

BlueN™



NUTRIENT EFFICIENCY BIOSTIMULANT

BlueN™ provides a crop with a unique way to capture nitrogen throughout the season, helping plants reach their yield potential.



Why use BlueN nutrient efficiency biostimulant?

- Maximises crop potential through optimised nitrogen management.
- BlueN enhances plant growth by improving the nitrogen availability in the plant throughout the growing season.
- BlueN meets changing market expectations by providing a sustainable source of nitrogen.

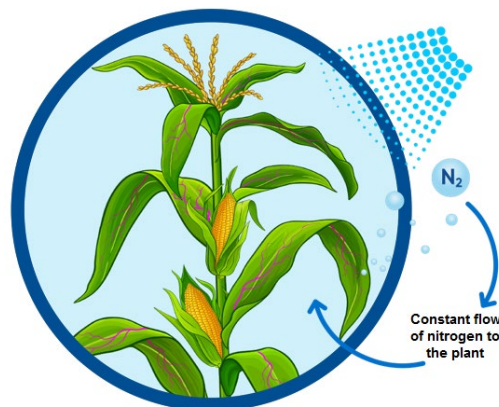
What is BlueN?

BlueN is a novel nutrient efficiency biostimulant for use in a broad range of crops. BlueN contains *Methylobacterium symbioticum*, a bacteria found in nature that fixes atmospheric nitrogen for use by the plant. BlueN provides a sustainable, alternative source of nitrogen that reduces dependency of nitrogen uptake from the soil and ensures the plant has access to nitrogen all season long.

How BlueN Works

- BlueN enters the plant through the stomata from where it can colonise the leaves.
- BlueN converts atmospheric N₂ into ammonium which can be used by the plant.

Plants generate methanol during normal growth which is used as a food source by BlueN ensuring reliable colonisation.



Supplies nitrogen throughout the crop cycle in an effective and controlled way

APPLICATION INFORMATION

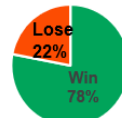
APPLICATION INFORMATION	
PACK SIZE	3kg
RECOMMENDED RATE	333g/ha
RAINFAST	1 hour
NUMBER OF APPLICATIONS	1 application per crop
APPLICATION TIMING	Apply between 4-8 true leaves (BBCH 14-18)
APPLICATION CONDITIONS - KEY FOR EFFECTIVE COLONISATION OF METHYLOBACTERIUM SYMBIOTICUM	<ul style="list-style-type: none"> • Apply to actively growing plants unaffected by stress. • Apply when the majority of stomata are open • Try to apply when day temperatures begin to reach at least 10°C up to 25°C (maximum 30°C) • Use water with a pH between 5 and 8.

BlueN Meta-analysis on Grain Maize, 2022

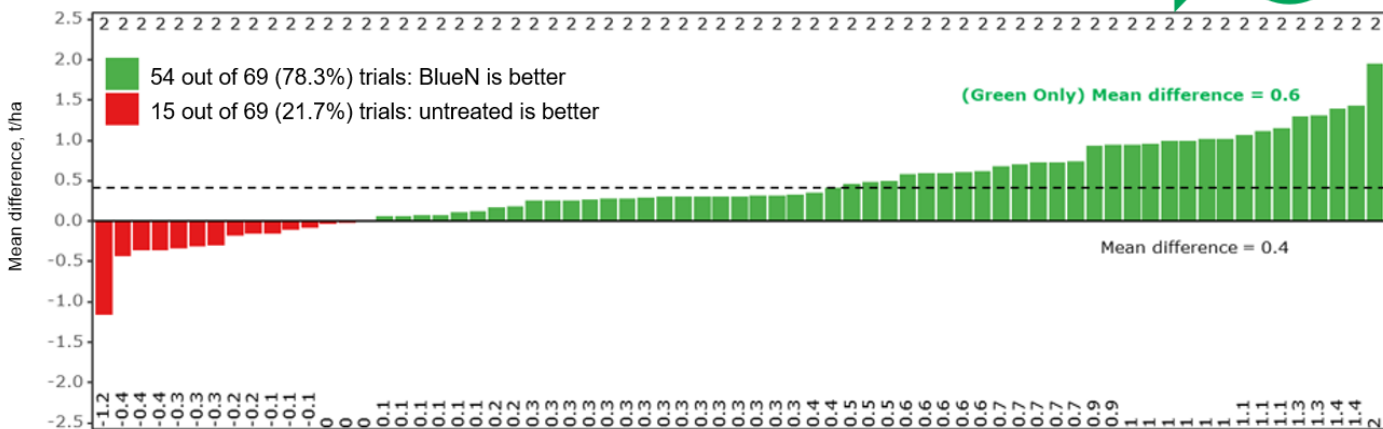
On top strategy (applying BlueN on top of planned fertiliser programme)

Grain Maize – on top <= 180 kg N/ha
BlueN vs Untreated

All the trials received a fertiliser programme below or equal to 180 kg N/ha



Getting here



For growers targeting a total fertiliser programme below or equal to 180 kg N/ha, the best strategy is to use BlueN on top of their normal fertiliser programme.

Blue N investment: £30/ha

In ≈ 80% of cases this strategy brings a yield increase over untreated with an average yield benefit +0.6 T/ha = + £150/ha.

Across all trials an average yield benefit is +0.4 T/ha = £100/ha

(Grain maize £250/t)

UK Forage Maize Trial information 2023

	Fresh Yield t/ha	DM %	DM Yield t/ha	D Value	ME	Starch
Treated	41.3	31.5	13	71	11.5	33.1
Untreated	37.7	33.2	12.5	64	10.4	32.1

Location: Cornwall

Variety: Cito

2.5 ha field, 24m control strip

Yields taken with Claas forager, yield monitor and GPS

Ruminant performance increases with forages containing higher amounts of ME and D-value. In the UK, the National Institute of Agricultural Botany (NIAB) have conducted their own research and found that a single point increase in D-value equates to 0.26 litres of milk per dairy cow per day, 40g/day extra beef liveweight gain and 20g/day of extra lamb liveweight gain.

7-point D-value gain from Blue N v untreated

Extra 1.82L/cow/day

Extra 280g/day beef live weight gain

Extra 140g/day lamb live weight gain

Or.....

If sold as a standing crop

Silage maize circa £60t so 3.6t/ha increase in yield = £216/ha

Always read the label and product information before use.

For further information including warning phrases and symbols refer to label.

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