

**Objectives** 

To evaluate the effect of Priming in the presence of Botrytis on tomato

#### Material and methods

Location: Mazarrón (Murcia) - Spain

Crop: Tomato, Duratón variety

Soil texture: Sandy

Date of transplant: September 5<sup>th</sup>

End of trial: February 28th

#### Material and methods

Number of plants for T2: 22 plants per elementary plot x 3 repetitions = 66 plants

Number of plants for T3: 22 plants per elementary plot x 3 repetitions = 66 plants

Number of Test plants: 22 plants per elementary plot x 3 repetitions = 66 plants

Type of application: root

Dosage of application:

T2: 2,5 l/ha

T3: 5,0 l/ha

Applications: 9 applications with intervals of 6 to 20 days

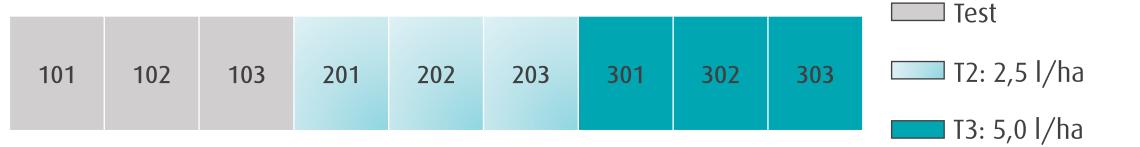
Evaluation dates: February 14<sup>th</sup>, 21<sup>th</sup> and 28<sup>th</sup> (at 7, 14 and 21 days after the last application)

#### Material and methods

Nº	Date	Application/ Evaluation	Days after last application	Temp. (°C)	HR (%)	Meteorology			- (-)	Height	
						Before	During	After	Cubr. (%)	(cm)	BBCH
1	24 November	Application		19,2	54	Sun	Covered	Covered	70	164	65
2	01 December	Application	7	17,2	69	Sun	Covered	Sun	75	167	67
3	07 December	Application	6	15,7	65	Sun	Sun	Sun	80	173	68
4	14 December	Application	7	11,7	71	Sun	Sun	Sun	85	179	70
5	21 December	Application	7	16,4	58	Sun	Covered	Covered	85	185	70
6	29 December	Application	8	17,5	50	Sun	Sun	Sun	85	185	71
		Botrytis inoculation is made at a concentration of 2,56 conidia/ml									
7	18 January	Application	20	16,3	52	Sun	Sun	Sun	90	190	81
8	24 January	Application	6	17,2	53	Sun	Sun	Sun	95	200	83
9	07 February	Application	14	6,2	63	Sun	Sun	Sun	95	200	85
10	14 February	Evaluation	7	18,6	52	Sun	Sun	Sun	95	210	85
11	21 February	Evaluation	14	17,3	50	Sun	Sun	Sun	95	210	85
12	28 February	Evaluation	21	18,3	56	Sun	Sun	Sun	95	210	89

#### Field Sketches

Location: Mazarrón	Province: Murcia		
Crop: Tomato	Variety: Duratón	Type of application: Root	
Plot size: 2 x 0,45m	Number of plants: 22	Number of replicates: 3	





#### **Evaluated parameters**

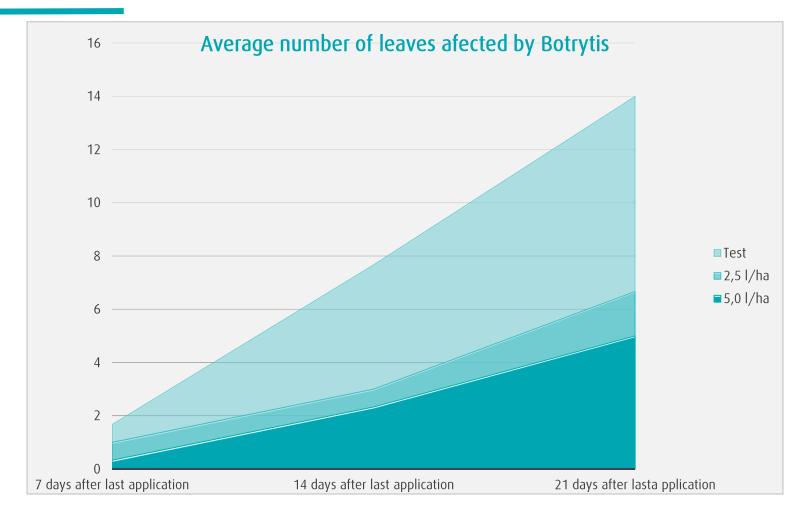
- Leaves affected by Botrytis
- Fruits affected by Botrytis

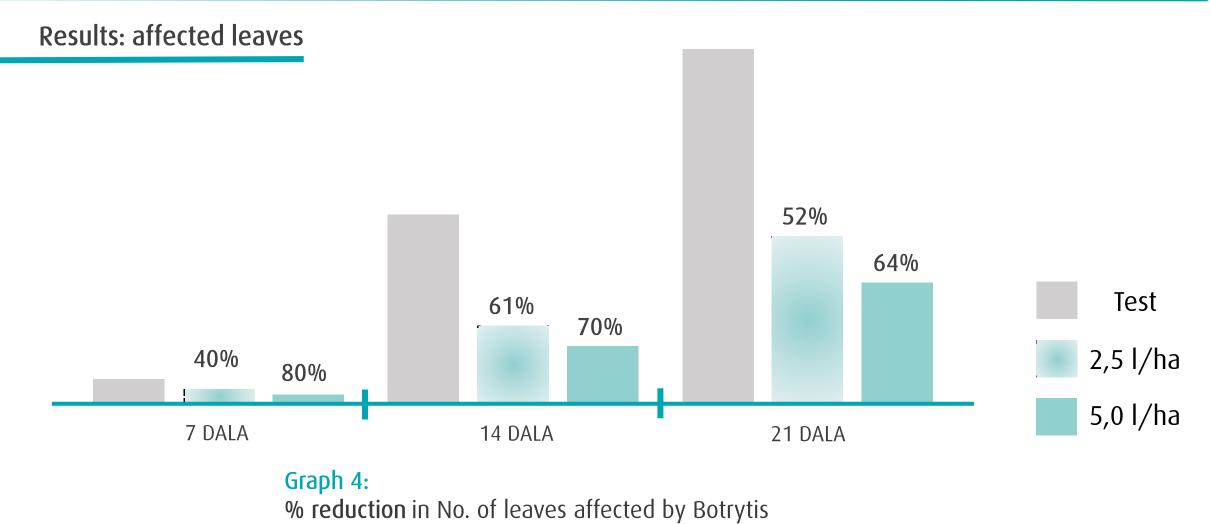
Results: affected leaves

	7 Days after last application	14 Days after last application	21 Days after last application
Test	1,67	7,67	14,00
2,5 l/ha	1,00	3,00	6,67
5,0 l/ha	0,33	2,33	5,00

Table 1:
Average of leaves affected by Botrytis

#### Results: afectad leaves





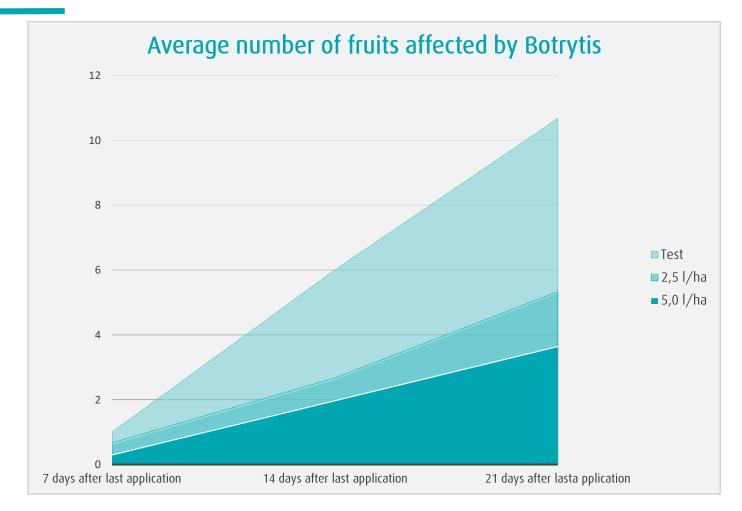
DALA: Days after last application

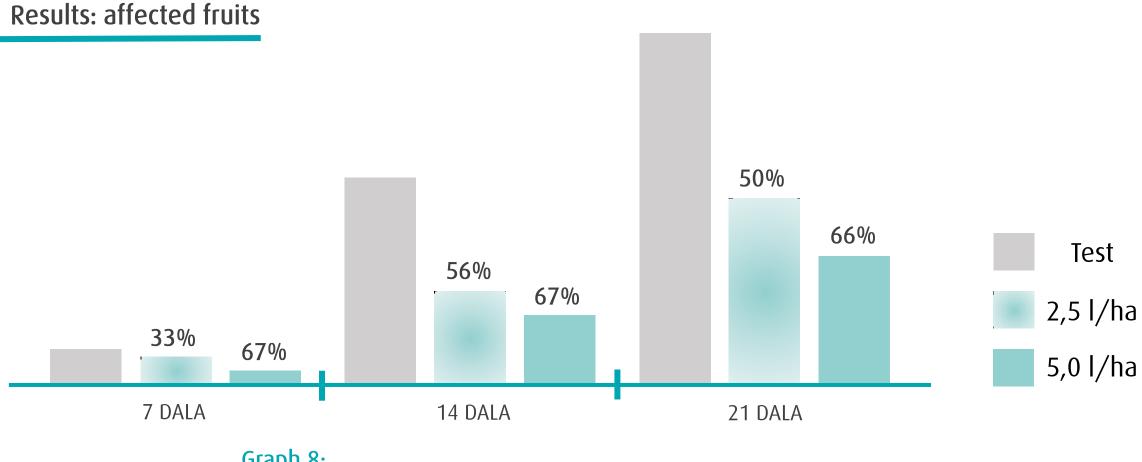
Results: affected fruits

	7 Days after last application	14 Days after last application	21 Days after last application
Test	1,00	6,00	10,67
2,5 l/ha	0,67	2,67	5,33
5,0 l/ha	0,33	2,00	3,67

Table 2:
Average of fruits affected by Botrytis

#### Results: affected fruits





Graph 8:% reduction in No. of fruits affected by Botrytis

DALA: Days after last application



#### **Conclusions**

# Applying **priming** technology in tomato we get:

Reduction in damages caused by Botrytis both in leaves and fruits

