

BlueN™ - Nutrient Efficiency Stimulant in Maize



BlueN™ provides a crop with an additional, 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, especially during critical growing periods.
- BlueN meets changing market expectations by providing a sustainable source of nitrogen, which is unaffected by unfavourable weather conditions, leaching or volatilisation.

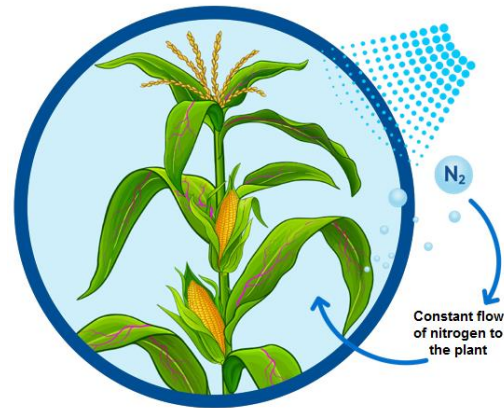


What is BlueN?

BlueN is a novel nutrient efficiency biostimulant for use in a broad range of crops. BlueN contains *Methylobacterium symbioticum*, a bacterium 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 does BlueN work?

- BlueN enters the plant through the stomata from where it can colonise the leaves and then quickly translocate to surrounding leaves, stems and roots.
- 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.
- Once BlueN has colonised the plant, on average it can deliver the equivalent of ~2 - 3kg/ha of applied nitrogen to the crop per week.



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

Application information

Pack Size	3kg – Aluminum bags to guarantee excellent product quality and 2 years shelf life. Use on day of opening
Recommended Rate	333g/ha
Rainfastness	1 hour
Number of Applications	1 application per crop
Application Timing	Apply between 4-8 true leaves (GS14-18)
Application Conditions – Key for effective colonisation of <i>Methylobacterium symbioticum</i>	<ul style="list-style-type: none"> • Apply to actively growing plants unaffected by stress to ensure successful colonisation. • Apply when most stomata are open, ie., morning, late afternoon and evening. • Try to apply when day temperatures begin to reach at least 10°C up to 25°C (maximum 30°C) and night temperatures over 5°C (refer to Arable App for specific timing information). • Use water with a pH between 5 and 8.

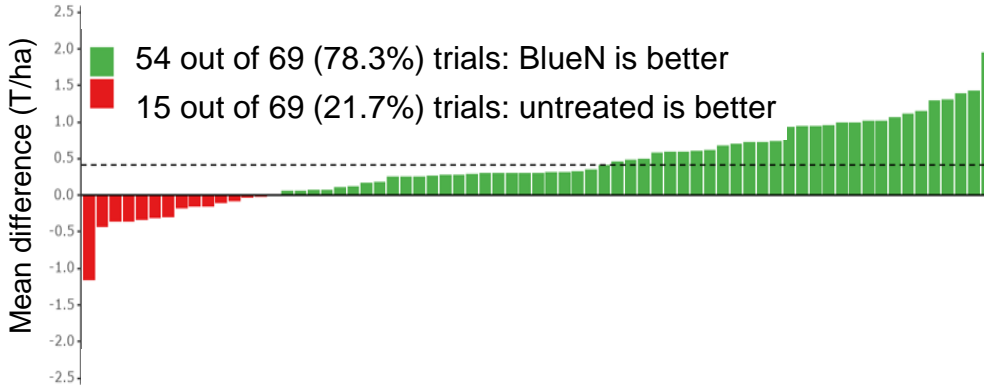


For further information, visit www.corteva.co.uk or call 0800 689 8899. Always read the label and product information before use. For warning phrases and symbols refer to label.

BlueN™ contains *Methylobacterium symbioticum*.
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 February 2025 – this versions supersedes all previous versions.

BlueN meta-analysis on grain maize

European studies including UK, 2022/23



Margin Over Input Cost

BlueN investment: £30/ha

Average yield benefit:
+0.4T/ha

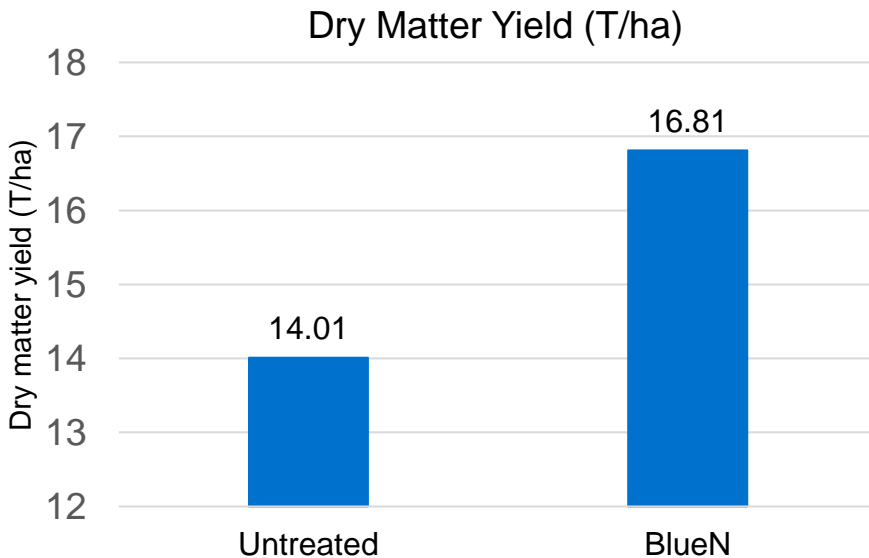
+£50/ha*

*Grain Maize £200/T

- In $\approx 80\%$ of cases BlueN brings a yield increase over untreated with an average yield benefit $+0.6T/ha = +£120/ha$.
- Across all 69 trials the average yield benefit is $+0.4T/ha = £50/ha$ return on investment.

Maize yield – replicated plot trial

Warwickshire, 2024



Trial information

Application: GS14 (4 leaf stage)

Date: 21/06/2024

Variety: DS1897B

Location: Warwickshire

Soil type: Sandy Loam

Applied in conjunction with normal farmer fertiliser programme

Margin Over Input Cost

BlueN Investment: £30/ha

Yield Benefit: $+2.80T/ha$

Milk return:

+£2574/ha#

#Milk price £0.35/L