

BlueN™ Nutrient Efficiency Biostimulant in Sugar Beet

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 crop's life in an effective and controlled way.
- BlueN meets changing market expectations by providing a sustainable source of nitrogen.
- For best results apply on top of your conventional fertiliser programme.

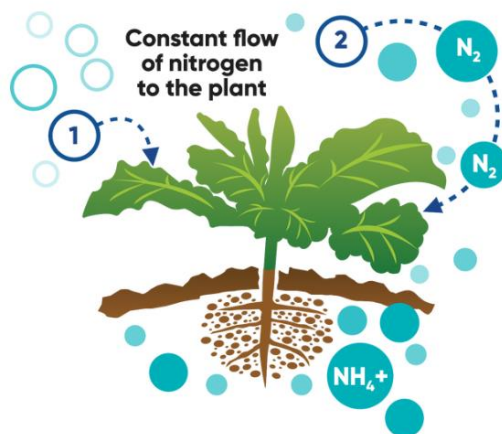
What is BlueN?

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

1. BlueN enters the plant through the stomata from where it can colonise the leaves.
2. BlueN converts atmospheric N₂ into ammonium which can be used by the plant.
3. Once BlueN has colonised the plant, on average it can deliver the equivalent of ~3kg/ha of applied nitrogen to the crop per week.

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



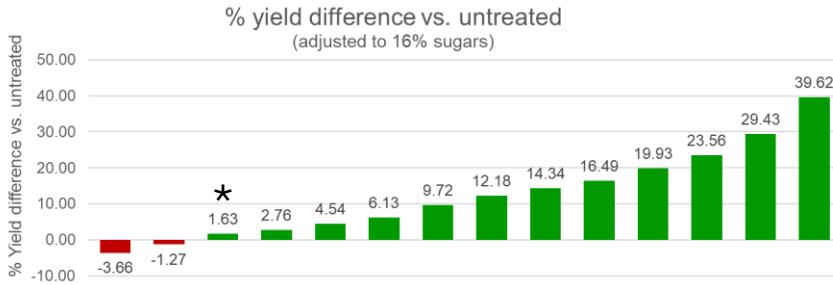
Supplies nitrogen throughout the crop cycle in an effective and controlled way

Application Information

Pack Size	3 kg
Recommended Rate	333 g/ha
Rainfastness	1 hour
Number of Applications	1 application per crop
Application Timing	GS16-35 (6 leaves – 50% ground cover)
Application conditions – Key for effective colonization of <i>Methylobacterium symbioticum</i>	<ul style="list-style-type: none"> • Apply to actively growing plants unaffected by stress. • Apply when the majority of stomata are open, e.g early morning, late afternoon or evening • Try to apply when day temperatures begin to reach at least 10°C up to 25°C (maximum 30°C) - refer to Corteva Arable App for local 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.

BlueN performance on sugar beet - 14 UK sites, 2023/2024



Margin Over Input Cost

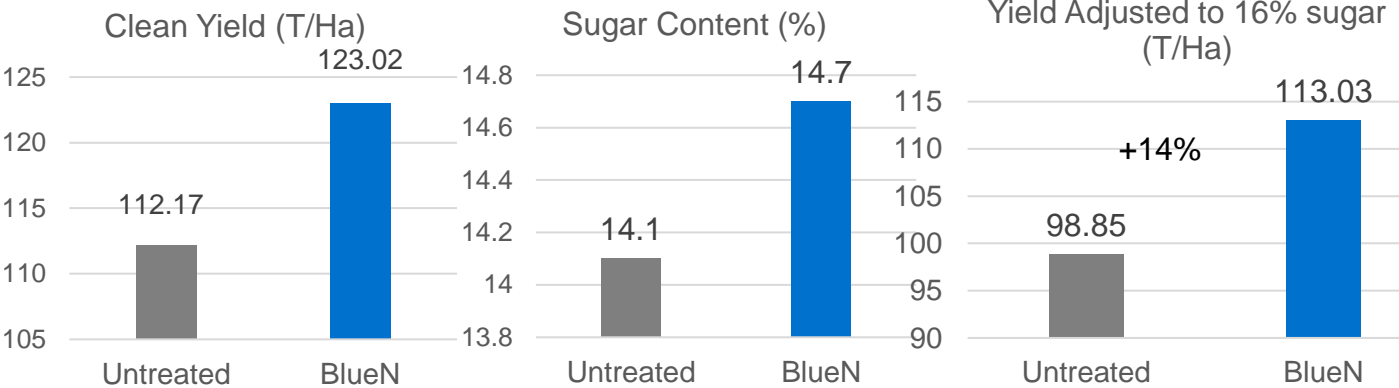
Across all trials:
 BlueN investment: £30/ha
 Average yield benefit:
 +13.49T/Ha
+£415/Ha#

#sugar beet £33/T

* Not adjusted to 16% sugar

- In more than 85% of cases BlueN returns a yield benefit over untreated
- Across all trials BlueN returns an average yield benefit of +13.49T/Ha or 12.5%
- Across all trials, BlueN margin over input cost is £415/Ha at 2025 contract price

BlueN tramline trial – Norfolk 2023



10 replicated digs per treatment

- An application of BlueN in this trial increased clean yield by 10.86T/Ha & sugar content by 0.6%
- Once adjusted, the BlueN treatment returned a yield increase of **+14.18T/Ha or 14%**
- At £33/T (adjusted) BlueN gave a Margin Over Input Cost of **+£438/ha**

Across UK trials in 2024, **impurities (Amino-N)** were in-line with control plots and well **within British Sugar limits.**