



2022 – 2025

## 23 Onion Field Trials

- ✓ Proven in the field by UK growers
- ✓ Consistent increases in yield
- ✓ Higher margins for growers

The data shows there is a **99.98% certainty** that Maxstim treatments are effective. (Chi Square Value of 15.69.  $p = 0.0001$ )

### Trial layout and methodology

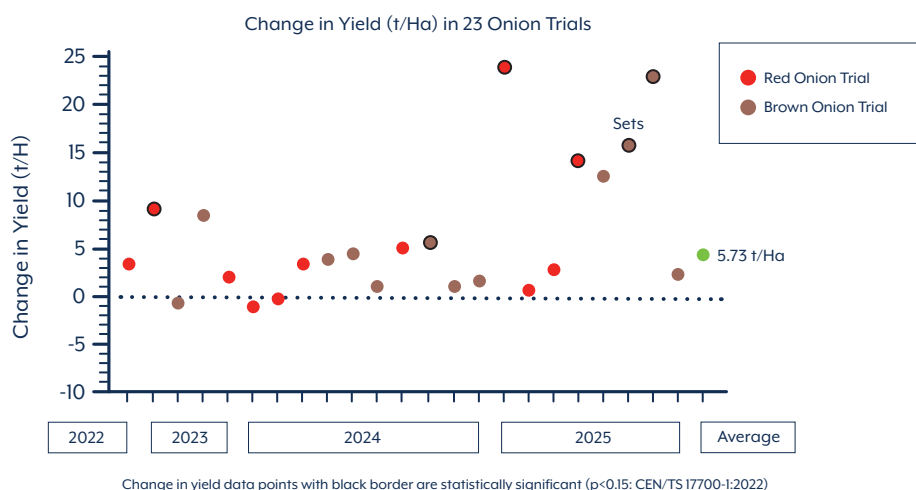
**Comparisons:** Maxstim Agriculture+ and Cynosa vs Farmers standard farm practice

#### 4 Treatment Protocols were used:

1. Maxstim Agriculture+ and Cynosa applied at sowing and 5 applications after emergence by conventional sprayer on Red and Brown onions
2. Maxstim Agriculture+ and Cynosa applied at sowing and 3 applications after emergence by Tape Irrigation with nitrogen on Brown onions
3. Maxstim Agriculture+ and Cynosa applied at sowing and 3 applications after emergence by Ecorobitix Precision sprayer on Red and Brown
4. Maxstim Agriculture+ and Cynosa applied as 5 applications after emergence by conventional sprayer on Brown onion sets

**Yield Plot Assessments:** 6 pairs of 3.66m<sup>2</sup>, 3.0m<sup>2</sup> or 2.745m<sup>2</sup> plots for treated and control

### 22 Sown Onion Trials and 1 Onion Set Trial



Average Marketable  
Yield Grade 50mm to  
80+mm

**+5.73 t/ha**

Most growers saw a  
margins increase between

**£350 - £600/ha**

Dependent on Application Protocol used

In 2025 some growers saw  
a margin increase of

up to **£2500/ha**

Dependent on Application Protocol used

## Marketable yields are based on:

Grade size 50mm to 80+mm

## Increase in margin based on:

1. Price per tonne of marketable yield sizes: Red £ 220/t, Brown £200/t entering storage.
2. The price of the Maxstim Products is the same retail price for all trials, this is deducted from the gross increased income before quoting the margin increase.

## 8 varieties were used in the trials:

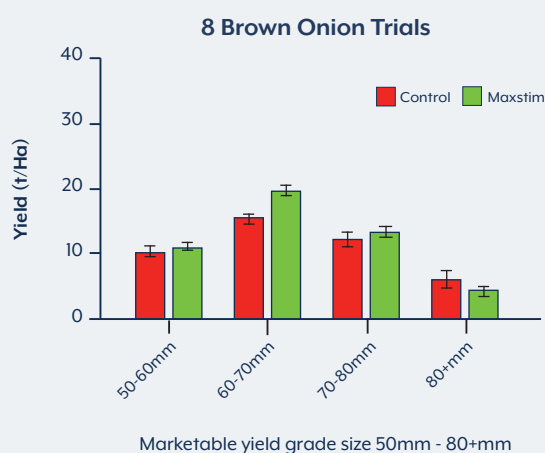
- ✓ Donna
- ✓ Numbito
- ✓ Hytech
- ✓ Julia
- ✓ Nation
- ✓ Red Baron
- ✓ Red Garnet
- ✓ Red Tide

## Data Recorded:

- ✓ Onion Plant number per ha at harvest
- ✓ Number of onions in grade sizes 50mm to 80+mm (In 10mm increments)
- ✓ Weight of onions in each grade size 50mm to 80+ mm (In 10mm increments)

## Conventional Sprayed Applications 2022-2025 / Brown Onions / Sown Crops

Protocol: Maxstim Agriculture+ 35-40 lit/ha & Cynosa 7-8 lit/ha, first application at sowing.



Average  
Marketable yield

**+3.88t/ha**

Est Average  
Increase in Margin

**£342**

Cost of Maxstim removed

Average  
control yield

**44.7t/ha**

% Increase in  
plant number /ha

**+7.36%**

Increase in  
Total Yield

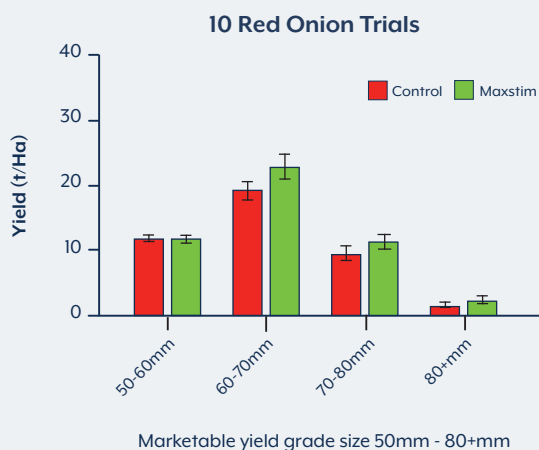
**+8.7%**

Average  
Maxstim yield

**48.6t/ha**

## Conventional Sprayed Applications 2022-2025 / Red Onions / Sown Crops

Protocol: Maxstim Agriculture+ 35-40 lit/ha & Cynosa 7-8 lit/ha, first application at sowing.



Average  
Marketable yield

**+5.92t/ha**

Est Average  
Increase in Margin

**£868**

Cost of Maxstim removed

Average  
control yield

**43.3t/ha**

% Increase in  
plant number /ha

**+5.63%**

Increase in  
Total Yield

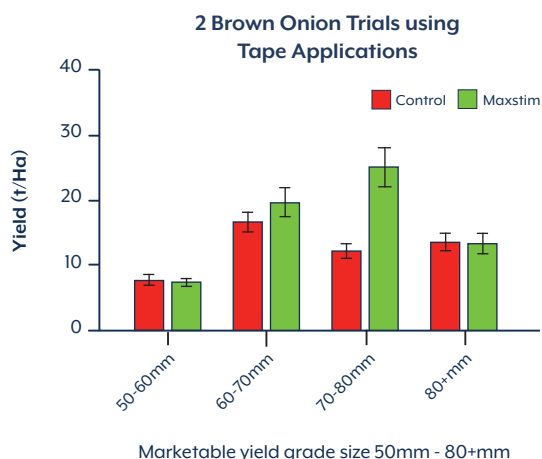
**+13.7%**

Average  
Maxstim yield

**49.2t/ha**

## Applied with Tape Irrigation 2023 & 2025 / Brown Onions / Sown Crops

Protocol: Maxstim Agriculture+ 7.5-12.5 lit/ha & Cynosa 3.75-5 lit/ha, first application at sowing.



Average Marketable yield

**+14.1t/ha**

Est Average Increase in Margin

**£2,639**

Cost of Maxstim removed

Average control yield

**53.0t/ha**

% Increase in plant number /ha

**+21.7%**

Increase in Total Yield

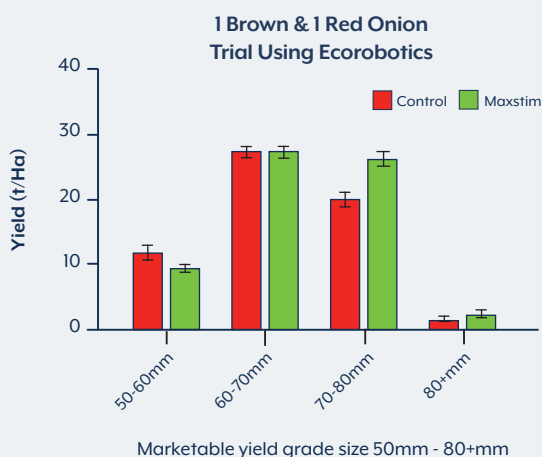
**+25.2%**

Average Maxstim yield

**67.1t/ha**

## Applied with Ecorobotix Precision Sprayer 2022-2025 / Red Onions / Sown Crops

Protocol: Maxstim Agriculture+ 16.8 lit/ha & Cynosa 4.7 lit/ha, first application at sowing.



Average Marketable yield

**+4.09t/ha**

Est Average Increase in Margin

**£638**

Cost of Maxstim removed

Average control yield

**58.3t/ha**

% Increase in plant number /ha

**-1.59%**

Increase in Total Yield

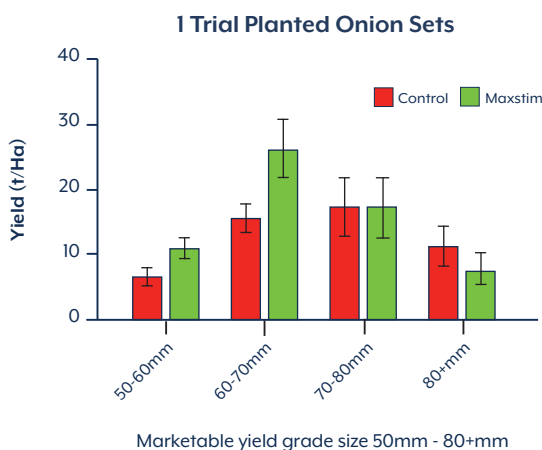
**+7.05%**

Average Maxstim yield

**62.4t/ha**

## Conventional Sprayed Applications 2022-2025 / Brown Onions / Planted Sets

Protocol: Maxstim Agriculture+ 30 lit/ha & Cynosa 6 lit/ha, first application at planting.



Average Marketable yield

**+14.4t/ha**

Est Average Increase in Margin

**£2,510**

Cost of Maxstim removed

Average control yield

**45.8t/ha**

% Increase in plant number /ha

**+11.1%**

Increase in Total Yield

**+14.4%**

Average Maxstim yield

**60.2t/ha**

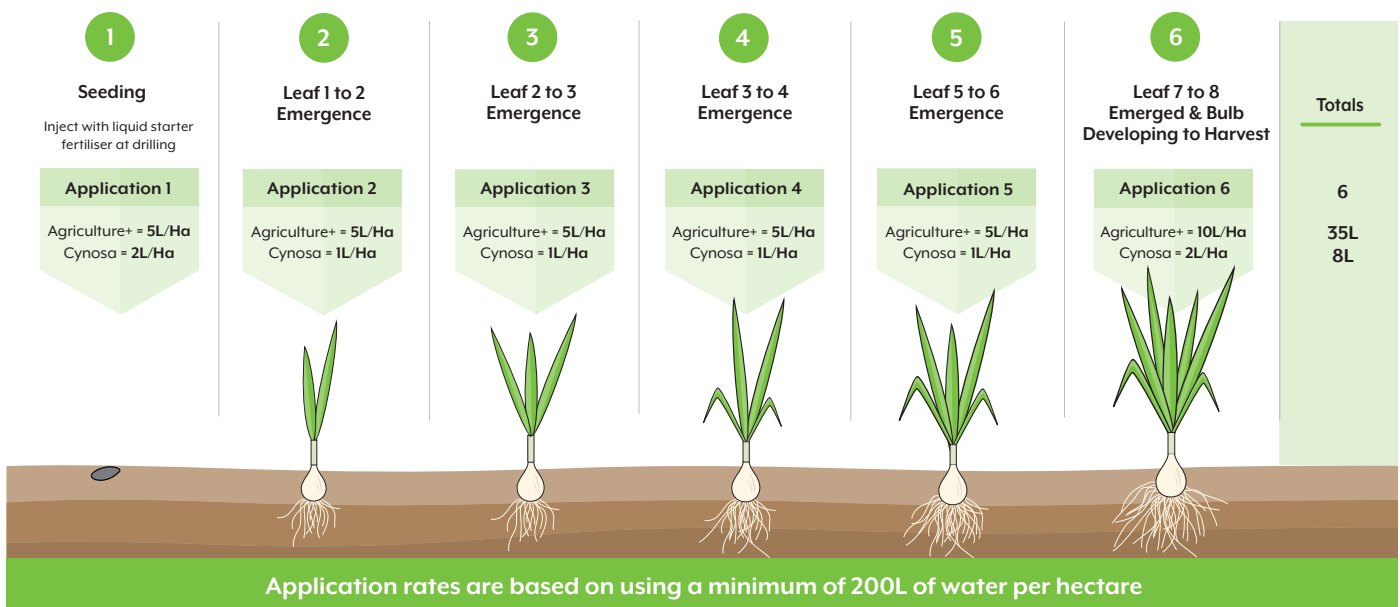
## Summary:

- ✓ 23 field trials with farmer growers with 8 varieties in 4 years
- ✓ Detailed scientific data recorded from 6 large, replicated plots per treatment

## Benefits:

- ✓ Reliable yield increases of marketable grades 50mm - 80+mm
- ✓ Increased margins after the deduction of Maxstim costs
- ✓ Improved establishment of onions per hectare increasing harvestable plant population

## Conventional spray application protocol



*Tape Irrigation and Ecorobotix precision spraying protocol guides are also available.*

**For more information on how you can incorporate Maxstim complex biostimulants into your crop maintenance program please call one of our experts:**

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