS

## ⇒ FRUITS

- WALNUT
- CHERRY
- PLUM
- PEAR
- APPLE
- STRAWBERRY

## ⇒ VEGETABLES

- POTATO
- ONION
- TOMATO
- MELON
- LETTUCE

## ⇒ ORNAMENTALS

- BERMUDA GRASS
- ORCHID
- PELARGONIUM
- CHRYSANTHEMUM

# AMINOFIT.Xtra on WALNUT (Australia 2003)

DO YOU WANT MORE FROM YOUR WALNUTS?

A new product is being trailed in Australia to assist farmers with improving the quality of their crops. Trials conducted by the Victorian Department of Natural Resources along with commercial field trials have shown the positive attributes of using pure, biologically active amino acids such as those contained in AMINOFIT in assisting crops overcome stress.

Crop types that have responded well are stone fruits, potatoes, strawberries, tomatoes, onions and walnuts. Initial trials on Walnuts have provided encouraging signs that yields can be significantly improved (Figure 1) when AMINOFIT is used in conjunction with the standard spraying program, along with the observed benefit of reduced percentage of nut drop from blight (figure 2).

We anticipate these walnut trials to be repeated for season 2003-2004.

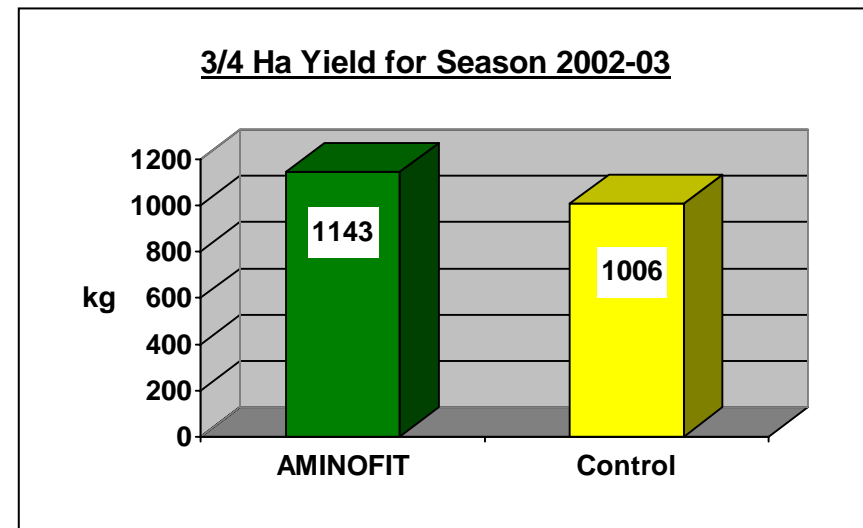
How does AMINOFIT work?

A walnut tree has an established level of protein production, which it requires to achieve the best walnuts it possible can. If this protein production is interrupted due to stress, then the tree will show signs of shutting down, or premature flower loss, or be more susceptible to disease etc.

Proteins are produced from amino acids. A product like AMINOFIT contains 19 essential amino acids that a tree requires to assist returning it to its premium level of protein production.

The unique structure of the amino acids in AMINOFIT allow the tree cells to use the amino acids without interruption of its chlorophyll activity, therefore the tree is not taxed of its energy.

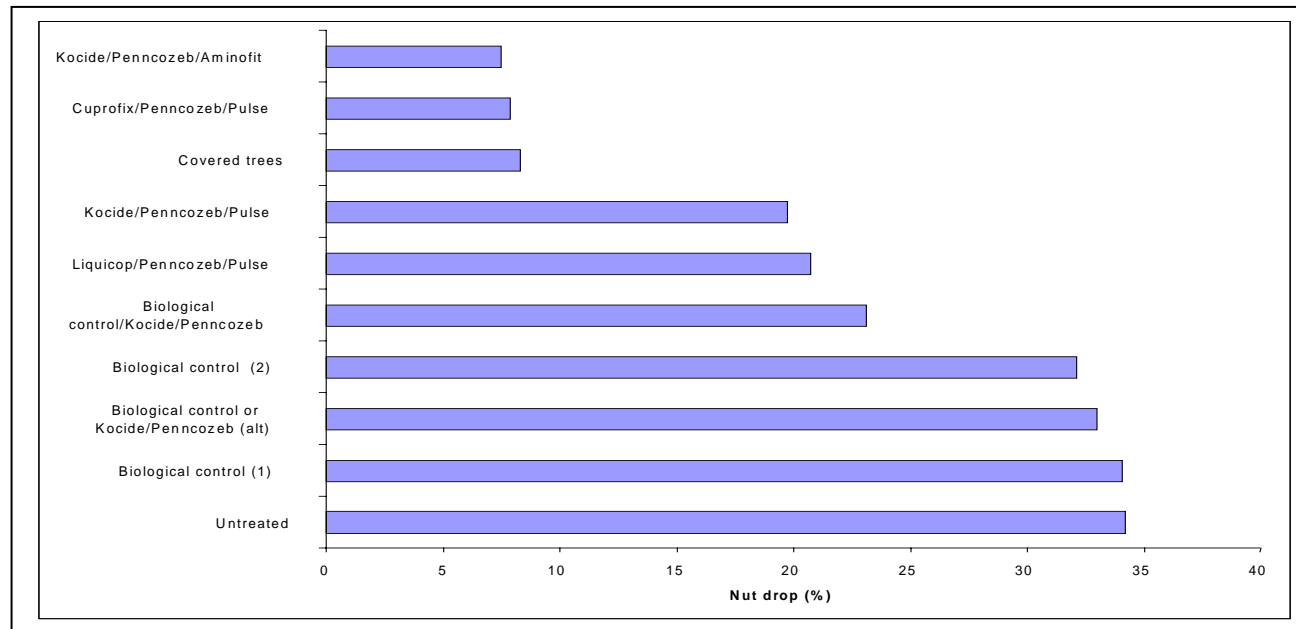
Figure 1



## CONCLUSION

IN SUMMARY IT APPEARS THAT TREES RECEIVING A REGULAR TREATMENT OF AMINOFIT ARE MORE LIKELY TO OVERCOME PERIODS OF STRESS EXPERIENCED DURING A SEASON, RESULTING IN AN IMPROVED YIELD AND REDUCED SEVERITY (NUT DROP) FROM BLIGHT.

Figure 2



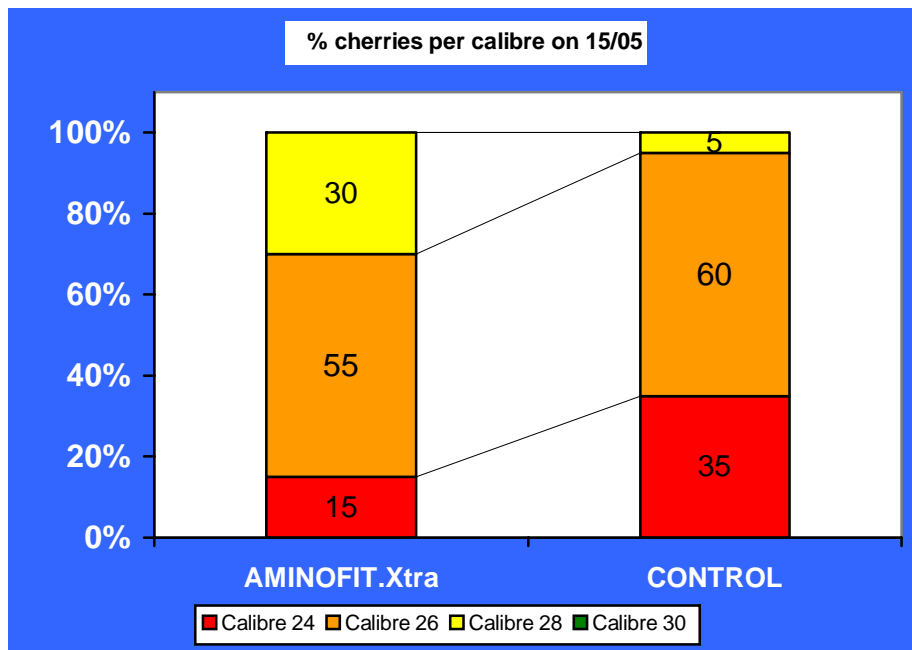
# AMINOFIT.Xtra on CHERRY (Burlat variety) (France 2002)

AMINOFIT.Xtra, applied 4 times starting from the flowering stage until 5 days before harvest, allows improving the quality level of the harvest. The effects are particularly visible in the increase in calibre, since at the date of the first harvest, 85 % of the cherries are of calibre 26/28 in the plots that were treated with AMINOFIT.Xtra against 65 % in the control plots.

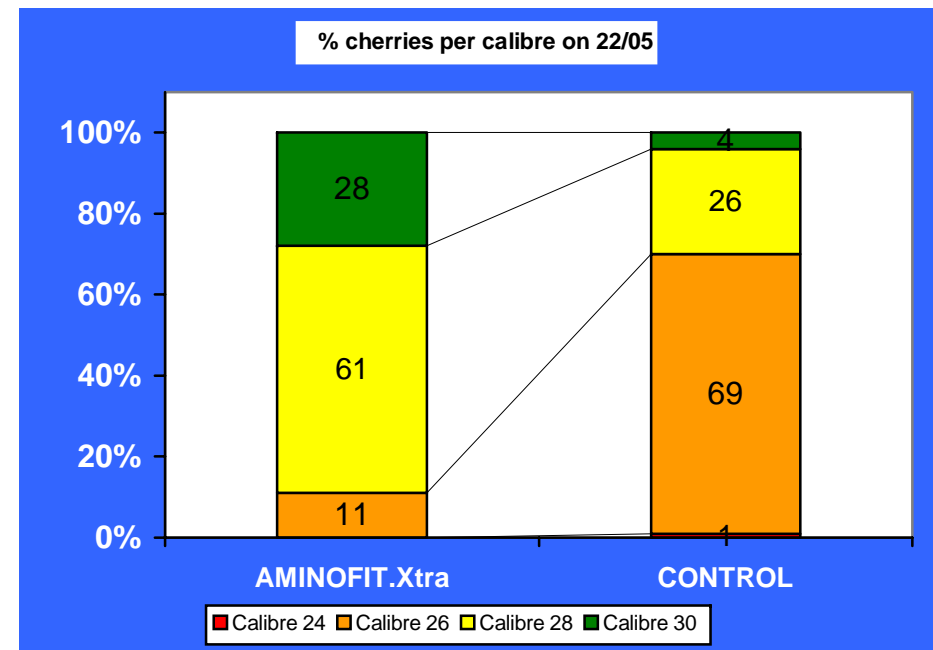
At the second harvest date, the results are similar with 89 % of the fruit of 28/30 in the treated plots against 30 % in the control plots. AMINOFIT.Xtra also allows to increase the brix from 0,4 to 0,6 point.

The cherries of the treated plots have a longer shelf life. 12 days after harvest, 52 % of the cherries in the control plots are no longer marketable against only 14 % in the treated plots.

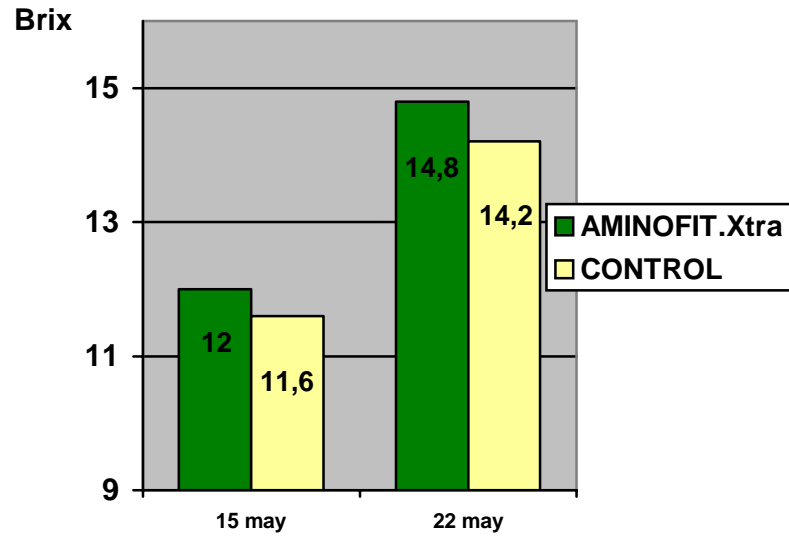
First picking



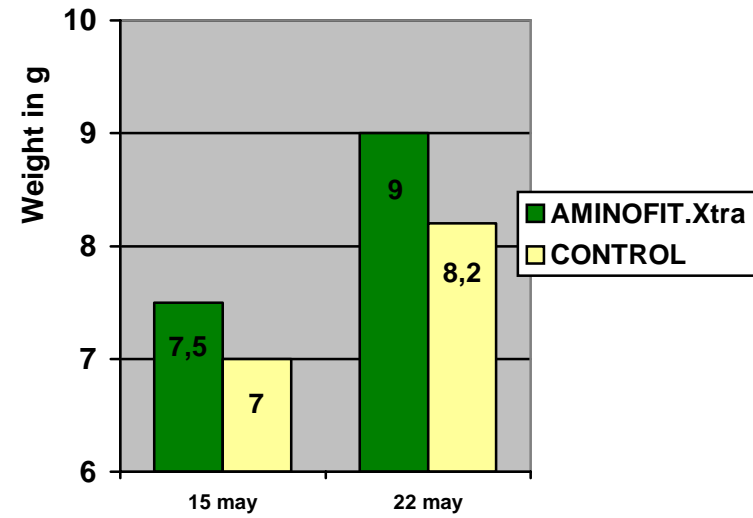
Second picking



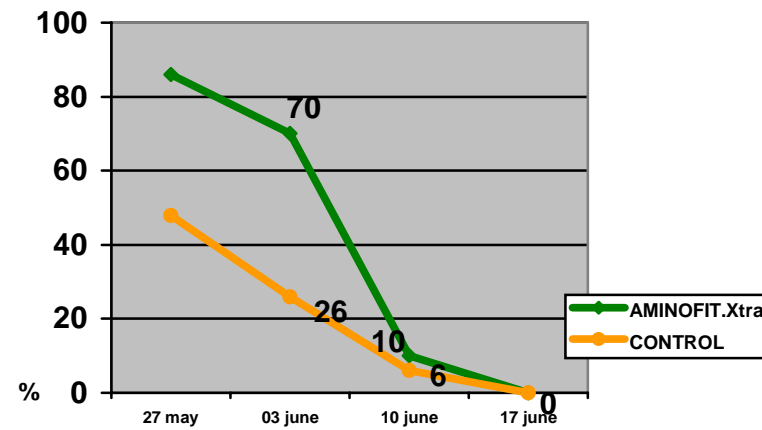
Refractometer index (Brix)



Average weight / cherry (in g)



Shelf life; % of marketable fruits



# AMINOFIT.Xtra on PLUM (Golden Japan variety) (France 2002)

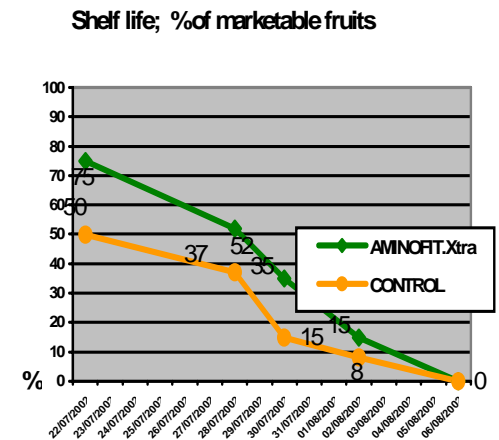
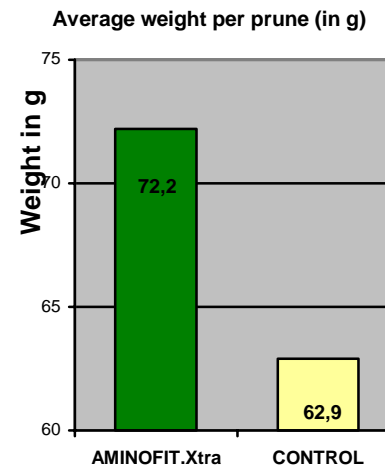
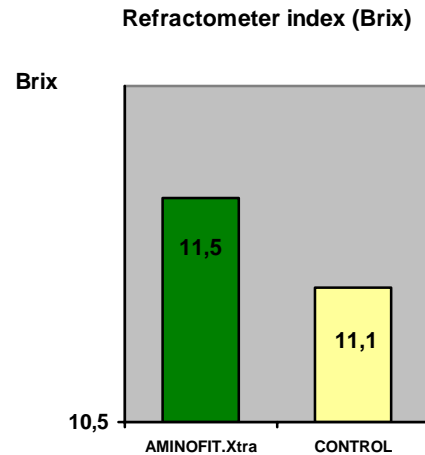
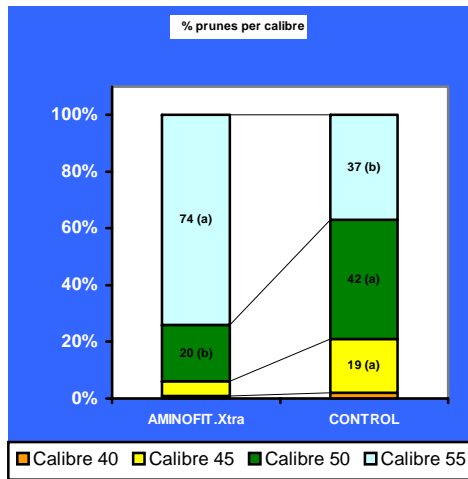
The 4 applications of AMINOFIT.Xtra that were realised from flowering stage until 15 days before harvest, have significantly increased the calibre of the fruits since 74 % of the fruits treated with AMINOFIT.Xtra were of calibre 55 and higher against 37 % for the control.

The average weight of the fruits was also largely augmented with an average difference of 9 grams 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 trial shows 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.

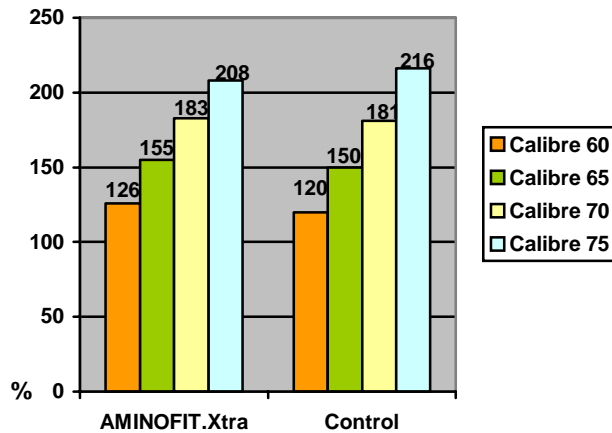
This increase in calibre and average weight of the fruit has a direct consequence on the sales price of the harvest. On the one hand, the capacity per ton per hectare was increased; on the other hand, fruit of high calibre is sold more expensive than fruit of smaller calibre. The sugar content is not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



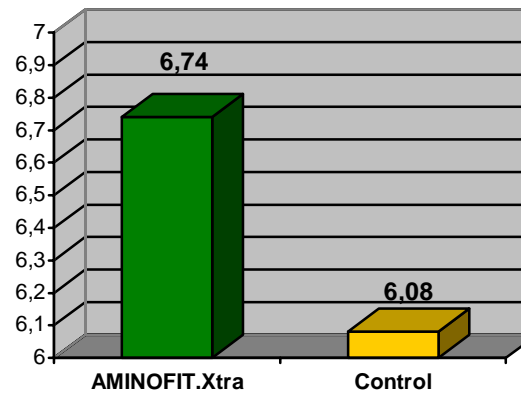
# AMINOFIT.Xtra on PEAR (variety Louise Bonne) (France 2003)

AMINOFIT.Xtra, applied 5 times starting from early flowering stage until 3 weeks before harvest, increased the average weight of the fruits with 11 g.  
AMINOFIT.Xtra also increased significantly the firmness of the fruits: + 0,66 Kg/cm compared to the control and increased the brix level : + 0,2 point.

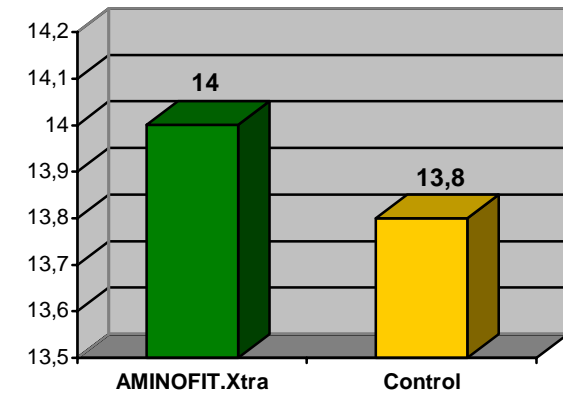
Average weight of the fruits per calibre



Firmness in kg/cm<sup>2</sup>

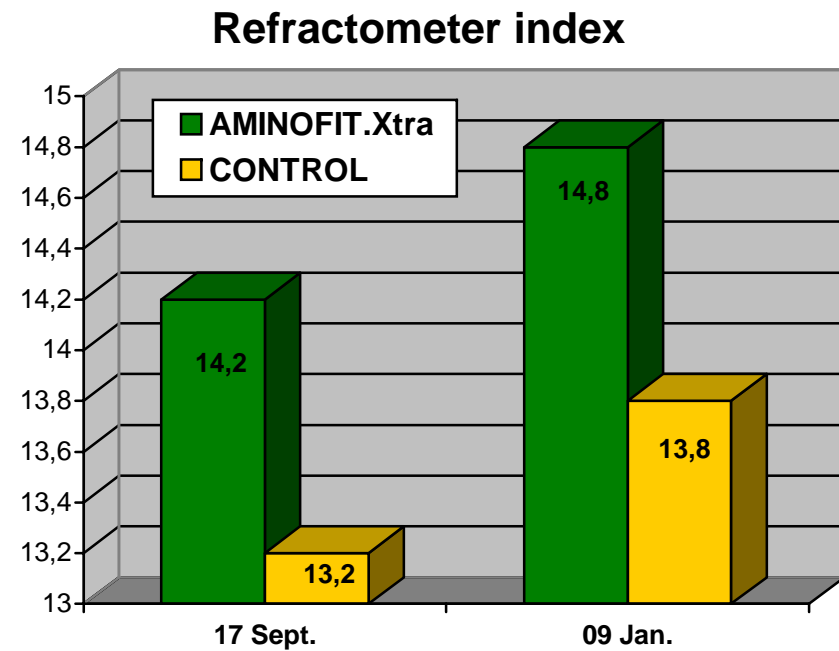
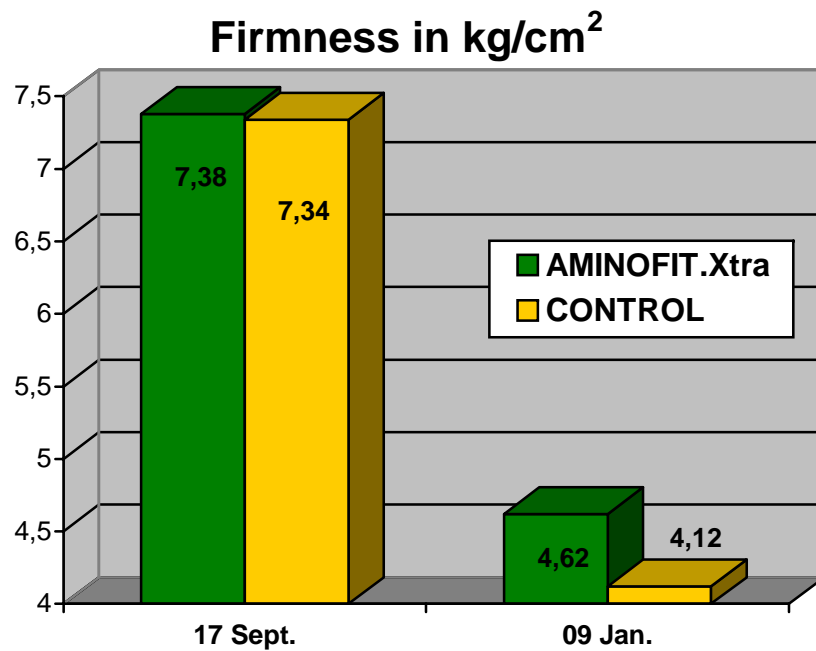


Brix level



## AMINOFIT.Xtra on APPLE (variety Golden) (France 2001)

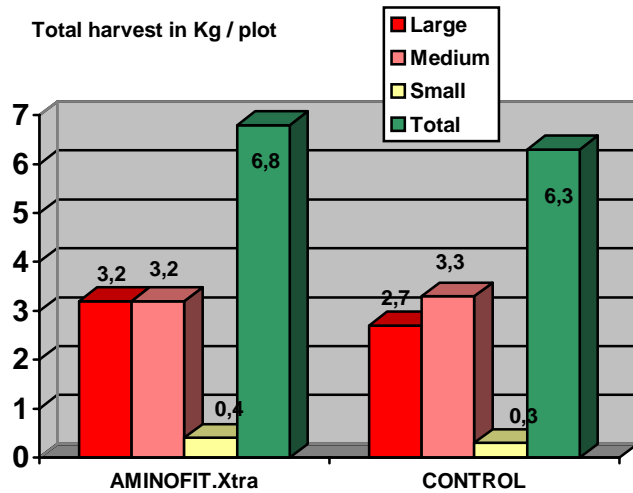
AMINOFIT.Xtra increased significantly the firmness of the fruits and the brix level.



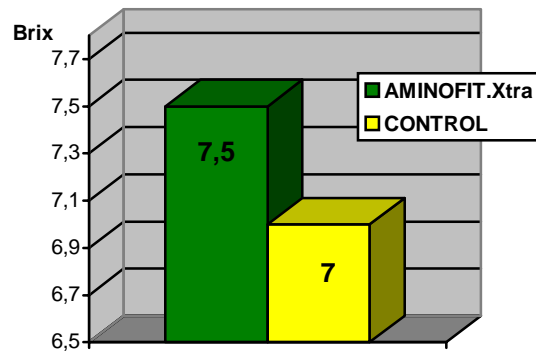
# AMINOFIT.Xtra on STRAWBERRIES in AUSTRALIA

Total Yield and Brix increases are recorded in plots treated with AMINOFIT.Xtra

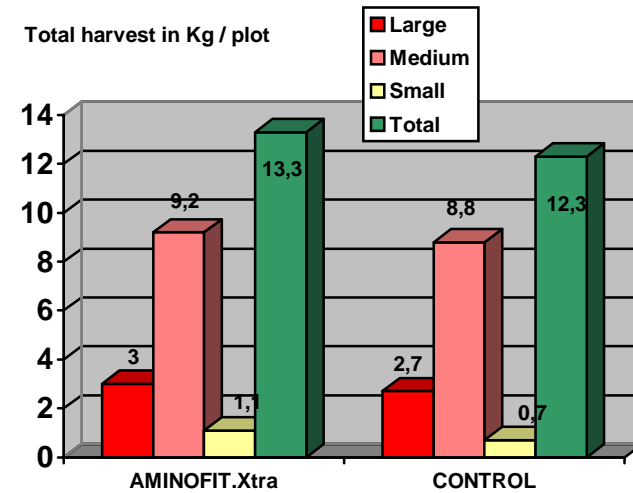
Australia 2001, variety Pajero



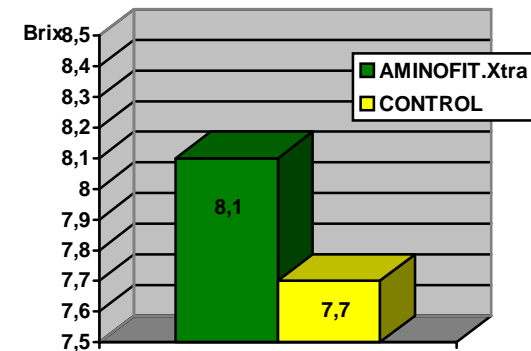
Refractometer index (Brix)



Australia 2001, variety Mindarie



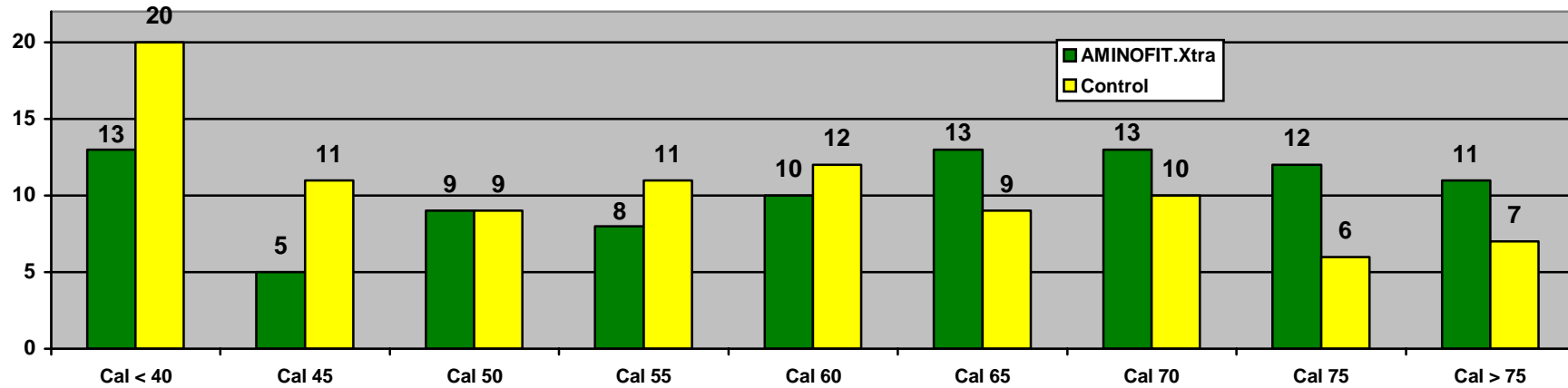
Refractometer index (Brix)



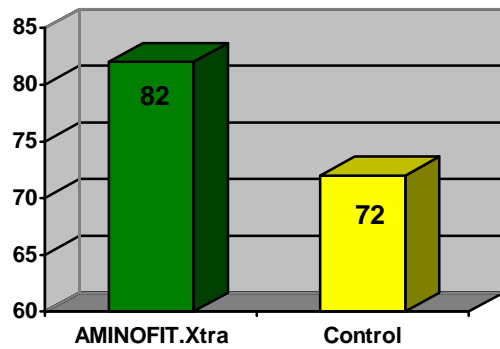
# AMINOFIT.Xtra on POTATO (Anaïs variety, France 2003)

- ⇒ A significant increase of the numbers of tubers is recorded: about + 14%.
- ⇒ A significant effect is also recorded on the tuber size.

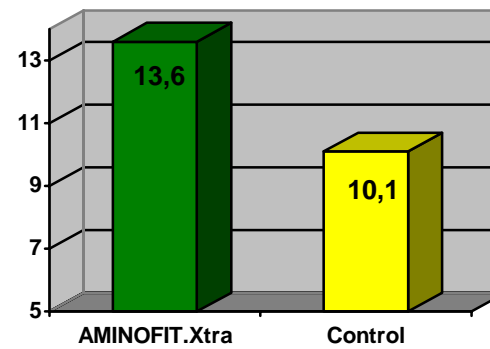
% tubers by calibre



Number of tubers



Weight of tubers per plot in Kg

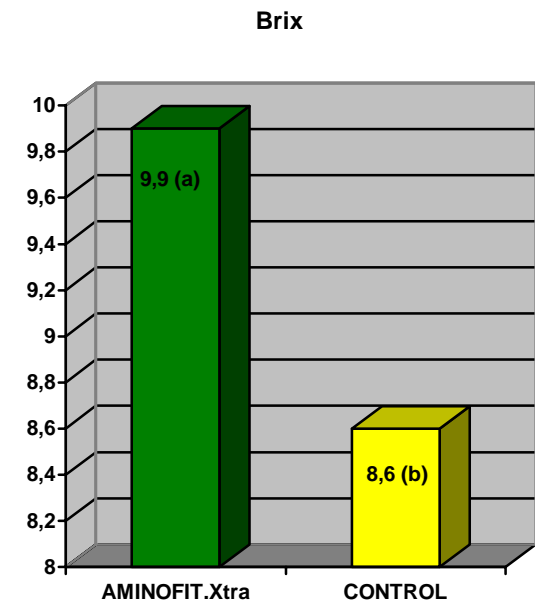
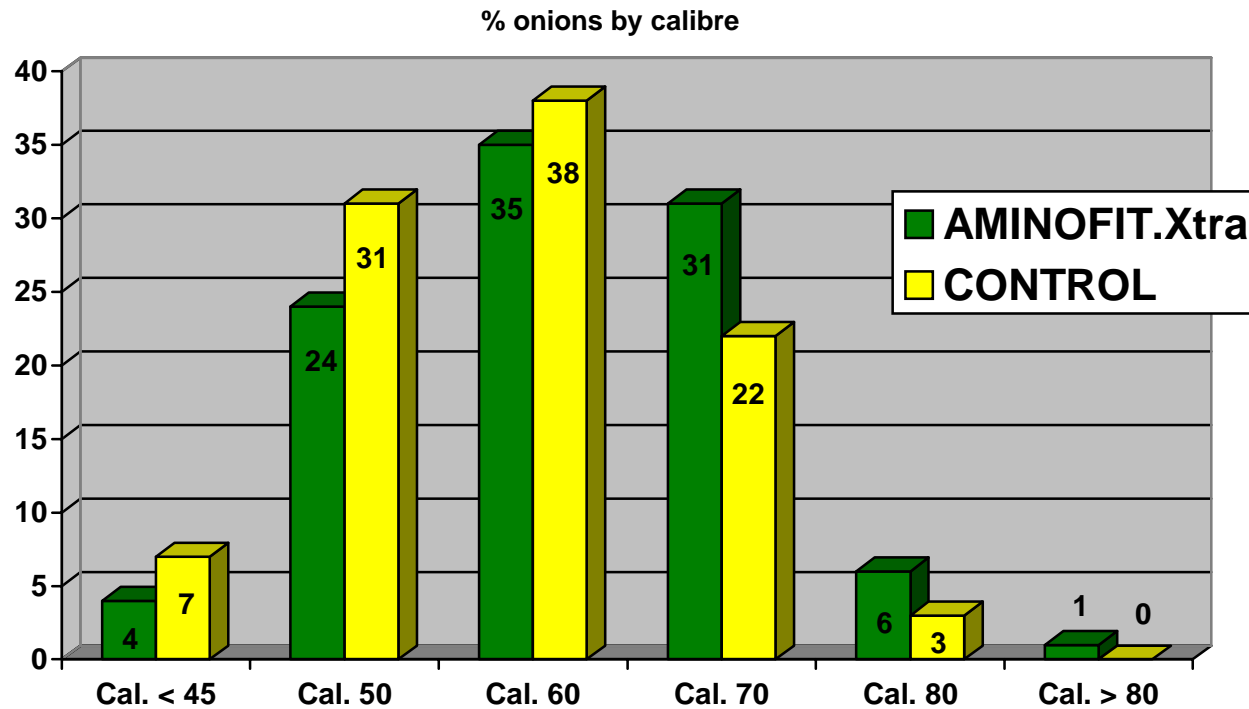


AMINOFIT.Xtra was foliar sprayed twice at 5L/HA

# AMINOFIT.Xtra on ONION

(Prince variety, France 2003)

AMINOFIT.Xtra applied 3 times increased significantly the size of the bulbs, since 38% of the bulbs are 70 mm diameter or more in the treated plots against 25% in the control plots. The size increase leads to a 20% yield increase. A significant effect is also measured in the brix level with a gain of 1,3 point.



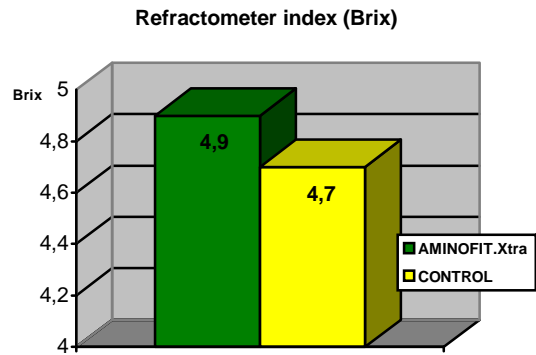
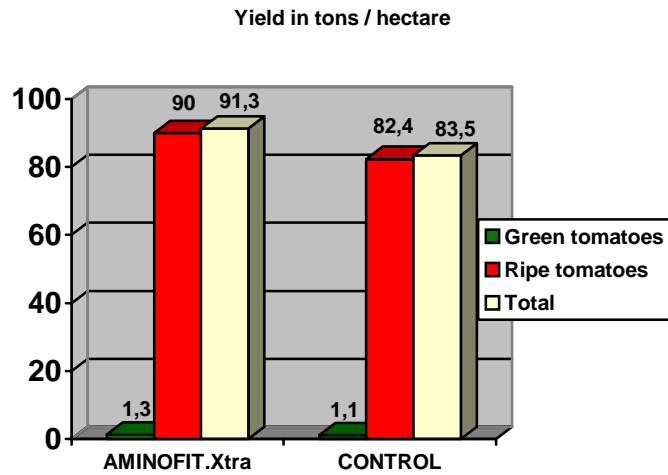
AMINOFIT.Xtra was foliar sprayed three times at 2 L/HA

# AMINOFIT.Xtra on PROCESSING TOMATOES

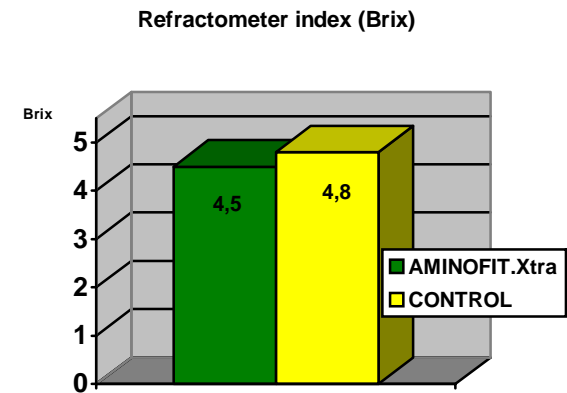
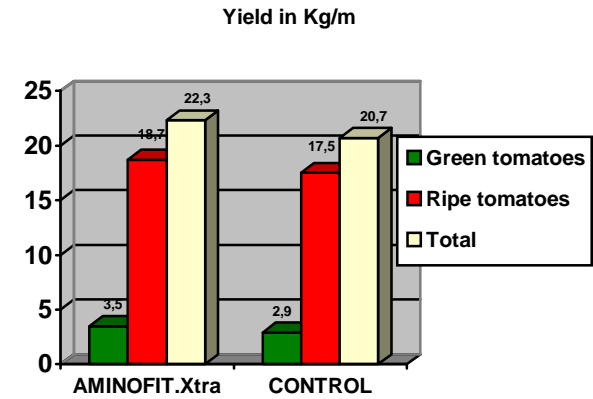
AMINOFIT.Xtra was foliar sprayed

The yield is increased by 7 to 9 %, compared to the control

France 2002, variety Montego

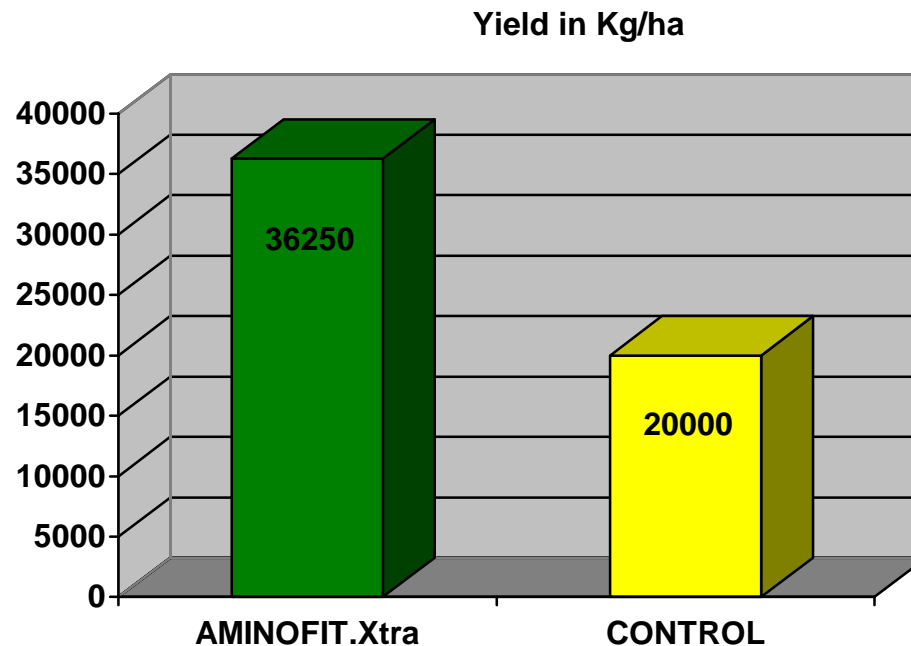


Australia 2002, variety Hz8704



## AMINOFIT.Xtra on MELON (Brazil 2002)

- ⇒ YIELD OF THE TREATED AREA 36.250 Kg/HA
- ⇒ YIELD OF THE CONTROL AREA 20.000 Kg/HA.
- ⇒ AVERAGE WEIGHT OF THE MELONS IN THE TREATED AREA: 10,5 Kg.
- ⇒ THANKS TO THE UNIFORMITY OF THE FRUITS, THERE WERE NEARLY NO SECOND CLASS MELONS
- ⇒ THE FARMER OBTAINED A SPECTACULAR PROFIT OF 145% (WITH THE COST FOR THE AMINOFIT.Xtra ALREADY DEDUCTED)!

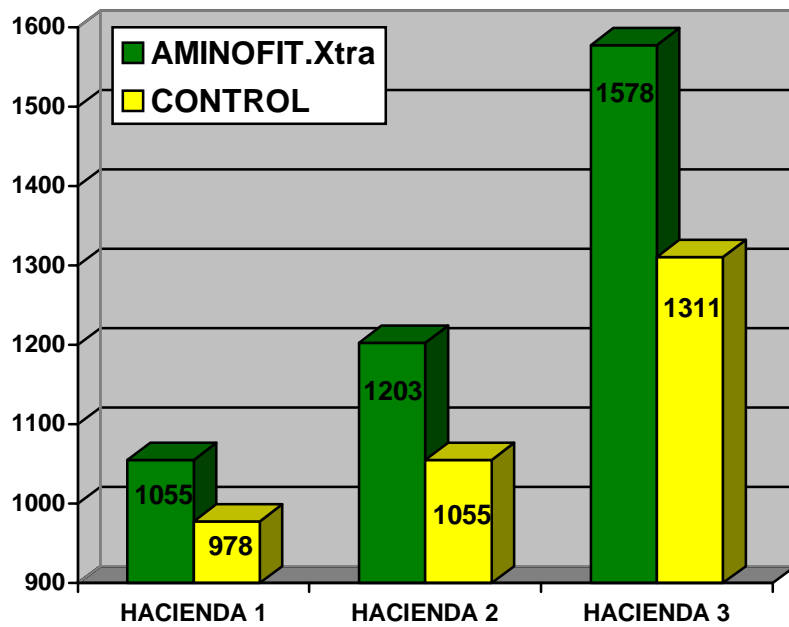


AMINOFIT.Xtra WAS FOLIAR SPRAYED THREE TIMES AT 5 L/HA.

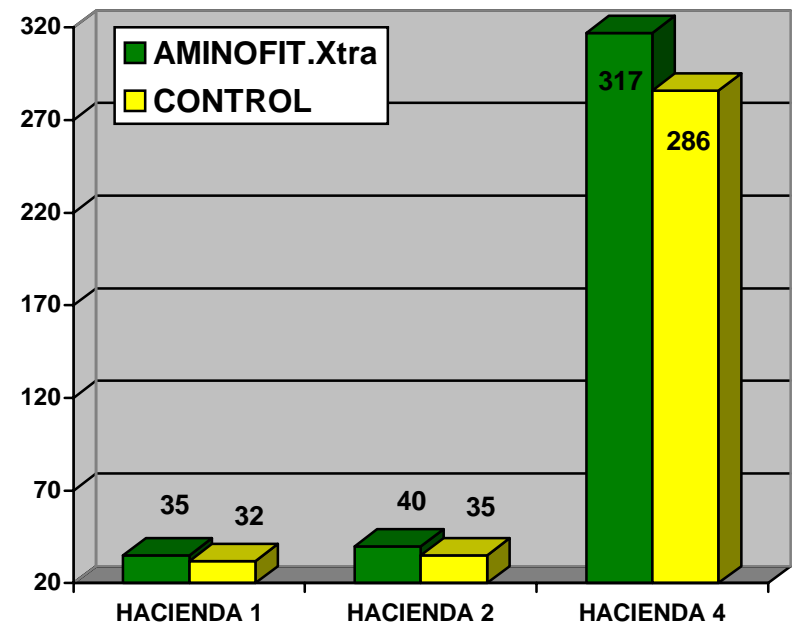
# AMINOFIT.Xtra on MELON (Guatemala 2002)

IN PLOTS TREATED WITH AMINOFIT.Xtra, THE YIELD INCREASES VARY BETWEEN + 8 TO + 25%

Number of cases with melons first class



Number of cases with melons second class



AMINOFIT.Xtra WAS FOLIAR SPRAYED TWICE AT 3 cc/L OF WATER.

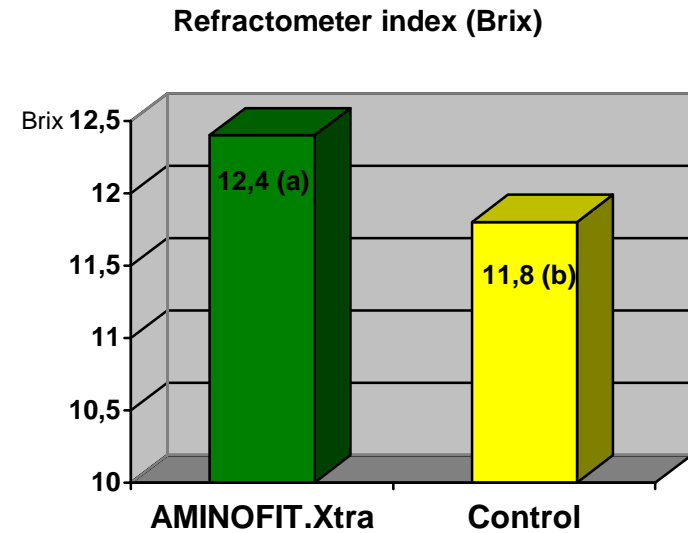
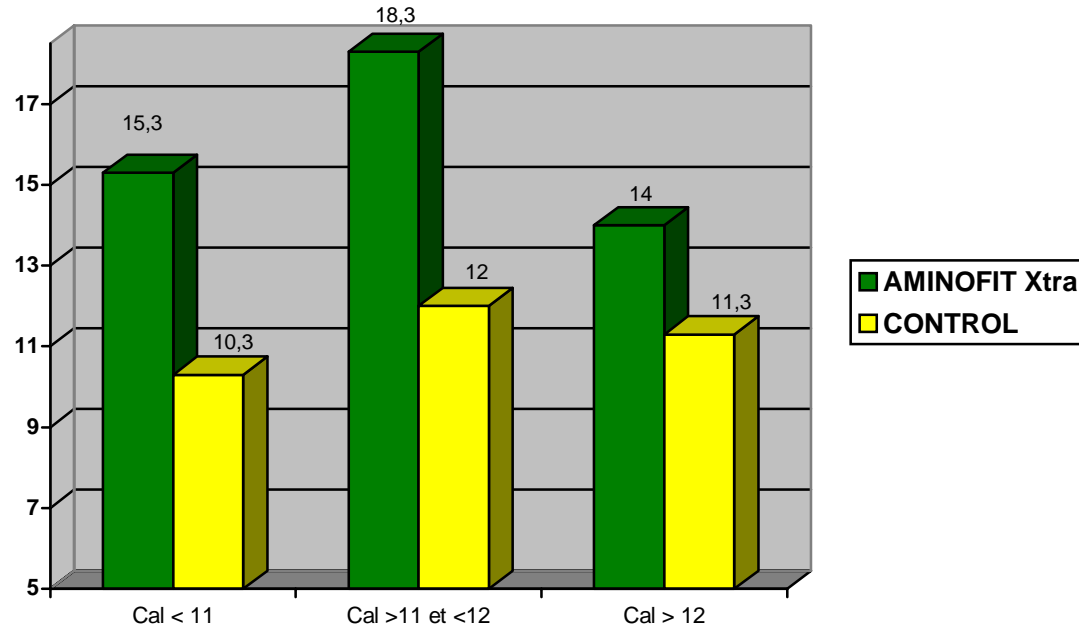
# AMINOFIT.Xtra on MELON

(France 2002)

The lots treated with AMINOFIT.Xtra constantly produce more melons than the control plots, at the end of the harvest there was a cumulated increase of 41% in number, compared to the control. As a consequence, the yield increased with the same percentage.

AMINOFIT.Xtra has a significant effect on the sugar content showing an increase of 0,6 point on the refractometer index.

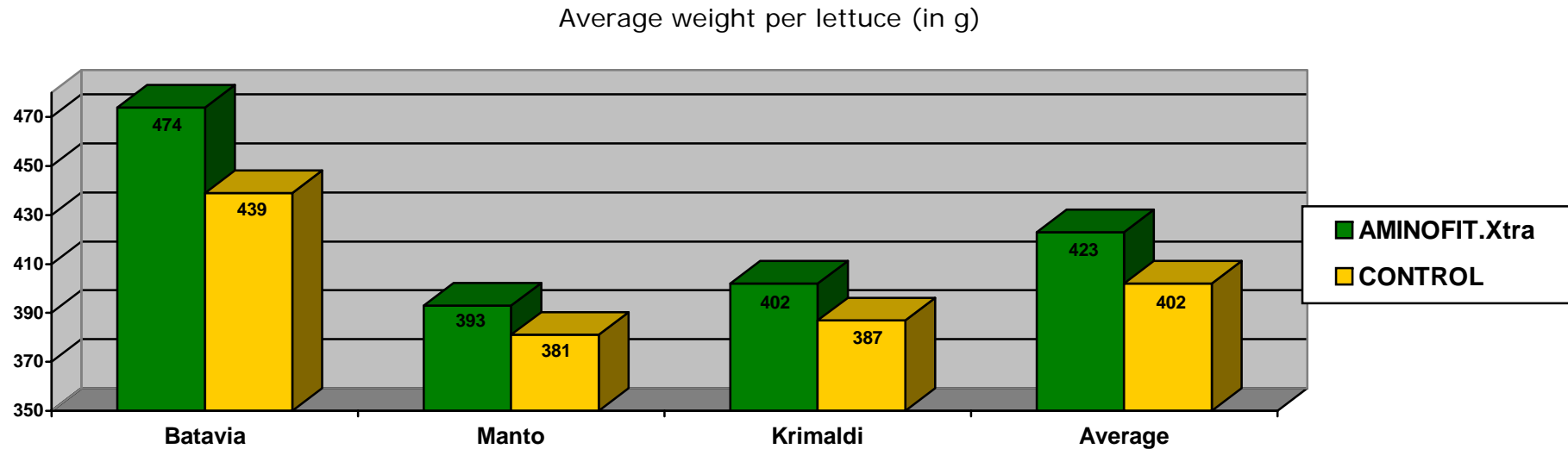
AVERAGE NUMBER OF MELONS PER CALIBRE (Diameter in centimetres)



AMINOFIT.Xtra was foliar sprayed three times at 5 l/ha

## AMINOFIT.Xtra on LETTUCE (France 2003)

⇒ A significant increase in weight is recorded: average + 5%.



### SITE and APPLICATION DETAILS

Varieties :	Batavia <b>Panthéon</b> , Red lettuce <b>Manto</b> , <b>Krimaldi</b>
Irrigation type :	Over head irrigation
Growing conditions	Open field
<b>Crop stage at application N°1</b>	8 to 10 leaves
<b>Crop stage at application N°2</b>	11 days pre harvest

AMINOFIT.Xtra was foliar sprayed

## AMINOFIT on BERMUDA GRASS (Thailand 2001)

**A significant effect is recorded on leaf expansion, green leaves and new plant emergence.**

We plunged the grass on June 15, 2001 and left it under the sun and rain in a normal atmosphere. Date of the experiment was June 23, 2001.

**Size of the grass sheet:** 2.5 inches wide and 4 inches long

**Date of Spray:** June 23 and 26, 2001. Comparison is also made as follows:

1. Material combined with B1, Biotin and Amino Acid (VIVA Brand) being popular when plunging is made. Ratio is 5cc/ 1 liter of water.
2. AMINOFIT at 5 cc / 1 liter of water
3. Control Group (Achievement of water and Fertilizer only)

### Experiment result after 48 hours

Experiment Group	Leaf Expansion	Green Leaves	New Plant	Branch Out
Vitamin B1	+++	++	-	-
AMINOFIT	++++	++++	+++	++ (not measured)
Control Group	+	+	-	-

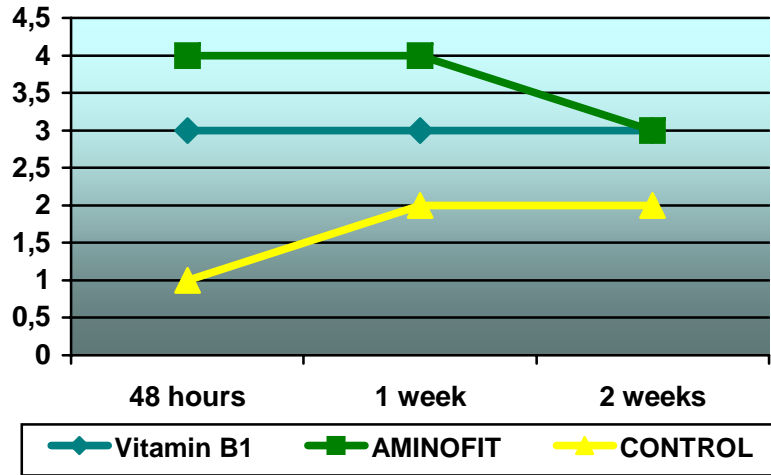
### Experiment result after 1 week

Experiment Group	Leaf Expansion	Green Leaves	New Plant	Branch Out
Vitamin B1	+++	++	++	-
AMINOFIT	++++	++++	+++	0.5cm range
Control Group	++	++	++	-

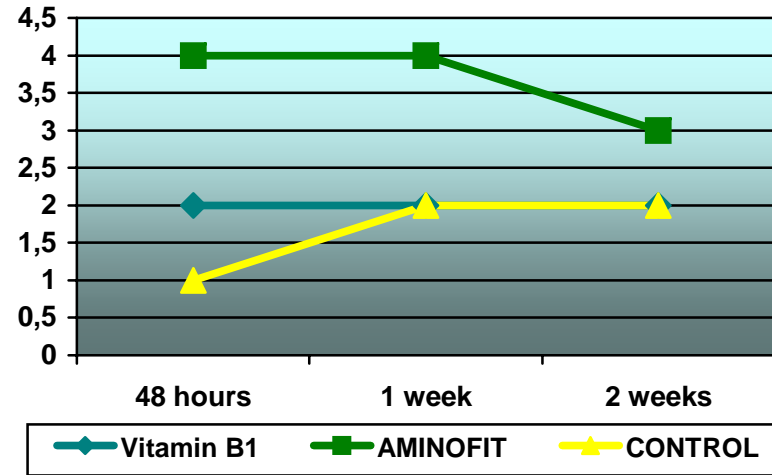
### Experiment result after 2 weeks

Experiment Group	Leaf Expansion	Green Leaves	New Plant	Branch Out
Vitamin B1	+++	++	++	-
AMINOFIT	+++	+++	+++	1.5 cm range
Control Group	++	++	++	-

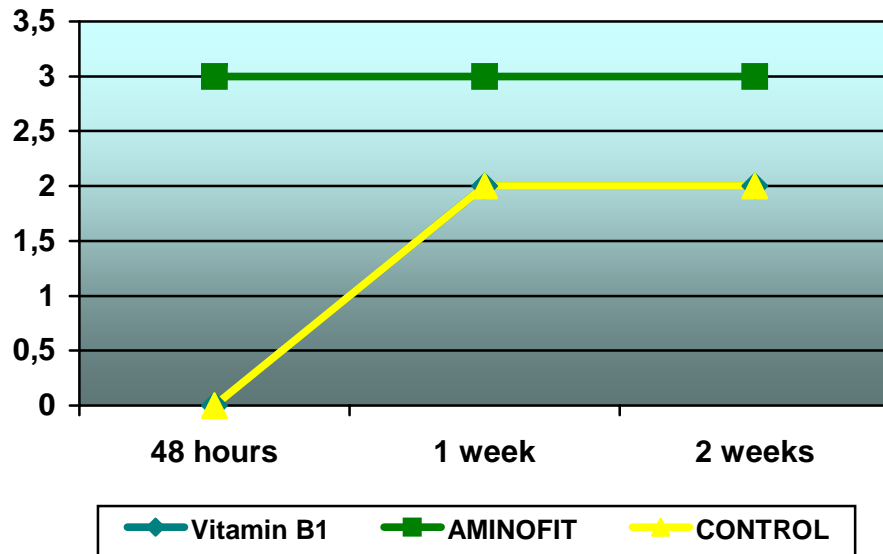
**Leaf Expansion**



**Green leaves**



**New plant**



**Note:**

No Development = - = 0  
 A bit better = + = 1  
 Better = ++ = 2  
 Much better = +++ = 3  
 Best development = ++++ = 4

# AMINOFIT on CUT FLOWER ORCHIDS PRESERVATION (Thailand 2001)

**A significant effect is recorded on the vase life.**

## Equipment and method

The test was conducted at normal room temperature (30-32 degree Celsius). The volume of solvents used was 100cc. Orchid flowers used in this test were bought at the same time on June 5, 2001 from an orchid nursery. Five samples of orchids flowers with the same age with closet size and stems were cut. These orchids flowers were then soaked in an antiseptic solution, i.e., 1.5% Sodium Hypo-Chloride in a ratio of 0.1cc /L of water for 10 minutes, and further 5 different preservative solvents for 1 hour and finally in purified water for determination of the vase life.

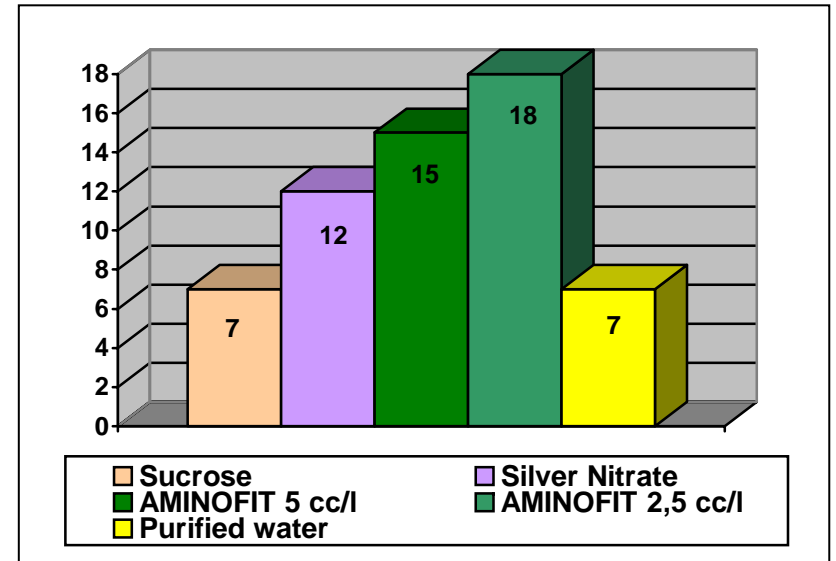
## Test results

Preservative Materials	Vase Life
Surcose sugar solvents in a ratio of 30 gram / 1 liter of water	7 days
Silver Nitrate solution in a ratio of 0.3 gram / 1 liter of water	12 days
AMINOFIT in a ratio of 5cc / 1 liter of water	15 days
AMINOFIT in a ratio of 2.5 cc / 1 liter of water	18 days
Purified Water	7 days

Note: The vase life is determined from the testing commencement date to the date the first orchid flower starts to fall.

## Conclusion

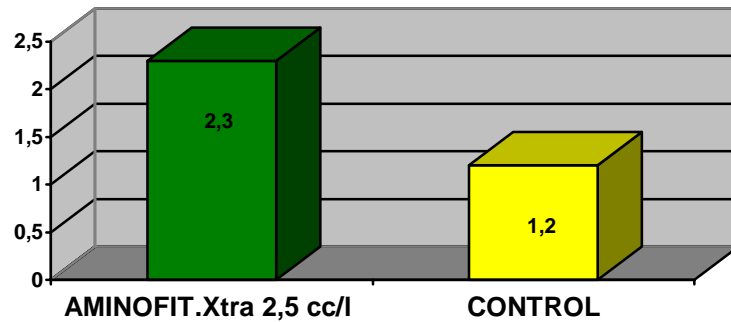
From the above table, it is evidence that AMINOFIT is better than other preservative materials generally available in Agro-Chemical shops in contributing to a longer vase life. The outcome of this test shall be primary information to present AMINOFIT to orchid-growing farmers for their further tests in the field. No control was made in the test to maintain the temperature and the moisture within the standard for orchid preservation. It was therefore anticipated that if appropriate temperature and moisture could be controlled within the standard level, the vase life would be longer, and that the AMINOFIT could be effectively used with other kinds of cut flowers. More tests in that respect shall be conducted in the future.



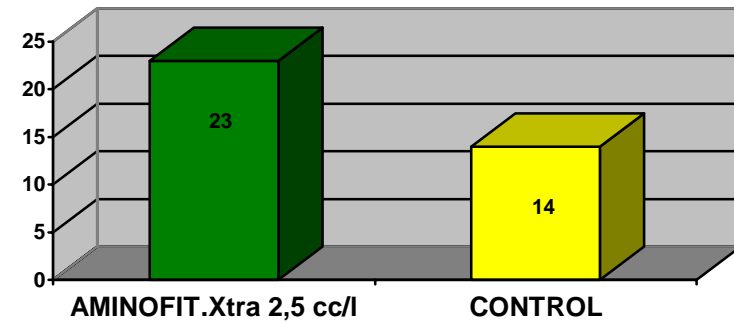
# AMINOFIT.Xtra on PELARGONIUM (France 2004)

THE EFFECTS OF AMINOFIT.Xtra ARE SIGNIFICANT ON THE NUMBER OF FLOWERS AND ON PLANT DEVELOPMENT.

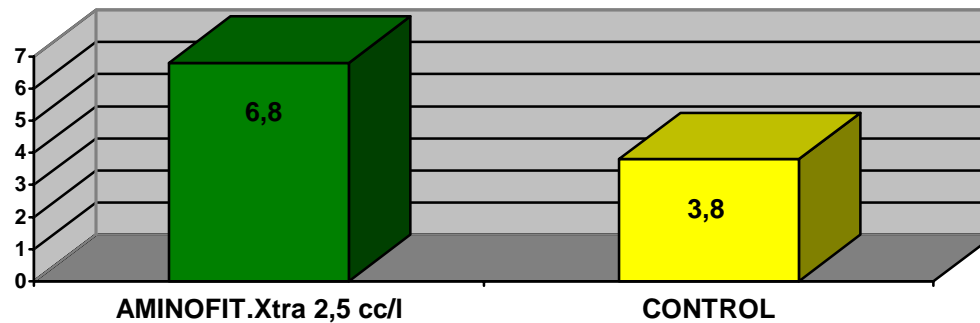
Average number of flowers per plant



Average number of leaves per plant



Average height of the plants



The test was conducted in glass house. AMINOFIT.Xtra was foliar sprayed pre transplant and 3 weeks post transplant.

# AMINOFIT.Xtra on CHRYSANTHEMUM (France 2001)

THE EFFECTS OF AMINOFIT.Xtra ARE VISIBLE WITH THE NAKED EYE AND CONSIST OUT OF A DENSER VEGETATION OF THE TREATED PLANTS. THE DIMENSIONS OF THE LEAVES CONFIRM THE VISUAL OBSERVATIONS, SINCE A SURFACE INCREASE OF 14 TO 36 %, DEPENDING ON THE DEVELOPMENT STAGE, IS REPORTED. HOWEVER, NO EFFECTS HAVE BEEN OBSERVED ON ADVANCING THE FLOWERING STAGE.

## Equipment and method

The test was conducted on chrysanthemum planted in clay pots and grown in open field. AMINOFIT.Xtra was foliar sprayed every month at dose rate 5 l/ha. The assessments were carried out at 2 dates.

SURFACE OF THE LEAVES IN CENTIMETRES

