Polymicrobial inoculant for dry fertilizer impregnation.

• Maximize return from fertilizer applications
• Improve harvest quality and yield
• Exceptional ROI
Grower Benefits

**PowerCoat®** is a mixture of highly effective proprietary strains of PGPR – Plant Growth Promoting Rhizobacteria that provide multiple modes of action for enhanced plant growth, yield potential, and harvest quality.

**FERTILIZER EFFICIENCY**

PowerCoat® improves the solubilization, cycling, and plant uptake of nutrients both from applied fertilizer and in the soil bank. Phosphorus uptake is enhanced by greater root volume and Phosphorus solubilizing enzymes. Iron uptake and metal acquisition is improved by the production of natural chelating agents (siderophores).

**IMPROVED HARVEST QUALITY AND YIELD POTENTIAL**

Production of growth promoting metabolites encourage root growth and provide greater leaf area, canopy development, and increased chlorophyll content. This results in increased production of starches, sugars and bio solids each of which contribute to improved harvest quality and yield.

**EASE OF APPLICATION**

PowerCoat® is unique in the agriculture industry because of Pathway’s formulation technology and ability to deliver a truly effective rate of bacterial spores on impregnated fertilizer. This provides the grower with consistent product performance without incurring additional application cost.

**EXCEPTIONAL ROI**

By optimizing fertilizer utilization and enhancing plant growth an exceptional ROI is realized – not just from the product itself, but with crop production inputs as a whole. As a result, growers maximize yield potential and are positioned to be more profitable.
Nutrient Response

**UNTREATED**

1. Untreated fertilizer applied broadcast or banded.
2. Limited solubilization of fertilizer and nutrients in soil bank remain unavailable.
3. Poor root system limits nutrient and water uptake.

**TREATED**

1. Fertilizer impregnated with PowerCoat® applied broadcast or banded.
2. PowerCoat® improves the solubilization of fertilizer into plant available forms, and releases bound nutrients.
3. More robust root system increases nutrient and water uptake.
**Performance Results**

**IMPROVED NUTRIENT USE EFFICIENCY AND HARVEST QUALITY ON TOMATOES**

Rutgers University field trial on variety H-5108 – 2013

Grower Standard pre-plant fertilizer impregnated with PowerCoat + PGPR liquid inoculant 1 pt/ac thru drip x 3 bi-weekly applications starting two weeks after transplant. 50% Grower Standard utilized half of Grower Standard fertilizer program. *Data significantly different vs. untreated at P ≤ .05.*

<table>
<thead>
<tr>
<th></th>
<th>Grower Standard</th>
<th>50% Grower Standard</th>
<th>Grower Standard + PGPR</th>
<th>50% Grower Standard + PGPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens (lbs/ac)</td>
<td>2,069</td>
<td>2,251</td>
<td>2,468</td>
<td>6,135*</td>
</tr>
<tr>
<td>Reds (lbs/ac)</td>
<td>5,264</td>
<td>5,009</td>
<td>5,264</td>
<td>6,135*</td>
</tr>
</tbody>
</table>

Total yield increase of 1,270 lbs/ac
- 19% more greens
- 17% more reds
IMPACT ON ALFALFA YIELD AND QUALITY

Pathway Alfalfa Field Trials – AgriTech Consulting Inc, WI (2016), ABG Ag Services, SD (2016)

RFQ/RFV ratings reflect 3 cut average.
INCREASED YIELD ON CORN WITH ENHANCED FERTILITY


<table>
<thead>
<tr>
<th>Bu/ac</th>
<th>Grower Standard</th>
<th>Grower Standard + PowerCoat</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>164.8 bu</td>
<td>174 bu</td>
</tr>
<tr>
<td></td>
<td>Increase of</td>
<td>Increase of 9.2 bu/ac</td>
</tr>
<tr>
<td></td>
<td>9.2 bu/ac</td>
<td></td>
</tr>
</tbody>
</table>
# PowerCoat® Technical Profile

| Mode of Action | • Nutrient solubilization and cycling improving nutrient availability – macronutrients and micronutrients  
|               | • Root growth promotion – improved production of root hairs and root tips for increased water and nutrient uptake |
| Fertilizer Compatibility | • Effective on a wide range raw nutrients, biosolids and dry fertilizer blends. Contact a Pathway representative for a complete list of compatible fertilizers. |
| Active Ingredients – Proprietary PGPR strains | • Bacillus subtilis  
|               | • Bacillus megaterium  
|               | • Bacillus licheniformis  
|               | • Bacillus methylotrophicus  
|               | • Bacillus amyloliquefaciens |
| Formulation | • Oil and water based formulation available |
| Shelf life | • 2 years |

## PowerCoat® Use Rates at a Glance*

<table>
<thead>
<tr>
<th></th>
<th>Oil Based Formulation</th>
<th>Water Based Formulation (250 lbs per acre minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impregnation Rate per ton (2000 lbs)</td>
<td>85 oz (5.3 lbs)</td>
<td>128 oz (8 lbs)</td>
</tr>
<tr>
<td>Fertilizer Application</td>
<td>• Apply PowerCoat impregnated fertilizer during the normal fertilizer schedule. PowerCoat can be banded or broadcast. If broadcast, a 100% overlap is recommended; non-uniform spreading may result in unsatisfactory performance.</td>
<td></td>
</tr>
</tbody>
</table>

* Always consult label or contact a product representative for complete use directions.