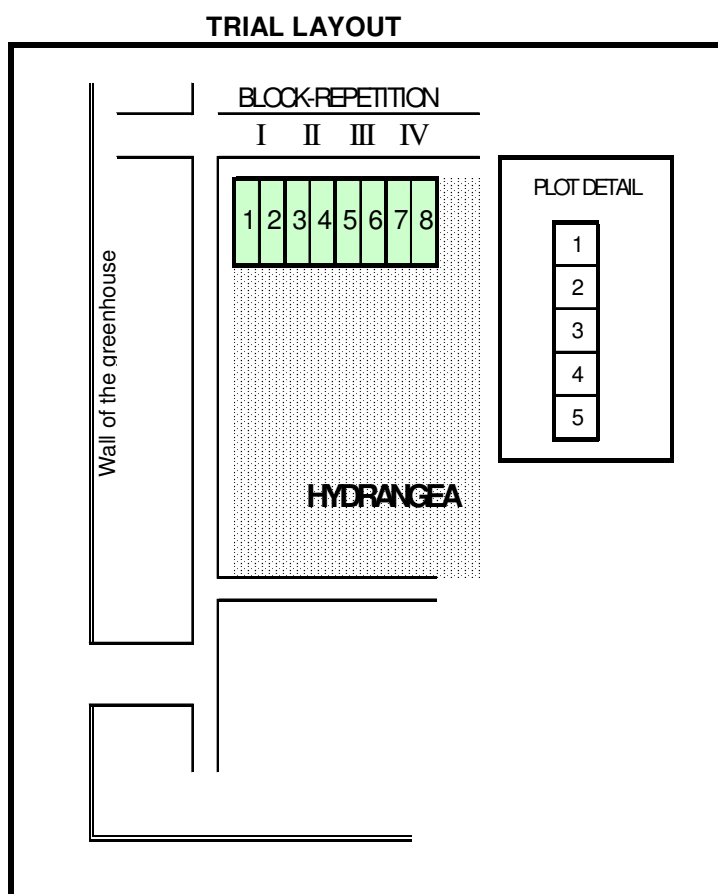




EQUIPMENT AND METHODS



Elementary Plot Size: 5 pots (22 cm diameter)
Number of plants per elementary plot: 5 plants

Signature:

Date: 28th February 2006

UTM COORDINATES

X: 45 95 08'1
Y: 04 48 37'0

EXPERIMENTAL DESIGN

Table 1. Trial will be based with a 1 Factor Randomized block design with four blocks. The trial treatments were as follow:

Treat.	COMMERCIAL NAME	FORMULATION		ELEMENTARY PLOTS			
			p.f. (cc/pot)				
1	UTC		-	1	4	5	7
2	HAPPY PLANTS PRIMEROS	Jeringa	5	2	3	6	8

CROP

Species: *Hydrangea (Hydrangea macrophylla)*
Variety: red DORIS II
Growing system: greenhouse conditions and individual pots with dripping irrigation.

SITE

Municipality: Vilassar de Mar (Barcelona)
Area: Cultius Itxart S.C.P.
Casa de Campo 52
Owner: Josep Itxart
Tel. 665580808

APPLICATIONS AND FINAL RATES

Performed according to the protocol.

Signature:



Date: 28th February 2006

Table 2. Rates calculation.

5 cc will be applied per each plant.

Table 3. Applications performed throughout the trial.

No	Date	Time	Temp. °C	Relative humidity (%)	Wind	Cloudiness	Volume	Growth stage
1	18-01-05	11:30	16.2	65	--	--	**	49
2	25-01-05	11	17	64	--	--	**	49
3	31-01-05	9:50	17.4	62	--	--	**	51

** Injection of the product with syringes of 20 cc.
Growth stage measured according to BBCH key.

ASSESSMENTS

Method

The vigour for each plant in each elementary plot was evaluated using the following scoring scale:

Table 5.-Scoring scale of vigour

- 0- Dead plant**
- 5- Normal appearance of the plant**
- 10- Optimal appearance of the plant**

Remarks of other effects on plants

All the effects of phytotoxicities that the plants may present will be noted and quantified, and evaluated using the following scoring scale:

	<u>Level of phytotoxicity</u>	<u>Description</u>
1	No damages	0%
2	Very slight damages	≤6.2%
3	Slight damages	6.3% - 12.5%
5	Moderate damages	12.6% - 25.0%
7	Severe damages	25.1% - 50.0%
9	Very severe damages	> 50.0%

Signature:



Date: 28th February 2006

Table 6. Timing of the assessments.

Assessment	Date	Evaluated sample	BBCH
1	18/01/2006	Overall plant	49
2	25/01/2006	Overall plant	49
3	31/01/2006	Overall plant	51
5	14/02/2006	Overall plant	51

Signature:



Date: 28th February 2006



PERFORMED ACTIONS

DATE	ACTIONS
Nov.2005	Mr. Josep Itxart was visited in order to ask for his permission to carry out the present study in some greenhouse on his property.
18/01/06	Elementary plots were set. The first assessment was performed (T_1+0). The first application was performed.
25/01/06	The second assessment was performed (T_2+0). The second application was performed.
31/01/06	The third assessment was performed (T_3+0). The third application was performed.
14/02/06	The fourth assessment was performed ($T_3+ 14$). Field actions were concluded. Collection of the stakes.

Signature:

A handwritten signature in blue ink, appearing to be "V. A.", written over a horizontal line.

Date: 28th February 2006



RESULTADOS

Table 7. Mean vigour of the plants (from 0 to 10) according treatment and assessment time.

TREATMENT	RATE	ASSESSMENT			
		T ₁ +0* 18-01-05	T ₂ +0* 25-01-05	T ₃ +0* 31-01-05	T ₃ +14 14-02-05
UTC	--	4.35	4.3	4.45	4.3 b
HAPPY PLANTS	5 cc/pot	4.15	4.85	5.45	6.35 a

* without significant differences between treatments (alfa= 0,05)

Table 8.- ABBOTT Efficacy of the HAPPY PLANTS PRIMEROS AUXILIOS product throughout the trial.

TREATMENT	RATE	ASSESSMENT			
		T ₁ +0 18-01-05	T ₂ +0 25-01-05	T ₃ +0 31-01-05	T ₃ +14 14-02-05
UTC	--	0	0	0	0
HAPPY PLANTS	5 cc/pot	0	12.79	22.47	47.67

Phytotoxicity

No phytotoxicity symptoms were observed on plants and no other secondary effects on other pests or diseases throughout the season.

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Date: 28th February 2006



CONCLUSIONS

In order to evaluate the effect of the HAPPY PLANTS PRIMEROS AUXILIOS product a study was carried out on hydrangea plants (red DORIS II variety) grown under greenhouse conditions and with dripping irrigation system. The trial was established in the area of Maresme, located in Vilassar de Mar (Barcelona, Spain). At initial time, the plants showed a 4.25 points of vigour (according to the applied scale). However, some of them showed yellow leaves and, in general, low development.

According to the protocol three sprayings were performed on 18/01/06, on 25/01/06 and on 31/01/06, 7 days apart. The application was based on the injection of 5 cc directly to the roots of the plant, close to the neck of the hydrangea. In each assessment time, 5 plants per elementary plot were evaluated before each application. Last assessment was carried out 14 days after final application (T₃).

The results revealed that HAPPY PLANTS PRIMEROS AUXILIOS product achieve positive effects as invigorating in plants, specially during the last assessment, since in 30 days, the vigour scoring increases gradually up to reach 6.35 points, 2.2 unities higher than at T₁+0. Significant differences were only observed in the final assessment carried out. The efficacy values increases week by week, although is not since last assessment (T₃+14) when the results were significant (47.6 % of efficacy).

At the end of the trial, treated plants showed intense and uniform green colour, higher turgidity and superior development of the floral buds in comparison with non-treated plants. Also, it's important to notice the easiness to apply the product because their presentation (syringe).

No phytotoxicity symptoms were observed on plants and no other secondary effects on other pests or diseases throughout the season.

To summarize, under the conditions of the trial, it can be stated that HAPPY PLANTS PRIMEROS AUXILIOS product showed a positive effect in hydrangea plants. These results were noticeable after third application of the product. In the particular case that it was necessary a fast reaction of the plants, possibly, it will be necessary to study other rates or schedules in their application.

Sabadell, 28th February 2006

THE TECHNICAL DIRECTOR

A handwritten signature in blue ink, consisting of a large, stylized 'F' followed by 'do. García', written over a horizontal line.

Fdo. Francisco Masoliver García

Signature:

A handwritten signature in blue ink, identical to the one above, contained within a rectangular box.

Date: 28th February 2006