BlueN[™] Nutrient Efficiency Biostimulant in Potatoes



BlueN™ provides a potato 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.
- · Increases marketable yield (quantity and size) by impacting haulm growth and development.
- Has no impact on fry colour or impact on determinate vs indeterminate varieties.
- In trials, meta data analysis from UK trials in 2023/24 shows on average a 4t/ha yield benefit.
- For best results apply on top of your conventional fertiliser programme.
- BlueN is compatible with many potato blight fungicides, including Option and Zorvec Entecta, for more information on tank mix partners follow the link: https://www.corteva.co.uk/tools-and-advice/tank-mix.html.
- · BlueN meets changing market expectations by providing a sustainable source of nitrogen.

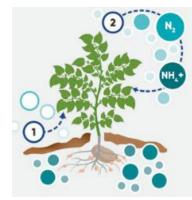


BlueN is a novel nutrient efficiency biostimulant for use in a broad range of crops including potatoes. BlueN contains *Methylobacterium symbioticum*, a bacteria found in nature that fixes atmospheric nitrogen for use by the plant. BlueN provides a sustainable, alternative source of nitrogen that reduces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

How BlueN Works

- BlueN enters the potato plant through the stomata from where it can colonise the plant.
- 2. BlueN converts atmospheric N_2 into ammonium which can be used by the plant.
- 3. Once BlueN has colonised the plant, on average it can deliver the equivalent of ~3 kg/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 (leave 24hrs before irrigating as a precaution)
Number of Applications	1 application per crop
Application Timing	GS25-60 Optimum timing GS25-33 (before plants meet in the row, immediately before rapid canopy expansion)
Application conditions – Key for effective colonisation of Methylobacterium symbioticum	 Apply to actively growing plants unaffected by stress. Apply when the majority of stomata are open, i.e. morning, later afternoon or 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 over 5°C (refer to Arable App for specific timing information). Use water with a pH between 5 and 8.

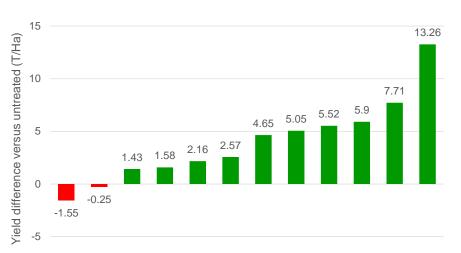
BlueN is verified for use in organic systems, for more information contact the Corteva Hotline.



BlueN performance on potatoes

12 UK sites, 2023/24

Marketable yield: BlueN vs. Untreated



Margin Over Input Cost

Across all trials: BlueN investment: £30/ha

Average yield benefit: +4.0 t/ha

+£970/ha*

*Potatoes £250/t

- Across all UK trials from 2023/24 seasons, BlueN returned an average marketable yield benefit over untreated of 4.0 t/ha.
- For all trials, the return on investment is £970/ha.

No effect on fry colour

















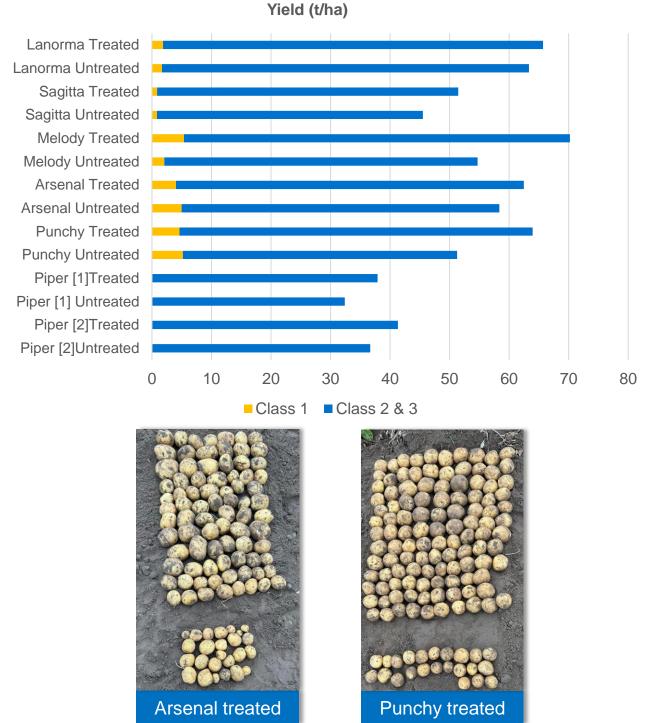
Variety: Punchy Grown for processing (crisps)

Location: Doncaster





Impact on tuber bulking across varieties



Results taken from a range of sites & application timings showing no impact on the number of Class 1 small tubers.