

# Field Trial +PROD

To evaluate
Its effectiveness in production on
Pepper crop
(Capsicum annum)



Field trial conducted by FS Trials for ARTAL Agronutrientes www.artal.net



Introduction

**Objectives** 

Material and Methods

Results and discussion

**Conclusions** 





#### The Product

**+PROD** is a water soluble liquid bioestimulant

It contains **natural organic compounds**, trace elements and **metabolic fuels** that favour the generation and transport of photoassimilates needed for production.





#### The Product

**+PROD** has been developed by the R+D+i department of **ARTAL Agrinutrients** 

Together with various Universities and Research Centers in order to:

- Increase production
- Improve the crops quality





F.S.TRIALS



**Objectives** 

To evaluate and measure the effect **+PROD** on:

Main parameters affecting the pepper crop from transplant to harvest

The production





#### Material and methods

Location: San Pedro del Pinatar (Murcia)

Crop: Pepper – Type: Yellow California

Variety: Gepar

Planting framework: 0,3m X 1m (33.333 plants/Ha)

Soil texture: Clay-loam

Transplant: December 16





#### Material and methods

**+PROD** plot area: 4.500 m2

Test plot area: 4.500 m<sup>2</sup>

Type of application: irrigation by dripping

**+PROD** dose: 5 applications at a rate of 5 L/Ha

(total 25 Lts / Ha and crop cycle)

1st Application: 15 days after transplanting (January 3)

(21st November).

Next Applications: monthly application

(February 7, March 6, April 2 and May 8)





#### **Assessment**

# Two physiological assessments:

- April 2 - May 8

# Evaluated parameters:

About 25 plants per sampling and random plot and zigzagging

Nº of fruits/plant

Plant height

Curdle\*

Blooming\*

\*subjective evaluation





#### **Assessment**

### Four evaluations of harvest:

- April 23 - May 14 - May 28 - June 27

# Evaluated parameters:

Total and partial Kgs (yellow and green)
(About 25 plants per sampling and random plot and zigzagging)

# Quality / appearance:

- Cracking\*
- Uniformity (w) (3 groups of 60 fruits randomly taken in control plot and +PROD plot)
- Color\*
- Wall / thickness\*

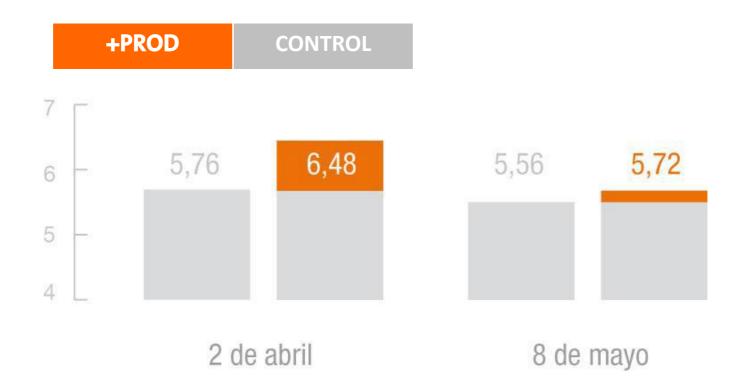


<sup>\*</sup>subjective evaluation



#### Results and discussion

# Physiological assessments Average fruit number/ plant:





#### Results and discussion





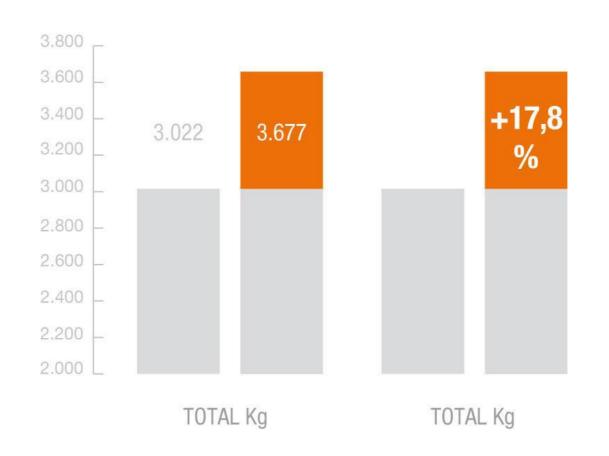
	1st EVA April 23	2nd EVA May 14	3rd EVA May 28	4th EVA June 27
<b>+PROD</b> Kg	+26,9%	- 10,8%	+15,7%	+28,3%





#### Results and discussion

# Total crop assessment Total Kgs harvested





Conclusions

**Plants** treated with **+PROD** present:

More flowers on the top of the plant

More open structure





#### Conclusions

# **Fruits** treated with **+PROD**:

- ✓ The have more wall (are "more California type") with the marking of the four helmets more distinct than the control ones
- ✓ Features more coloring uniformity in the natural yellow
- ✓ **Greater uniformity of weight** (220-240-250 g/fruit) versus control peppers (205-273-236 g/fruit)
- ✓ In the beginning shows more precocity y more setting
- ✓ We observed less "cracking"



Conclusions

# Applying **+PROD** on peppers we get:

+ 17,8%

# More production

