

# FERTILIZER'S PERFECT COMPLEMENT

**BioPath**<sup>®</sup>  
BIOLOGICAL FERTILIZER COMPLEMENT

FROM



BioPath<sup>®</sup> is a biological fertilizer complement formulated with proven strains of PGPR — Plant Growth Promoting Rhizobacteria — that increases nutrient availability, uptake and utilization. This improves early-season plant growth and vigor, optimizing corn yield potential.

## EXPLORE BIOPATH

---

### Agronomic advantages

- Supports vigorous early-season crop growth and development
- Increases soil nutrient availability and plant uptake and utilization
- Facilitates healthy root development
- Boosts season-long plant health to optimize grain fill
- Promotes soil health

### Economic benefits

- Cost-effective applications (at or below the industry standard)
- Improved production efficiencies
- Optimized yield potential (on average, 3.7 bu/A year-over-year yield advantage)\*
- Field-proven 3.6 to 1 ROI on BioPath applications\*

### Ease of use

- Easily incorporated into most liquid fertilizer programs
- Easy to tank-mix or pre-blend in liquid fertilizer (available from a trusted manufacturer, Mosaic)
- Has a 24 month shelf life in concentrate, and up to 18 months when pre-blended
- Compatible with starters, UAN and most crop protectants
- Flexible application timing — at plant or sidedress

## FREQUENTLY ASKED QUESTIONS

---

### How does BioPath work?

BioPath 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 BioPath produce organic acids and enzymes that improve the solubilization of fertilizer into plant available forms.

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

Unlike other biologicals, BioPath is formulated with *Bacillus* strains that have been carefully screened and selected for their ability to deliver proven product performance. BioPath has consistently performed in research trials, with an average 80–90% win rate.

### How does BioPath fit into an operation's fertility program?

BioPath is compatible with most liquid fertilizers and crop protectants, has no special storage conditions, and has a 24 month shelf-life. It also has a shelf-life of up to 18 months in fertilizer blends, ensuring that it's ready to go when your customers are.

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

BioPath is an affordable way for growers to increase their return on fertilizer investment. Adding BioPath to the tank mix 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.

# FIELD-PROVEN BENEFITS

BioPath has been rigorously tested across growing environments to ensure consistent performance no matter the conditions.

## IMPROVES EARLY PLANT VIGOR AND NUTRIENT USE EFFICIENCY

- Increases in total nutrient uptake of nitrogen, phosphorus, potassium and micronutrients.
- Better nutrient utilization can increase ROI from fertilizer inputs and better position growers to maximize yield potential.
- Stronger, healthier plants are better equipped to handle stress.

### Rate recommendations

Stand-alone application  
 Starter or Sidedress: 16 oz. per acre

### As Ingredient

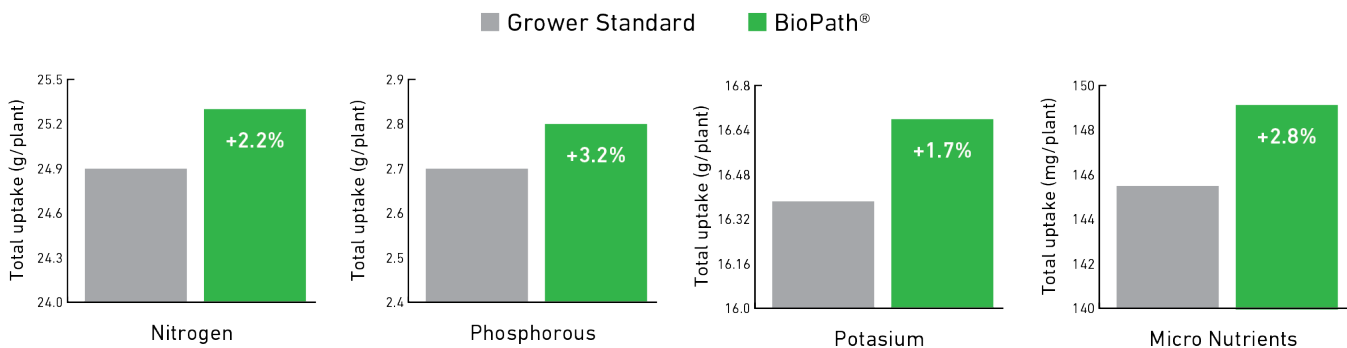
Fertilizer Rate	Incorporation Rate
UAN @ 40 GPA	0.3%
UAN @ 20 GPA	0.5%
UAN @ 10 GPA	1.0%
Starter @ 5 GPA	2.0%
Starter @ 3 GPA	3.5%

### APPLY AT PLANT OR WITH SIDEDRESS NITROGEN

### Crop Types

Corn, wheat, small grains, alfalfa and specialty crops

## BIOPATH INCREASES TOTAL NUTRIENT UPTAKE\*\*\*



Data reflects the average difference of 325 corn plants across 12 location. Total nutrient uptake = biomass x nutrient concentration.

**Learn More at [AmplifyYourROFI.com](https://www.amplifyyourrofi.com)**

\*\*\*Data reflects average of 19 third-party small plot replicated research trials and 11 on-farm trials conducted between 2016 and 2021. All treatments received grower standard production inputs. BioPath was applied at 16 oz/A with SDN. Grower Standard average yield was 211 bu/A.

\*\*By location data reflects the average difference at V5 from each treatment. Overall % change reflects the average difference of 60 readings from each treatment across 6 locations at V5. All treatments received grower standard production inputs to include sidedress N.

\*\*\*Based on 2021 field trials across 12 locations. Additional nutrient utilized calculated using typical corn fertilizer rates in the USA (180 N, 90 P, 160 K), multiplied by the treatment effect increases in total nutrient uptake of 2.2% for N, 3.2% for P and 1.7% for K. Nitrogen \$ utilized calculated using UAN 32 \$658/ton, Phosphorus \$ utilized calculated using MAP \$1,009/ton, Potassium \$ utilized calculated using Potash \$878/ton.