

Onion Trials

Netherlands 2024

Trial aims:

To assess the effects of Maxstim Agriculture+ and Maxstim Cynosa applied to brown onions.

Trials conducted by:

AIKC (Agricultural Innovation and Knowledge Centre) Rusthoeve.

Maxstim yield increase

9.84%

Maxstim increase in yield

4.04t/ha

We compared 4 treatments in replicated plots.

Treatments:

- A. Control with no chemical fungicide application
- B. Standard chemical fungicide application
- C. Maxstim treated plus a reduction of 20% chemical fungicide application
- D. Maxstim treated with full, 100% chemical fungicide application

Fungicides used:

- Fandango
- Zorvec Endavia
- Luna Experience
- Orondis
- Amistar
- Winby

Assessments:

1. Mildew on 07/08 2024 and 21/08/2024. Where scores were recorded from 9= Green not affected and 1 =completely affected.
2. Harvested weight (kg/ha)



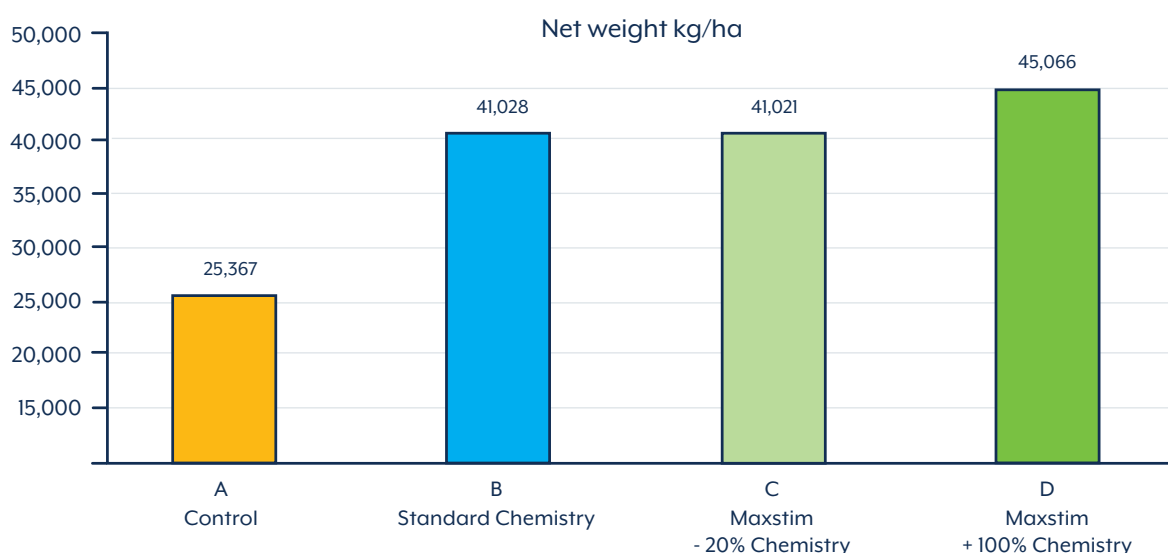
Application protocols:

- **Spraying:** 300 lit/ha water. When spraying with less water, 5% solution maximum.
- Nozzle Agrotop Airmix 110-03
- We used NO artificial infections
- Active dripirrigation to enlarge the possibility for mildew
- Max 100 lit/ha water in furrow at sowing

Application and timing of Maxstim protocol

APPLICATION DATES AND PROTOCOL FOR MAXSTIM Products lit/ha	at sowing	flagstage	2-3 leafstage	T1	T2	T3	T4	T5
DATE	02/05/2024	13-May	05-Jul	11-Jul	18-Jul	25-Jul	02-Aug	07-Aug
MAXSTIM PRODUCTS								
Agriculture +	2.5	10	5		5		5	5
Cynosa	1	2	1		1		1	1

Comparison of yield between treatments



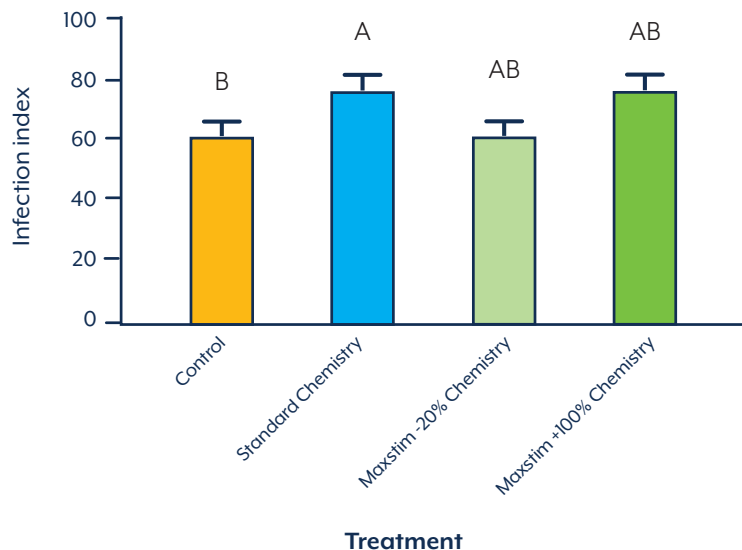
Results:

- ✓ Maxstim treatment plus full chemical treatment (D) is the highest yielding treatment, yielding **19,699 kg/ha** above control (A) and yielding **4,038 kg/ha** above the full chemical treatment, with no Maxstim (B).
- ✓ This represents a treatment of (9.84%) statistically significant increase in average yield.
- ✓ The yield increase would produce a significant **increase in the grower's margin between treatment B and Maxstim treated D.**
- ✓ There was no significant difference between the full chemical treatment (B) and the Maxstim treatment with a 20% reduction in chemical input (C).
- ✓ **This represents a saving for the grower of 20% of the chemical costs.**

Analysis of infection levels of mildew between treatments

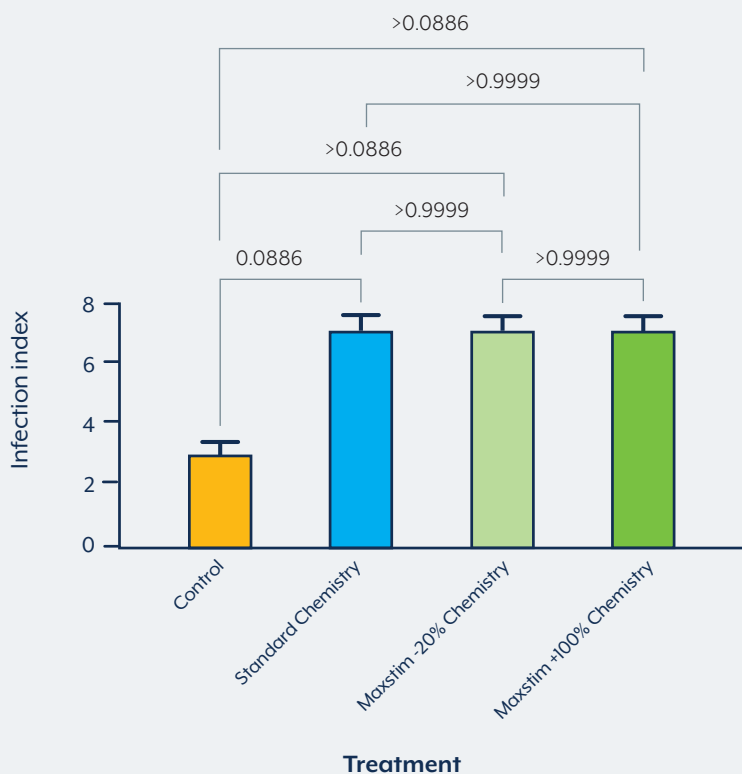
The analyses for infection levels used a non-parametric analysis (Kruskal Wallace test).

Assessment for active mildew (07/08/2024)



Assessment on 07/08/24.
Only the Standard chemical treatment had a significantly lower infection levels than the untreated control. All other treatments did not differ significantly.

Mildew infection rating (21/08/2024)

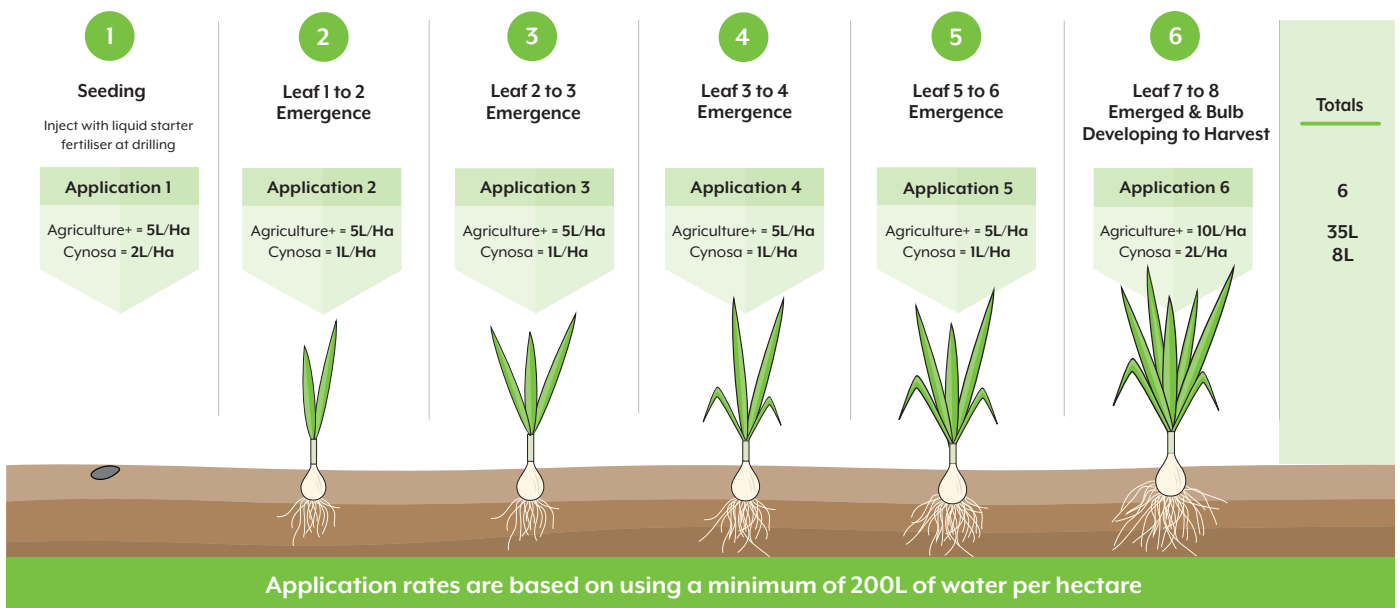


The assessment on the 21/08/2024 showed there where no significant differences in infection levels between treatments.

Conclusions:

- Maxstim treated crops with a full 100% chemical application **increases yield by 9.84%** above the standard 100% chemical treated crops, (A yield increase of 4.04t/ha).
- The observed yield significantly improves the growers margins.
- Maxstim treated crops with a 20% reduction in chemical inputs yields the same as a crop treated with full 100% chemical input.
- There is an environmental and financial benefit from reducing chemical fungicide inputs.
- The infection levels show no significant difference between treatments but all treated crops show a significant reduction in infection levels compared to control crops.

Advised protocol for conventionally sprayed crops of onions.



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

Oscar Rietkerk (NL)
Email: ventas.espana@maxstim.com
Mobile: + 31 6 15941946

Tim Cannon (UK)
Email: tim.cannon@maxstim.com
Mobile: 07884 586191

Leanne Coleman (UK)
Email: leanne.coleman@maxstim.com
Mobile: 07552 097554

Phil Kingsmill (UK)
Email: phil.kingsmill@maxstim.com
Mobile: 07860 269996

Tony Kelly (UK)
Email: tony.kelly@maxstim.com
Mobile: 07974 435417

www.maxstim.com

Maxstim™ is a trademark of Maxstim Ltd.

Maxstim
 Creating New Standards in Biostimulants