



Revv-UP™

NEXT GENERATION BIOLOGICAL SOLUTION FOR PHOSPHORUS USE EFFICIENCY

Revv-uP™ is made up of two specific plant growth promoting rhizobacteria (PGPRs) in spore form. Once the PGPRs become active, they help convert applied phosphates or phosphates tied up in the soil into a soluble, plant available form, increasing uptake, utilization, and agronomic ROI. Revv-uP was designed to be applied with liquid phosphates.

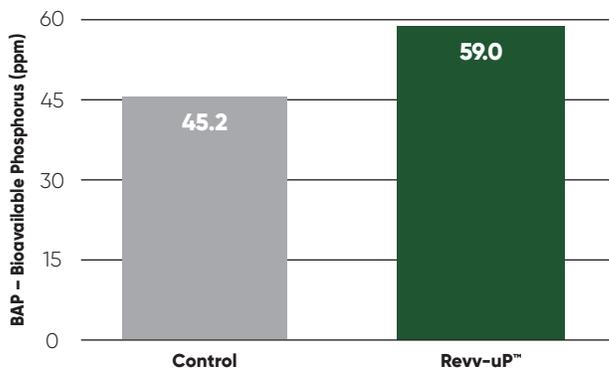
BENEFITS

- Plant growth promoting rhizobacteria (PGPRs) in spore form
- Once active, PGPRs help convert applied phosphate or phosphate tied up in the soil into soluble, plant available forms
- Healthier rooting system
- Helps mitigate stresses associated with salinity
- Designed to be applied with liquid phosphates

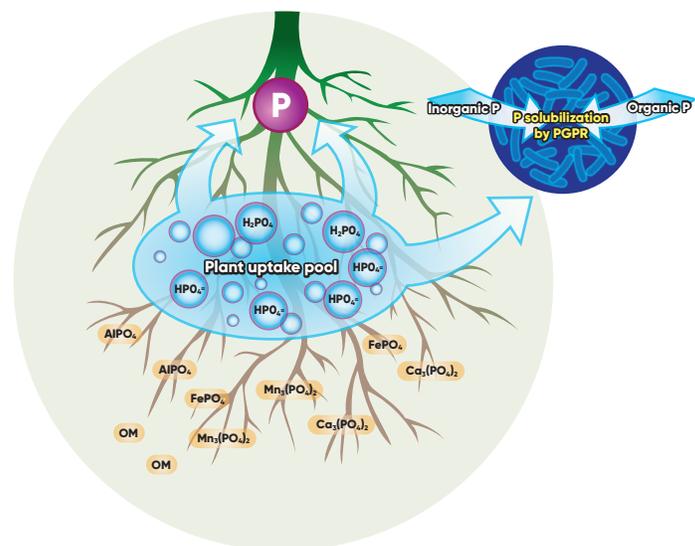
HOW REVV-UP™ TECHNOLOGY WORKS

1. The bioactives in Revv-uP – *Bacillus tequilensis* and *Bacillus velezensis* – produce organic acids and enzymes that transform insoluble P to soluble forms that are plant accessible.
2. Increases in bioavailable phosphorus can provide expanded root volume, improving nutrient uptake.
3. This ultimately enables optimal plant growth and improved yield potential.

REVV-UP™ CAN INCREASE PLANT-AVAILABLE SOIL P



Results reflect average of four greenhouse pot study trial conducted by Innvictis trial partner. All Treatments received standard fertility. Data Significantly different at * p<0.10.



PRODUCT PROFILE

Mechanism of Action:	Phosphorus solubilization
Fertilizer Compatibility:	Effective with a wide range of fertility solutions to include starter fertilizers, UAN and blends. Contact an Innvictis BioScience representative for a complete list of compatible fertilizers.
Active Ingredients –Proprietary PGPR strains:	Bacillus velezensis (5 x 10 ⁷ cfu/mL) Bacillus tequilensis (5 x 10 ⁷ cfu/mL)
Packaging:	2 x 2.5 gal case, Tote
Shelf life :	24 month in concentrate Up to 18 months in fertilizer

STAND ALONE APPLICATION (ON FARM TANK-MIX)

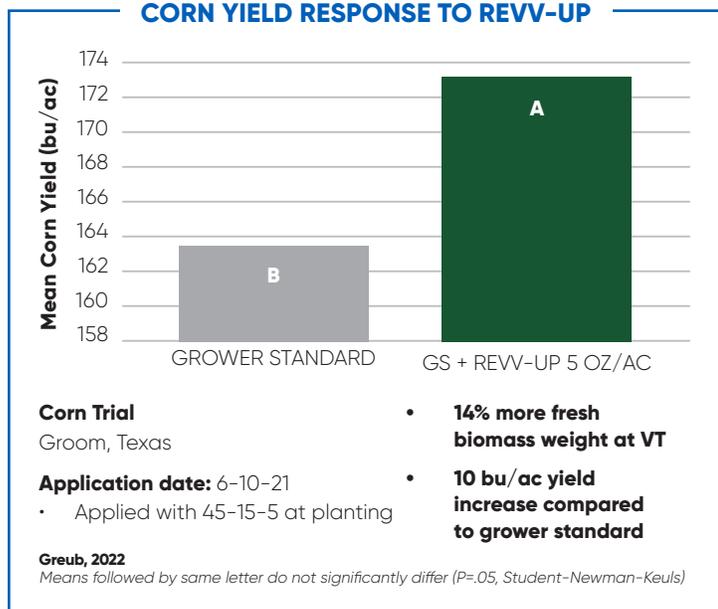
Starter or Sidedress:	16–32 oz/A
Topdress:	16–32 oz/A

AS INGREDIENT SOLUTION (V/V)

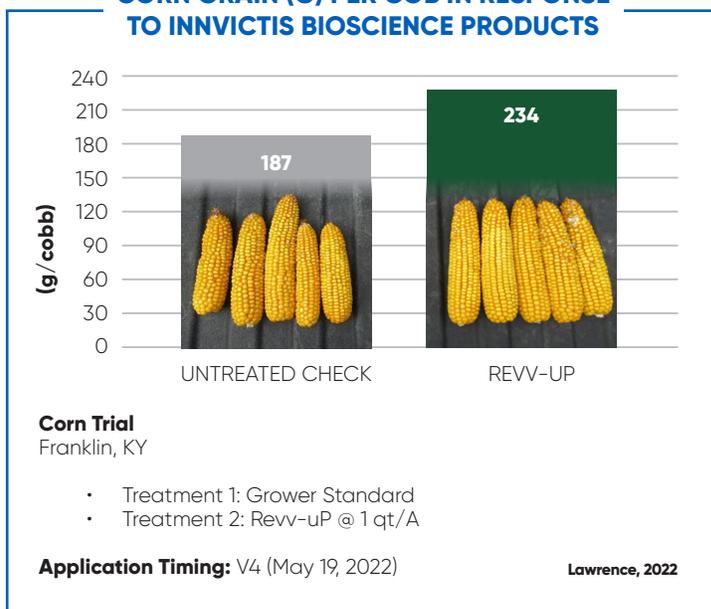
UAN @ 20 GPA:	0.5% by volume
UAN @ 10 GPA:	1% by volume
Starter @ 5 GPA:	2% by volume
Starter @ 3 GPA:	3.5% by volume

CORN TRIALS - EASTERN US

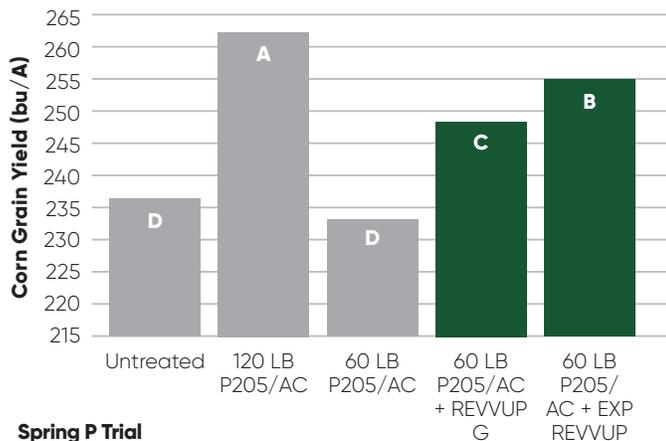
CORN YIELD RESPONSE TO REVV-UP



CORN GRAIN (G) PER COB IN RESPONSE TO INVICTIS BIOSCIENCE PRODUCTS



CORN GRAIN YIELD



Spring P Trial

Aurora, NE

Application Date

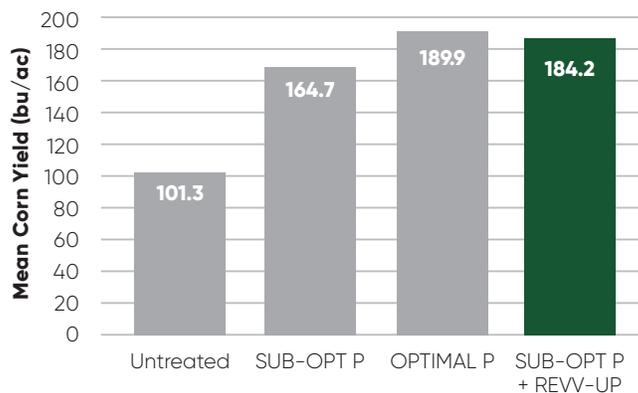
5/10/2022 – Soil Test P Level = 9 ppm

- Greatest grain yield achieved with optimal P fertilization
- Reduced P fertilization with Revv-uP increased grain yield 12 bu/ac when compared to reduced fertilizer alone

Greub, 2022

Means followed by same letter do not significantly differ (P=0.05, Student-Newman-Keuls)

CORN GRAIN YIELD



P Management Corn Trial

Cambridge, WI

Application

- Pre-Plant Incorporated 5/13/22
- Standard Rate 120#
18-46-0/ac
- Sub-Optimal Rate 60#
18-46-0

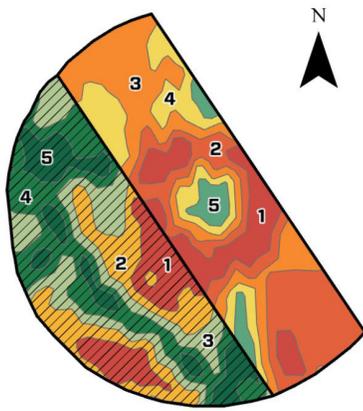
Jerabek

BOX ELDER RANCH - REVV-UP TRIAL - 2021 YIELD

Yield - Machine Data



Yield - Zone Averages



- Revv-uP treated corn produced 10% more above-ground fresh biomass production (p=0.042) at the R2 growth stage.
- Revv-uP treated corn produced greater yield within all five mgmt. zones compared to untreated
- Yield increases ranged from 7 to 12 bu/ac

Acres

Zone	Revv-uP	Untreated
1	5.65	6.72
2	8.20	11.85
3	9.37	12.24
4	10.14	7.12
5	5.72	2.41
Total	39.08	40.34

Yield (Bu/Acre)

Zone	Revv-uP	Untreated	Difference
1	210.3	198.6	11.7
2	227.4	217.5	9.9
3	232.2	225.3	6.9
4	237.6	230.4	7.2
5	241.8	233.4	8.4
Ave	229.9	221.0	8.8

Moisture (%)

Zone	Revv-uP	Untreated	Difference
1	14.4	13.8	0.6
2	14.8	14	0.8
3	14.7	13.9	0.8
4	14.8	14	0.8
5	14.6	14.4	0.2
Ave	14.7	14.0	0.6