



PLATTE

peak crop performance

PLATTE - Peak Crop Performance
Trusted Product Solutions



About Frenchman Valley Cooperative

Frenchman Valley Cooperative is a farmer-focused agricultural cooperative that has served growers and ranchers across Kansas, Nebraska, Colorado, and Wyoming since 1912. With deep roots in Nebraska, FVC remains committed to supporting local producers through agronomy expertise, reliable input supply, and long-standing community relationships. Built on more than a century of service, FVC combines regional reach with a strong local presence to meet the needs of its members and customers.

As part of this commitment, Frenchman Valley Cooperative offers PLATTE - Peak Crop Performance, providing adjuvants and micronutrients in Nebraska. Designed to complement FVC's agronomy services, PLATTE - Peak Crop Performance brings together trusted products and practical systems that support crop performance while maintaining a regionally focused, locally supported product lineup.

Contact Us

Chappell - Agronomy

16515 County Road 14
Chappell, NE 69129
(308) 874-3241

Grant - Agronomy

32945 Nebraska 23
Grant, NE 69140
(308) 352-4295

Imperial - Agronomy (Aerial)

101 S Douglas St.
Imperial, NE 69033
(308) 882-3224

McCook - Agronomy

203 Karrer St.
McCook, NE 69001
(308) 345-3615

Pine Bluffs, WY - Agronomy

100 North Main
Pine Bluffs, WY 82082
(307) 245-3202

Sidney - Agronomy

303 Illinois St.
Sidney, NE 69162
(308) 254-2563

NUTRIENT ROLES

PRIMARY NUTRIENTS

SECONDARY NUTRIENTS

MICRONUTRIENTS

CARBON

Primary nutrients, secondary nutrients, micronutrients, and carbon are essential for crop development. Each is important to the plant, yet required in vastly different amounts.

NITROGEN (N)

- Promotes chlorophyll production which is essential for photosynthesis
- Increases protein content
- Moves to root surfaces for absorption due to its mobility

PHOSPHORUS (P)

- Captures and converts the sun's energy
- Stimulates root development
- Increases stalk and stem strength
- Improves flower formation and seed production

POTASSIUM (K)

- Enhances enzyme actions aiding in photosynthesis
- Produces grains rich in starch
- Increases root growth and improves drought tolerance
- Reduces water loss and wilting

CALCIUM (Ca)

- Helps form cell walls to strengthen the plant
- Stimulates root and leaf development
- Affects uptake and activity of other nutrients

MAGNESIUM (Mg)

- Acts as a phosphorus carrier
- Improves root growth
- Required for better root formation and thus better nutrient/water efficiency

SULFUR (S)

- Exists in every living cell
- Important in photosynthesis and winter crop hardiness
- Required for synthesis of certain amino acids and proteins
- Necessary for efficient nitrogen fixation in legumes

BORON (B)

- Improves seed set under stressful conditions
- Aids in development of cell walls to increase plant stability

COPPER (Cu)

- Not easily accessed due to its immobility in the soil system
- Necessary to chlorophyll formation
- Catalyzes several other plant reactions

IRON (Fe)

- Acts as an oxygen carrier in nodules of legume roots
- Performs as a catalyst to chlorophyll formation

MANGANESE (Mn)

- Plays vital role in photosynthesis by aiding in chlorophyll synthesis
- Required in higher amounts by soybeans and wheat

MOLYBDENUM (Mo)

- Essential to enzyme systems as a component of plant growth
- Required in larger amounts by legumes due to the symbiotic bacteria living in their root nodules

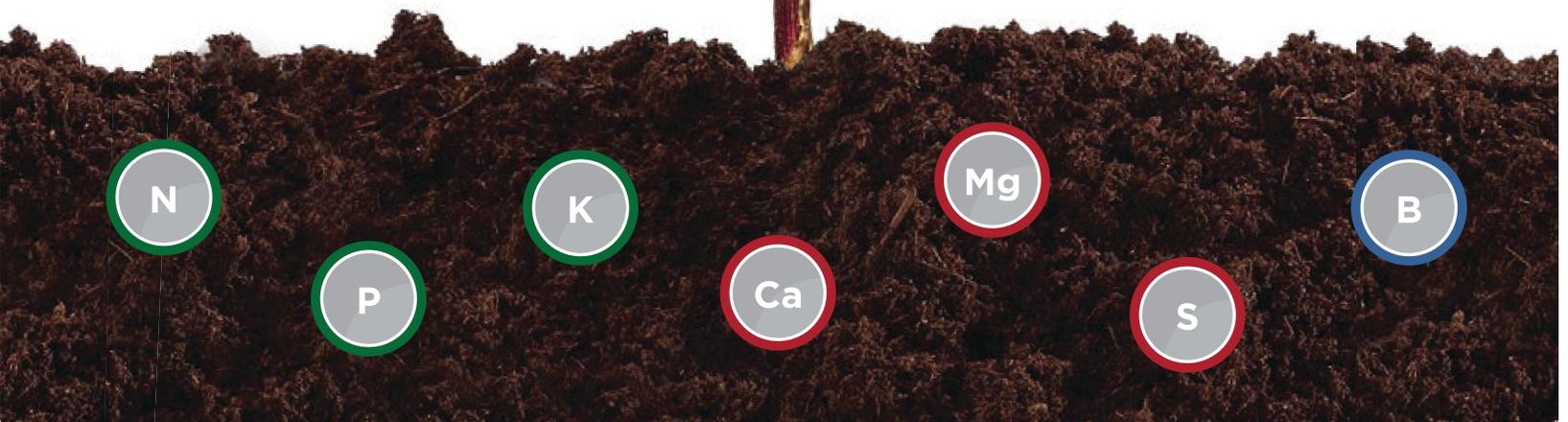
ZINC (Zn)

- Decreases in availability as soil pH increases
- Aids in synthesis of plant-growth substances and enzyme systems
- Promotes certain metabolic reactions

Carbon (C)

- Encourages a healthy soil system by increasing the cation exchange capacity (CEC), water holding capacity, and improving aeration
- Facilitates the movement of nutrients into the crop more efficiently than fertilizer alone
- Provides food for the microbiome in the soil system

Source: CropNutrition.com



 **RoyalGREEN™**

Crop Nutrition Solutions





RoyalGREEN Humic RTU

ROYALGREEN™ HUMIC RTU has superior compatibility giving it the ability to be mixed and applied with most types of fertilizers (including low pH systems), pesticides, seed treatments, and micronutrients. The addition of ROYALGREEN HUMIC RTU can improve nutrient absorption and retention in the soil profile and gives healthier, high-yielding crops.

Product Benefits

- Improves nutrient absorption and retention within the soil profile to support efficient nutrient availability
- Enhances compatibility with a wide range of crop inputs, including low-pH systems
- Supports healthier plant development and yield potential when applied through soil, foliar or irrigation programs
- Flexible, ready-to-use formulation designed for easy integration into existing fertility and crop management programs

Guaranteed Analysis

Humic Acid	3.50%
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Density: 8.42 lb/gal

Rate Recommendations

Irrigation: Apply 0.25 – 1.00 gal/acre via irrigation prior to or during the growing season. Apply weekly treatments up to 5x during the growing season.

Soil Application: Plant with infurrow or band with other fertilizers at 8-16 oz/acre.

Foliar Application: Apply 16-32 oz/acre diluted in water at max 10% concentration. Can be mixed with other fertilizers. Apply up to 5x during the growing season.



RoyalGREEN All Purpose

ROYALGREEN™ ALL PURPOSE is an EDTA chelated solution designed to address nutrient deficiencies by use in liquid fertilizers and suspensions as a soil application, foliar, or through irrigation for all crops that require Zn, Mg, Cu, Mn, Ca, and B.

Product Benefits

- Provides a balanced blend of essential micronutrients to address multiple deficiencies
- EDTA-chelated formulation supports nutrient availability and uptake
- Flexible application options through soil, foliar or irrigation programs
- Designed to integrate easily into standard crop fertility programs

Guaranteed Analysis

Calcium (Ca)	0.50%
Magnesium (Mg)	1.00%
Boron (B)	0.20%
Copper (Cu)	0.70%
Manganese (Mn)	0.50%
Zinc (Zn)	2.00%

Derived from: Calcium EDTA, Magnesium EDTA, Boron Ethanolamine, Copper EDTA, Manganese, and Zinc EDTA

Density: 10.9 lb/gal

Rate Recommendations

Soil Application: ROYALGREEN ALL PURPOSE MICRONUTRIENT BLEND is recommended for use on all types of soils. Because this is a concentrated solution, it should be diluted before use to ensure uniform coverage. Soil applications may be made by drip, sprinkler or furrow irrigation systems or in band or broadcast fertilizer applications. For trees or individual plants, the product may be diluted as above or sprinkled directly on the soil uniformly under the plant's drip line, then watered in. NOTE: The rates given below are based on broadcast application. If broadcast rates are used for spot or banded applications, phytotoxicity may result.

Field, Row, Vegetable Crops: Apply 2-8 quarts per acre.
Fruit, Tree and Vine Crops: Apply 2-10 quarts per acre or 1 to 4 Tbsp per inch of tree diameter. *Ornamentals:* Apply 2 Tbsp for small shrubs and up to 2 Tbsp per inch of tree diameter for large trees and shrubs. *Turf:* For professional use apply to only actively growing turf. Apply 4 oz per 1,000 sq. ft. or 1.5 gallons per acre.

Foliar Application: Avoid applying this product when plants are suffering from moisture stress. If there is any doubt, apply the spray solution to a small test area of the crop or foliage to assess any undesirable effects or phytotoxicity before general application.

Field, Row, Vegetable Crops: Apply 1-2 pints per acre in a minimum of 20 gallons water.

Fruit, Tree and Vine Crops: Apply 1-2 pints per acre in a minimum of 25 gallons water. For smooth skinned fruit apply 1 pint per acre in 50-100 gallons of water.

Citrus: Apply 1-2 pints per 100 gallons of cover spray any time except during bloom. *Aerial:* Apply 0.5-1 pint per acre in at least 10 gallons of water.



RoyalGREEN 9% Zinc

ROYALGREEN™ 9% Zinc offers high quality, fully chelated EDTA micronutrients. The chelation shields and protects the nutrients, which prevents them from reacting and binding with other elements in the soil and other fertilizers. This protection helps ensure that nutrients remain available to the plant in a wide range of tank mixes, as well as pH soil conditions.

Product Benefits

- Helps prevent and correct zinc deficiencies in crops
- Fully chelated formulation supports nutrient availability and uptake
- Flexible application through soil, foliar, or irrigation programs
- Designed to integrate easily into balanced crop fertility programs

Guaranteed Analysis

Zinc (Zn)	9.0%
9.0% Chelated zinc	
<small>Derived from zinc EDTA.</small>	

Density: 10.9 lb/gal

Rate Recommendations

Soil Application: ROYALGREEN 9% ZINC is recommended for use on all types of soils. Because this is a concentrated solution, it should be diluted before use to ensure uniform coverage. Soil applications may be made by drip, sprinkler or furrow irrigation systems or in band or broadcast fertilizer applications. For trees or individual plants, the product may be diluted as above or sprinkled directly on the soil uniformly under the plant's drip line, then watered in. NOTE: The rates given below are based on broadcast application. If broadcast rates are used for spot or banded applications, phytotoxicity may result.

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RoyalGREEN V5-Bio

ROYALGREEN™ V5-BIO is a specially formulated corn nutritional system with a leading biological package by PLATTE – Peak Crop Performance™. All components of ROYALGREEN™ V5 -BIO have been specifically selected for chlorophyll production, resulting in a better start for the plant, stronger roots and higher yields.

Product Benefits

- Supports early-season plant development for a stronger start
- Promotes root growth and overall plant vigor
- Combines plant nutrition with beneficial microorganisms to support nutrient availability
- Designed to support yield potential through balanced nutrition and soil activity

Rate Recommendations

ROYALGREEN™ V5 + BIO should be used at a rate of 5 gallons per acre. The PLATTE-BIO™ CORN component should be used at a rate of 0.2 ounces per acre.

Guaranteed Analysis

Platte Bio™ Corn

<i>Bacillus formis</i>	2.2 x 10 ⁷ CFU/Gm
<i>Bacillus composti</i>	2.2 x 10 ⁷ CFU/Gm
<i>Bacillus azotofixans</i>	2.2 x 10 ⁷ CFU/Gm
<i>Bacillus ligniniphilus</i>	2.2 x 10 ⁷ CFU/Gm
<i>Thiobacillus sulfooxidans</i>	2.2 x 10 ⁷ CFU/Gm
<i>Thiobacillus ferrooxidans</i>	2.2 x 10 ⁷ CFU/Gm
<i>Azotobacter chroococcurr</i>	2.2 x 10 ⁷ CFU/Gm
<i>Bradyrhizobium denitricians</i> .	2.2 x 10 ⁷ CFU/Gm

In the final liquid form, contains no less than 650 billion total colony forming units (CFUs) per gallon (6.5 x 10¹¹ CFU/gal) of soil health microbes (1 gm = 1 ml).

ROYALGREEN™ ALL PURPOSE

Zinc (Zn)	2.00%
Magnesium (Mg).	1.00%
Copper (Cu)	0.70%
Manganese (Mn).	0.50%
Calcium (Ca)	0.50%
Boron (B)	0.20%

ROYALGREEN™ 2.5% MAGNESIUM

Magnesium (Mg)	2.5%
2.5% Chelated Magnesium	

STANDKING™ 4.0

Cytokinin (as kinetin).	0.009%
Gibberellic Acid.	0.005%
Indole-3-butyric Acid.	0.005%
Indole-3-acetic Acid.	0.005%

ROYAL GREEN™ 12-58-0 CONCENTRATE EZT

Nitrogen (N)	12.00%
Phosphorus (P)	58.00%
Potassium (K)	0.00%

ALSO CONTAINS NON-PLANT FOOD INGREDIENTS

Phosphatase.	5.0 x 10 ² μUnits/g
Mannanase	2.2 x 10 ⁶ μUnits/g

ROYALGREEN™ 9% ZINC

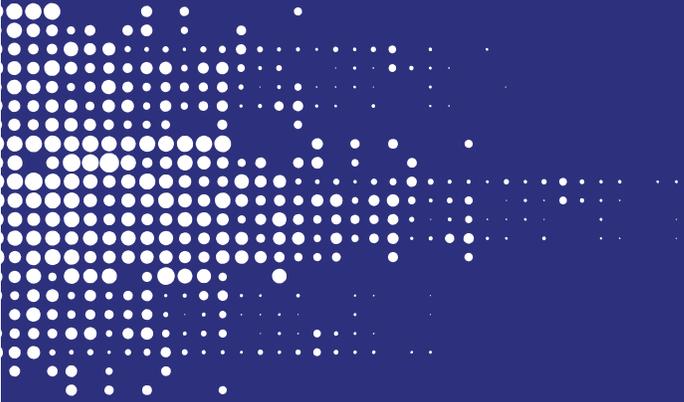
Zinc (Zn).9.00%
Derived from zinc EDTA	



CJTPOST™

SPRAY TANK ADJUVANTS

Spray Tank Additives



DEADBOLT PLUS

AMS

OUTPOST[™]
SPRAY TANK ADJUVANTS

DEADBOLT PLUS AMS

DEADBOLT PLUS AMS OUTPOST combines a blend of water conditioning agents including AMS while simultaneously controlling drift and being fully compatible with glyphosate. This combination provides a distinct advantage over other water conditioners. The rewards with this product grow when you consider all the beneficial products bundled together in this water conditioning blend. With this product you get the speed and quick mixing of spray grade liquid AMS, nonionic surfactant, and our industry best drift control.

Product Benefits

- Conditions hard water with AMS to improve herbicide performance, including glyphosate
- Helps control spray drift while maintaining coverage and deposition
- Combines liquid AMS, nonionic surfactant, and drift control in one formulation
- Quick mixing liquid formulation for consistent performance in the spray tank

Principal Functioning Agents

Polyvinyl polymer (polyacrylamide, non-reactive), ammonium sulfate, emulsifiers, nonionic surfactant.100%
Total:100%

All ingredients are exempt from tolerance requirements under 40 CFR180.1001(d)

Directions for Use

- This product has demonstrated excellent plant safety; however, not all species and varieties have been tested. Before treating a large area, treat a small area and observe prior to full scale application.
- The application rate is 1-8 quarts per 100 gallons spray solution, depending on water hardness, wind speed, and other weather conditions.
 - 1 gallon per 100 gallons has demonstrated better performance than 8 pounds of AMS.
 - Additional amounts of AMS might need to be added depending on label and percentage of water hardness.



DEADBOLT DRA

DEADBOLT DRA is a proprietary adjuvant blend containing unique drift reduction technology. This product reduces physical drift and enhances deposition and surface activity properties and retention of many agrochemical sprays. This product may be used on agricultural, forestry, turf and ornamental, and non-cropland sites.

Product Benefits

- Reduces spray drift to help keep applications on target
- Enhances spray deposition and retention on crop surfaces
- Supports more consistent coverage during application
- Designed to integrate easily into crop spray programs

Principal Functioning Agents

Methylated Seed Oil, Polyethylene Sorbitan Ester, Ethoxylated Soybean Oil and Fatty Acids. . .	.100%
Total:	100%

All ingredients are exempt from the requirements of a tolerance in 40 CFR 180.

Density: 7.43 lb/gal

Directions for Use

Read and follow the precautions, restrictions and recommendations on the labels of pesticides used with This product. Use according to the most restrictive label directions for each product in any tank mix.

GROUND APPLICATIONS

Drift Reduction:

For use with herbicides, insecticides and fungicides.

- 4-6 ounces per acre in 5-20 GPA applications.
- 6-8 ounces per acre in 20-40 GPA applications.

Deposition and Coverage for Fungicides and Insecticides:

- 2-4 ounces per acre in 5-20 GPA applications.

AERIAL APPLICATIONS (Drone, Airplane, Helicopter, etc.)

Deposition and Coverage for Fungicides and Insecticides:

- 2-4 ounces per 2-5 gallons per



FIRELOCK HS-MSO

FIRELOCK HS-MSO is a highly effective blend of methylated seed oil (60%) and quality nonionic surfactants (40%). It is designed for use with pesticides when a combination of oil and surfactant is required or preferred. Because of the concentrated surfactant load, this product can be used at lower rates than traditional oils without sacrificing performance and effectiveness. This product's unique technology increases droplet spreading, cuticle penetration, and has humectant properties that resist evaporation for increased deposition. This product utilizes a low foam technology, has enhanced crop safety and is NPE/APE free.

Product Benefits

- Improves spray coverage through enhanced spreading on leaf surfaces
- Supports better penetration to help maximize spray effectiveness
- Helps reduce evaporation for improved deposition on crops
- Designed for easy integration into crop spray programs

Directions for Use

Methylated Seed Oil, Sorbitan Fatty Acid Ester Ethoxylates and Fatty Acids100%
 Total:100%

All ingredients are exempt from the requirement of a tolerance in 40 CFR 180

Density: 7.7 lb/gal

Rate Recommendations

Ground, Aerial, Low volume, CDA:

Recommended Rate of Crop Oil Concentrate or Methylated Seed Oil	FIRELOCK HS-MSO Use Rate
1% v/v (1 gallon per 100 gallons of water)	0.5-1% v/v (2-4 quarts per 100 gallons of water)
0.5% v/v (2 quarts per 100 gallons of water)	0.25-0.5% v/v (1-2 quarts per 100 gallons of water)
2 pints per acre	1-2 pints per acre
1.5 pints per acre	0.75-1.5 pints per acre
1 pint per acre	0.5-1 pint per acre

SHOTGUN 90

NIS



SHOTGUN 90 NIS

SHOTGUN 90 NIS is a blend of nonionic surfactants and super wetting organo-siloxane surfactants that provide superior spreading and dramatically reduces surface tension in spray solutions resulting in improved wetting of leaves and other parts of plants. This product also improves uptake through penetration of cuticular waxes and stomatal flooding.

Product Benefits

- Improves spray coverage through enhances spreading and wetting
- Supports better uptake by helping spray solutions penetrate leaf surfaces
- Compatible with most agricultural pesticides and tank mixes
- Designed to integrate easily into standard crop spray programs

Principal Functioning Agents

Polyether Modified Siloxanes and Polyvinyl Alcohol	90%
Constituents Ineffective as Spray Adjuvant: . .	10%
Total:	100%

APE and NPE Free
All ingredients are exempt from tolerance requirements under 40 CFR 180.1001(d)

Density: 8.31 lb/gal

Directions for Use

1-2 quarts per 100 gallons of water. Read and follow the precautions, restrictions, and recommendations on the labels for pesticides used with this product. Use according to the most restrictive label directions for each product in any tank mix. This product may be used on agricultural, forestry, turf and ornamental and non-crop land sites.



BUCKSHOT HS-COC

BUCKSHOT HS-COC is a high-surfactant oil concentrate formulated to support spray coverage, penetration, and herbicide performance. Built with a concentrated surfactant system, it is designed to deliver consistent results at efficient use rates while maintaining ease of handling in the spray tank. BUCKSHOT HS-COC fits well in programs where oil-based adjuvants are recommended to enhance activity.

Product Benefits

- Promotes improved spreading and coverage on crop leaf surfaces
- Supports active ingredient penetration for more consistent control
- Formulated for effective performance at reduced use rates
- Maintains low-foam characteristics for easier mixing and handling
- Designed for strong tank mix compatibility
- Performs reliably under warm, dry and other challenging field conditions

Principal Functioning Agents

Paraffinic petroleum oil and Alcohol ethoxylate.100%
Total:100%
Surfactant content.	40%
Unsulfonated Oil Residue (UR) Value	>92%

Density: 7.25 lb/gal

Directions for Use

Read and follow the precautions, restrictions and recommendations on the labels of pesticides used with This product. Use according to the most restrictive label directions for each product in any tank mix.

GENERAL USE

- 3-4 pints per 100 gallons (0.375-0.5% v/v) of spray solution when herbicide labels recommend or require the use of a crop oil concentrate.
- 1 pint/acre for spray volumes below 12.5 gallons per acre.

CROP OIL CONCENTRATE (COC) REPLACEMENT RATES

- This product maybe applied 1/2 to 2/3 rate of traditional crop oil concentrate adjuvants.

AERIAL APPLICATIONS

- 8 fluid ounces per acre by air with fungicides and insecticides.



BRANDT®

Professional Agriculture™

About BRANDT

BRANDT Technology Solutions

BRANDT is a family-owned agricultural company founded in 1953 with a long history of supporting growers through practical plant nutrition and crop input solutions. Built on research, manufacturing expertise, and field experience, BRANDT continues to develop technologies designed to support crop performance across a wide range of growing conditions.

Through its partnership with Frenchman Valley Cooperative, BRANDT technologies are made available as part of a local, service-driven offering. Together, the focus remains on providing dependable solutions and straightforward support that help growers make informed decisions season after season.

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BRANDT 80/20

Premium Seed Fluency and Graphite Blend

BRANDT 80/20 is a premium seed fluency and graphite blend designed to support consistent seed flow through planter box systems. Formulated to reduce bridging and improve seed movement, BRANDT 80/20 helps maintain accurate seed placement across a wide range of planting conditions.

In addition to fluency agents, BRANDT 80/20 supplies supporting levels of Fe and Mn to complement early-season nutrition at planting.

Key Benefits

- Promotes smooth, consistent seed flow
- Helps reduce bridging and buildup in planter box systems
- Supports accurate seed singulation and placement
- Includes micronutrients to complement early-season crop nutrition



80/20 Seed fluency and graphite blend
0.7% Fe, 0.9% Mn

Application and Use

Vacuum and Feedcup Meters:

Add 1/4 cup of BRANDT 80/20 per 80,000 seeds. Increase rate for treated seed and high humidity conditions.

Product is filled by weight not by volume. Settling will occur during shipping.

80/20 Seed fluency and graphite blend
0.7% Fe, 0.9% Mn



BRANDT Liquid Molybdenum Micronutrient Supplement

BRANDT Liquid Molybdenum is a concentrated micronutrient fertilizer designed to prevent and correct molybdenum deficiencies across a wide range of crops. Molybdenum plays a critical role in nitrogen metabolism and enzyme activity, supporting efficient nutrient use and overall plant function. This formulation is suitable for soil or foliar application and is compatible with many common crop input programs.

Key Benefits

- Supports nitrogen utilization and enzyme activity within the plant
- Helps correct and prevent molybdenum deficiencies
- Flexible application options including soil, foliar, and fertigation
- Compatible with many fertilizers and crop protection products

Guaranteed Analysis

Molybdenum (Mo) 5.0%

Derived from sodium molybdate
Density: 9.2 lb/gal

Application and Use

Foliar Application: Actively growing plants with young leaves absorb foliarly applied BRANDT LIQUID MOLYBDENUM most efficiently. Immediate post-irrigation or post-rainfall application will enhance foliar uptake. Thorough coverage and wetting are needed for optimum foliar spray results.

Applications should be separated by a minimum of 7-14 days. AVOID foliar applications of this product when plants are under moisture. AVOID foliar applications to deciduous tree crops during bloom.

Dilute: For rates higher than 1.5 pints per acre, split applications of 1.5 pints or less are preferred to minimize phytotoxicity.

Concentrates: Use up to 1.5 pints in a minimum of 25 gallons of water per acre.

Aerial: Up to 1.5 pints per 5 gallons of spray may be used, but more dilute solutions will improve coverage and results.

Soil Application: The lower rates are for field, row and vegetable crops. The higher rates are for fruit, tree and vine crops.

- Soil Fertility Maintenance..... 0.5-1 pint/acre
- Mild Deficiency1-2 pints/acre
- Severe Deficiency2-3 pints/acre

Fertigation: Apply the recommended amount of product in split applications 1-2 weeks apart throughout the growing season.



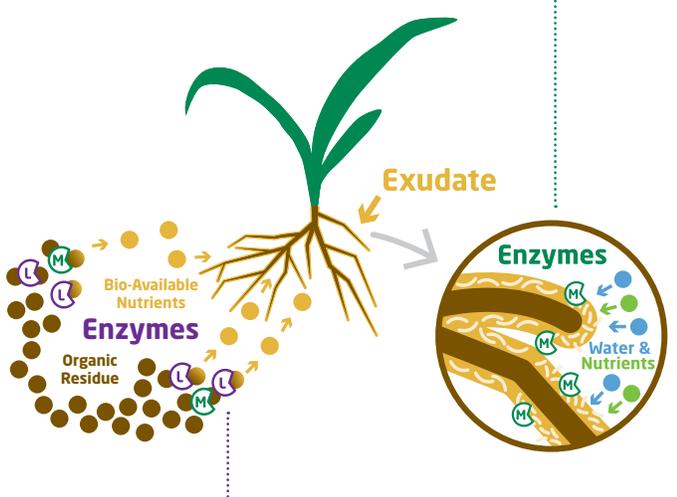
BRANDT® EnzUp® SeedFlow™ Zn

Enzyme Seed Fluency with Zinc



BRANDT EnzUp SeedFlow Zn combines three technologies into one convenient product for planter box applications. The enzyme technology improves plant health and vigor through increased water and nutrient uptake. The SeedFlow technology is designed to provide zinc directly to the seed. Zinc is critical for seed viability and promotes early root and shoot growth. BRANDT EnzUp SeedFlow Zn also contains a seed fluency agent that results in less planting skips and better seed singulation.

Mannanase enzyme - breaks down starches in the exudate that surrounds the outermost layer of the root tips. This draws water and nutrients to the root zone and releases sugars to the plant. This boosts root growth and increases microbial activity.



Lipase enzyme – its primary function is to break down lipids in root exudates and organic residue in the soil allowing for better water flow and nutrient uptake by the roots.

Functioning Agents

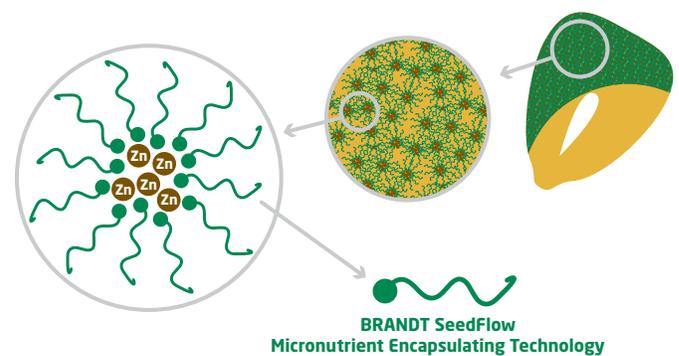
Graphite	20%
Talc	30%
Zinc	4%
Fe	0.7%
Mn	0.9%

ALSO CONTAINS NON-PLANT FOOD INGREDIENTS:

Mannanase	1.0 x 10 ⁸ µUnits/mL
Lipase	2.0 x 10 ³ µUnits/mL

BRANDT SeedFlow technology dry powder micronutrient encapsulation for improved seed retention and fluency.

- Film forming dry powder
- Improves retention of micronutrients to the seed
- Improves overall seed fluency properties
- Reduces dust-off and residual build-up in planters
- Natural and biodegradable





BRANDT® EnzUp® Zn

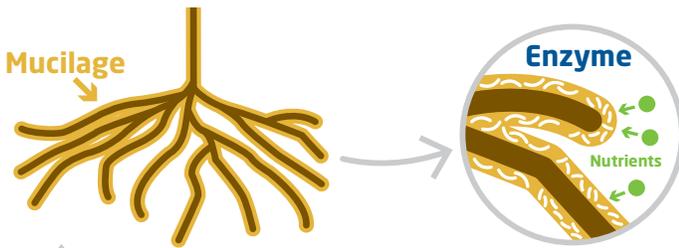
Concentrated Liquid Enzyme and Nutrient Solution

BRANDT ENZUP ZN is a concentrated, proprietary liquid enzyme and nutrient solution designed for use alone or with in-furrow or banded starter fertilizer applications to boost nutrient efficacy.

It is an excellent tool for improving soil health and enhancing yield, boosting soil microbial activity and getting plants off to a strong start early in the season. BRANDT ENZUP ZN rapidly disperses 100-1200x more enzymes than what is naturally present in the soil, which helps boost soil microbial activity and nutrient uptake. It is recommended for use on row crops including corn, cotton, sorghum and soybeans.

Patent Pending Enzyme Technology

BRANDT ENZUP ZN rapidly disperses a high volume of two enzymes into the soil, which interacts with the outermost layer of the roots, the mucilage layer, and creates a draw for more water and nutrients towards plant roots. The enzymes in this formulation have been stabilized using a proprietary, patent pending process that speeds up plant response and efficacy, making it more effective than other enzymes and microbial products.



BRANDT ENZUP ZN enzymes interact with the outermost layer of the roots to draw in more water and nutrients towards the root zone

Guaranteed Analysis

Zinc (Zn)..... 4.0%
4.0% Chelated zinc

Derived from zinc EDTA.

ALSO CONTAINS NON-PLANT FOOD INGREDIENTS:

Lipase..... 2.0 x 10³ µUnits/mL
Mannanase 1.0 x 10⁶ µUnits/mL

Density: 9.7 lb/gal

Key Benefits of BRANDT ENZUP ZN

- Increases water and nutrient uptake
- Reduces rates of NPK starter fertilizers needed
- Optimizes NPK starter application efficacy by enhancing and speeding up the plant's nutrient uptake and metabolism
- Delivers 100-1200x more enzymes to the soil
- Formulation rapidly diffuses in the soil and performs consistently across varying soil types
- Naturally derived, green technology

The Importance of Enzymes in Plant Health

Enzymes are small proteins made by plants, microbes or other organisms in the soil that perform chemical reactions. They act as catalysts to breakdown organic matter in the soil and release plant available nutrients.

Enzymes also play a role in many biochemical processes that occur in the soil:

- Nitrogen fixation and conversion
- Urea and organic matter breakdown and availability
- Carbon cycling
- Pesticide degradation



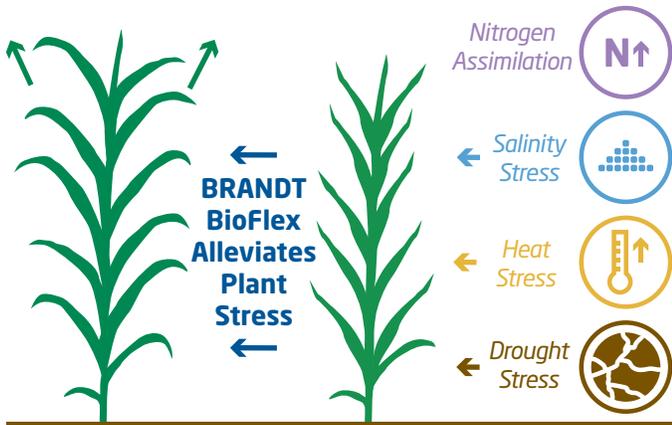
BRANDT BioFlex

High Performance Biostimulant

BRANDT BioFlex combines the resilience-enhancing properties of phytosterols and fulvic acid to improve plant performance under environmental stresses such as heat, salinity, and drought.

BRANDT Bio-Flex Advantages

- **Protects Plants from Stress:** Helps crops bounce back from heat and drought with improved water use and stress tolerance
- **Boosts Growth:** Supports strong root and shoot growth
- **Improves Photosynthesis:** Keeps leaves green and photosynthesis active for better energy production and yield
- **Prevents Damage:** Reduces cell damage by neutralizing harmful stress compounds
- **Better Nitrogen Use:** Enhances nitrogen absorption and use, improving growth in stressful environments



Principal Functioning Agents

1,2,3-Propanetriol, fulvic acid, alkyl polyglucoside, phytosterols	80%
Constituents Ineffective as Spray Adjuvant	20%
Total	100.0%

All ingredients are exempt from the requirements of tolerance as specified under Title 40 CFR part 180. 25% Fulvic Acid and >180 ppm Encapsulated Phytosterol 18% Surfactant Content

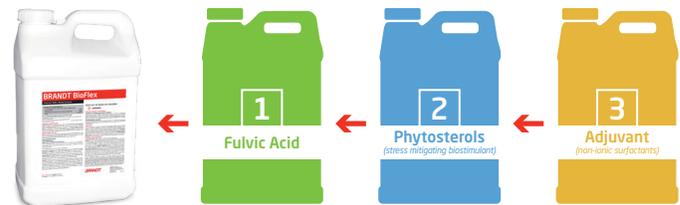
Application and Use

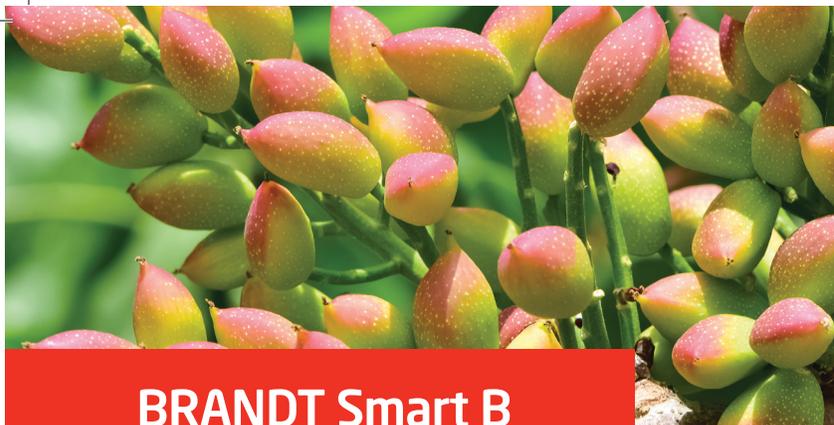
Abiotic Stress Mitigation Applications:

Ground Rig Application: Use a minimum rate 1 to 4 pints per 100 gallons.

Aerial Application: Use 6 fl oz per acre in a minimum of 2 gallons of spray solution per/acre.

Non-Ionic Surfactant for crop protectants and or a carrier for foliar fertilizers or PGRs: 2 to 4 pints per 100 gallons of spray solution is sufficient to replace most 80-20 and 90-10 non-ionic surfactant loads.





BRANDT Smart B

Advanced Nutrient Delivery Technology

BRANDT Smart B is a highly-efficiency foliar boron formulation within the proven BRANDT® Smart System® product line. This formulation delivers boron to support in-season nutrient availability. BRANDT Smart B provides up to 8x more efficiency and mobility than 10% boron. Built on advanced Smart System technology, it is designed for use in complex tank mixes to support efficient nutrient delivery in modern practices.

Key Benefits of BRANDT Smart B

- **Advanced Nutrient Delivery:** Smart System technology supports efficient nutrient uptake within the plant
- **Highly Available Nutrients:** Formulated to keep boron available and mobile within the plant to support reproductive development and nutrient utilization
- **pH-Stable Formulation:** Low salt index and low impurities help reduce crop response risk
- **Tank Mix Compatible:** Designed for use in complex tank mixes to support efficient nutrient delivery

Plant Nutrient Functions

The nutrient composition is selected to support key physiological processes in crops.

Boron: Supports cell wall integrity, reproductive development, carbohydrate movement, and overall plant structure

Guaranteed Analysis

Boron (B)	5.0%
5.0% Water soluble boron	

Derived from boric acid.

Density: 10.6 lb/gal

Application Recommendations

Foliar Applications

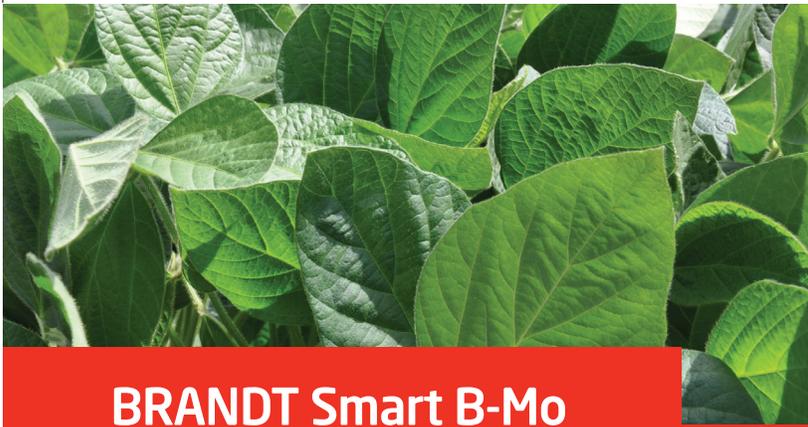
Field Crops, Row Crops, Vegetables and Small Fruit: Apply 0.5-1 pint per acre per application throughout the growing season. More frequent applications at 1 pint per acre may be needed to correct deficiencies once they occur.

Fruit and Nut Tree Crops: Apply 1-4 pints per acre per application throughout the growing season. More frequent applications at 2 pint per acre may be needed to correct deficiencies once they occur.

Ornamentals: Apply 1-2 pints per 100 gallons water. Cover foliage thoroughly to point of runoff.

Soil Applications

All crops: Use 1-3 quarts per acre.



BRANDT Smart B-Mo

Advanced Nutrient Delivery Technology

BRANDT Smart B-Mo is a foliar boron and molybdenum formulation built on proven BRANDT® Smart System® technology. This solution delivers boron and molybdenum through a protected delivery platform designed to improve nutrient uptake and in-plant mobility. Engineered for use in complex tank mixes, BRANDT Smart B-Mo helps ensure nutrients remain available in the spray solution and efficiently reach the crop's growing points to support reproductive development and in-season performance.

Key Benefits of BRANDT Smart B-Mo

- **Protected Nutrient Delivery:** Smart System technology helps prevent nutrient tie-up in the tank, supporting consistent delivery into the plant
- **Targeted Nutrient Support:** Provides highly available boron and molybdenum to support reproductive development, nutrient utilization and carbohydrate movement
- **Enhanced Uptake and Mobility:** Designed to improve foliar absorption and support movement to active growing points
- **Tank Mix Compatible:** Low salt index formulation designed for complex tank mixes to support crop safety and consistent nutrient delivery

Plant Nutrient Functions

The nutrient composition is selected to support key physiological processes in crops:

Boron: Supports cell wall integrity, reproductive development, and carbohydrate movement within the plant

Molybdenum: Supports nitrogen utilization and metabolic processes essential for plant growth

Guaranteed Analysis

Boron (B)	5.0%
5.0% Water soluble boron	
Molybdenum (Mo)	0.5%

Derived from: boric acid and sodium molybdate.

Density: 10.7 lb/gal

Application Recommendations

Foliar Applications

Field Crops, Row Crops, Vegetables and Small Fruit: Apply 0.5-1 pint per acre per application throughout the growing season. More frequent applications at 1 pint per acre may be needed to correct deficiencies once they occur.

Fruit and Nut Tree Crops: Apply 1-4 pints per acre per application throughout the growing season. More frequent applications at 2 pint per acre may be needed to correct deficiencies once they occur.

Ornamentals: Apply 1-2 pints per 100 gallons water. Cover foliage thoroughly to point of runoff.

Soil Applications

All crops: Use 1-3 quarts per acre.

Aerial (plane, helicopter & drone) Applications: Apply 1-2 pints per acre. When applying fungicide and insecticide chemistries be sure there is sufficient water volume to properly disperse products. Disperse suspension concentrate and emulsion concentrate based products prior to adding BRANDT Smart B-Mo.



BRANDT® Sequestar® 9% Zn EDTA Chelated Micronutrient

BRANDT Sequestar 9% Zn is a fully chelated zinc fertilizer designed to prevent and correct zinc deficiencies as part of a balance fertility program. Formulated with EDTA-chelated zinc, it delivers reliable zinc availability across a wide range of soil conditions and cropping systems. This product is suitable for both and foliar applications and can be used across many crop types.

BRANDT Humic 12 Advantages

- Provides fully chelated zinc for improved nutrient availability
- Helps prevent and correct zinc deficiencies across crop types
- Flexible use through soil, foliar, and irrigation applications
- Compatible with balanced fertility and crop protection programs

Application and Use

Soil Application: BRANDT SEQUESTAR 9% Zn is recommended for use on all types of soils. Because this is a concentrated solution, it should be diluted before use to ensure uniform coverage. Soil applications may be made by drip, sprinkler or furrow irrigation systems or in band or broadcast fertilizer applications. For trees or individual plants, the product may be diluted as above or sprinkled directly on the soil uniformly under the plant's drip line, then watered in. NOTE: The rates given below are based on broadcast application. If broadcast rates are used for spot or banded applications, phytotoxicity may result.

Guaranteed Analysis

Zinc (Zn) 9.0%
9.0% Chelated zinc

Derived from zinc EDTA

Density: 10.9 lb/gal

Field, Row, Vegetable Crops: Apply 2-8 quarts per acre.

Fruit, Tree and Vine Crops: Apply 2-10 quarts per acre or 1 to 4 Tbsp per inch of tree diameter.

Ornamentals: Apply 2 Tbsp for small shrubs and up to 2 Tbsp per inch of tree diameter for large trees and shrubs.

Turf: For professional use apply to only actively growing turf. Apply 4 oz per 1,000 sq. ft. or 1.5 gallons per acre.

Foliar Application: Avoid applying this product when plants are suffering from moisture stress. If there is any doubt, apply the spray solution to a small test area of the crop or foliage to assess any undesirable effects or phytotoxicity before general application.

Field, Row, Vegetable Crops: Apply 1-2 pints per acre in a minimum of 20 gallons water.

Fruit, Tree and Vine Crops: Apply 1-2 pints per acre in a minimum of 25 gallons water. For smooth skinned fruit apply 1 pint per acre in 50-100 gallons of water.

Citrus: Apply 1-2 pints per 100 gallons of cover spray any time except during bloom.

Aerial: Apply 0.5-1 pint per acre in at least 10 gallons of water.



BRANDT Humic Plus Modified Humic Acids

BRANDT Humic Plus is a high-performance, modified humic acid formulated for superior compatibility with NPK fertilizer solutions. With 10% humic acid and a 4-0-1 nutrient profile, this advanced formulation improves nutrient delivery and supports efficient uptake during critical growth stages. Unlike traditional humate liquids, BRANDT Humic Plus remains in solution with phosphate-based fertilizers, making it an ideal addition to starter blends and foliar applications across a variety of crop systems.

BRANDT Humic Plus Advantages

- Contains 10% modified humic acid for enhanced charge and performance
- Formulated to stay in solution with NPK fertilizers—no precipitation
- Includes a 4-0-1 nutrient analysis with added sulfur for improved nutrient efficiency
- Fully compatible with phosphate fertilizers like 10-34-0 and 11-37-0
- Effective in foliar and soil applications across a wide range of crops
- Supports nutrient delivery and root uptake in early growth stages

Guaranteed Analysis

4-0-1

Total Nitrogen (N)	4.0%
4.0% Ammoniacal nitrogen	
Soluble Potash (K ₂ O)	1.0%
Sulfur (S)	4.0%
4.0% Combined sulfur	

Derived from ammonium sulfate and potassium hydroxide.

ALSO CONTAINS NONPLANT FOOD INGREDIENT:

10% Humic acids derived from leonardite ore

Density: 9.7 lb/gal

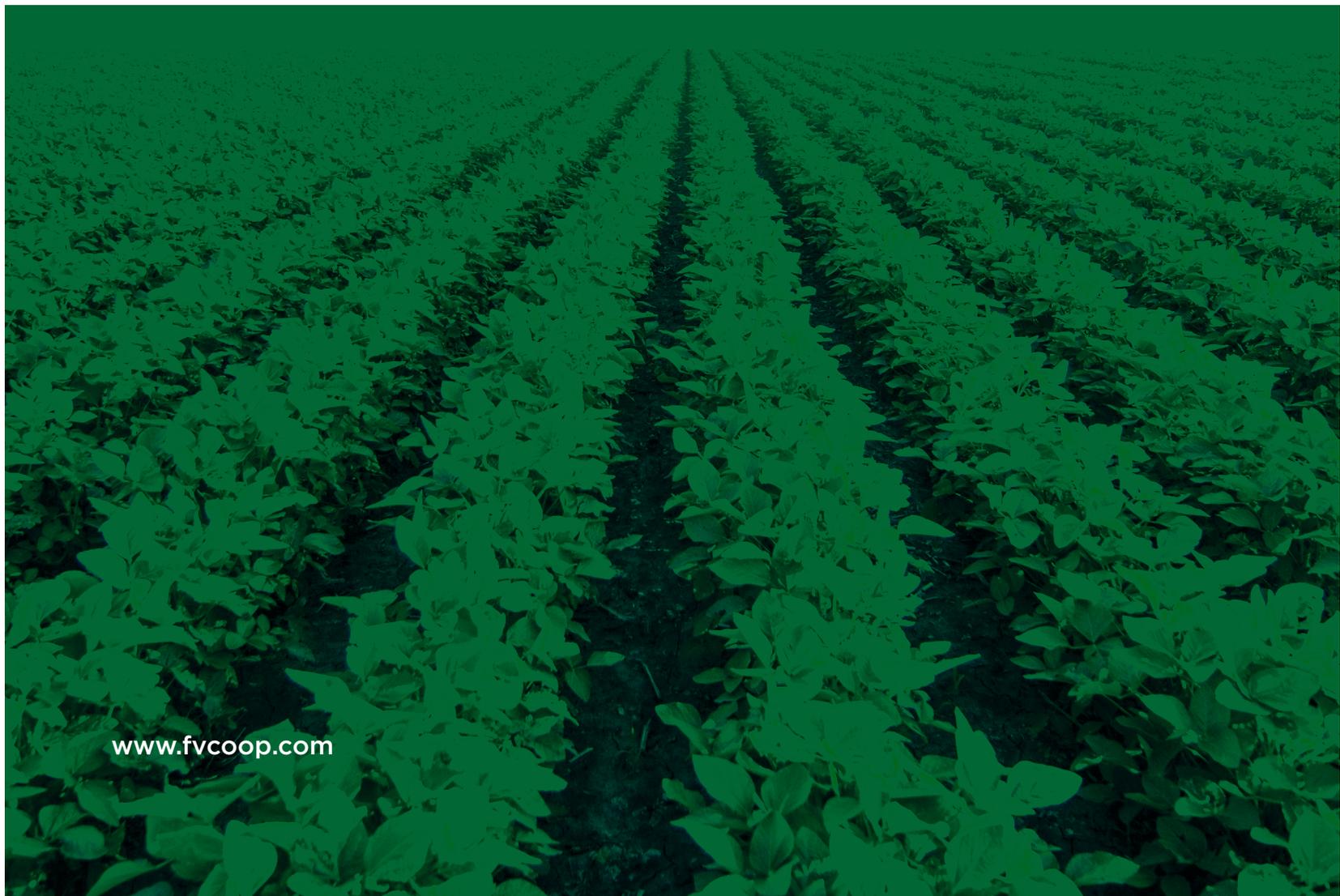
Application and Use

Foliar Application

Ground: Apply 1-4 pints per acre in a minimum of 10 gallons of water per acre and repeat as needed

Aerial: Apply 1-2 pints in a minimum of 2 gallons of water per acre and repeat as needed

Soil Application: Add 1-4 pints of this product per 5-10 gallons of liquid NPK fertilizer solution and mix thoroughly. Apply this mixture in accordance with standard NPK fertilizer practice.



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