### BlueN<sup>™</sup> Nutrient Efficiency Biostimulant in Cereals

BlueN<sup>™</sup> 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, especially during critical growing periods.
- 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, which is not affected 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 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 and then quickly translocate to surrounding leaves, stems and roots.
- BlueN converts atmospheric N<sub>2</sub> into ammonium which can be used by the plant.
- 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.

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



Supplies nitrogen throughout the crop's life 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	Winter cereals GS25-61 (5 tillers to the beginning of anthesis) Optimum timing is GS25-32 Spring cereals GS25-32
<b>Application conditions</b> – Key for effective colonisation of <i>Methylobacterium symbioticum</i>	<ul> <li>Apply to actively growing plants unaffected by stress.</li> <li>Apply when most stomata are open, i.e., morning, late afternoon or evening.</li> <li>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).</li> <li>Use water with a pH between 5 and 8.</li> </ul>

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



Visit us at corteva.co.uk







## UK meta-analysis in winter wheat, 2023 On top strategy (applying BlueN on top of planned fertiliser programme).



# Meta-analysis in winter barley, 2023 On top strategy (applying BlueN on top of planned fertiliser programme).



<ul> <li>On top strategy:</li> <li>BlueN investment: £30/ha</li> <li>Yield benefit: +0.44 t/ha</li> <li>= + £70.4 ha*</li> </ul>	
*Barley £160/t	
•	The best strategy is to use
	BlueN on top of existing
	fertiliser programmes.
•	In 74% of cases this strategy
	brings a vield increase over the
	untreated on average $\pm 0.44$
	t/ba
•	Across all the trials an average
	yield benefit is +0.3 t/ha

#### growing together

CORTEVA biologicals