# SOME THINGS ARE JUST BETTER TOGETHER.

ROCK + ROLL

JEANS + BOOTS





BURGERS + FRIES







THE ADVANCED CROP NUTRITION GUIDE

# ADVANCED CROP NUTRITION

Crop nutrition needs are changing in corn. Higher-yielding hybrids, aggressive production goals and new, evolving plant stresses require an advanced approach to fertility. As your trusted crop nutrition partner, Mosaic invests in research and innovative products to unlock your farm's fullest potential. PowerCoat® is our new biological that enhances the relationship between soil and crop nutrients to boost crop revenue potential.

#### FERTILIZER'S PERFECT COMPLEMENT

PowerCoat is a biological fertilizer complement formulated with proven strains of PGPR — Plant Growth Promoting Rhizobacteria — that improves nutrient utilization for greater plant growth and vigor, helping growers maximize ROI from fertilizer inputs.

#### **On-Farm Value**

PowerCoat is the perfect complement to your granular fertilizer applications and an economical way to improve your return on fertilizer investment (ROFI).

#### Ease of Use.

PowerCoat is compatible with most granular fertilizers, has no special storage conditions, and has a 24-month shelf-life. Once applied to dry fertilizer, PowerCoat remains viable for up to 18 months.

#### **Consistent Performance.**

The strains of *Bacillus* bacteria in PowerCoat, their modes of action and use rates are well-understood. PowerCoat has consistently performed in research trials where it's increased total uptake of key nutrients, ROI of fertilizer inputs and ability of plants to handle stress.

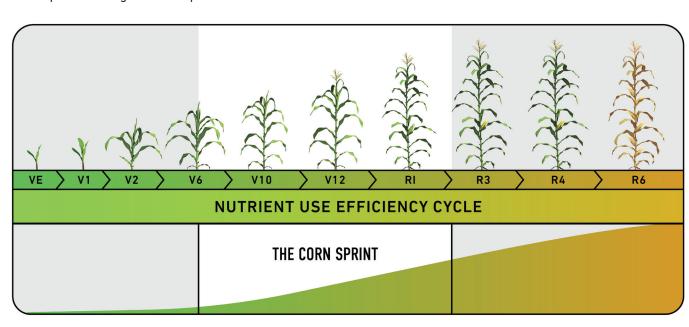
#### Economics.

PowerCoat's cost per acre is at or below the industry average. A yield advantage ROI of 4.9 to 1 when combined with BioPath® applications make it an economical way to improve ROFI.

#### PREPARING FOR THE CORN SPRINT —

Matching nutrient supply with a corn crop's needs is critical to optimizing yield and grain quality potential, especially in high-productivity environments. A corn crop uses as much as 60 percent of available nutrients during the rapid growth window from V6 to R3. We call this critical developmental stage the "Corn Sprint," and it's when the crop's nutrient demand is highest as it prepares for pollination and grain fill.

Since there is a finite number of nutrients a plant can absorb each day, any limitations can result in a lost opportunity to maximize yield potential. PowerCoat enhances nutrient availability, uptake and utilization to support rapid development during the Corn Sprint.



#### PowerCoat's Role During the Corn Sprint

PowerCoat is a biological fertilizer complement that can be included in your granular fertilizer applications to improve nutrient accessibility to plants and set up your crop for success during the pivotal developmental period before pollination and grain fill. Here's how PowerCoat enhances your crop nutrition strategy:

#### Increases nutrient availability

The select strains of *Bacillus* in PowerCoat produce organic acids and enzymes that improve the solubilization of dry fertilizer into plant-available forms.

## Facilitates efficient nutrient uptake and utilization

PowerCoat helps produce plant growth promoting compounds essential for root development and growth. A healthier, more robust root system facilitates more efficient nutrient absorption.

#### Improves plant health and yield potential

PowerCoat helps harness soil nutrients so corn plants have the nutrition they need at peak uptake times throughout the season, particularly during the Corn Sprint. Improved nutrient efficiency combined with more vigorous early-season plant growth can increase the return on fertilizer investments and optimize corn yield potential.

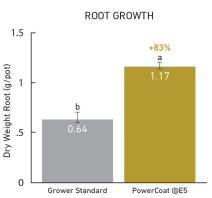
#### FIELD TESTED

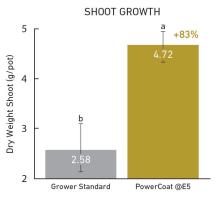
PowerCoat has been rigorously tested in fields like yours, with consistent performance across environmental conditions.

#### PowerCoat Optimizes Yield Potential\*

# CORN YIELD RESPONSE PowerCoat\* & BioPath\* 220 - Grower Standard bu/ac 210 - 216.6 bu/ac

#### Increases Total Corn Growth\*\*





#### FREQUENTLY ASKED QUESTIONS

#### How does PowerCoat work?

PowerCoat contains select, highly effective strains of spore-forming *Bacillus* bacteria (PGPR) that colonize in and around developing corn roots and promote positive plant growth responses. The select strains of *Bacillus* in PowerCoat produce organic acids and enzymes that improve the solubilization of fertilizer into plant available forms.

### How is PowerCoat different from other biologicals on the market?

Intensive research and evolving science have proven that *Bacillus* is one of the most powerful partners in developing corn root systems. That's why Mosaic created a natural, effective biological specifically designed to support corn growth. Unlike other biologicals, PowerCoat is formulated with *Bacillus* strains that have been carefully screened and selected for their ability to deliver proven product performance.

# How does PowerCoat fit into my operation's fertility program?

PowerCoat is compatible with most granular fertilizers, has no special storage conditions, and has a 24-month shelf-life. Once applied to dry fertilizer, PowerCoat remains viable for up to 18 months, ensuring it's ready to go when your customers are.

#### What value does PowerCoat bring to the farm?

PowerCoat is an affordable way for growers to increase their return on fertilizer investment. Adding PowerCoat to dry fertilizer blends helps ensure that nutrients are accessible and in plant available forms ahead of critical plant uptake periods. Better nutrient efficiency combined with greater early season corn plant growth and vigor can increase the return on fertilizer investments and optimize yield potential.







#### Learn More at AmplifyYourROFI.com

\*All treatments received grower standard production inputs.

\*\*All treatments received grower standard fertility: DAP 18-46-0 applied 55.5 lbs/ac in-furrow (2x2) at plant – equivalent to 10 lbs N/ac, 25.5 lbs P205/ac; UAN (90 lbs N/acre) at 14 DAP. PowerCoat impregnated on DAP. Media utilized was Wingate alkaline soil – pH 8.0.

Means within each column with different letters differ significantly (p<0.10) Trial conducted by Pathway BioLogic, Plant City, FL.