

BETTERACRE.AG | PRODUCT GUIDE

BETTERACRE

Agent Product Guide 2026

*Make Every Acre a **BetterAcre***

BETTERACRE.AG

BetterAcre exists to help growers get more out of every acre they manage.

"Every product we recommend must prove its worth in the field."

DATA-DRIVEN APPROACH

BetterAcre uses modern tools and analytics to bring clarity to the chaos of today's ag input marketplace. With technologies like Solvix, we evaluate what's truly moving the needle — not what just sounds good on paper. Every recommendation is grounded in real results, not assumptions.

MEASURABLE OUTCOMES

Every product we recommend must prove its worth in the field. BetterAcre focuses on measurable economic outcomes, ensuring that every input adds value to your operation — from optimizing nitrogen use to improving crop resilience and soil health.

BALANCE OVER EXTREMES

We believe success comes from balance, not extremes. BetterAcre helps growers integrate biological and regenerative products alongside proven conventional inputs for a more effective and economical system — combining the strengths of both worlds to build programs that improve nutrient uptake, reduce waste, and support healthier soil over time.

CUSTOMIZED SOLUTIONS

Our solutions are customized to fit the unique conditions of each operation, supporting stronger soils, smarter nutrient use, and new opportunities for profitability. By focusing on long-term soil health alongside near-term returns, we equip you with the tools and insight needed to make confident agronomic decisions.

Soil Performance Summary Report

Biology, fertility, and soil health — in high definition. Your foundation for every product conversation.

REPORT TYPE

SPS — Field-Level Analysis

TESTING METHODS

3 Integrated Analyses

CUSTOM BRANDED

FIELD SPECIFIC

DATA GUIDED

WHAT IS THE SPS REPORT?

The Soil Performance Summary (SPS) is a custom-branded, field-specific report that gives BetterAcre agents a clear, data-driven picture of what is actually happening inside the soil — biologically, nutritionally, and chemically. It bridges the gap between a soil test and a meaningful sales conversation.

In an industry crowded with products and promises, the SPS gives agents something no product sheet can: **a reason to recommend rooted in real field data**. It tells you which products are needed, at what rates, and why — making every conversation more confident and every placement more precise.

HOW IT'S CREATED

THREE INTEGRATED TESTING METHODS

- 1 **Total Nutrient Digestion**
Measures the complete nutrient pool — what's in the soil and what the biology can access over the season.
- 2 **Haney Test**
Evaluates biological activity, respiration, and how effectively the soil food web is cycling nutrients.
- 3 **Genomics Analysis**
Identifies the microbial community at the species level — revealing balance, diversity, and disease risk indicators.

WHY IT CHANGES EVERYTHING

- 
Supercharge Sales
Anchors every conversation in data. Moves decisions beyond a product sheet to a prescription grounded in field reality.
- 
Guided Product Placement
Directs your team on which products to place, when to apply, and at what rates — removing guesswork from biological recommendations.
- 
Continue the Conversation
Tracks soil health over time, giving agents a built-in reason to return next season — and evidence that the products are working.
- 
Custom Branded for BetterAcre
Reports carry your brand identity. Every page reinforces your credibility and differentiates you from competitors without soil data tools.
- 
Trusted, Defensible Insights
Goes beyond trial data. Field-specific genomics and biological analysis create confidence that no testimonial or brochure can match.

HOW TO GET AN SPS REPORT

- 1 **Collect a Composite Sample**
Standard 6"–8" depth composite sample from the field using traditional methods.
- 2 **Submit via the Solvix Portal**
Log in, enter sample details and field information, then ship to the lab.
- 3 **Access Your Report**
Track progress and receive your completed SPS through the Solvix dashboard, ready to share with your grower.

The Soil Performance Summary — Page 1 of 2

Familiarize yourself with the report your growers will receive.

SAMPLE HEALTH SCORE

18 / 100

Very Low — High Opportunity



SOIL PERFORMANCE SUMMARY

Grower:
Farm/Field:
Sample ID:
Date:

Overall Soil Health Score - 18

VERY LOW0-20	LOW21-40	MODERATE41-60	HIGH61-80	VERY HIGH81-100
Difficult growing conditions due to low fertilizer efficiency and high environmental stress. Enhancing soil health is essential for addressing biological and nutritional constraints.	Unstable crop production and elevated pest pressure are possible. Advancing soil health leads to improved fertilizer performance, and greater resistance to pest and disease pressure.	Soil begins to support stronger plant growth with enhanced pest suppression and microbial activity. Continued progress improves yield reliability and nutrient cycling.	Crop performance improves through effective nutrient use and active carbon cycling. Further improvement strengthens biological resilience and overall soil stability.	Soil operates at peak performance with robust biology, low stress impact, and superior crop support. Sustaining this level ensures long-term productivity.

Fungi:Bacteria Ratio

Moderate

1:308

OPTIMAL: 1:1

Microbial balance is improving. Soil biology begins supporting better plant health and reduced disease vulnerability.

Respiration

Low

17.5

The rate of soil respiration is minimal. Limited biological activity hinders nutrient processing and plant development.

Stress Adaptation

Very Low

19

Soil has limited stress adaptation. It is susceptible to pests, drought, and other environmental pressures.

Disease Risk

Moderate

50

1. Goss' Wilt
2. Aspergillus Rot
3. Fusarium Rot
4. Pythium Rot
5. Red Root Rot

Soil Composition & Available Nutrients

Total Biological Species 689	Carbon	TOTAL (LBS)	23520	PATHWAY	19	AVAILABLE (LBS)	348	Sulfur 7.9 ppm
Mycorrhiza Ratio Only Ecto.	Nitrogen	TOTAL (LBS)	4151	PATHWAY	71	AVAILABLE (LBS)	96	Zinc 0.7 ppm
Microbial Active Carbon 12.1%	Phosphorus	TOTAL (LBS)	720	PATHWAY	50	AVAILABLE (LBS)	23	Calcium 659.5 ppm
Organic Matter 3.4%	Potassium	TOTAL (LBS)	1200	PATHWAY	37	AVAILABLE (LBS)	84	Sodium 30.2 ppm
Soluble Salt 0.5 mmho/cm								Magnesium 101.1 ppm
pH 5.9								Manganese 7.6 ppm
								Copper 0.1 ppm
								Iron 52.3 ppm

A photograph of two young seedlings growing out of a bed of dark, moist soil. The seedling on the left is a pale, translucent green, with a long, curved hypocotyl. The seedling on the right is a more vibrant green, with a straight stem and two small, pointed cotyledons. The background is a soft, out-of-focus green, suggesting a natural growth environment.

SECTION 01

Seed Treatment

Start Strong. Grow Smarter.

A Strong Start for Every Acre

Seed treatment is where performance begins. Before a crop ever emerges, the right combination of biology, nutrition, and protection can shape how consistently and aggressively that plant establishes. The products in this section are designed to activate that early-stage potential — supporting faster, more uniform emergence while setting the foundation for stronger root development and season-long performance.

Across this lineup, the focus is on delivering beneficial microbes, essential nutrients, and biological stimulants directly to the seed. These inputs work together to enhance nutrient availability, improve early metabolic function, and promote natural plant defense responses. By establishing a more active root zone from day one, they help drive better stand uniformity and increase the plant's ability to handle stress throughout the growing season.

This portfolio also offers flexibility to match crop type and application preference, with solutions tailored for both monocots and dicots, as well as dry and liquid formulations. Whether applied directly to seed or in-furrow, these treatments are designed to integrate seamlessly into existing workflows while complementing broader fertility and crop management programs.

Prime Pro-D

Formulated for dicot crops, this biological seed treatment improves germination, uniform emergence, and root architecture while encouraging a fungal-dominant soil system to support early vigor and season-long performance.

DICOT CROPS

DRY & LIQUID



Prime Pro-M

Formulated for corn and other monocot crops, this biological seed treatment enhances germination, promotes uniform emergence, and strengthens root development while supporting a fungal-dominant soil system for early vigor and season-long performance.

MONOCOT / CORN

DRY & LIQUID



HYPRgERM Max

A premium liquid seed treatment formulated to provide essential nutrients and biological support for superior seed performance. Harnesses the power of naturally sourced minerals, bioactive compounds, and beneficial bacteria (MetaGrow 5X+) to create an optimal environment for seed germination.

PREMIUM LIQUID

METAGROW 5X+



PRIMEPRO-D™

Biological seed and seed trench inoculant
tailored for dicot plants and legumes

IN-FURROW RATE

4–8 oz / acre

FORMULATION

Liquid · 2.5 gal · 275 gal

MADE IN USA

2-YR SHELF LIFE

DICOTS / LEGUMES

MYCORRHIZAL

OVERVIEW

PRIMEPRO-D is a specialized biological seed and seed trench inoculant tailored for dicot plants, particularly legumes. This unique formula incorporates beneficial bacteria, free-living nitrogen fixing bacteria, and a variety of mycorrhizal fungi. Together, these microorganisms establish a harmonious symbiotic relationship leading to improved nutrient absorption, heightened drought resistance, and enhanced protection against pathogenic threats.

FEATURES

- Seed treatment **specifically designed for dicots and legumes.**
- Improves **emergence, quality, and yields.**
- Inoculates roots with **mycorrhizal fungi and nitrogen fixing bacteria.**
- Enables and improves **nutrient acquisition.**
- Contains **Azotobacter, Clostridium, mycorrhizae (Rhizophagus intraradices),** and more.
- Improves the plant's **stress tolerance.**

BENEFITS

- Improves **germination and seedling vigor.**
- Increases the plant's **resilience to drought stress.**
- Improves nodulation on roots and **nitrogen fixation.**
- Mycorrhizae increase **water and nutrient acquiring capability.**
- Increases plant defenses against **soil-born plant pathogens.**

ADVANTAGES

2yr

2-year shelf life from date of manufacture.



Mixable with manures, herbicides, insecticides, and fertilizers without affecting product efficacy.



Product stability allows storage between **45°F and 150°F.**

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 4%

Azotobacter vinelandii	400,000 CFU/ml
Azotobacter chroococcum	400,000 CFU/ml
Mycorrhizae (Rhizophagus intraradices)	400,000 CFU/ml

*400,000 CFU/ml after activation

USAGE RATE

4–8 oz in-furrow at planting with min. 3 gal water. With pop-up fertilizers: add min. 2 gal water additional.

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

PRIMEPRO-D™ — Technical Label (Liquid)

Biological seed treatment improves emergence and yields in dicots · Liquid Formulation

LABEL NO. F003622

8.5 lbs/gal at 68°F

GUARANTEED ANALYSIS

Active Ingredients 4%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Azotobacter chroococcum</i>	400,000 CFU/ml
<i>Rhizopagus intraradices</i>	400,000 CFU/ml
*400,000 CFU/ml after activation	

USAGE RATE

Apply **4–8 ounces in-furrow at planting** with a minimum of 3 gallons of water. When applying product with pop-up fertilizers, use a minimum of 2 gallons of water in addition to fertilizer.

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. Product can be applied with water at time of use. **Once mixed, product should be used within 7–10 days.**

When mixing with starter fertilizers for in-furrow applications, perform a jar test. This product is comprised of live aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly in a dry place out of direct sunlight. Expires **2 years from date of manufacture.**

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy microbial populations.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

betteracre.ag · [\[email protected\]](#)

PRIMEPRO-D™ DRY

Biological seed inoculant for dicots — high quality Talc combined with advanced beneficial biologicals

USAGE RATE

2 scoops / 45 lbs seed

PACKAGING

7 lb bucket · Scoop included

MADE IN USA

5-YR SHELF LIFE

DICOTS / LEGUMES

DRY / TALC

OVERVIEW

PRIMEPRO-D Dry is a specialized biological seed inoculant tailored for dicot plants, particularly legumes. This unique treatment combines the proven seed-flow benefits of high quality Talc with an advanced formulation of beneficial biologicals. This dual-action coating ensures precision planting while enhancing soil and plant health from the moment the seed enters the soil.

FEATURES

- Seed treatment **specifically designed for dicots.**
- Ensures **smooth planting and prevents clumping.**
- Promotes **even seed spacing** — essential for maximum yield.
- Helps suppress **airborne dust** during seed handling.
- Enhances equipment performance **reducing wear on planting machinery.**

APPLICATION INSTRUCTIONS

Planter Box Application Method

- 1 Fill planter box **1/3 full** with seed.
 - 2 Dust/apply **1/3 amount of product** onto the seed.
 - 3 Repeat in **1/3 increments** until planter box is full.
- For best results, **mechanically stir** to help with even application and adherence.

BENEFITS

- Improves **germination and seedling vigor.**
- Increases the plant's **resilience to drought stress.**
- Enhances the soil microbiome, **releasing nutrients directly to the seed.**
- Mycorrhizae increase **water and nutrient acquiring capability.**
- Increases plant defenses against harmful pathogens by creating a **protective shield around the seed and young roots.**

ADVANTAGES

5yr

5-year shelf life from date of manufacture — exceptional longevity for a biological product.

📦

Seed can be stored **up to 1 year after treatment** in low moisture conditions.

+

Additional Talc and/or graphite may be added if needed for enhanced seed flow.

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 4%

Azotobacter vinelandii	400,000 CFU/ml
Azotobacter chroococcum	400,000 CFU/ml
Mycorrhizae	400,000 CFU/ml
Inert Ingredients (Talc)	96%

USAGE RATE

2 scoops per 45 lbs of seed.
Each bucket treats up to 2,200 lbs. Scoop included.

PACKAGING

7 lb bucket (3.2 kg)
Dry Formulation

PRIMEPRO-D™ — Technical Label (Dry)

Biological seed treatment improves emergence and yields in dicots · Dry / Talc Formulation

LABEL NO. F003622

7 lb bucket (3.2 kg)

GUARANTEED ANALYSIS

Active Ingredients 4%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Rhizopagus intraradices</i>	400,000 CFU/ml
Inert Ingredients (Talc)	96%

*400,000 CFU/ml after activation

USAGE RATE

Apply **2 scoops per 45 lbs of seed**. Each bucket treats up to 2,200 lbs of seed. Scoop included in bucket.

DIRECTIONS FOR USE

Shake bucket prior to use. Apply product to seed prior to or at the time of planting in seed boxes. Additional Talc and/or graphite may be added if needed.

Recommendations: (1) Fill planter box 1/3 full with seed. (2) Dust/Apply 1/3 amount of product onto seed. (3) Repeat in 1/3 increments until planter box is full.

For best results, **mechanically stir** to help with even application and adherence.

STORAGE INFORMATION

Store in a **low moisture location**. Keep opened bottles closed tightly and dry. Expires **5 years from date of manufacture**.

Seed could be stored up to **1 year after treatment** in low moisture conditions.

PACKAGING

☑ 7 lb bucket (3.2 kg) · Dry Formulation · Scoop included

⚠ CAUTION

Wear protective clothing. Avoid contact with skin and inhalation of dust.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

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betteracre.ag · [\[email protected\]](#)

PRIMEPRO-M™

Biological seed treatment improves emergence and yields in corn and other monocots

USAGE RATE

8 oz / acre

FORMULATION

Liquid · 2.5 gal · 275 gal

MADE IN USA

2-YR SHELF LIFE

CORN & MONOCOTS

MYCORRHIZAL

OVERVIEW

PRIMEPRO-M serves as the monocot counterpart to PRIMEPRO-D. This specialized biological seed inoculant is tailored for monocot plants, particularly corn and grains. Applied as a seed trench inoculant, it delivers beneficial microbes and endomycorrhizal fungi directly to the seed zone to support establishment, nutrient acquisition, and stress tolerance from the earliest stages of growth.

FEATURES

- Seed treatment **specifically designed for corn and monocots.**
- Improves **emergence, stand uniformity, and yields.**
- Contains **Azotobacter vinelandii** for nitrogen fixation.
- Contains **Glomus aggregatum** — endomycorrhizal fungus for extended root reach.
- Applied as a **seed trench inoculant** — 8 oz per acre.
- Improves the plant's **stress tolerance** from day one.

PRIMEPRO-M VS. PRIMEPRO-D

Which formulation is right for your crop?
PrimePro-M Corn, wheat, sorghum, and other monocots
PrimePro-D Soybeans, legumes, and other dicots

BENEFITS

- Improves **germination and seedling vigor.**
- Increases the plant's **resilience to drought stress.**
- Enhances the soil microbiome, releasing **nutrients directly to the seed.**
- Increases **water and nutrient acquiring capability.**
- Increases plant defenses against harmful pathogens by creating a **protective shield around the seed and young roots.**

ADVANTAGES

2yr

2-year shelf life from date of manufacture.

7-10

Once mixed, product should be used within **7–10 days**.
Perform a jar test when mixing with starter fertilizers.

45-150

Product stability allows storage between **45°F and 150°F**.

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 8%

Azotobacter vinelandii	400,000 CFU/ml
Glomus aggregatum	400,000 CFU/ml
Inert Ingredients (water)	92%

USAGE RATE

8 oz per acre as a seed trench inoculant. Use within 7–10 days of mixing.

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

PRIMEPRO-M™ — Technical Label (Liquid)

Biological seed treatment improves emergence and yields in corn and other monocots · Liquid Formulation

LABEL NO. F003622

8.5 lbs/gal at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients..... 8%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Glomus aggregatum</i>	400,000 CFU/ml
Inert Ingredients (water)	92%

USAGE RATE

Apply **8 ounces per acre** as a seed trench inoculant.

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. Product can be applied with water at time of use. **Once mixed, product should be used within 7–10 days.**

When mixing with starter fertilizers for in-furrow applications, perform a jar test if there is a question. This product is composed of aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake bottle thoroughly or simply screen the material if desired and continue with application.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly in a dry place out of direct sunlight. Expires **2 years from date of manufacture.**

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy microbial populations.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

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NOTICE TO BUYER

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betteracre.ag · [\[email protected\]](#)

PRIMEPRO-M™ DRY

Biological seed inoculant for corn and monocots —
Talc-based dual-action coating for precision planting

USAGE RATE

2 scoops / 50 lbs seed

PACKAGING

7 lb bucket · Scoop included

MADE IN USA

5-YR SHELF LIFE

CORN & MONOCOTS

DRY / TALC

OVERVIEW

PRIMEPRO-M Dry is the dry Talc-based counterpart to PRIMEPRO-M Liquid, tailored specifically for monocot plants — particularly corn and grains. This unique treatment combines the proven seed-flow benefits of high quality Talc with an advanced formulation of beneficial biologicals. The dual-action coating ensures precision planting while enhancing soil and plant health from the moment the seed enters the soil.

FEATURES

- Seed treatment **specifically designed for corn and monocots.**
- Ensures **smooth planting and prevents clumping.**
- Promotes **even seed spacing** — essential for maximum yield.
- Helps suppress **airborne dust** during seed handling.
- Enhances equipment **reducing wear on planting performance by machinery.**

APPLICATION INSTRUCTIONS

Planter Box Application Method

- 1 Fill planter box **1/3 full** with seed.
 - 2 Dust/apply **1/3 amount of product** onto the seed.
 - 3 Repeat in **1/3 increments** until planter box is full.
- For best results, **mechanically stir** to help with even application and adherence.

BENEFITS

- Improves **germination and seedling vigor.**
- Increases the plant's **resilience to drought stress.**
- Enhances the soil microbiome, releasing **nutrients directly to the seed.**
- Increases **water and nutrient acquiring capability.**
- Increases plant defenses against harmful pathogens by creating a **protective shield around the seed and young roots.**

ADVANTAGES

5yr

5-year shelf life from date of manufacture — exceptional longevity for a biological product.



Seed can be stored **up to 1 year after treatment** in low moisture conditions.



Additional Talc and/or graphite may be added if needed for enhanced seed flow.

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 4%

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Glomus aggregatum</i>	400,000 CFU/ml
Inert Ingredients (Talc)	96%

USAGE RATE

2 scoops per 50 lbs of seed.
Each bucket treats up to 2,000 lbs. Scoop included.

PACKAGING

7 lb bucket (3.8 kg)
Dry Formulation

PRIMEPRO-M™ — Technical Label (Dry)

Biological seed treatment improves emergence and yields in corn and other monocots · Dry / Talc Formulation

LABEL NO. F003622

7 lb bucket (3.8 kg)

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients 4%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Glomus aggregatum</i>	400,000 CFU/ml
Inert Ingredients (Talc)	96%

USAGE RATE

Apply **2 scoops per 50 lbs of seed**. Each bucket treats up to 2,000 lbs of seed. Scoop included in bucket.

DIRECTIONS FOR USE

Shake bucket prior to use. Apply product to seed prior to or at the time of planting in seed boxes. Additional Talc and/or graphite may be added if needed.

Recommendations: (1) Fill planter box 1/3 full with seed. (2) Dust/Apply 1/3 amount of product onto seed. (3) Repeat in 1/3 increments until planter box is full.

For best results, **mechanically stir** to help with even application and adherence.

STORAGE INFORMATION

Store in a **low moisture location**. Keep opened buckets closed tightly and dry. Expires **5 years from date of manufacture**.

Seed could be stored up to **1 year after treatment** in low moisture conditions.

PACKAGING

☑ 7 lb bucket (3.8 kg) · Dry Formulation · Scoop included

⚠ CAUTION

Wear protective clothing. Avoid contact with skin and inhalation of dust.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

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betteracre.ag · [\[email protected\]](#)

HYPRgERM MAX™

Creates a biome around the seed to increase germination rates, consistency, and overall early plant health

APPLICATION RATE

6–8 oz per 100 lbs seed

PROVEN ROI

Up to \$60+ / acre

METAGROW 5X+

OCEAN MINERALS

CHITOSAN

FULVIC ACID

OVERVIEW

HYPRgERM Max is a premium liquid seed treatment formulated to provide essential nutrients and biological support for superior seed performance. It harnesses the power of naturally sourced minerals, bioactive compounds, and beneficial bacteria (MetaGrow 5X+) to create an optimal biome around the seed from the moment of germination.

HYPRgERM promotes more root growth, plant vigor, and stress tolerance — leading to more photosynthesis, larger stalks for increased nutrient flow, and a larger root mass for a more robust rhizosphere.

KEY INGREDIENTS & WHAT THEY DO

MetaGrow 5X+

Beneficial soil bacteria that activate nutrient availability and promote the rhizophagy cycle at germination.

Ocean Minerals

Full-spectrum micronutrients (Zn, Cu, B, I, Mo) for enzyme activation, hormone balance, and early metabolic function.

Fulvic Acid

Natural chelator that improves uptake and mobility of nutrients within the seedling.

Chitosan

Biopolymer from crustacean shells — triggers plant immune response and improves resistance to disease and stress.

Proven ROI per acre via increases in yield, test weight, protein (1–2%), biomass, and carbon sequestration — plus potential reduction in N fertilizer.

KEY BENEFITS

- **Boosts seed germination** with kickstarter microbes and base nutrients — faster, more uniform emergence.
- Promotes **rhizophagy cycle right the way at germination** — visible longer, healthier roots vs. untreated seed.
- Increases **germination rates and consistent emergence.**
- Elicits the plant's **immune response** and improves stress tolerance.
- Provides **extend throughout the growing season** — stronger, more efficient photosynthesis.
- Increases **yield, test weight, and protein content.**
- Supports potential **reduction in nitrogen fertilizer** inputs.

APPLICATION



Apply **6–8 oz per 100 lbs of seed** through a commercial seed treater, cement mixer, or during transfer of seed from Pro Box to Air Seeder/Planter.



Can be **mixed with other seed treatments**. Jar test recommended to check compatibility with other inputs.



Consult with your BetterAcre advisor to **create a custom plan** for your operation.

RATE

6–8 oz per 100 lbs of seed

BRAND

Elevate AG
elevateag.com

HYPRgERM Max™ — Technical Reference

Premium Liquid Biological Seed Treatment · MetaGrow 5X+ Technology

HOW HYPRGERM MAX WORKS

HYPRgERM Max enhances germination by promoting quicker, more uniform seed emergence through a balanced supply of microbes, nutrients, and growth stimulants. When applied to seed, it provides the building blocks for symbiotic relationships between root and soil microbes to establish at germination.

MetaGrow 5X+ introduces beneficial soil bacteria that actively enhance nutrient availability and promote the rhizophagy cycle — where root cells absorb microbes from the soil, strip them of nutrients inside the root, then expel them back into the rhizosphere to gather more.

Fulvic acid acts as a natural chelator, improving the uptake and mobility of nutrients within the seedling. **Chitosan** triggers natural plant defense mechanisms, improving resistance to disease and abiotic stress from the earliest growth stage.

APPLICATION RATE & METHOD

Apply **6–8 oz of HYPRgERM Max per 100 lbs of seed.**

Apply through a **commercial seed treater, cement mixer**, or during transfer of seed from Pro Box to Air Seeder/Planter. Can be mixed with other seed treatments. Jar test recommended to confirm compatibility with specific inputs.

SEASON-LONG PERFORMANCE

HYPRgERM Max provides benefits that extend throughout the growing season — encouraging stronger and more efficient photosynthesis, larger stalks for increased nutrient flow, and a more robust rhizosphere compared to plants with no seed treatment applied.

PROVEN RESULTS

Reported Field Outcomes

ROI per acre Up to \$60+

Protein increase 1–2%

Root development Visibly longer & healthier

Germination Faster & more uniform

N fertilizer potential Reduction possible

ACTIVE INGREDIENTS & FUNCTION

MetaGrow 5X+ — Concentrated beneficial microbial inoculant. Fixes nitrogen, solubilizes phosphorus, chelates key soil cations (K, Ca, Mg, Mn, Fe, Cu, Zn). Promotes the rhizophagy cycle at germination.

Ocean Minerals — Full spectrum micronutrients including zinc, copper, boron, iodine, and molybdenum. Essential for enzyme activation, hormone balance, and early metabolic function.

Fulvic Acid — Natural chelating agent. Improves nutrient uptake and mobility within the seedling.

Chitosan — Naturally occurring biopolymer derived from crustacean shells. Acts as a plant immune stimulant — triggers natural defense mechanisms and improves resistance to disease and abiotic stress.

⚠ APPLICATION NOTES

Jar test is recommended before combining with other inputs to check compatibility.

Consult with your BetterAcre advisor to create a custom application plan for your specific operation and crop.

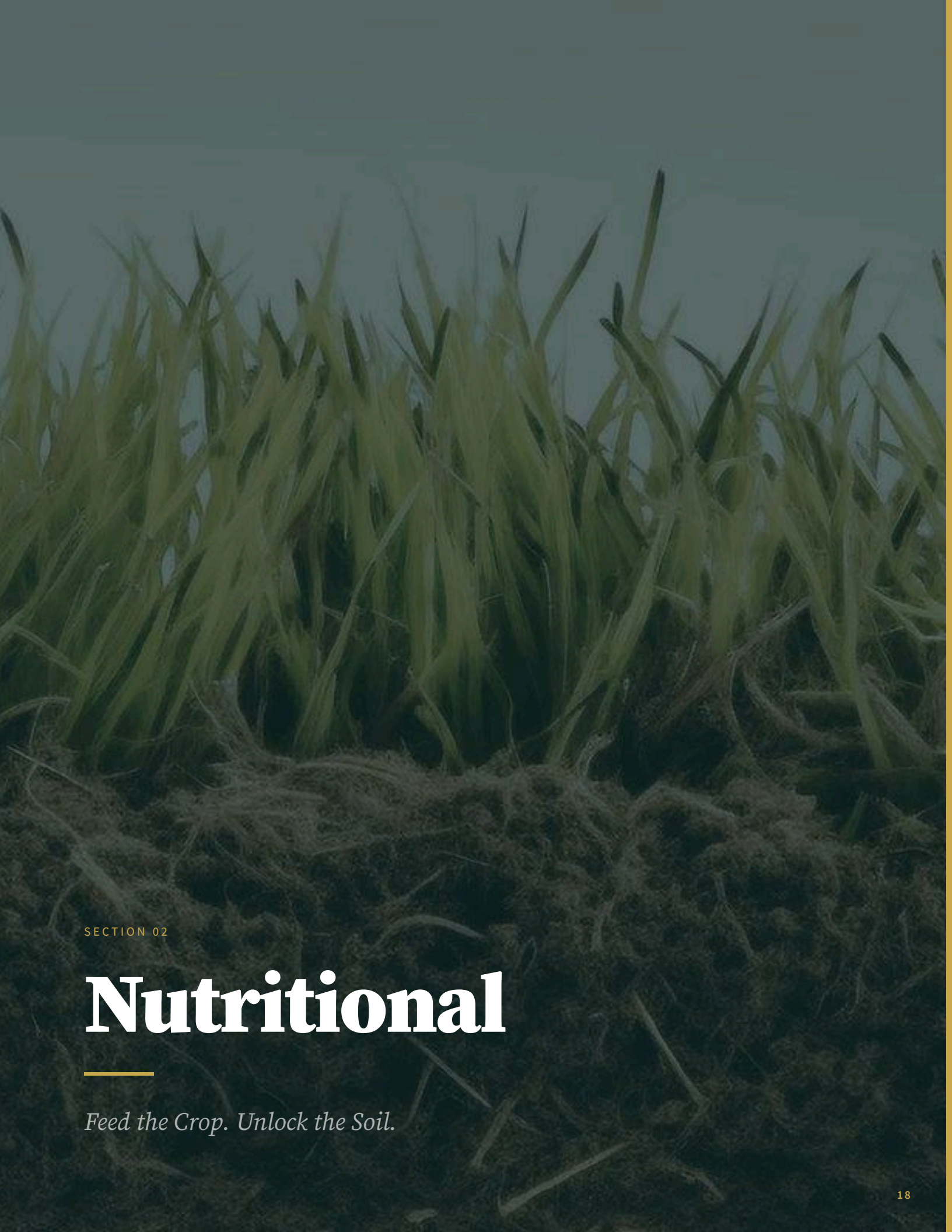
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FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

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SECTION 02

Nutritional

Feed the Crop. Unlock the Soil.

Built for Better Nutrient Efficiency

Crop nutrition is more than just applying fertilizer — it's about making nutrients more available, more efficient, and more responsive to the needs of the plant. The products in this section are designed to unlock tied-up nutrients, enhance biological activity in the soil, and improve how effectively crops access and utilize what's already there.

At the core of this lineup is a biological approach to nutrition. These solutions introduce and support beneficial microbial populations that actively fix nitrogen, solubilize phosphorus and potassium, and help release other soil-bound nutrients into plant-available forms. By working within the soil system — not against it — they help create a more dynamic and efficient nutrient cycle that supports stronger growth from early development through maturity.

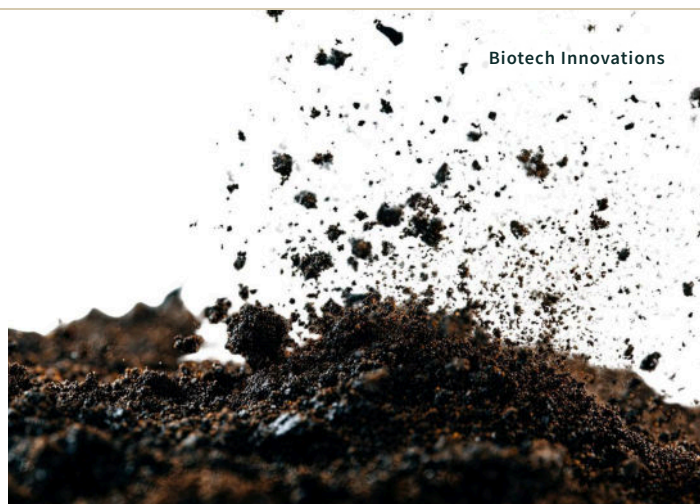
In addition to biological activation, this portfolio includes nutrient blends designed to correct deficiencies and deliver key elements directly to the plant when and where they're needed. Whether applied in-furrow, through irrigation, or as a foliar treatment, these products are built to integrate seamlessly into existing fertility programs while improving overall nutrient performance.

Activ8 & Activ8-IF

Drives nitrogen fixation while solubilizing critical soil-bound nutrients — calcium, carbon, sulfur, magnesium, and zinc — to improve nutrient efficiency and support consistent crop performance.

N FIXATION

BIOTECH INNOVATIONS

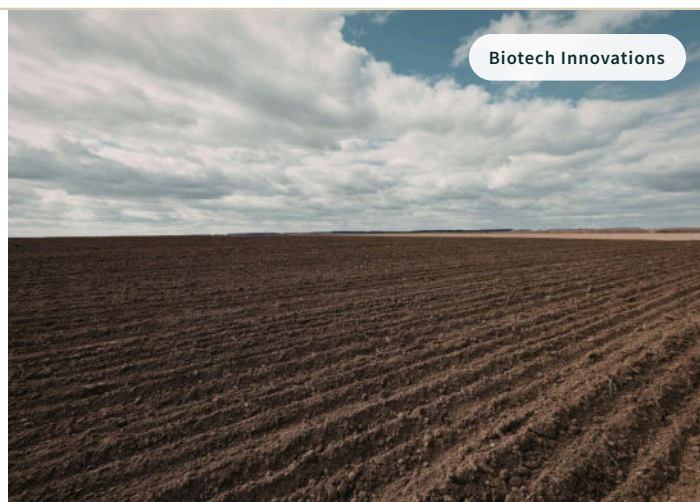


K-Phos

Drives the release of soil-bound phosphorus and potassium while increasing availability of essential micronutrients — supporting improved nutrient efficiency and stronger crop performance.

P & K RELEASE

BIOTECH INNOVATIONS

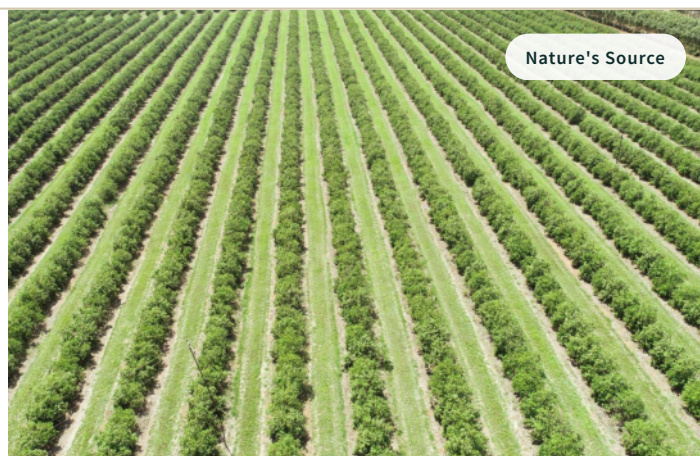


AggrePak

Nature's Source AggrePak is a soil and foliar applied nutrient solution designed to resolve nutrient deficiencies on fruit and nut orchards, vineyards, vegetable crops, and all field and row crops.

SOIL & FOLIAR

NATURE'S SOURCE



ACTIV8™

*Fixes nitrogen in soil plus solubilizes
7 other vital soil-bound nutrients*

USAGE RATE

32 oz / acre

PACKAGING

2.5 gal | 275 gal

MADE IN USA

2-YR SHELF LIFE

OVERVIEW

ACTIV8 is one of Biotech Innovations' most remarkable microbial products, meticulously crafted to consistently enrich soil quality year after year, fostering optimal plant growth and delivering superior yields in a cost-effective manner.

This formulation serves as a catalyst, facilitating the uptake of vital plant macro-nutrients — calcium, magnesium, phosphorus, potassium, and nitrogen — while safeguarding plants against excessive uptake. Within the ACTIV8 formula, a diverse array of soil microbes, encompassing both aerobic and anaerobic species alongside nitrogen-fixing bacteria, provides a comprehensive solution.

FEATURES

- **Diverse microbial array** of aerobic and anaerobic species alongside nitrogen-fixing bacteria — maintains optimal macro-nutrient balance.
- Fixes nitrogen in soil plus **solubilizes 7 other vital soil-bound nutrients.**
- Multi-species formulation to more holistically address the soil's functionality for more effective plant nutrition.
- Will **enrich soil quality year after year.**
- Helps release unavailable soil essential nutrients; microbes work with the plant to obtain nutrients.
- Prevents the **detrimental effects of excessive nitrogen applications.**
- Assists in **stress adaptation and disease suppression.**

BENEFITS

- Works on many aspects of the nitrogen cycle.
- Increases the **water holding capacity** of the soil.
- Increases absorption of organic compounds — aiding plant nutrition, physiology, and cleanup of polluting or toxic materials in the soil.
- Aids in the **stabilization of soil pH.**
- Darkens soil color, which **increases absorption of solar energy.**
- Increases absorption of minerals, converting them into plant-available nutrient forms.

ADVANTAGES

2yr

2-year shelf life from date of manufacture.



Mixable with **manures, herbicides, insecticides, and fertilizers** without affecting product efficacy.



Product stability allows storage in **temperatures between 45°F and 120°F.**

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 11.4%

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Lactobacillus acidophilus</i>	400,000 CFU/ml
Inert Ingredients (water)	88.6%

USAGE RATE

32 oz / acre broadcast prior to planting when soil temps ~50°F and warming.

PACKAGING

275 gallons (2,337.5 lbs)
2.5 gallons (21.25 lbs)

ACTIV8™ — Technical Label

Fixes nitrogen in soil and may solubilize other vital soil-bound nutrients

LABEL NO. F003622

8.5 lbs per gallon (3.8 kg) at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients		11.4%
<i>Azotobacter vinelandii</i>		400,000 CFU/ml
<i>Clostridium pasteurianum</i>		400,000 CFU/ml
<i>Lactobacillus acidophilus</i>		400,000 CFU/ml
Inert Ingredients (water)		88.6%
*400,000 CFU/ml after activation		

DIRECTIONS FOR USE

Shake well before use. Mix **one (1) gallon of ACTIV8™ with 79 gallons of water** to activate. Once activated, the mixture's recommended lifespan is generally **7–10 days** but can last up to 14 days. Consult with a Biotech Innovations representative if more time is needed.

Apply **minimum 10 gallons of activated liquid mixture per acre**. ACTIV8™ can be applied preplant, at planting, or post plant with anhydrous ammonia, liquid 28% or 32%, manure, or urea by land rig or irrigation systems.

It is suggested that nitrogen applications be **split via preplant at planting and then post plant**.

USAGE RATE

Use **32 ounces per acre** broadcast prior to planting when soil temperatures are around 50°F and warming up.

STORAGE INFORMATION

Store in a temperature-controlled location at or **above 45°F and below 150°F**. Keep opened bottles closed tightly and out of direct sunlight.

Expires **2 years from the date of manufacture** on the label.

PACKAGING

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into tank to agitate, as this could destroy the microbe population.

Note that **Phosphorus (P) and Potassium (K) fertility programs should not be altered**.

Do not use with fungicides, except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN
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ACTIV8-IF™

Fixes nitrogen in soil plus solubilizes vital soil-bound nutrients — formulated for in-furrow

IN-FURROW RATE

10 oz / acre

PACKAGING

2.5 gal · 275 gal

MADE IN USA

2-YR SHELF LIFE

IN-FURROW

MYCORRHIZAL

OVERVIEW

ACTIV8-IF is the in-furrow formulation of Biotech Innovations' industry-leading ACTIV8 microbial product. It delivers a diverse array of nitrogen-fixing and nutrient-solubilizing microbes directly into the seed furrow at planting, providing an immediate biological boost right where seeds need it most.

The addition of **Glomus aggregatum** — a powerful endomycorrhizal fungus — further enhances root colonization, extending the plant's nutrient and water acquisition capacity beyond what the root system could access alone.

FEATURES

- Designed specifically for **in-furrow application at planting**.
- Fixes nitrogen while solubilizing critical **soil-bound nutrients**.
- Contains **Glomus aggregatum** for endomycorrhizal root colonization — extends nutrient and water reach.
- Active microbial lifespan of **72–96 hours** once mixed.
- Compatible with water, fertilizers, sugars, carbon, and micronutrients.
- Promotes **root and shoot growth** and improved plant vigor from day one.
- Assists in **stress adaptation** and improved plant establishment.
- Multi-species formulation to holistically address soil functionality.

BENEFITS

- Establishes a beneficial microbial community **at the seed zone** from the moment of planting.
- Mycorrhizal fungi extend the plant's **nutrient and water absorption capacity**.
- Supports nitrogen fixation and P/K solubilization immediately at planting.
- Improves early stand establishment and **uniform emergence**.
- Compatible with pop-up fertilizers when mixed with a minimum of 2 gal water.
- Will **enrich soil quality year after year**.

ADVANTAGES

2yr **2-year shelf life** from date of manufacture. Store above 45°F and below 150°F.

Tank mixable with water and fertilizers. Add sugars, carbon, micronutrients, or pesticides **just prior to filling tank to capacity**.

Product stable between **45°F and 150°F**. Active microbial lifespan 72–96 hours once mixed.

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 11.4%

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Lactobacillus acidophilus</i>	400,000 CFU/ml
<i>Glomus aggregatum</i>	400,000 CFU/ml
Inert Ingredients (water)	88.6%

IN-FURROW RATE

10 oz/acre with min. 3 gal water.
With pop-up fertilizers: add min. 2 gal water additional.

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

ACTIV8-IF™ — Technical Label

Fixes nitrogen in soil and may solubilize other vital soil-bound nutrients · In-Furrow Formulation

LABEL NO. F003622

8.5 lbs/gal (3.8 kg) at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients 11.4%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Lactobacillus acidophilus</i>	400,000 CFU/ml
<i>Glomus aggregatum</i>	400,000 CFU/ml
Inert Ingredients (water)	88.6%

USAGE RATE

Apply **10 ounces in-furrow at planting** with a minimum of 3 gallons of water. When applying with pop-up fertilizers, use at least **2 gallons of water in addition to fertilizer**.

DIRECTIONS FOR USE

Shake thoroughly before use. Product can be applied with water and/or fertilizers.

When mixing into planter tanks: Fill tank 2/3 full of water and/or fertilizer, add Activ8-IF, then fill the rest of the tank. Note: When using sugars, carbon, micronutrients, or pesticides, add these just prior to filling tank to capacity.

The active microbial lifespan is **72–96 hours**. After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

STORAGE INFORMATION

Store product in a temperature-controlled location at or **above 45°F and below 150°F**. Keep opened bottles closed tightly and out of direct sunlight. Expires **2 years from the date of manufacture** printed on label.

PACKAGING

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy the microbial population.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Skin and eyes: rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

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K-PHOS™

Release trapped Phosphorus and Potassium in the soil to enhance plant growth and inhibit pathogens

BROADCAST RATE

32 oz / acre

IN-FURROW RATE

10–24 oz / acre

MADE IN USA

3-YR SHELF LIFE

MYCORRHIZAL

P & K RELEASE

OVERVIEW

K-Phos enhances the acquisition of phosphorus and potassium through the work of solubilizing organisms that tap organic and inorganic sources of these nutrients. By this action, K-PHOS promotes root growth, inhibits plant pathogens, elevates the availability of several micronutrients, and improves plant health and vigor.

FEATURES

- Releases **Phosphorus and Potassium** in the soil to enhance plant trapped growth.
- Comprised of **Azotobacter, Clostridium, and Mycorrhizae (Rhizophagus intraradices).**
- Multi-species formulation to holistically address the soil's functionality for **more effective plant nutrition.**
- Will **enrich soil quality year after year.**
- Helps release unavailable soil essential nutrients.
- Prevents the **detrimental effects of excessive fertilizer applications.**
- Assists in **stress adaptation and disease suppression.**
- Promotes root growth from the moment of germination by making **nitrogen fixation more efficient.**

BENEFITS

- Elevates **phytohormones synthesis.**
- Inhibits growth of **plant pathogens.**
- Improves obtainability of **trace elements like iron and zinc.**
- Distinctive blend of active anaerobic and aerobic **phosphate solubilizing microorganisms (PSM).**
- Promotes **sustainable practices.**

ADVANTAGES

3yr

3-year shelf life from date of manufacture — longest shelf life in the Biotech Innovations lineup.



Mixable with manures, herbicides, insecticides, and fertilizers without affecting product efficacy.



Product stability allows storage between **45°F and 120°F.**

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 9%

Azotobacter vinelandii 400,000 CFU/ml

Clostridium pasteurianum 400,000 CFU/ml

Rhizophagus intraradices 400,000 CFU/ml

Inert Ingredients (water) 91%

USAGE RATES

Broadcast: 32 oz min. to 10 gal water/acre

In-Furrow: 10–24 oz with min. 2 gal water

PACKAGING

275 gal (2,337.5 lbs)

2.5 gal (21.25 lbs)

K-PHOS™ — Technical Label

Solubilizes Phosphorus and Potassium in the soil to enhance plant growth

LABEL NO. F003622

8.5 lbs/gal (3.8 kg) at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients 9%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Rhizopagus intraradices</i>	400,000 CFU/ml
Inert Ingredients (water)	91%

USAGE RATES & APPLICATION METHODS

APPLICATION METHOD & RATE

Broadcast (pre-planting, at planting, or post-planting)	32 oz min. to 10 gal water/acre
In-Furrow (land rig or irrigation system)	10–24 oz with min. 2 gal water

Once mixed, product should be used within 7–10 days. Perform a jar test when mixing with starter fertilizers for in-furrow applications.

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. Product can be applied with water at the time of use. This product is comprised of live aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly in a dry place out of direct sunlight. Expires **3 years from date of manufacture**.

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy microbial populations.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

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MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

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AGGREPAK™

Resolves P, K, and micronutrient deficiencies across all crops — soil and foliar applied

FOLIAR RATE

0.25–2 gal / acre

SOIL RATE

0.25–10 gal / acre

0-5-13.5

MADE IN USA

SOIL & FOLIAR

+ MICRONUTRIENTS

OVERVIEW

Nature's Source AggrePak is a soil and foliar applied nutrient solution designed to resolve nutrient deficiencies on fruit and nut orchards, vineyards, vegetable crops, and all field and row crops. Its unique 0-5-13.5 formulation delivers available phosphate, soluble potash, boron, copper, and molybdenum directly where the plant needs it — mobilizing carbohydrates and reducing heat stress by supplying key nutrients at the correct timing.

FIELD RESEARCH — ALFALFA YIELD RESULTS

+11%

Yield increase vs. untreated
Net \$39 / acre ROI

+27%

Yield increase vs. untreated
Net \$114 / acre ROI

Applied foliar at 8" of regrowth. ROI calculated at \$200/ton feeder market rate.

GUARANTEED ANALYSIS — 0-5-13.5

GUARANTEED ANALYSIS

Available Phosphate (P_2O_5)	5.0%
Soluble Potash (K_2O)	13.5%
Boron (B)	0.2%
Copper (Cu)	0.25%
Molybdenum (Mo)	0.02%

Derived From: Potassium Hydroxide, Phosphoric Acid, Potassium Nitrate, Boric Acid, Copper Sulfate, Sodium Molybdate

FEATURES & BENEFITS

- Resolves nutrient deficiencies on **fruit and nut orchards, vineyards, vegetables, and all field crops.**
- Enhances the plant's ability to **mobilize carbohydrates** while reducing heat stress.
- Supplies key nutrients (P, K, B, Cu, Mo) at the correct timing for **maximum plant uptake efficiency.**
- Compatible with most agricultural soil products — **jar test recommended** before tank mixing.
- Best soil results when applications are **watered in** — inject with drip or sprinkler, or broadcast spray prior to irrigation.
- Best foliar results when applied **early morning or late evening** when stomata are open.
- Do not apply foliar **when temperatures exceed 80°F (27°C).**

APPLICATION METHODS

SOIL APPLICATIONS — BEST WATERED IN

Inject with drip or sprinkler irrigation, broadcast spray prior to sprinkler irrigation, or knife into soil prior to irrigation.

Rate: 0.25–10 gal/acre. Repeat as needed.

FOLIAR APPLICATIONS — EARLY MORNING OR LATE EVENING

Not recommended when temperature exceeds 80°F (27°C).

Rate: 0.25–2 gal/acre. Repeat as needed.

PACKAGING

275 gal (2,750 lbs)
2.5 gal (25 lbs)

WEIGHT & STORAGE

10.45 lbs/gal at 68°F
Do not store below **40°F (5°C)**

AggrePak™ — Technical Label

Soil and foliar applied nutrient solution · 0-5-13.5 · For Commercial Use Only

GUARANTEED ANALYSIS — 0-5-13.5

Available Phosphate (P_2O_5)	5.0%
Soluble Potash (K_2O)	13.5%
Boron (B)	0.2%
Copper (Cu)	0.25%
Molybdenum (Mo)	0.02%

Derived From: Potassium Hydroxide, Phosphoric Acid, Potassium Nitrate, Boric Acid, Copper Sulfate, Sodium Molybdate. Weight: 10.45 lbs/gal at 68°F (1.2 kg/L at 20°C).

APPLICATION RATES

METHOD & RATE

Foliar (all crops)	0.25–2 gal/acre, repeat as needed
Soil (all crops)	0.25–10 gal/acre, repeat as needed

Foliar: Apply early morning or late evening when stomata are open. Do not apply when temperature exceeds 80°F (27°C). Soil: Best results when watered in.

ALFALFA RESEARCH RESULTS

Foliar Trial — Applied at 8" Regrowth
Untreated Check (baseline) 3.5 tons/acre
1 gal/acre foliar +11% · \$39/acre net
2 gal/acre foliar +27% · \$114/acre net

ROI calculated at \$200/ton feeder market rate. AggrePak enhanced the plant's ability to mobilize carbohydrates while reducing heat stress by supplying key nutrients at the correct timing.

STORAGE & PACKAGING

Do not store below 40°F (5°C).

☑ 2.5 Gal (25 lbs) ☑ 275 Gal (2,750 lbs)

COMPATIBILITY

AggrePak is compatible with most agricultural soil products. Adding additional water to tank mixes will always improve compatibility. **Always establish compatibility using the standard quart jar method** prior to tank mixing.

⚠ DANGER — KEEP OUT OF REACH OF CHILDREN & PETS

Contains potassium hydroxide. May cause skin irritation. May cause serious eye irritation.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing. Get medical attention. **If on skin:** Wash with plenty of soap and water.

DISCLAIMERS OF LIABILITY & LIMITATION OF REMEDY

Nature's Source BioEssentials is a supplement and does not replace routine practices and protocols for good plant nutrition. Seller disclaims all express or implied warranties. Seller shall not be liable for any direct or indirect, incidental, special, exemplary, punitive or consequential damages.

If the product is not accepted under these terms and conditions, it must be returned at once in the original unopened container. The purchase price will be refunded.

For full Disclaimers visit: www.ns-pf.com/terms-of-use

NOTICE TO BUYER

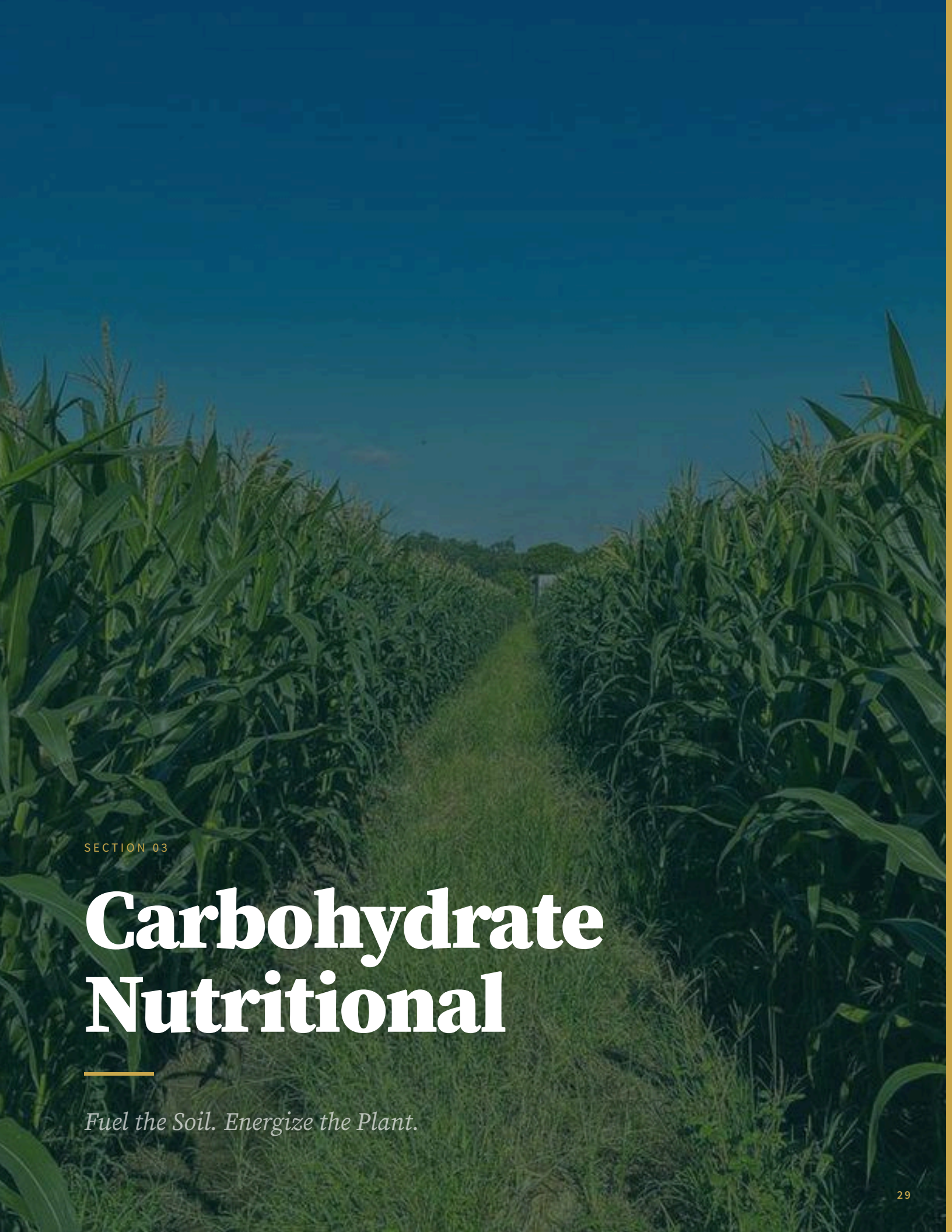
Seller makes no express or implied warranty as to any results obtained with this product. Users must always use product as directed.

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SECTION 03

Carbohydrate Nutritional

Fuel the Soil. Energize the Plant.

Balanced Energy for Better Growth

Carbohydrate-based nutrition plays a unique role in crop performance — fueling both the plant and the biological system it depends on. Rather than focusing solely on mineral inputs, these products deliver carbon-rich compounds that support energy transfer, microbial activity, and overall plant metabolism. The result is a more active soil environment and a crop that can more efficiently convert nutrients into growth and yield.

This lineup is built around BioNutrition™ technology, utilizing fermented plant-based inputs to provide a readily available carbon source alongside balanced nutrition. These formulations help stimulate beneficial microbial populations, promote a more biologically active soil, and improve the cycling of nutrients already present in the system.

With flexible application options — including soil, foliar, and continuous feeding — these products are designed to integrate seamlessly into a wide range of fertility programs.

BioNutrition Essentials 10-4-5

In addition to N-P-K, delivers L-amino acids, calcium, magnesium, and key micronutrients to provide well-rounded plant nutrition. Promotes rapid nutrient response and improved nutrient use efficiency for a wide range of crops and soil conditions.

10-4-5 NPK

NATURE'S SOURCE



Nature's Source

Foliar Essentials 2-1-1

A foliar spray to boost crops' nutrient efficiency. Contains N-P-K plus secondary micronutrients including calcium and magnesium, and organic compounds including 20 L-amino acids to help crops perform to their full potential.

2-1-1 NPK

20 L-AMINO ACIDS



Nature's Source

Organic 3-1-1

CDFA Organic Input Material Approved. Can be used for organic production. Provides consistent toned growth and quick green-up. Promotes rapid nutrient response and hearty plant growth for a wide range of crops.

CDFA ORGANIC

NATURE'S SOURCE



Nature's Source

Soil Essentials 3-2-1

Nature's Source Soil Essentials Root & Soil BioNutrition™ feeds the plants and promotes a robust soil. Ideal for a wide range of crops, promotes Nutrient Use Efficiency and supports and stimulates soil biology.

3-2-1 NPK

ROOT & SOIL

NATURE'S SOURCE



BIONUTRITION ESSENTIALS™ 10-4-5

Sustainable. Effective. Easy.

All-purpose liquid plant food from fermented oilseed extract.

AG SOIL RATE

1–10 gal / acre

AG FOLIAR RATE

1 qt – 1 gal / acre

10-4-5 NPK

LOWER EC

PATHOGEN FREE

GMO FREE

MADE IN USA

OVERVIEW

BioNutrition Essentials 10-4-5 is a comprehensive liquid plant food built on Nature's Source BioNutrition™ technology. Derived from fermented oilseed extract, it delivers balanced N-P-K alongside calcium, magnesium, sulfur, and key micronutrients — feeding both the plant and the soil microbes for increased microbial population and enhanced survivability.



Lower EC than most fertilizers — reduces the likelihood of salt burn and salt build-up in planting beds, attributed to its root sources of nitrogen.

FEATURES & BENEFITS

- **All-purpose liquid plant food** — N-P-K, calcium, magnesium, sulfur, and 7 key micronutrients.
- BioNutrition™ **feeds plants and feeds soil microbes** for increased microbial survivability.
- **Pathogen Free · Heavy Metals Free · GMO Free.**
- Compatible with fungicide and insecticide sprays. **Jar test recommended.**
- Suitable with **most liquid application equipment** — cold water is effective for mixing.
- Lower EC means **reduced risk of salt burn** and soil salt build-up.

GUARANTEED ANALYSIS

10-4-5 — FULL ANALYSIS

Total Nitrogen (N)	10%
Available Phosphate (P ₂ O ₅)	4%
Soluble Potash (K ₂ O)	5%
Calcium (Ca)	0.01%
Magnesium (Mg)	0.05%
Sulfur (S)	0.2%
B · Cu · Fe · Mn · Mo · Zn	trace

AGRICULTURAL APPLICATION RATES

AG SOIL — COMPATIBLE WITH CONVENTIONAL FERTILIZER BLENDS

Rate: 1–10 gal/acre. Compatible with conventional fertilizer blends.

AG FOLIAR — COMPATIBLE WITH FUNGICIDE AND INSECTICIDE SPRAYS

Rate: 1 qt–1 gal/acre. Apply with minimum 50 gal water/acre.

TANK MIX CHART (DESIRED PPM N)

DESIRED PPM N	OZ PER GALLON	OZ PER 50 GALLONS
100	0.11	5.5
300	0.32	16.0
500	0.54	27.0
600	0.64	32.0

INJECTOR / FERTIGATION SETTINGS

DIRECT FROM CONTAINER — INJECTOR SETTINGS

1:200 → feeds at 600 ppm **1:300** → feeds at 400 ppm **1:400** → feeds at 300 ppm

Stock tank for 1:100 injectors: fill at 1:1 ratio Nature's Source/water → feeds at 600 ppm.

Note: Any solution made should be used immediately, not stored.

LANDSCAPE & TURF

RATE PER 1,000 SQ FT

13 oz per 1,000 sq ft of bedding, ornamentals, and turf (regular intervals)
26 oz per 1,000 sq ft every 14–28 days (longer intervals)

PACKAGING

2.5 gal twin pack
4.7 gal box
55 gal drum
275 gal tote · Bulk

WEIGHT & STORAGE

10 lbs/gal at 68°F
 Climate controlled
35°F–90°F
 No direct sunlight

BioNutrition Essentials™ 10-4-5 — Technical Label

Nursery & Landscape Special · For Continuous Liquid Feed · For Commercial Use Only

10 lbs/gal at 68°F · Made in USA

FULL GUARANTEED ANALYSIS — 10-4-5

Total Nitrogen (N)	10%
2.10% Ammoniacal N · 1.80% Nitrate N · 5.15% Urea N	
0.75% Other Water Soluble N · 0.20% Water Insoluble N	
Available Phosphate (P ₂ O ₅)	4%
Soluble Potash (K ₂ O)	5%
Calcium (Ca)	0.01%
Magnesium (Mg) — 0.05% Water Soluble	0.05%
Sulfur (S) — 0.2% Combined Sulfur	0.2%
Boron (B)	0.002%
Copper (Cu) — Water Soluble	0.001%
Iron (Fe) — Water Soluble	0.002%
Manganese (Mn) — Water Soluble	0.014%
Molybdenum (Mo) — Water Soluble	0.0001%
Zinc (Zn) — Water Soluble	0.005%

Derived From: Fermented Oilseed Extract, Phosphoric Acid, Potassium Hydroxide, Ammonium Nitrate, Urea, Magnesium Sulfate, Boric Acid, Copper Sulfate, Iron Sulfate, Manganese Sulfate, Zinc Sulfate.

GREENHOUSE / NURSERY DIRECT INJECTION CHART

PPM N	250	300	400	480	600
Injector Ratio	1:500	1:400	1:300	1:250	1:200

STORAGE & PACKAGING

Store in a climate controlled area. Optimum temperature: **35°F to 90°F**. Do not store in direct sunlight.

☑ 2.5 gal ☑ 4.7 gal ☑ 55 gal ☑ 275 gal · Bulk delivery available (truck & rail)

LINE SANITATION NOTE

Line sanitation is important to prevent biofilm and emitter clogging. Good water line sanitation practices will reduce the risk of biofilm buildup. Understanding water source and quality will help identify possible factors that cause emitter clogging.

⚠ NOTICE — KEEP OUT OF REACH OF CHILDREN & PETS

May be harmful if swallowed. When applied as directed, this product meets guidelines for metals adopted by the AAPFCO (1991). Information regarding the contents and levels of metals available at aapfco.org/metals.html.

DISCLAIMERS OF LIABILITY & LIMITATION OF REMEDY

Seller disclaims all express or implied warranties. Purchaser's exclusive remedy for loss or damage is solely limited to refund of the purchase price. Seller shall not be liable for any direct or indirect, incidental, special, exemplary, punitive or consequential damages, including damages for seed or plant production, volume, size, yield or the loss of profits.

If the product is not accepted under these terms, it must be returned at once in the original unopened container. The purchase price will be refunded.

For full Disclaimers visit: www.ns-pf.com/terms-of-use

NOTICE TO BUYER

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FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN
betteracre.ag · [\[email protected\]](#)

FOLIAR ESSENTIALS™

2-1-1

Easy, efficient and effective — naturally.
A foliar spray to boost crops' nutrient efficiency.

AG FOLIAR RATE

1 qt – 1 gal / acre

FEED FREQUENCY

Every 7–10 days

2-1-1 NPK

20 L-AMINO ACIDS

MADE IN USA

PATHOGEN FREE

GMO FREE

OVERVIEW

Nature's Source Foliar Essentials BioNutrition™ Spray is a valuable addition to all nutrition programs. It can be applied starting in propagation and on through the growing cycle of the crop. Foliar Essentials application encourages a more compact growth habit with increased tone and nutrient uptake.

The natural compounds found in fermented oilseed extract promote nutrient uptake efficiency. In addition to N-P-K, it contains trace secondary micronutrients including calcium and magnesium, and organic compounds including **20 L-amino acids** to help crops perform to their full potential.

FEATURES

- Valuable addition to **all nutrition programs** — propagation through harvest.
- Encourages **more compact growth habit** with increased tone.
- Natural compounds in oilseed extract **promote nutrient uptake efficiency.**
- Compatible with new chemistry — **tank mix compatible.**
- Avoid tank mixing with micro nutrients or heavy metal fungicides.
- No adjuvants needed when tank mixing or applying from injected solution.
- A jar test is always recommended.
- Pathogen Free · Heavy Metals Free · GMO Free.**

GUARANTEED ANALYSIS — 2-1-1

GUARANTEED ANALYSIS

Total Nitrogen (N) **2%**

1.70% Other Water Soluble N

0.30% Water Insoluble N

Available Phosphate (P₂O₅) **1%**

Soluble Potash (K₂O) **1%**

Derived From: Fermented Oilseed Extract

10 lbs/gal @ 68°F

APPLICATION RATES

AGRICULTURAL — FEED EVERY 7-10 DAYS

Tree Nuts: 1 qt – 1 gal/acre

Fruit Tree Crops: 1 qt – 1 gal/acre

Row Crops: 1 qt – 1 gal/acre

Grapes: 1 qt – 1 gal/acre

All crops: Up to 5 gal/acre per application

Aerial: 16–32 oz/acre in min. 10 gal water

GREENHOUSE & NURSERY — FEED EVERY 7-14 DAYS

64–128 oz (1 gallon) per 100 gallons of water.

Apply as needed for enhanced nutrient uptake and plant tone.

GREENHOUSE INJECTOR RATIO CHART

INJECTOR SETTING	½ RATE (OZ)	FULL RATE (OZ)
1:15	10	20
1:50	32	64
1:100	—	64

BENEFITS

- Boosts crops' **nutrient use efficiency.**
- Contains **20 L-amino acids** for full metabolic support.
- Delivers calcium and magnesium alongside N-P-K.
- Sustainable, efficient, and effective — **naturally.**
- Promotes rapid nutrient response and hearty plant growth.

PACKAGING & STORAGE

AVAILABLE SIZES

4.7 gal box

55 gal drum

275 gal tote

Bulk delivery (truck & rail)

STORAGE

Climate controlled area.

Optimum: **35°F to 90°F.**

No direct sunlight.

Shake or mix before use.

Foliar Essentials™ 2-1-1 — Technical Label

BioNutrition™ Foliar Spray · Shake or mix before use · For Commercial Use Only

©2022 NATURE'S SOURCE · NS-PF.COM

10 lbs/gal at 68°F · Made in USA

GUARANTEED ANALYSIS — 2-1-1

Total Nitrogen (N)	2%
--------------------	----

1.70% Water Soluble Nitrogen

0.30% Water Insoluble Nitrogen

Available Phosphate (P ₂ O ₅)	1%
--	----

Soluble Potash (K ₂ O)	1%
-----------------------------------	----

Derived From: Fermented Oilseed Extract. 10 lbs. per gallon at 68°F.

FOLIAR DIRECTIONS FOR USE — AGRICULTURAL

Feed every 7–10 days.**Foliar Per Application:**

Tree Nuts: 1 qt.–1 gal./acre Fruit Tree Crops: 1 qt.–1 gal./acre

Row Crops: 1 qt.–1 gal./acre Grapes: 1 qt.–1 gal./acre

All crops: Up to 5 gallons per acre per application.

Aerial Per Application: 16–32 oz. per acre in a minimum of 10 gallons of water.

Compatible with new chemistry for tank mixing. Jar testing is still recommended to ensure nutrient solutions and water do not cause coagulation. **Avoid tank mixing with micro nutrients or heavy metal fungicides.**

GREENHOUSE & NURSERY DIRECTIONS

Feed every 7–10 days.Application Rates: **64 oz.–128 oz. (1 gallon) per 100 gallons of water.**

STORAGE INFORMATION

Store in a climate controlled area. Optimum storage temperature range: **35°F to 90°F**. Do not store in direct sunlight.

PACKAGING

☑ 2.5 Gal (9.46 L) · NET WT 25 lbs ☑ 4.7 Gal (17.8 L) · NET WT 47 lbs

☑ 55 Gal (208.2 L) · NET WT 550 lbs ☑ 275 Gal (1040.8 L) · NET WT 2750 lbs

⚠ NOTICE — KEEP OUT OF REACH OF CHILDREN & PETS

May be harmful if swallowed. When applied as directed, this product meets guidelines for metals adopted by the AAPFCO (1991). Information regarding the contents and levels of metals in this product is available at aapfco.org/metals.html.

DISCLAIMERS OF LIABILITY & LIMITATION OF REMEDY

Seller disclaims all express or implied warranties and makes no other warranties including merchantability, non-infringement, title and fitness for particular purpose or otherwise. No recommendation for use creates any warranty, express or implied.

Purchaser's or any third party, exclusive remedy for loss or damage related to the purchase or use of the product is solely limited to **refund of the purchase price**. Seller shall not be liable for any direct or indirect, incidental, special, exemplary, punitive or consequential damages, including damages for seed or plant production, volume, size, yield or the loss of profits.

If the product is not accepted under these terms and conditions, it must be returned at once in the original unopened container. The purchase price will be refunded. Users of the product are deemed to have accepted the terms of this notice. This notice to buyer may not be orally modified.

For full Disclaimers of Liability and Limitation of Remedy, visit: www.ns-pf.com/terms-of-use

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betteracre.ag · [\[email protected\]](#)

ORGANIC PLANT FOOD™ 3-1-1

Sustainable. Effective. Easy.

CDFA Organic Input Material — for certified organic production.

SOIL RATE

1–20 gal / acre / season

FOLIAR RATE

1 qt – 5 gal / acre

3-1-1 NPK

CDFA ORGANIC

PATHOGEN FREE

CA ONLY

OVERVIEW

CDFA Organic Input Material Approved, Nature's Source Organic Plant Food 3-1-1 is a liquid plant food that contains oilseed extract — a source of plant nutrition derived from seeds. It provides consistent toned growth and quick green-up while feeding both the plant and the soil microbes for increased microbial population and enhanced survivability.

Derived from fermented oilseed extract and corn steep liquor — naturally fermented byproducts that deliver balanced, plant-available nutrients in a form that supports both the plant and soil biology.

CDFA ORGANIC LISTED

USDA NOP COMPLIANT

PATHOGEN FREE

FEATURES & BENEFITS

- CDFA Organic Input Material Approved — **safe for certified organic use.**
- Provides **consistent toned growth** and quick green-up when needed.
- Promotes **rapid nutrient response** and hearty plant growth.
- BioNutrition™ technology **feeds plants and feeds soil microbes** for enhanced microbial survivability.
- Pathogen Free · Heavy Metals Free.**
- Suitable for use with most liquid application equipment — **agitate/mix prior to each use.**
- Ideal for a wide range of crops and soil conditions.

GUARANTEED ANALYSIS — 3-1-1

GUARANTEED ANALYSIS

Total Nitrogen (N) **3%**

2.55% Water Soluble N · 0.45% Water Insoluble N

Available Phosphate (P₂O₅) **1%**

Soluble Potash (K₂O) **1%**

Derived From: Fermented Oilseed Extract, Corn Steep Liquor · 10 lbs/gal at 68°F

APPLICATION RATES

ORGANIC FIELD PRODUCTION — SOIL PER APPLICATION

All Crops: 1–20 gal/acre per season.

ORGANIC FIELD PRODUCTION — FOLIAR PER APPLICATION

All Crops: 1 qt–5 gal/acre.

TANK MIX CHART (DESIRED PPM N)

DESIRED PPM N	OZ PER GALLON	OZ PER 50 GALLONS
100	0.36	18
150	0.54	27
200	0.72	36
300	1.08	54
500	1.80	90

Organic Feeding Protocol

Proper preparation is required due to its organic nature. **Agitate/mix product prior to each use.** Flush lines with a sanitizing solution approved for certified organic greenhouses. Mix only enough stock solution as can be used in a few days, or use direct injection.

PACKAGING

4.7 gal box
55 gal drum
275 gal tote
Bulk delivery

WEIGHT & STORAGE

10 lbs/gal at 68°F
Climate controlled
35°F–90°F
Shake before use

Organic Plant Food™ 3-1-1 — Technical Label

For Continuous Liquid Feed · CDFA Certified Organic Input Material · Available in CA Only

©2023 NATURE'S SOURCE

10 lbs/gal at 68°F · Shake before use

GUARANTEED ANALYSIS — 3-1-1

Total Nitrogen (N)	3%
2.55% Water Soluble Nitrogen	
0.45% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅)	1%
Soluble Potash (K ₂ O)	1%

Derived From: Fermented Oilseed Extract, Corn Steep Liquor. 10 lbs/gal at 68°F.
Available in CA only.

50/50 CONCENTRATION INJECTOR CHART

PPM N	SETTING	PPM N	SETTING
280	1:64	125	1:150
250	1:75	90	1:200
180	1:100	62.5	1:300
140	1:128	45	1:400

DIRECT INJECT CHART

3-1-1 PPM N	SETTING	3-1-1 PPM N	SETTING
560	1:64	250	1:150
500	1:75	180	1:200
360	1:100	125	1:300
280	1:128	90	1:400

STORAGE & PACKAGING

Store in a climate controlled area. Optimum temperature range: **35°F to 90°F**.
Do not store in direct sunlight. Shake or mix before use.

☒ 4.7 gal box ☒ 55 gal drum ☒ 275 gal tote ☒ Bulk delivery

ORGANIC FEEDING PROTOCOL

Proper preparation and protocol is required due to its organic nature.

Agitate/mix product prior to each use. Flush lines with a sanitizing solution approved for certified organic greenhouses.

As with any organic solution, airborne organisms may colonize on the surface of the stock tank solution. **Mix only enough stock solution as can be used in a few days, or Direct Inject.**

⚠ NOTICE — KEEP OUT OF REACH OF CHILDREN & PETS

May be harmful if swallowed. When applied as directed, this product meets guidelines for metals adopted by the AAPFCO (1991). Information regarding metal contents available at aapfco.org/metals.html.

DISCLAIMERS OF LIABILITY & LIMITATION OF REMEDY

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SOIL ESSENTIALS™

3-2-1

Root & Soil BioNutrition — promotes a living soil while feeding plants from the root up

AG SOIL RATE

1–20 gal / acre / season

GREENHOUSE RATE

0.5 oz per 1 gal water

3-2-1 NPK

ROOT & SOIL

LOWER EC

CA ONLY

OVERVIEW

Soil Essentials 3-2-1 is a Root & Soil BioNutrition™ product from Nature's Source — specifically formulated to promote a living soil while simultaneously feeding plants through the root system. With a slightly higher phosphate content than the 3-1-1 formula, it delivers enhanced root development and soil biology support.

Derived from fermented oilseed extract and corn steep liquor, it delivers natural amino acids, vitamins, organic carbon, and oilseed-based nutrition that feeds both the plant and the soil microbes for increased microbial population and enhanced survivability.



Effective

Promotes Nutrient Use Efficiency and stimulates soil biology



Sustainable

Oilseed extract — renewable source of plant nutrition



Low Salt

Lower EC reduces risk of salt burn in soil

FEATURES & BENEFITS

- **Promotes a living soil** — feeds soil microbes for increased microbial population and survivability.
- Supports and stimulates **soil biology** for healthier root environments.
- Natural L-amino acids, vitamins, and organic carbon provide **root-zone nutrition and mineral chelation.**
- Lower EC — **reduces risk of salt burn** and soil salt build-up.
- Compatible with chemicals for tank mixing. **Jar test recommended.**
- **Pathogen Free · Heavy Metals Free.**
- Shake or mix before each use.

GUARANTEED ANALYSIS — 3-2-1

GUARANTEED ANALYSIS

Total Nitrogen (N) 3%

2.55% Water Soluble N · 0.45% Water Insoluble N

Available Phosphate (P₂O₅) 2%

Soluble Potash (K₂O) 1%

Derived From: Fermented Oilseed Extract, Corn Steep Liquor

APPLICATION RATES

AGRICULTURAL CROPS — SOIL APPLICATION

All Crops: 1–20 gallons per acre per season.

GREENHOUSE & NURSERY

0.5 oz per 1 gallon of water. Tank mix compatible — jar test recommended.

TANK MIX CHART (DESIRED PPM N)

DESIRED PPM N	OZ PER GALLON
100	0.50
150	0.75
200	1.00
300	1.50
500	2.50

PACKAGING

2.5 gal · 4.7 gal
55 gal · 275 gal

STORAGE

Climate controlled
35°F–90°F
No direct sunlight

Soil Essentials™ 3-2-1 — Technical Label

Root & Soil BioNutrition™ · Shake or mix before each use · Available in CA Only

Helps promote a living soil

GUARANTEED ANALYSIS — 3-2-1

Total Nitrogen (N)	3%
2.55% Water Soluble Nitrogen	
0.45% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅)	2%
Soluble Potash (K ₂ O)	1%

Derived From: Fermented Oilseed Extract, Corn Steep Liquor. Available in CA only.

SOIL APPLICATION DIRECTIONS

Agricultural Crops — All Crops: 1–20 gallons per acre per season.

Greenhouse & Nursery: 0.5 oz per 1 gallon of water.

TANK MIX CHART

DESIRED PPM N	OZ OF 3-2-1 PER GALLON
100	0.50
150	0.75
200	1.00
300	1.50
500	2.50

Compatible with chemicals for tank mixing. Jar test recommended to ensure nutrient solutions and water do not cause coagulation.

STORAGE & PACKAGING

Store in a climate controlled area. Optimum temperature range: **35°F to 90°F**.

Do not store in direct sunlight. Shake or mix before each use.

☑ 2.5 gal (25 lbs) ☑ 4.7 gal (47 lbs) ☑ 55 gal (550 lbs) ☑ 275 gal (2,750 lbs)

WHAT MAKES SOIL ESSENTIALS DIFFERENT

Soil Essentials 3-2-1 has a higher phosphate level (2%) compared to the Organic 3-1-1 and Foliar Essentials 2-1-1 formulas — making it specifically suited for **root zone and soil applications** where P availability supports root development and microbial activity.

The oilseed extract delivers natural organic carbon, L-amino acids, and natural wetting agents that disperse easily in water and penetrate quickly when soil applied — feeding the soil biology while delivering balanced nutrition to the root zone.

⚠ NOTICE — KEEP OUT OF REACH OF CHILDREN & PETS

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For full Disclaimers visit: www.ns-pf.com/terms-of-use

NOTICE TO BUYER

Seller makes no express or implied warranty as to any results obtained with this. Users must always use product as directed. In Mississippi, this is considered a low analysis fertilizer.

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SECTION 04

Carbohydrate Sugar

Simple Sugars. Powerful Activation.

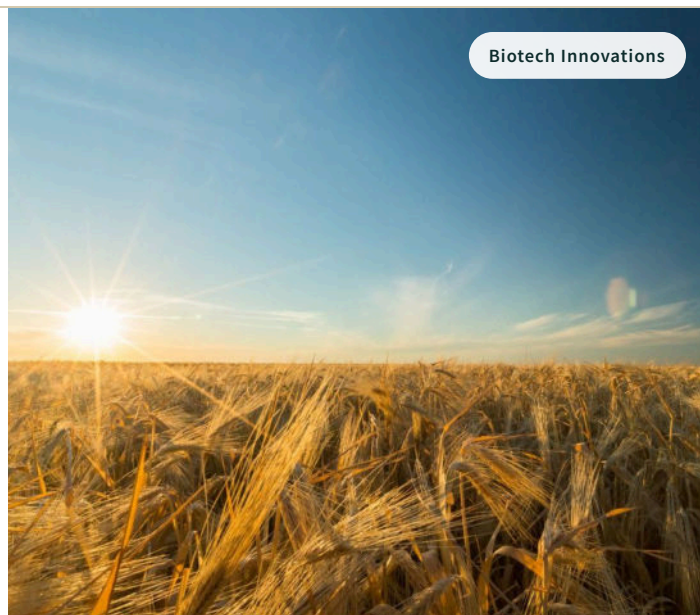
Unleash

Delivers simple sugars alongside beneficial microbes to stimulate biological activity and accelerate the breakdown of organic matter. Provides an immediate food source that activates microbial populations driving nutrient cycling and improved soil function. Supports decomposition, unlocks tied-up nutrients, enhances soil biology, and promotes consistent plant performance throughout the growing season.

SIMPLE SUGARS

BIOTECH INNOVATIONS

Biotech Innovations



UNLEASH™

Powerful food source and microbes to activate decomposition of soil organic matter

6 APPLICATION METHODS

Pre-plant · In-Furrow · Side-dress
Foliar · Y-Drop · Fertigation

PACKAGING

2.5 gal · 275 gal

- MADE IN USA
- 2-YR SHELF LIFE
- SIMPLE SUGARS
- LIVE MICROBES

OVERVIEW

UNLEASH delivers simple sugars alongside beneficial microbes to stimulate biological activity and accelerate the breakdown of organic matter. By providing an immediate food source for soil microbes, it activates microbial populations that drive nutrient cycling and improve overall soil function.

The result is a more responsive soil environment where nutrients are released more efficiently and made available to the crop when they're needed most — unlocking tied-up nutrients, enhancing soil biology, and promoting consistent plant performance throughout the growing season.

APPLICATION RATES BY METHOD

- Pre-Plant
6–12 oz/acre
- In-Furrow
6–10 oz/acre
- Side-Dress
6–12 oz/acre
- Foliar
6–12 oz/acre
- Y-Drop
8–12 oz/acre
- Fertigation
4–6 oz/week

FEATURES & BENEFITS

- Provides an **immediate food source** for soil microbes — activates biological activity fast.
- Activates microbial populations that **drive nutrient cycling** and improve overall soil function.
- Nutrients are released more efficiently and **made available when the crop needs them most.**
- Supports decomposition and **unlocks tied-up nutrients.**
- Tank mixable with biologicals, fertilizers, micronutrients, and pesticides.
- 6 flexible application methods** — integrates into virtually any program.
- Contains **simple sugars** (glucose, sucrose, fructose, maltose) alongside live microbes.

ADVANTAGES

- 2yr** 2-year shelf life from date of manufacture. Store between 45°F and 150°F.
- ⚠** Bloating is possible during transport or heat — **slowly open lid** to release gas buildup if needed.

ACTIVE INGREDIENTS

CONTAINS BENEFICIAL SUBSTANCES & SOIL AMENDMENT INGREDIENTS	
Azotobacter vinelandii	400,000 CFU/ml
Lactobacillus acidophilus	400,000 CFU/ml
Glucose	10%
Sucrose	10%
Fructose	8%
Maltose	4%
Inert Ingredients (water)	63%

- PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)
- WEIGHT

8.5 lbs/gal at 68°F

UNLEASH™ — Technical Label

Powerful food source and microbes to activate decomposition of soil organic matter

LABEL NO. F003622

8.5 lbs/gal at 68°F

CONTAINS BENEFICIAL SUBSTANCES & SOIL AMENDMENT
INGREDIENTS

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Lactobacillus acidophilus</i>	400,000 CFU/ml
<i>Glucose</i>	10%
<i>Sucrose</i>	10%
<i>Fructose</i>	8%
<i>Maltose</i>	4%
<i>Inert Ingredients (water)</i>	63%

USAGE RATES BY APPLICATION METHOD

METHOD	RATE
Pre-Plant	6–12 oz/acre
In-Furrow	6–10 oz/acre
Side-Dress	6–12 oz/acre
Foliar	6–12 oz/acre
Y-Drop	8–12 oz/acre
Fertigation	4–6 oz/week

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly and out of direct sunlight. Expires **2 years from date of manufacture**.

Note: Bloating is possible during transportation, extended storage, or heat. If this occurs, slowly open lid to release gas buildup.

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. **Add Unleash™ with water prior to adding additional products.** Product can be tank mixed with biologicals, fertilizers, micronutrients, and pesticides.

To ensure compatibility, **perform a jar test** prior to adding into applicator. This product is comprised of live aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy the microbial population.

Bloating is possible during transportation, extended storage, or during heat. **Slowly open lid** to release gas buildup if this occurs.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

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SECTION 05

Residue Digester

Break It Down. Build It Back.

Innov8

Formulated to accelerate crop residue decomposition, this biological solution converts residue into organic matter, releases tied-up nutrients, increases microbial activity (MAC), and supports a balanced bacteria-to-fungi ratio.

RESIDUE DIGESTION

BIOTECH INNOVATIONS



Biotech Innovations

MetaGrow 5X

Concentrated microbial inoculant designed to expand beneficial microbe populations and diversity, enhancing nutrient cycling and soil function. Supports nitrogen fixation, phosphorus solubilization, and chelation of key cations — including K, Ca, Mg, Mn, Fe, Cu, and Zn.

MICROBIAL INOCULANT

ELEVATE AG



Elevate AG

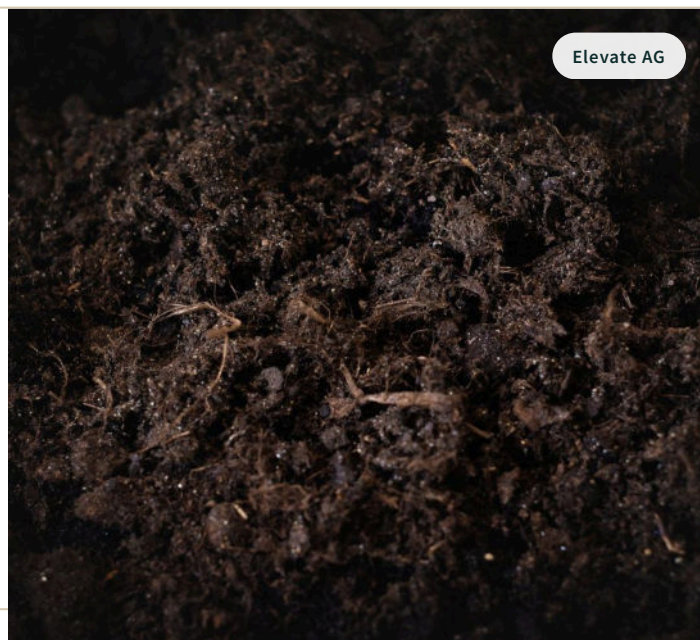
MetaGrow F

Fungal-dominant microbial inoculant derived from arthropod frass, soy protein hydrolysate, and seaweed extract. Promotes vigorous root development, improves soil structure and porosity, increases cation exchange capacity (CEC), and contributes organic matter to create a more active, resilient soil environment.

FUNGAL-DOMINANT

CEC ENHANCEMENT

ELEVATE AG



Elevate AG

INNOV8™

Digests and decomposes crop residue
and converts it to organic matter

COTTON / SOY / SMALL GRAIN

6–12 oz / acre

CORN RESIDUE

8–16 oz / acre

MADE IN USA

2-YR SHELF LIFE

RESIDUE DIGESTION

OVERVIEW

INNOV8 is a combination of beneficial fungi and bacteria that work synergistically to accelerate the decomposition of crop residue. By enhancing the natural breakdown of organic matter, INNOV8 plays a pivotal role in returning essential nutrients to the soil, promoting soil health, and supporting the growth of future crops.

Selected strains of beneficial microbes are focused on breaking down complex organic compounds and returning them into simpler forms that can be readily absorbed by plants. This efficient decomposition process aids in the recycling of nutrients while contributing to improved soil structure and fertility.

FEATURES

- Beneficial microbes work synergistically to **accelerate decomposition of crop residue.**
- Plays a **returning essential nutrients to the soil,** promoting soil health, and supporting future crops. in
- Contains **Azotobacter, Bacillus, Streptomyces.**
- Increases the soil's **aggregate stability.**
- Returns and replenishes essential nutrients to the **subsequent crops.**
- Increases **microbially active carbon** in the soil.

BENEFITS

- Reduces **labor and environmental impact** of residue management methods.
- Promotes **sustainable practices.**
- Improves **planting operations** by reducing residue interference.

ADVANTAGES

2yr

2-year shelf life from date of manufacture.



Mixable with herbicides, macro/micro nutrient fertilizers, carbon and sugar based products, or water only.



Product stability allows storage between **45°F and 120°F.**

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 12.3%

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Azotobacter chroococcum</i>	400,000 CFU/ml
<i>Bacillus coagulans</i>	400,000 CFU/ml
<i>Streptomyces endophyticus</i>	400,000 CFU/ml
<i>Inert Ingredients (water)</i>	87.7%

USAGE RATES

Cotton/soy/small grain: 6–12 oz/acre, min. 20 gal water
Corn residue: 8–16 oz/acre, min. 30 gal water

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

INNOV8™ — Technical Label

Digests and decomposes crop residue and converts to organic matter

LABEL NO. F003622

8.5 lbs/gal (3.8 kg) at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients 12.3%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Azotobacter chroococcum</i>	400,000 CFU/ml
<i>Bacillus coagulans</i>	400,000 CFU/ml
<i>Streptomyces endophyticus</i>	400,000 CFU/ml
Inert Ingredients (water)	87.7%

USAGE RATES BY CROP

APPLICATION RATE & MINIMUM WATER VOLUME

Cotton, Soybean & Small Grain Residue	6–12 oz/acre · min. 20 gal water
Corn Residue	8–16 oz/acre · min. 30 gal water

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. Product can be applied with herbicides, macro/micro nutrient fertilizers, carbon and sugar based products, or water only at the time of use. **Once mixed, Innov8™ should be used within 72 hours.**

This product is comprised of live aerobic and anaerobic microorganisms. After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly in a dry place out of direct sunlight. Expires **2 years from date of manufacture.**

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy microbial populations.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

betteracre.ag · [\[email protected\]](#)

METAGROW 5X+™

Highly diverse microbial concentrate to restore soil biology, improve nutrient availability, and support long-term fertility

MINIMUM RATE

1 qt / acre · dilute 2:1 min.

CERTIFICATIONS

OMRI Listed · Shelf Stable

20,000+ SPECIES

OMRI LISTED

ELEVATE AG

OVERVIEW

MetaGrow 5X+ is an OMRI listed, highly concentrated, shelf-stable microbial inoculant designed to restore soil biology and improve nutrient availability. Derived from earthworm castings and natural microbial cultures including protozoa and fungi, it is crafted to mimic the complexity of native soil ecosystems and support long-term sustainability.

12.5B+

Beneficial microbes
per ml

20,000+

Beneficial microbe
species

HOW IT WORKS

- Contains **6 nitrogen fixing species** — converts atmospheric N₂ into plant-usable forms (e.g., L-amino acids), reducing dependence on synthetic nitrogen fertilizers.
- Contains **8 phosphorus solubilizing species** — unlocks bound P in the soil, making it accessible for plant uptake, especially important in high pH or compacted soils.
- Includes **iron and zinc chelators** which unlock bound nutrients like K, Ca, Mg, Mn, Fe, Cu, and Zn while enhancing soil CEC.
- Broad spectrum microbial communities **mimic native soil ecosystem** complexity for long-term biological balance.

KEY BENEFITS



Breaks down and solubilizes nutrients, making them more accessible to plants throughout the growing season.



Higher microbial diversity increases resilience against pathogens and promotes organic matter decomposition.



Improvement in **water infiltration, soil aggregation, porosity, root development**, and stress tolerance.



Builds long-term soil fertility by restoring microbial balance and improving biological function without relying solely on synthetic inputs.

APPLICATION

MINIMUM RATE

1 qt per acre diluted at a minimum of 2:1. Most effective as part of a program with a diverse food source.

METHODS

Seed treatment · Root dip · In-furrow · Y-drop · Irrigation injection · Foliar · Residue application

PRO TIP

For best results, apply MetaGrow 5X+ as part of a program that includes **added carbon, food sources, and additional biology**. May allow for reduction in synthetic inputs. Consult your BetterAcre advisor for a custom plan.

MetaGrow 5X+™ — Technical Label

Concentrated Microbe Inoculant · OMRI Listed · Filter Size 100 Mesh (149 Micron)

BIN: 0621X

8.5 lbs/gal at 68°F · 275 US Gallons

DERIVED FROM

Vermicompost (earthworm castings), plant protein hydrolysate, and seaweed. Contains over 20,000 species of beneficial bacteria, protozoa, and fungi with 12.5+ billion CFU per ml.

SELECTED MICROBIAL SPECIES (CFU/ML)

Acinetobacter lwoffii 1×10⁸ · *Achromobacter xylosoxidans* 5×10⁷ · *Pseudomonas alcaligenes* 5×10⁷ · *Pseudomonas stutzeri* 5×10⁷ · *Brevundimonas subvibrioides* 2×10⁷ · *Beijerinckia indica* 1×10⁷ · *Mesorhizobium alhagi* 5×10⁶ · *Pseudomonas putida* 4×10⁶ · *Bradyrhizobium japonicum* 1×10⁶ · *Bacillus cereus* 1×10⁶ · *Trichoderma harzianum* 1×10⁴ · *Penicillium chrysogenum* 1×10⁴ · and 20,000+ additional species.

APPLICATION RATES BY METHOD

METHOD & STANDARD RATE	
Seed Treatment	1 pt–1 qt per 100 wt seed
In-Furrow / Transplant Water	50 oz/acre direct over seeds
Berm / Y-Drop	50 oz/acre · dilute 10:1 min.
Irrigation Injection	50 oz/acre/application monthly
Foliar	50 oz/acre with microbe foods
Residue Decomposition	50 oz/acre at incorporation

Rates can vary 16 oz to 10 gal/acre depending on crop, number of applications, and timing.

DIRECTIONS FOR USE

Most effective when applied as part of a program with a diverse food source.
Apply at a minimum of 1 qt per acre diluted at a minimum of 2:1.

May tank mix with fertilizers — check compatibility. Store out of direct sunlight under 100°F (38°C). Check compatibility before mixing with pesticides or fungicides.

For irrigation injection: apply at middle of the set so soil is pre-wetted and additional water is applied after injection to push material into the soil.

⚠ CAUTION — NOT FOR HUMAN CONSUMPTION

May be harmful if swallowed. May cause eye and respiratory irritation. Do not breathe spray or mist. Avoid contact with eyes. Keep container closed when not in use.

First Aid: If swallowed, call physician immediately if severe cramping occurs. If in eyes, rinse with water 15 minutes. If inhaled, move to fresh air. If on skin, wash thoroughly. Keep out of reach of children.

LIMITED WARRANTY

Sustainable Growing Solutions, LLC makes no implied or express warranties other than that the product is consistent with the label's derivation statement and is reasonably fit for the purpose set forth on the label. Liability is limited to replacement of any product not conforming to this warranty.

MANUFACTURED BY

Sustainable Growing Solutions, LLC
under the Elevate AG brand

FOR ADDITIONAL INFORMATION

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betteracre.ag · [\[email protected\]](#)

METAGROW™ F

*Fungal-dominant inoculant to complete soil restoration —
the missing piece in most regenerative farming programs*

TYPICAL IRRIGATION RATE

2–4 gal / acre monthly

CERTIFICATIONS

CDFA Organic Listed · USDA NOP

FUNGAL DOMINANT

CDFA ORGANIC

70+ CROPS

SHELF STABLE

OVERVIEW

MetaGrow F has a large and diverse fungal population to build higher-level soil health and plant beneficial functions. It is the perfect product to complete the regenerative farming soil restoration process. The fungal components of soil microbe populations are often the last to successfully colonize — even in soils that have been regeneratively farmed for 20+ years, the essential fungal component is often still missing.

In addition to fungi and Mycorrhizae, MetaGrow F includes a broad spectrum biology: bacteria, archaea, actinomycetes, yeast, micro-algae, and bacteria phages.

PLANT BENEFICIAL FUNCTIONS

NITROGEN FIXING

20 species at 1×10^9 /ml — free N-fixers and Rhizobium N-fixers for legumes.

PHOSPHORUS SOLUBILIZING

12+ species at 1×10^9 /ml including endophytic fungi for plant phosphorus delivery — a function missing from most competitor products.

CATION CHELATING

Dozens of siderophore species at 1×10^9 /ml improve plant nutrient status of **K, Ca, Mg, Mn, Mo, Cu, Fe, and Zn**.

BENEFITS OF ESTABLISHING DIVERSE FUNGI



Supplies and builds soil organic matter (SOM) — 1% SOM increases in a year are not uncommon.



Extends the root network and effectiveness — improves drought tolerance and nutrient efficiency.



Improves **soil structure and porosity** — better oxygen exchange, water infiltration, erosion control, and moisture holding capacity.



Increases soil **CEC** — improves soil nutrient retention and plant nutrient availability.



Reduces frequency and severity of plant diseases by improving nutrient status and natural plant defense processes.

KEY ADVANTAGES

- Liquid **shelf-stable** product that mixes easily for irrigation and foliar use.
- Compatible for **tank-mixing with all fertilizer inputs**.
- Suitable **organic crop** CDFA-Organic listed. USDA NOP for **production.** compliant.
- Proven on over **70 different crops** on every soil type.
- No re-entry restrictions** or days-to-harvest limitations.
- Contains organic acids, amino acids, vitamins, enzymes, and plant bioactive compounds — plants respond **right after application.**

IRRIGATION RATE

2–4 gal/acre monthly during irrigation season or before key crop growth phases.

PACKAGING

275 US Gallons
8.4 lbs/gal at 68°F
BIN: 0313W

MetaGrow™ F — Technical Label

0.02-0-0.01 Fungal Dominant Microbe Inoculant · USDA NOP Compliant · CDFA Organic Listed

BIN: 0313W

Filter Size 100 Mesh (149 Micron)

GUARANTEED ANALYSIS — 0.02-0-0.01

Total Nitrogen (N)	0.02%
0.01% Ammoniacal Nitrogen	
0.01% Other Water Soluble Nitrogen	
Soluble Potash (K ₂ O)	0.01%
Derived From: Arthropod Frass, Soy Protein Hydrolysate, Seaweed Extract, Potassium Hydroxide. 8.4 lbs/gal at 68°F.	

ORGANIC COMPLIANCE

This product meets the Program Standards as set forth by the **United States Department of Agriculture National Organic Program (NOP) 7 CFR part 205**. CDFA Registered Organic Input Material.

APPLICATION RATES BY METHOD

METHOD & RATE	
Seed Treatment	1 pint–4 qt per 100 wt seed
Root Dip	Dilute 10:1 with water
In-Furrow / Transplant Water	2 gal/acre over seeds
Berm / Y-Drop	2 gal/acre · dilute 10:1
Irrigation Injection	2–4 gal/acre monthly
Foliar	1–3 gal/acre by plant size

Rates can vary 16 oz to 20 gal/acre depending on crop, applications, and timing.

STORAGE

Store out of direct sun under **100°F (38°C)**. Net Contents: 275 US Gallons (1041 Ltrs).

APPLICATION GUIDANCE

For best results, apply MetaGrow F together with **MetaGrow MFOOD or CFOOD** (0.5 lbs per gallon of F) and other components of a balanced biological fertility program.

May tank mix with fertilizers — check compatibility. Check compatibility before mixing with pesticides or fungicides.

Also recommended on **crop and cover crop residue** to aid decomposition and future nutrient availability.

⚠ CAUTION — NOT FOR HUMAN CONSUMPTION

May be harmful if swallowed. May cause eye and respiratory irritation. Do not breathe spray or mist. Avoid contact with eyes. Keep container closed when not in use.

First Aid: If swallowed, call physician immediately if severe cramping occurs. If in eyes, rinse with water 15 minutes. Remove contact lenses first 5 minutes. If inhaled, move to fresh air. If on skin, wash thoroughly. Keep out of reach of children.

FOOD SAFE PRODUCTION

MetaGrow microbes are grown from diverse cultures sourced worldwide. No manure or waste product is used in source materials. An intensively aerobic production process assures pathogens and plant toxins are not present. Products are tested and **certified free of pathogens**. There are no application restrictions on re-entry or days to harvest.

LIMITED WARRANTY

Sustainable Growing Solutions, LLC makes no implied or express warranties other than that the product is consistent with the label's derivation statement and is reasonably fit for the purpose set forth on the label. Liability is limited to replacement of any product not conforming to this warranty.

MANUFACTURED BY

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FOR ADDITIONAL INFORMATION

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SECTION 06

Biocontrol Agent

Protect the Plant. Strengthen the System.

Defend Pro

Built on a foundation of beneficial microbes, this solution improves nutrient availability while supporting a more competitive and active microbial environment around the root zone. Increases biological activity and diversity to create conditions that favor plant health, stronger establishment, and improved tolerance to environmental stress.

Application methods include seed treatment, in-furrow, foliar, and broadcast — integrating easily into existing programs for consistent support from emergence through harvest.

SEED TREATMENT

IN-FURROW

FOLIAR

BROADCAST

BIOTECH INNOVATIONS



DEFEND PRO™

Biological fungicide strengthens the root zone
to protect against pathogens

APPLICATION METHODS

In-Furrow · Foliar
Broadcast · Seed Coat

PACKAGING

2.5 gal · 275 gal

MADE IN USA

2-YR SHELF LIFE

MYCORRHIZAL

BIOCONTROL

OVERVIEW

By harnessing the power of beneficial microorganisms and mycorrhizal fungi, DEFEND-PRO acts as a formidable shield, protecting plants against a wide array of detrimental diseases and harmful pathogens. By establishing a symbiotic relationship with the plant's root system, DEFEND-PRO strengthens the plant's innate defense mechanisms, enabling it to resist and combat potential threats with remarkable efficacy.

FEATURES

- Strengthens the plant's **inherent defense mechanisms.**
- Enhances the soil's microbiome.
- Selected blend of **beneficial microbial strains and mycorrhizal fungi.**
- Contains **Azotobacter, Clostridium, Lactobacillus, Bacillus.**
- Establishes a **symbiotic relationship with the plant's root system.**
- Mycorrhizal fungi extend the plant's **nutrient and water absorption capacity.**

BIOLOGICAL DEFENSE AGAINST

TARGETED PATHOGENS (INCLUDING BUT NOT LIMITED TO)

Pythium	Fusarium
Botrytis	Alternaria
Phomopsis	Rhizoctonia
Phytophthora	+ more

BENEFITS

- Beneficial microorganisms work synergistically to **suppress harmful pathogens,** restore microbial balance in the soil, and facilitate optimal nutrient uptake by the plant.
- Creates an **inhospitable environment for pathogens.**
- Increased **resilience and stress tolerance.**
- Promotes sustainable practices.

ADVANTAGES

2yr

2-year shelf life from date of manufacture.



Mixable with **manures, herbicides, insecticides, and fertilizers** without affecting product efficacy.



Product stability allows storage between **45°F and 120°F.**

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 11%

Azotobacter vinelandii	400,000 CFU/ml
Clostridium pasteurianum	400,000 CFU/ml
Lactobacillus acidophilus	400,000 CFU/ml
Bacillus subtilis	350,000 CFU/ml
Inert Ingredients (water)	89%

USAGE RATES

In-furrow: 8–16 oz/acre
Foliar: 32 oz/gal water/acre
Broadcast: 16–32 oz/acre
Seed coat: 3 oz/unit seed

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

DEFEND PRO™ — Technical Label

Helps to strengthen the root zone by improving nutrient availability

LABEL NO. F003622

8.5 lbs/gal (3.8 kg) at 68°F

GUARANTEED ANALYSIS — SOIL AMENDING

Active Ingredients 11%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Clostridium pasteurianum</i>	400,000 CFU/ml
<i>Lactobacillus acidophilus</i>	400,000 CFU/ml
<i>Bacillus subtilis</i>	350,000 CFU/ml
Inert Ingredients (water)	89%

USAGE RATES

APPLICATION METHOD & RATE

In-Furrow	8–16 oz per acre
Foliar	32 oz per 1 gal water or carrier solution per acre
Broadcast & Drench	16–32 oz per acre
Seed Coat	3 oz per unit of seed (corn or soybean)

*A carrier solution is any liquid other than fungicides.

DIRECTIONS FOR USE

Shake bottle thoroughly prior to use. Product can be applied with water at time of use. **Once mixed, product should be used within 24 hours.** This product is comprised of live aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Shake thoroughly or simply screen the material if desired and continue with application.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep open bottles closed tightly and out of direct sunlight. Expires **2 years from the date of manufacture** on label.

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

⚠ CAUTION

Do not blow air into the tank to agitate — this could destroy microbial populations.

Do not use with fungicides except for Phosphite fungicides.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

This product should be used as a part of a good plant nutrition program and is not intended to replace proper crop management and protocols. Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

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SECTION 07

Biology Food Source

Fuel the Microbes. Drive the Results.

EnSoil Algae

Built around living microalgae, this solution goes beyond traditional inputs by actively stimulating microbial populations and accelerating nutrient cycling within the soil. Utilizes live *Chlorella vulgaris* cells that actively participate in the soil ecosystem — attracting and transporting beneficial microbes to the root zone, increasing nutrient availability, improving uptake, and enhancing overall plant function.

Crops benefit from enhanced chlorophyll production, improved photosynthetic efficiency, and greater tolerance to environmental stress while helping reduce dependency on synthetic inputs.

LIVE MICROALGAE

CHLORELLA VULGARIS

ENSOIL ALGAE



ENSOIL ALGAE™

Living freshwater microalgae that stimulates soil microbes, increases yield, and reduces dependency on synthetic inputs

APPLICATION RATE

8 oz / acre

FREQUENCY

3 applications / season

LIVING CELLS

OMRI LISTED

TANK MIX OK

ALL EQUIPMENT

OVERVIEW

EnSoil Algae is a liquid concentration of living freshwater microalgae — *Chlorella vulgaris* — grown via a patented process that allows the algae to remain alive in dark storage for at least 6 months. Unlike commercial algae broth, EnSoil's live cells actively participate in the soil ecosystem as transport vehicles for microbes, chlorophyll, amino acids, and nutrients — driving results that extract products cannot replicate.

Crops benefit from enhanced chlorophyll production, improved photosynthetic capacity, and greater tolerance to environmental stress while helping reduce dependency on synthetic inputs.

5 CORE BENEFITS



Stimulates diverse soil microbes — releases signaling molecules that grow microbial populations, soil respiration, water-extractable C & N, and balanced bacteria/fungi ratios.



Increases nutrient availability & uptake — attracts soil microbes to the plant, accelerating nitrogen fixation and mineral bioavailability.



Enhances chlorophyll & photosynthesis — algae cells donate chlorophyll to the plant for deeper green pigment and greater photosynthetic efficiency.



Boosts stress adaptation — optimizes soil for drought, heat, salinity, and pH extremes; stimulates plant enzyme release for survival under stress.



Maximizes water holding capacity — boosts soil microbial biomass and organic matter, improving soil structure, porosity, and water retention.

PROVEN FIELD RESULTS

CORN

+26 bu

per acre increase
Jay Lane, Bayside Farms NC

SOYBEANS

+13 bu

per acre + \$175/acre ROI
Jay Lane, Bayside Farms NC

CORN (SILAGE)

19.5 T

vs 8-ton proven yield
Steve Tucker, Tucker Farms NE

PERMANENT CROPS

+13%

yield - 5,908 lbs/acre
Herb Young, Southern Valley GA

APPLICATION TIMING

ALL APPLICATIONS AT 8 OZ / ACRE

Corn	In-Furrow · V3-V6 · V8-R2
Soybeans	In-Furrow · V8 · R1-R2
Pasture / Hay	3-4x per season after each cutting/grazing
Permanent Crops	Bud Break · Fruit Set · Fruit Fill · Before Stress
Vegetables	At Seed · Post Emergence · Flower/Fruit

COMPATIBILITY

- Tank mix compatible with **herbicide, NPK, primer, fungicide, biologicals,** and more.
- Compatible with **all irrigation and application equipment** — drip, micro-injection, sprinkler, pivot, furrow, boom sprayer, drone, Y-drop, knife, backpack sprayer, and more.
- OMRI Listed** — approved for certified organic crop production.

EnSoil Algae™ — Technical Reference

Living *Chlorella vulgaris* · 8 oz/acre · 3 applications/season · OMRI Listed · ensoilalgae.com

No formal EPA label

Use info packet as reference

HOW IT WORKS — THE SCIENCE

EnSoil Algae is a liquid concentration of living freshwater microalgae — *Chlorella vulgaris* — grown via a patented process. A concentration of living microalgae, this solution profoundly stimulates microbial populations and accelerates natural nutrient cycling processes. Living *Chlorella vulgaris* cells actively participate in the soil ecosystem for weeks — attracting and transporting beneficial microbes into the roots, increasing nutrient availability, improving uptake, and enhancing overall plant function.

Enlightened Soil Corp's patent-pending growing process induces *C. vulgaris* to use heterotrophic metabolism — consuming organic material and growing in the dark — while also photosynthesizing in the light. This allows EnSoil to remain viable in dark storage for at least **6 months (a full growing season)**.

ENSOIL ALGAE VS. COMMERCIAL BROTH

LIVE CELLS VS. PHYTOHORMONE EXTRACTS

EnSoil Algae™	Commercial Broth
✓ Contains Live Cells	✗ No Live Cells
✓ Phytohormone Availability	✓ Phytohormone Availability
✓ Improves Nutrient Cycling	✗ Improves Nutrient Cycling
✓ Long-Term Fertility Storage	✗ Long-Term Fertility Storage
✓ Actively Participates in Soil	✗ Passive only
✓ Is Endophytic (taken in by plants)	✗ Not Endophytic
1–4x per season	Every 2–4 weeks

USE RATES & APPLICATION METHODS

APPLICATION	RATE
All field crops (soil or foliar)	8 oz/acre
Dilute solution	5 mL per gallon of water
Greenhouse / potted plants	Weekly x 2, then every 2 weeks
Gardens / raised beds / lawns	Weekly x 2, then every 4 weeks

GROWER TESTIMONIALS

"The ROI is there to use algae across all of our acres. We saw consistent yield increases versus the check strips."

— Jay Lane, Bayside Farms · NC · +13 bu/acre soybeans · \$175/acre ROI

"The yield on the treated acres was 9.7% higher than non-treated. The stalks at harvest were thicker and leaves remained greener 3 days longer through significant heat stress."

— Russell Hedrick, JRH Grain Farms · NC

"We harvested 19.5 tons of silage on ground with a proven yield of 8 tons and a previous best of 12 tons."

— Steve Tucker, Tucker Farms · NE

"13% yield increase over 10 harvest timings — nearly 6,000 lbs/acre increase at \$0.68/lb is a return of over \$4,000 per acre."

— Herb Young, Southern Valley · GA

CLEMSON UNIVERSITY STUDY

EnSoil Algae promoted squash yield across all treatments. Best result: **25% of normal fertilizer input + EnSoil Algae foliar = 46% increase in crop weight**. Soil application alone yielded a 40% increase vs. untreated control.

STORAGE & SHELF LIFE

EnSoil Algae remains viable in dark storage for **at least 6 months** — a full growing season. Store away from direct sunlight and extreme heat. Refrigeration not required.

MANUFACTURED BY

Enlightened Soil Corp
ensoilalgae.com · [\[email protected\]](#)

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN
betteracre.ag · [\[email protected\]](#)



SECTION 08

Crop Protection

Defend the Crop. Preserve the Yield.

System-K Blue

A potassium phosphite-based fungicide designed for control and suppression of a broad range of plant diseases across both soil and foliar applications. Acts primarily as a preventative solution — directly suppressing pathogens while activating the plant's natural defense mechanisms.

Effective against Phytophthora, Pythium, Fusarium, Rhizoctonia, Xanthomonas, Anthracnose, and Cercospora. Labeled for food crops, ornamentals, turf, and bedding plants.

FUNGICIDE

SOIL & FOLIAR

ROVENSA NEXT



PREV-AM

A versatile 3-in-1 contact fungicide, insecticide, and miticide providing broad-spectrum, fast-acting control with improved spray coverage. Ideal for use in Integrated Pest Management (IPM) programs as an alternate mode of action to manage pest resistance or supplement beneficial insect release programs.

No pre-harvest interval (PHI) and exempt from residue requirements on registered crops — ideal for use before harvest.

3-IN-1

NO PHI

IPM COMPATIBLE

ROVENSA NEXT



SYSSTEM-K BLUE®

EPA labeled potassium phosphite solution — preventative fungicide for control or suppression of plant diseases

STANDARD FOLIAR RATE

1–3 qt / acre in min. 20 gal water

PACKAGING

2.5 gal · 265 gal tote

EPA REGISTERED

BROAD CROP LABEL

SOIL & FOLIAR

DAY OF HARVEST

OVERVIEW

Sysstem-K Blue is an EPA registered potassium phosphite fungicide for control or suppression of a wide range of plant diseases in both soil and foliar applications. It acts primarily as a **preventative fungicide** by acting directly on the pathogen and stimulating natural host defenses. It may be applied **up to the day of harvest**.

Labeled on a broad range of crops including food crops, ornamentals, turf, and bedding plants across numerous application methods.

TARGETED DISEASES

CONTROLS / SUPPRESSES

Phytophthora

Pythium

Fusarium

Rhizoctonia

Xanthomonas

Anthracnose

Downy Mildew

Powdery Mildew

Cercospora

Fire Blight

MODE OF ACTION

DUAL MODE OF ACTION

- ☒ **Suppresses pathogens** — acts directly on the pathogen.
- ☒ **Stimulates natural host defenses** — activates the plant's own resistance mechanisms.

KEY FEATURES

- **EPA registered fungicide** — EPA Reg. No. 48222-10. Only product of its type with broad federal label.
- Active ingredient: **Mono- and Dipotassium Phosphites — 57%** (6.3 lbs/gal, equivalent to 4.1 lbs phosphorous acid/gal).
- Multiple application methods: **foliar, soil drench, root dip, trunk injection, irrigation, in-furrow.**
- Apply up to **day of harvest** — no pre-harvest interval restriction.
- REI of only **4 hours** for agricultural uses.
- Compatible with biologicals — **Phosphite fungicides** (note for Biotech can be used with Innovations products).
- Do not mix with fixed copper-based fungicides or strongly acidic/alkaline materials.

BROAD CROP COVERAGE

- **Field crops:** Corn, soybean, wheat, alfalfa, sorghum, cotton, and more.
- **Fruits & vegetables:** All major crop groups including berries, brassicas, citrus, cucurbits, legumes, pome fruits, stone fruits, tree nuts, vegetables.
- **Ornamentals & turf:** Golf courses, nurseries, greenhouses, bedding plants, trees.

EPA REG. 48222-10

Apply before disease development. Minimum 3-day interval between applications. Do not apply to dormant or heat/moisture stressed plants.

ACTIVE INGREDIENT

Mono- & Dipotassium Phosphites 57%

6.3 lbs/gal active · 4.1 lbs phosphorous acid/gal

PACKAGING

2.5 gal bottle
265 gal tote

Sysstem-K Blue® — Technical Label

EPA Labeled Potassium Phosphite Solution · EPA Reg. No. 48222-10 · CA Reg. No. 48222-10-AA-CA

EPA REG. 48222-10

Available: 2.5 gal · 265 gal tote

ACTIVE INGREDIENTS

Mono- and Dipotassium Phosphites*	57%
Other Ingredients	43%

*Contains 6.3 lbs/gallon of active ingredients. Equivalent to 4.1 lbs Phosphorous Acid/gallon.

STANDARD APPLICATION RATES

METHOD	RATE
Foliar (most crops)	1–3 qt/acre in min. 20 gal water
Foliar (aerial)	1–3 qt/acre in min. 10 gal water
Irrigation (overhead)	2–4 qt in at least 100 gal water/acre
Irrigation (drip)	2–3 qt in at least 100 gal water/acre
Root Dip	2 qt per 100 gal water
Trunk Injection	3 tsp per linear yard of canopy
Soil Drench (ornamentals)	12–24 fl oz per 100 gal water/acre
Turf foliar	3–6 fl oz per 1,000 sq ft
Potato in-furrow	3–5 qt/acre

APPLICATION INTERVALS

Prevention Program: Apply lower rate at 2–4 week intervals after plants become established.

Control Program: Apply higher rate at 2–3 week intervals until control is reached.

Minimum interval between applications: 3 days. Do not apply to dormant or heat/moisture stressed plants. Allow foliage to completely dry after application.

MIXING INSTRUCTIONS

1. Fill spray tank with 1/2 of required water volume. 2. Add Sysstem-K Blue slowly while agitating. 3. Continue filling with water while agitating. 4.

Continue agitation when applying.

Compatibility: **Do not apply with fixed copper-based fungicides.** Avoid strongly acidic or alkaline materials. Always conduct a jar test before tank mixing. Test phytotoxicity on small area before large-scale applications.

⚠ CAUTION — AGRICULTURAL USE REQUIREMENTS

REI (Restricted Entry Interval): **4 hours** for agricultural uses. Do not enter or allow worker entry into treated areas during the REI.

PPE required: Long-sleeved shirt, long pants, shoes plus socks, and **protective eyewear.**

Do not apply directly to water or intertidal areas. Do not contaminate water when disposing of equipment wash waters.

⚠ CAUTION — KEEP OUT OF REACH OF CHILDREN

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses after first 5 minutes. Call poison control center or doctor.

STORAGE

Keep containers tightly closed when not in use. Keep away from heat and open flame.

MANUFACTURED BY

Oro Agri, Inc. / Rovensa Next

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

betteracre.ag · [\[email protected\]](#)

PREV-AM®

Quick knockdown 3-in-1 fungicide, insecticide & miticide
boosted with OROWET® Technology

STANDARD RATE
50–100 fl oz per 100 gal water

KEY INTERVALS
0-day PHI · 24-hr REI

EPA REGISTERED

0-DAY PHI

OROWET® TECH

IPM COMPATIBLE

OVERVIEW

PREV-AM is a versatile 3-in-1 fungicide, insecticide, and miticide boosted with OROWET® Technology. It offers broad-spectrum, fast-acting control against a variety of pests through dual modes of action — desiccation and suffocation — without requiring pre-harvest intervals or maximum residue limits.

This mode of action makes it ideal for integrated pest management and resistance management programs. Its effectiveness at various pest lifecycle stages leads to significant population reductions.

FUNGICIDE

INSECTICIDE

MITICIDE

MODE OF ACTION

CONTACT, NON-RESIDUAL DUAL MODE OF ACTION

- ☒ **Desiccation:** Breaks down waxy layers of insect/mite exoskeletons and protective layers of fungal mycelium.
- ☒ **Suffocation:** Enhances penetration of spray liquid into insect and mite respiratory openings.
- ☒ **Broad spectrum:** Targets pests at various lifecycle stages — best efficacy on soft-bodied insects and life stages.
- ☒ **IPM friendly:** Low impact on beneficial insect populations and positive impact on predator-prey ratios.

EPA REG.	PRE-HARVEST INTERVAL	REI	GROUP
72662-3	0 Days	24 Hours	8D

KEY FEATURES

- EPA registered 3-in-1** — fungicide, insecticide, AND miticide in a single product.
- Boosted **OROWET® Technology** for superior compatibility, improved coverage, and better canopy penetration.
- Zero pre-harvest interval (PHI)** — can be applied up to the day of harvest.
- 24-hour REI** for agricultural uses.
- Contact, non-residual mode of action — **ideal for resistance management.**
- Do NOT use between V10 and VT stage on corn.**
- Do NOT apply in midday sun or during periods of drought/heat stress.
- Do NOT tank mix with other surfactant-based adjuvants — PREV-AM already contains sufficient NIS surfactants.

BROAD CROP COVERAGE

Row Crops (corn, soy)	Berries & Cane
Vegetables	Fruits (Pome & Stone)
Grapes & Hops	Citrus & Tropicals
Tree Nuts	Herbs & Hemp
Turf (golf course)	Ornamentals

STANDARD RATE

50 fl oz per 100 gal water (disease/insects). Up to **100 fl oz/100 gal** for heavy pressure.

PACKAGING

2.5 gal bottle
Active: Sodium Tetraborohydrate Decahydrate 0.99%

PREV-AM® — Technical Label

Fungicide, Insecticide and Miticide · Group 8D Insecticide · 0-Day PHI · 24-Hour REI

EPA REG. 72662-3

Net Contents: 2.5 US Gal (9.46 L)

ACTIVE INGREDIENT

Sodium Tetraborohydrate Decahydrate	0.99%
Other Ingredients	99.01%

Contains 0.084 lb. of active ingredient per gallon.

APPLICATION RATES BY CROP TYPE

CROP / USE	RATE (FL OZ / 100 GAL)	INTERVAL
Row crops, vegetables, berries, herbs, soybean	50–100	Every 7–10 days
Pome fruit, stone fruit, citrus, tree nuts, hops	50–100	Every 10–14 days
Grapes (wine & raisin)	50	Every 10–14 days
Turf (golf course)	1 fl oz per 1,000 sq ft	Every 7–10 days
Ornamentals / Roses (nursery)	30–50	Every 7–10 days
Aerial / ULV equipment	100 fl oz / 100 gal water	Max 32 fl oz/ acre
Chemigation (all crops)	12–20 fl oz/acre min.	Per specific crop

Minimum retreatment interval: 7 days. Do not apply between V10 and VT stage on corn.

MIXING INSTRUCTIONS

Add PREV-AM to the tank. Agitate continuously prior to and during application. Use sufficient water to obtain full coverage of foliage, stems, etc. and spray up to the point of runoff. Pre-rinse all tanks and spray lines before adding PREV-AM.

Do NOT tank mix with other surfactant-based adjuvants. Compatible with most commonly used insecticides, miticides, fungicides, herbicides, and fertilizers. Always jar test before widespread use.

KEY USE RESTRICTIONS

- **Do NOT use between V10 and VT stage on corn.**
- Do NOT tank mix with other surfactant-based adjuvants.
- Do NOT mix with copper products in-season (dormant use is acceptable).
- Do NOT apply in midday sun or during drought/heat stress.
- Do NOT use when freezing temperatures or frost are expected.
- Not for use on table grapes.
- Ground application only for pome/stone fruit, tree nuts, strawberry, and grapes.

⚠ AGRICULTURAL USE REQUIREMENTS — REI 24 HOURS

Do not enter or allow worker entry into treated areas during the **24-hour REI**. PPE required: protective eyewear/goggles, coveralls, and waterproof gloves (nitrile, neoprene, PVC, or viton).

Resistance management: Rotate PREV-AM with Group 8D insecticides/ acaricides. Adopt an IPM program.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Causes substantial but temporary eye injury. Harmful if absorbed through skin or inhaled. Wear goggles/face shield. Avoid breathing spray mist.

If in eyes: Hold eye open and rinse with water for 15–20 minutes. Remove contact lenses after 5 minutes. Call poison control.

Chemical Emergency: Call CHEMTREC (800) 424-9300.

MANUFACTURED BY

Oro Agri, Inc. / Rovensa Next

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

betteracre.ag · [\[email protected\]](#)

A wide-angle photograph of a lush green agricultural field, likely corn, stretching towards a distant treeline. The sky is filled with soft, grey clouds, and a single bird is visible in flight near the top center. The overall tone is muted and atmospheric.

SECTION 09

Adjuvant

Improve Coverage. Maximize Performance.

ORO-HSMOC

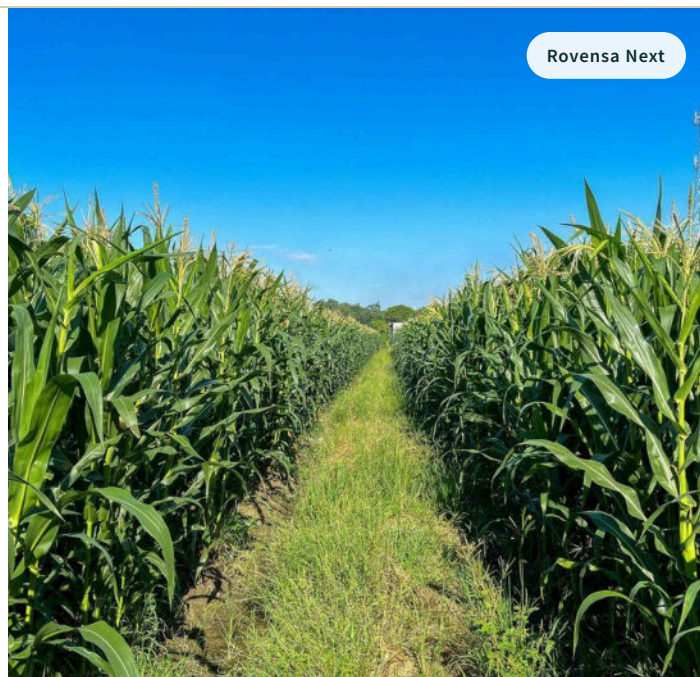
A high-surfactant methylated oil concentrate formulated with OROWET® technology to enhance the performance of post-emergent herbicides requiring MSOs or crop oil concentrates. Improves spray coverage, penetration, and translocation — delivering more consistent and effective weed control at lower use rates. APE/NPE Free.

HSMOC

OROWET® TECH

APE/NPE FREE

ROVENSA NEXT



ORO-RZ

Improves how soil-applied inputs perform — enhancing penetration, movement, and uniform distribution throughout the soil profile. Powered by OROWET® technology, it maximizes the effectiveness of pre-emergence herbicides, fungicides, and nutrient applications.

OMRI LISTED

CDFA CERTIFIED

ORGANIC READY

ROVENSA NEXT



ORO-HSMOC®

*Foliar adjuvant for oil-loving herbicides —
OROWET® Technology for superior weed control at lower rates*

RECOMMENDED RATE

16–64 fl oz / 100 gal

PACKAGING

2.5 gal · 265 gal tote

OROWET® TECH

APE/NPE FREE

HSMOC

CORN & SOYBEANS

OVERVIEW

ORO-HSMOC is a high surfactant methylated oil concentrate (HSMOC) formulated with proprietary OROWET® Technology. It enhances the effectiveness of post-emergent herbicides requiring methylated seed oils (MSOs) or crop oil concentrates (COCs) — delivering efficient translocation and superior weed control at lower use rates than traditional alternatives.

WHAT IS OROWET® TECHNOLOGY?

PROPRIETARY OROWET® TECHNOLOGY

A proprietary combination of **cold pressed citrus oil** and a **patented surfactant mixture** forms the base for ORO-HSMOC. Products incorporating OROWET Technology provide a more sustainable alternative with **reduced environmental impact** compared with traditional chemistries. APE/NPE Free — free of alkyl phenol ethoxylate and nonylphenol ethoxylate surfactants.

FEATURES

- **High surfactant methylated oil concentrate (HSMOC)** — effective at lower rates than traditional MSOs or Crop Oils.
- Designed for use with **post-emergent herbicides requiring MSOs or COCs.**
- Contains proprietary ingredients including **OROWET® Technology.**
- **APE/NPE Free** — free of ecotoxic surfactants.
- Flexible application rates based on **weed size and conditions.**

MODE OF ACTION

- ☒ OROWET Technology ensures **more effective uptake and distribution** of systemic active ingredients throughout the plant, including the roots.

- ⚡ Results in a **more complete and faster kill** of target weeds.

- ☒ Produces **smaller, more stable emulsion particles** for better tank mix compatibility.

- ☒ Ensures **uniform application and improved canopy penetration.**

- ☒ **Lower use rate and uniform application reduces crop response** with herbicides.

APPLICATION & PRECAUTIONS

⚠ KEY APPLICATION NOTES

Do NOT use between V10 and VT stages on corn. Due to high surfactant content, test with post-emergent tank mix combinations prior to widespread use to minimize phytotoxicity risk. Do NOT combine with other surfactants. Not for aquatic use.

RECOMMENDED RATE

16–64 fl oz (0.125–0.5% v/v)
per 100 gal spray solution. Use lower rates for in-season, over-the-top applications.

PACKAGING

2.5 gal bottle
265 gal tote

ORO-HSMOC® — Technical Label

High Surfactant Methylated Oil Concentrate • For Use with Pesticides Requiring MSO or COC

V20231025

Net Contents: 2.5 US Gal (9.46 L)

PRINCIPAL FUNCTIONING AGENTS

Soybean Oil, Methyl Esters and Oxirane, Methyl, Polymer with Oxirane, Monoether with 2-Ethylhexanol	74.9%
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Constituents ineffective as spray adjuvants	25.1%
---	--------------

Surfactant Content	10.9%
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All ingredients are exempt from tolerance according to 40 CFR 180.

RECOMMENDED RATES

Apply at a rate of **16 fl. oz. – 64 fl. oz. (0.125–0.5% v/v) per 100 gallons** of spray solution in ground, aerial, low volume, or CDA applications. Use lower rates for in-season, over-the-top applications.

DIRECTIONS FOR USE

Prior to use, read all directions on this label and on the labels of the pesticides being used with this product. Conduct a jar test to confirm compatibility. **Always test new tank-mix combinations before widespread use.**

To ensure thorough mixing, recirculate mini tanks and bulk tanks or shake containers before using. **DO NOT combine with other surfactants.**

Pre-rinse all tanks and spray lines thoroughly before the first use of ORO-HSMOC. Add 20 oz of ORO-HSMOC to 20 gallons of water, circulate for 20 minutes, and spray to waste.

Mixing sequence: Fill tank 1/2 to 2/3 with water. Add pesticides and other tank mix components. Fill remainder with water. **Add ORO-HSMOC last.**

STORAGE & DISPOSAL

Store in a well-ventilated place. Keep cool. Store in original tightly closed container. In the event of spillage, soak up with absorbent materials and dispose at licensed waste disposal site. Triple rinse container and pour rinsate into spray tank. Do not reuse container. Visit www.acrecycle.org to find your local recycler.

HAZARD STATEMENTS

Combustible liquid. May cause an allergic skin reaction. **Causes serious eye damage.**

⚠ PRECAUTIONARY STATEMENTS

Keep away from flames and hot surfaces — no smoking. Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. **Wear eye protection or face protection.**

Hazardous to the aquatic environment. **Do not contaminate water sources** by cleaning of equipment or disposal of wastewaters.

⚠ DANGER / PELIGRO — KEEP OUT OF REACH OF CHILDREN

For Chemical Emergency (spill, leak, fire, or accident) call **CHEMTREC (800) 424-9300**.

If on skin: Wash with plenty of water. If irritation occurs, get medical attention. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing. Call poison center/doctor if unwell. **If swallowed:** Rinse mouth. Do NOT induce vomiting. **In case of fire:** Use water fog, foam, dry chemical, or CO₂.

NOTICE OF WARRANTY

The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the Directions For Use. Exclusive remedy is limited to refund of purchase price or replacement of product, at Company's election.

MANUFACTURED BY

Oro Agri, Inc.

Contact: [\[email protected\]](#)

FOR ADDITIONAL INFORMATION

BetterAcre • Harmony, MN

betteracre.ag • [\[email protected\]](#)

ORO-RZ®

Advanced soil adjuvant for uniform distribution of soil-applied pesticides and nutrients

SOIL / IN-FURROW RATE

16–32 fl oz / acre

IRRIGATION RATE

16–128 fl oz / acre

OMRI LISTED

OROWET® TECH

APE/NPE FREE

SOIL ADJUVANT

OVERVIEW

ORO-RZ is an advanced soil adjuvant designed to improve performance of soil-applied pesticides and nutrients. Utilizing patented OROWET® Technology, it improves soil wetting and penetration and ensures uniform distribution of partner chemistries — including soil applied fungicides, pre-emergence herbicides, and nutrients.

ORO-RZ is an OMRI Listed organic input material suitable for use in certified organic crop production when combined with organic pesticides.

OMRI LISTED

APE/NPE FREE

CPDA CERTIFIED

OROWET® TECHNOLOGY

PROPRIETARY OROWET® TECHNOLOGY

A proprietary combination of **cold pressed citrus oil and a patented surfactant mixture**. Products incorporating OROWET Technology provide a more sustainable alternative with **reduced environmental impact** compared with traditional chemistries. Principal functioning agents: **Alcohol ethoxylate and orange oil (cold pressed) — 29.40%**. Surfactant Content: 19.4%.

FEATURES

- Advanced adjuvant with OROWET Technology for **soil applied pesticides and nutrients.**
- Improves performance of soil applied chemistries like **fungicides or pre-emergence herbicides.**
- Suitable for various application methods: **in-furrow, broadcast, or irrigation.**
- OMRI certified for **organic crop production** when combined with organic pesticides.
- Best used with **root-inhibiting herbicides.**

MODE OF ACTION

☑ **Enhances soil wetting** with OROWET technology for uniform distribution of soil-applied pesticides and nutrients.

↓ **Reduces surface tension of water** for improved infiltration into the soil profile.

☑ **Minimizes runoff** from rain and irrigation — keeps applied chemistry where it belongs.

APPLICATION RATES

APPLICATION METHOD	RATE (FL OZ/ACRE)
In-furrow at planting with soil pesticides	16–32
Pre-emergent herbicide sprays	16–32
Broadcast tank mix solutions	16–64
Irrigation (drip, microjet, sprinkler, pivot)	16–128
Growing media	8–64 fl oz/ton
Burndown (foliar)	8–24
Desiccation (foliar)	8–64

PACKAGING

2.5 gal bottle
265 gal tote

KEY NOTE

Not for aquatic use. Always jar test before widespread use. Add **ORO-RZ last** in mixing sequence.

ORO-RZ® — Technical Label

Adjuvant for the Uniform Distribution of Soil-Applied Pesticides and Nutrients · OMRI Listed

V20231205

Net Contents: 2.5 US Gal (9.46 L)

PRINCIPAL FUNCTIONING AGENTS

Alcohol ethoxylate and orange oil (cold pressed)	29.40%
Constituents ineffective as spray adjuvants	70.60%
Surfactant Content	19.4%

All ingredients are exempt from tolerance according to 40 CFR 180. APE/NPE Free.

DOSAGE RATES

APPLICATION METHOD	RATE (FL OZ/ACRE)
In-furrow at planting with soil pesticides	16–32
Pre-emergent herbicide sprays	16–32
Broadcast tank mix solutions	16–64
Irrigation systems (drip/microjet/sprinkler/pivot)	16–128
Growing media	8–64 fl oz/ton
Burndown foliar	8–24
Desiccation foliar	8–64

DIRECTIONS FOR USE

ORO-RZ can be applied in-furrow, flood, microjet, sprinkler, and other irrigation systems. Can also be applied in conjunction with most liquid fertilizers or as a soil spray.

Prior to use, read all directions on this label and labels of partner pesticides.

Test for compatibility prior to mixing. Always test new tank-mix combinations before widespread use. Pre-rinse all tanks and spray lines before adding ORO-RZ.

NOT FOR AQUATIC USE.

STORAGE & PACKAGING

Keep away from heat, sparks, and open flame. Store in a cool, dry, well-ventilated place out of direct sunlight. Store in original tightly closed container.

☑ 2.5 gal bottle ☑ 265 gal tote

HAZARD STATEMENTS

Flammable liquid and vapor. Causes serious eye irritation.

⚠ PRECAUTIONARY STATEMENTS

Keep away from heat/sparks/open flames/hot surfaces — **no smoking.** Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating equipment. Use only non-sparking tools.

Wear protective gloves. **Wear eye protection or face protection.** Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

Do not contaminate water sources by cleaning of equipment or disposal of wastewaters.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

For Chemical Emergency call **CHEMTREC (800) 424-9300.**

If in eyes: Rinse with water for several minutes. Remove contact lenses. Continue rinsing. If irritation persists, get medical attention. **If inhaled:** Move to fresh air. **If on skin:** Remove contaminated clothing. Rinse with water/shower. **In case of fire:** Use sand, carbon dioxide, or powder extinguisher.

NOTICE OF WARRANTY

The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the Directions For Use. Exclusive remedy is limited to refund of purchase price or replacement of product, at Company's election.

MANUFACTURED BY

Oro Agri, Inc.

Contact: [\[email protected\]](#)

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN

[betteracre.ag](#) · [\[email protected\]](#)



SECTION 10

Pit Digester

Break It Down. Capture the Value.

Devour

Managing livestock waste isn't just about handling volume — it's about unlocking its potential. Built on a diverse blend of aerobic and anaerobic microorganisms, Devour actively digests and decomposes waste in lagoons and pits, reducing buildup while improving overall system function.

Accelerates decomposition to convert waste into a more uniform, nutrient-rich output for use as organic fertilizer — resulting in reduced solids, improved consistency, and enhanced nutrient value.

AEROBIC & ANAEROBIC

LAGOON / PIT

BIOTECH INNOVATIONS

Biotech Innovations



DEVOUR™

*Digests and decomposes livestock waste
and converts it to organic fertilizer*

INITIAL RATE (FIRST 2 MO.)

8–16 oz / 10,000 gal

MAINTENANCE RATE (10 MO.)

1–2 oz / 10,000 gal/mo

MADE IN USA

2-YR SHELF LIFE

DUAL MODE ACTION

SELF-SPREADING

OVERVIEW

DEVOUR is one of the most unique pit digester technologies on the market today. It uses anaerobic digestion while simultaneously providing aerobic oxygen to the pit — this dual mode of action is needed for the successful clean up of weed seeds, animal parasites, antibiotics, and insect eggs that can collect in an untreated pit.

DEVOUR's built-in pH regulator keeps the microorganisms working at maximum efficiency. It also eliminates the need to cover the pit for the anaerobic digestion process. As simple as pour it in and wait for results.

FEATURES

- **Self-spreading technology** — can be poured at the edge of the pit.
- Breaks down **Dried Distiller Grains (DDGs)**.
- Breaks down **fats, proteins, seeds, insect eggs, antibiotics, and parasites**.
- Built-in **pH regulator** keeps microorganisms at maximum efficiency.
- Eliminates the need to **cover the pit** for the anaerobic digestion process.
- Improves **nutrient content** of the waste output.

BENEFITS

- Controls odor and **reduces flies**.
- Reduces solids, salts, and crust — produces a **more uniform consistency**.
- Controls and **reduces foaming**.
- Can be **safely reused on crops** as organic fertilizer.

ADVANTAGES

2yr

2-year shelf life from date of manufacture.


Mixable with manures, herbicides, insecticides, and fertilizers without affecting product efficacy.


 Product stability allows storage between **45°F and 120°F**.

GUARANTEED ANALYSIS

ACTIVE INGREDIENTS — 13.8%

<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Azotobacter chroococcum</i>	400,000 CFU/ml
<i>Bacillus coagulans</i>	400,000 CFU/ml
<i>Streptomyces spp.</i>	400,000 CFU/ml
<i>Inert Ingredients (water)</i>	86.2%

APPLICATION SCHEDULE

Applied **monthly**. Initial rate for first 2 months, then maintenance rate for the following 10 months.

PACKAGING

275 gal (2,337.5 lbs)
2.5 gal (21.25 lbs)

DEVOUR™ — Technical Label

Digests and decomposes livestock waste and converts it to organic fertilizer

LABEL NO. F003622

8.5 lbs/gal (3.8 kg) at 68°F

GUARANTEED ANALYSIS

Active Ingredients 13.8%	
<i>Azotobacter vinelandii</i>	400,000 CFU/ml
<i>Azotobacter chroococcum</i>	400,000 CFU/ml
<i>Bacillus coagulans</i>	400,000 CFU/ml
<i>Streptomyces endophyticus</i>	400,000 CFU/ml
Inert Ingredients (water)	86.2%

APPLICATION RATE TABLE

WATER VOLUME (GALLONS)	INITIAL — 2 MO. (OZ)	MAINT. — 10 MO. (OZ)
Less than 10,000	8.0 – 16.0	1.0 – 2.0
10,000 – 20,000	16.0 – 32.0	2.0 – 4.0
20,000 – 40,000	32.0 – 40.0	4.0 – 5.0
40,000 – 75,000	40.0 – 48.0	5.0 – 6.0
75,000 – 150,000	64.0 – 128.0	8.0 – 16.0
150,000 – 326,000	128.0 – 200.0	16.0 – 25.0
More than 326,000	See above dosing rates for ponds	

Rates can vary based on conditions.

STORAGE & PACKAGING

Store above 45°F and below 150°F. Keep opened bottles closed tightly and out of direct sunlight. Expires **2 years from date of manufacture**.

☑ 275 gallons (2,337.5 lbs) ☑ 2.5 gallons (21.25 lbs)

DIRECTIONS FOR USE

Shake bottle prior to use. **Pour product directly into the lagoon.** This product is comprised of live aerobic and anaerobic microorganisms.

After packaging, transporting, and storing, it is not uncommon for a biofilm to develop. Simply screen the material and continue with application.

⚠ WARNING — KEEP OUT OF REACH OF CHILDREN

Use proper protection while mixing. Contact with skin or eyes — rinse with water. Call a doctor if irritation develops.

DISCLAIMER OF LIABILITY & LIMITATION OF REMEDY

Biotech Innovations guarantees this product to the extent of the purchase price, only when used according to the label directions.

NOTICE TO BUYER

The information contained on this label is believed to be accurate, reliable, and reasonably fit for the purposes stated on the label, and when used under normal use conditions in accordance with the label directions.

MANUFACTURED & GUARANTEED BY

Biotech Innovations

FOR ADDITIONAL INFORMATION

BetterAcre · Harmony, MN
betteracre.ag · [\[email protected\]](#)

SEED TREATMENT Prime Pro-D Biological seed treatment for dicot crops	SEED TREATMENT Prime Pro-M Biological seed treatment for corn & monocots	SEED TREATMENT HYPRgERM Max Premium liquid seed treatment with MetaGrow 5X+
NUTRITIONAL Activ8 / Activ8-IF N fixation & nutrient solubilization	NUTRITIONAL K-Phos P & K release, micronutrient availability	NUTRITIONAL AggrePak Soil & foliar nutrient deficiency correction
CARB NUTRITIONAL BioNutrition Essentials 10-4-5 Balanced NPK with amino acids & micronutrients	CARB NUTRITIONAL Foliar Essentials 2-1-1 Foliar spray with 20 L-amino acids	CARB NUTRITIONAL Organic 3-1-1 CDFA certified organic plant food
CARB NUTRITIONAL Soil Essentials 3-2-1 Root & soil BioNutrition with NUE support	CARB SUGAR Unleash Simple sugars for microbial activation	RESIDUE DIGESTER Innov8 Accelerates crop residue decomposition
RESIDUE DIGESTER MetaGrow 5X Concentrated microbial inoculant	RESIDUE DIGESTER MetaGrow F Fungal-dominant inoculant for soil biology	BIOCONTROL Defend Pro Beneficial microbe biocontrol agent
BIO-STIMULANT EnSoil Algae Live Chlorella vulgaris for soil activation	CROP PROTECTION System-K Blue K-phosphite fungicide, broad spectrum	CROP PROTECTION PREV-AM 3-in-1 fungicide / insecticide / miticide
ADJUVANT ORO-HSMOC High-surfactant oil concentrate adjuvant	ADJUVANT ORO-RZ Soil adjuvant, OMRI Listed, organic-ready	PIT DIGESTER Devour Biological lagoon & pit waste digester

