

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.



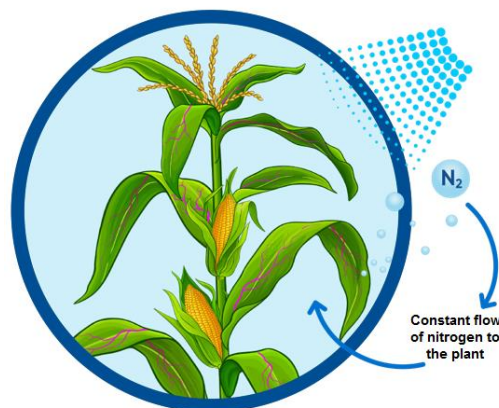
What is BlueN?

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.

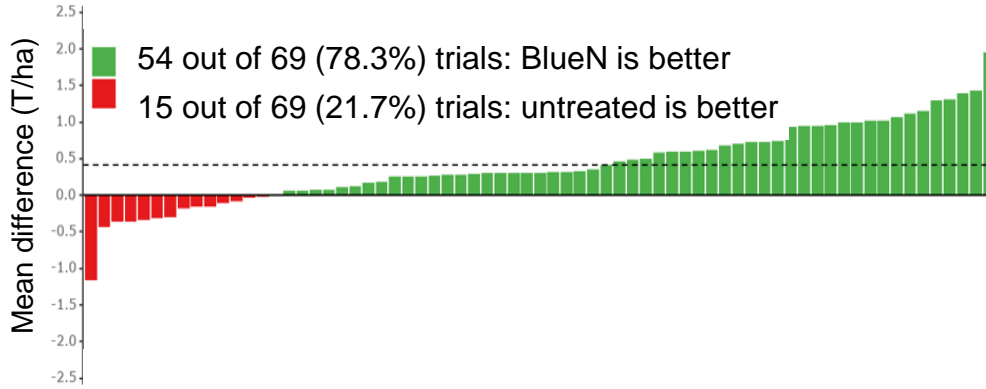
BlueN is verified for use in organic systems, for more information contact the Corteva Hotline.



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*.
®, ™ Trademarks of Corteva Agriscience and its affiliated companies. © 2025 Corteva.
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*

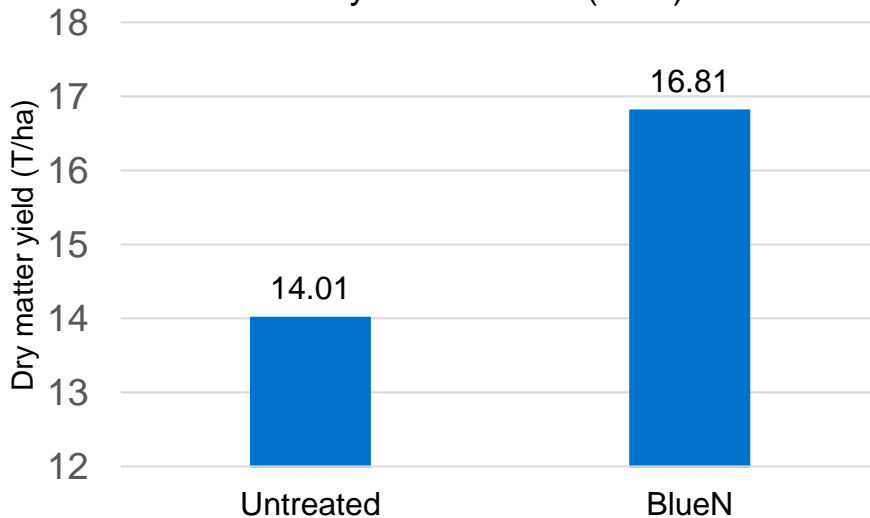
*Grain Maize £200/T

- 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

Dry Matter Yield (T/ha)



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