## bíologícals



BlueN<sup>™</sup> 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 growing season.
- BlueN meets changing market expectations by providing a sustainable source of nitrogen.

#### What is BlueN?

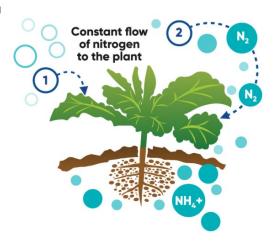
BlueN is a novel nutrient efficiency biostimulant for use in a broad range of crops. BlueN contains *Methylobacterium symbioticum*, a bacteria found in nature that fixes atmospheric nitrogen for use by the plant. BlueN provides a sustainable, alternative source of nitrogen that reduces dependency of 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  $N_2$  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.



BlueN provides an additional source of sustainable nitrogen ensuring the plant has access to nitrogen all season long.



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



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APPLICATION INFORMATION	
CROPS	A range of crops – see label for specific crops – including cereals, oilseed rape and maize
PACK SIZE	3kg
RECOMMENDED RATE	333g/ha
WATER VOLUME	100-400 L/ha depending on crop type
RAINFAST	1 hour
NUMBER OF APPLICATION	1 application per crop
APPLICATION CONDITIONS - KEY FOR EFFECTIVE COLONISATION OF METHYLOBACTERIUM SYMBIOTICUM	<ul> <li>Apply to actively growing plants unaffected by stress.</li> <li>Apply when the majority of stomata are open, for example morning or late afternoon</li> <li>Apply when the day temperature will reach minimum 10 degrees and max 25 degrees and the night temperature a minimum 5 degrees</li> <li>Apply with sufficient plant biomass that the crop presents a large surface area for the spray to hit</li> <li>Use water with a pH between 5 and 8.</li> </ul>
RECOMMENDED APPLICATION TIMING	
CEREALS	<ul> <li>Winter cereals BBCH 25-61 (optimum timing is BBCH 25-32)*</li> <li>Spring cereals BBCH 25-32</li> </ul>
OSR	<ul><li>BBCH 14-16 in autumn</li><li>Rosette stage to BBCH 69 in spring</li></ul>
MAIZE	BBCH 14-16
LEGUMES	BBCH 14-18
GRASSLAND	BBCH 21-39
POTATOES	BBCH 25-61 (optimum timing is BBCH 25-33, immediately before rapid canopy expansion)
SUGAR BEET	BBCH 35

Application timings are a guide based on when the conditions for colonisation are likely to be most favourable. BlueN should be applied as early as possible when conditions allow to get the most benefit from the bacteria.

<sup>\* -</sup> please consult Corteva for more information

