



# AGRONOMY GUIDE



www.ottawacoop.com

2025

# **Contacts**



Bob Nutt Crop Production Manager	785-418-5031
Cal Wenger Seed Manager	620-504-2135
Curtis Hutchison Agronomy Logistics Manager	785-242-1032
Abby Colwell Precision Agronomy Manager	913-755-8193
Mike Beying Sales Agronomist	785-447-3384
Scott Jones Sales Agronomist	620-341-2037
Cody Crim Sales Agronomist	660-988-5679
Alex Barker Sales Agronomist	816-244-3354
David Bartman Sales Agronomist	913-244-3971
Lindsey Sylvester Conservation Agronomist/Truterra	785-893-2594







For more information contact: Lindsey Sylvester at 785-242-5170 ext. 203

# 2025 Truterra® Carbon Program

PROVIDING A PATHWAY TO INCENTIVES FOR RECENT PRACTICE ADOPTERS

The **2025 Truterra® carbon program** may help eligible farmers offset some of the financial risk associated with the transition to conservation agriculture practices and reward them for the environmental impacts produced by improved land stewardship.

2025 Truterra® carbon prog	ram
FARMER INCENTIVE	\$30 per metric ton* with a \$2 per acre minimum. Minimum payments will be applied at whole-farm level, not a per-field level.
ELIGIBLE PAYMENT YEAR(S)	Farmers will be paid on tonnage from CY2025 only
ENROLLMENT PERIOD	Eligible re-enrolling farmers: Dec 4, 2024 – March 31, 2025 New farmers: Dec 11, 2024 – March 31, 2025, <b>or until program enrollment cap is met</b>
DUAL ENROLLMENT	Fields may be enrolled in this program plus the Truterra® early adopter – a USDA supported program or another publicly funded program. Fields must meet eligibility requirements for all programs enrolled.
FIELD ELIGIBILITY EQUIREMENT	TS
GEOGRAPHIES	Region 1: IA, IL, IN, NE Region 2: Al, KS, KY, MI, MN, MO, OH, TN Region 3 (open to re-enrollments only): AR, GA, LA, MD, MS, ND, OK, PA, SD, TX, WI
CROPS (2025 CASH CROP)	Corn (grain only), soybeans, wheat (grain only) "Fallow" or other crop type may appear as cash crop no more than 2 times between 2019-2024
FIELD SIZE	10-acre minimum N/A
FARMER ENROLLMENT CAP	N/A
PROGRAM ENROLLMENT CAP	1.5 million acres, available on a first-come, first-serve basis Region 1: 1.125 million acres maximum Region 2: 375,000 acres maximum Region 3: N/A (re-enrollments only)
FIELD PRACTICES	Strip/no-till and/or_use of cover crops in CY2025 • Fields with practice reversals between CY2023 and CY2025 are not eligible. Legacy acres with practice reversals in CY2025 are not eligible (previously contracted reversals do not cause ineligibility). • For the 2025 Truterra® carbon program, "no-till" includes a single tillage pass that disturbs no more than 1/3 of the surface area (strip till), or a single pass (1-3 inches deep) of either seedbed preparation, post-planting cultivation, or fallow tillage.
PRACTICE CHANGE YEAR(S)	2023, 2024, 2025 Re-enrolling fields may enroll with eligible practices implemented in CY2022
PAYMENTS AND CONTRACTING	
CONTRACTED YEAR	2025

CONTRACT LENGTH	One year contract + 5 future data reporting years (2026-2030)
ESTIMATED PAYMENT TIMELINE	Q2 2026
DATA REQUIREMENTS	
DATA COLLECTION YEARS	2019-2025
DATA COLLECTION DEADLINE	Historical years: April 30, 2025 CY2025: December 1, 2025

<sup>\*</sup>Metric tons qualified for payment will be further identified in your vintage year enrollment schedule.

For qualified farmers to participate in the 2025 Truterra® carbon program, farmers will need to provide the following data points for each field enrolled:

# CY2019-2025 require the following data points:

WINTER CROP (COVER CROP)	TILLAGE	SUMMER CROP (CASH CROP)	FERTILIZER APPLICATIONS
Crop type	Type (depth) of each pass	Crop type	Product & type
Planting date	Date of each pass	Planting date	Application date(s)
Harvest/termination date		Harvest/termination date	Rate (field average)
Yield (field average) if harvested		Yield (field average)	Total N, P, K applied
Termination method		Residue removal	Additives used
Residue removal			

Additional data points collected may include residue removal, conservation practices, pest management strategies, irrigation, drainage, and/or grazing headcount/duration.

How to get started: Visit Truterraag.com/enroll or scan the QR code to complete our pre-enrollment form today.



# Nitrogen Stabilizers







Nitrogen stabilizer for Anhydrous

# What N-Serve does:

- Reduces Nitrogen loss
- Improves standability
- Provides healthier corn and consistently higher yields
- Reduces risk of stalk rot
- Enables quicker crop dry down
- Reduces leaching of nitrates and denitrification
- Keep nitrogen available for corn crop
- Helps protect water quality

Use N-Serve with anhydrous ammonia is fall and spring by adding 1 qt. per acre.



# **Side by Side Trial**



With N-Serve

Without N-Serve





# PROTECTS NITROGEN AT THE PLANT ROOT ZONE

# NITROGEN STABILIZER

# N-Serve® Nitrogen Stabilizer

- · Active ingredient is nitrapyrin
- Oil based formulation that mixes well with anhydrous ammonia
- Optimizes yield potential of corn when used with anhydrous ammonia
- · Proven and trusted technology for over 35 years

### How Does N-Serve® Work?

N-Serve® inhibits the Nitrosomonas bacteria in the soil keeping Nitrogen in the stabile ammonium form longer and protected from leaching and denitrification.



### **Application Rates**

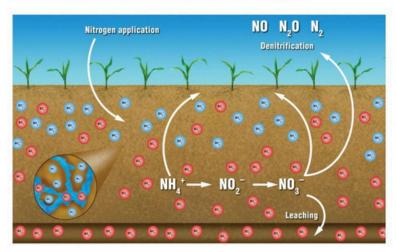
Fall applications

1 quart per acre

### Spring applications

Pre-emerge: 1 quart per acre Sidedress: 0.5 to 1 quart per acre

# What Happens to Unstabilized Nitrogen?



### When Do Nitrogen Losses Occur?

Most Nitrogen Losses occur during the Spring:

- Spring Rains and warm soil temperatures lead to heavy losses through both leaching and denitrification.
- Stabilizing with N-Serve® greatly reduces both leaching and denitrification protecting nitrogen in the root zone.

### Stronger, Healthier Plants

- · Increased yield
- · Improved standibility
- · Reduced risk of stalk rot
- · Increased grain protein
- Faster crop drydown

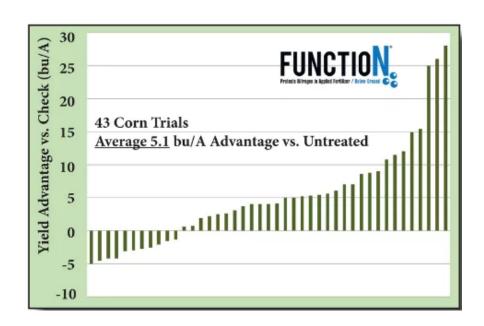
For more information about N-Serve® visit www.NitrogenStabilizers.com or contact your local Dow AgroSciences sales representative.



# Protects applied nitrogen from below ground losses.

Function is a proprietary DCD formulation with a unique solvent system, easy-to-use and patent pending formulation. Keep your nitrogen available at crucial growth stages.

Roughly 80% of a corn plant's total nitrogen need occurs 75 days after emergence!





Use Rates

Rate: 1.5-3 pt/A 9.7 lbs/gallon pH 7.7



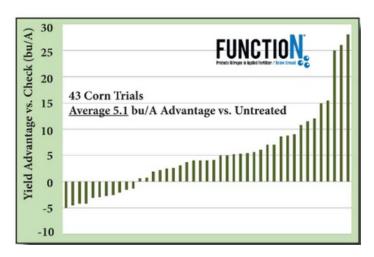
# Protects applied nitrogen from below ground losses.

FunctioN is a proprietary DCD formulation with a unique solvent system, easy-to-use and patent pending formulation. Keep your nitrogen available at crucial growth stages.

Roughly 80% of a corn plant's total nitrogen need occurs 75 days after emergence!



Use Rates Rate: 1.5-3 pt/A 9.7 lbs/gallon pH 7.7



# **Anhydrous Ammonia Applications of FunctioN**

- Non- Corrosive, excellent cold weather handling, NRCS approved
- Can be pumped through most commercial NH3 injection systems
- Can be used in any sidekick system on the market

Switching Nitrification Inhibitors in an Injection System

- 1. Previous Nitrification Inhibitor
- 2. Rinse with Diesel
- 3. Rinse with UAN
- 4. FunctioN









REGION

All regions

CROP

All crops

TIMING

Season long

RATE

See label

PACKAGE

2.5 Gal., 265 Gal. tote

N-Charge\* G uses patented Verdesian T5 polymer technology to make applied nitrogen (N) more available to the plant, supporting in-season Nitrogen Use Efficiency. N-Charge G increases nitrogen uptake throughout the growing season.

### WHY N-CHARGE G?

**NUTRIENT AVAILABILITY:** Polymer technology acts as an exchange resin, supporting in-season improvement of Nitrogen Use Efficiency

NUTRIENT ACCESSIBILITY: Increased availability of ammonium to the plant during peak Nitrogen use increases Nutrient Use Efficiency

**NUTRIENT UPTAKE:** Increases total Nitrogen uptake during the growing season to maximize grower Return on Investment (ROI)

# RETURN ON INVESTMENT (ROI)

CORN PRICE	\$3.00	\$3.50	\$4.00	\$4.50
EXPECTED GROSS RETURN	\$28.20	\$32.90	\$37.60	\$42.30
N-CHARGE G COST	\$12.00	\$12.00	\$12.00	\$12.00
NET RETURN	\$16.20	\$20.90	\$25.60	\$30.30
RETURN (ROI)	1.4x	1.7x	2.1x	2.5x

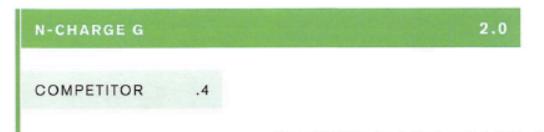
200 bu target com. Assume 300 b N Urea applied and N-Charge G cost of \$12. All 2018-2019 3rd party and retail trials included. N=31

### IMPROVED NITROGEN USE EFFICIENCY

- N-Charge G has an impact to improve Nitrogen Use Efficiency by reducing the effects of nitrogen loss (as demonstrated by Partial Nutrition Balance (PNB) and Agronomic Efficiency metrics)
- Forty-three 2018-2020 third party Contract Research party trials across eight states with 207 replicates delivered a 2.9% increase (all sites) in corn yield
- 70% win rate vs. Competitive Nitrogen Stabilizers: 14 wins and 6 losses vs. competition, delivering 1.6% (3.3 bu/A) advantage vs. competition across 20 trials
- Proprietary T5 polymer improving nitrogen efficiency (more gain vs. competitive nitrogen stabilizers from every unit of N when treated with N-Charge G)

#### PROOF OF PERFORMANCE

Average % Increase in Corn Yield Vs. Fertilizer Control (43 sites, 207 replications) Bu/Ac



ASK US ABOUT THE VERDESIAN PERFORMANCE GUARANTEE

Important: Always read and follow label use directions. All TMVR © 2022 Verdesian Life Sciences. All rights reserved, VLS 22,0306

> VLSCI.COM 800-868-6446

# **NUTRISPHERE-N°HV**

# A **VERDESIAN** NUE SOLUTION™

NutriSphere-N® HV Nitrogen Liquid Fertilizer Manager keeps more nitrogen available for plant uptake and impacts all three forms of N loss. This helps contribute to higher yield potential and can reduce the amount of nitrogen that winds up in surface or ground water through runoff and leaching.

#### **CHEMISTRY**

- Shields nitrogen on a molecular level by inhibiting enzymes and keeping more nitrogen in the more immobile ammonium form for a longer period of time
- · Provides long-lasting protection against volatilization and leaching
- · Provides long-lasting protection for high volume liquid fertilizers

### **KEY BENEFITS**

- · Formulated specifically for liquid nitrogen fertilizers
- · Protects against three forms of nitrogen loss
- · Protects soil health and water quality

#### HANDLING AND APPLICATION

- NutriSphere-N HV was designed for high-volume UAN application rates of 15 gallons per acre or greater
- · Easy to use, easy to handle
- · Easy application via applicator or fertigation

#### OTHER KEY POINTS

- · Used on more than 46 million acres in 40 states
- · 3.6 ROI in responsive sites



REGION



CROP
Row and Specialty Crops



TIMING

Preplant, Post Plant Broadcast, Sidedress, Post Direct (Y-Drop)



.64 oz/gal UAN up to 18 oz./ac.





**ASK US ABOUT THE VERDESIAN** 



800-868-6446 | vlsci.com

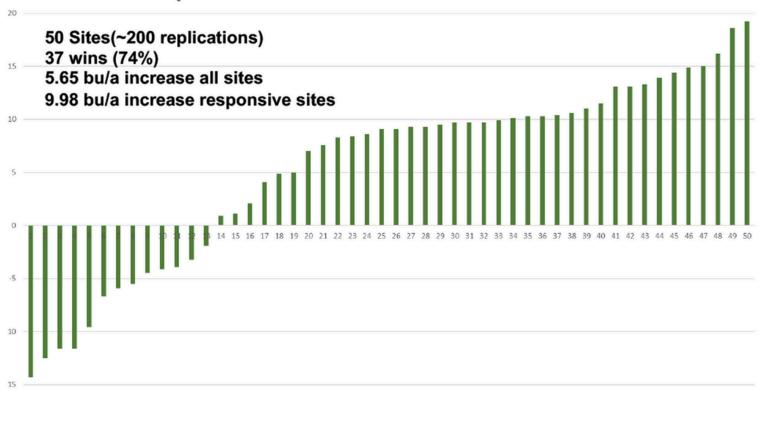
#### UNTREATED CHECK 60GPA 28-0-0-5

#### NUTRISPHERE-N HV 180Z/A 60GPA 28-0-0-5





# NutriSphere-N and HV combined Trials 2013-2017





**ASK US ABOUT THE VERDESIAN** 



800-868-6446 | vlsci.com

# AVAIL75

### A VERDESIAN NUE SOLUTION™

AVAIL® T5 uses patented polymer technology to make applied phosphorus (P) more available for plant uptake, speeding early growth, making crops healthier and boosting yields — while continuing to reduce the amount of P lost to the environment. The improved formulation also means better handling, storage and ease-of-use.

### IMPROVED PHOSPHORUS EFFICIENCY

- · More phosphate uptake means stronger roots/shoots and better early performance
- · Better stress tolerance for early-season performance
- · On average, 45% more P available depending on soil type

### POWERED BY NEW GENERATION T5 (TETRA) POLYMER

- More Effective Charge (8-24% in agronomic pH range)
- AVAIL T5 has a negative charge that provides the material with a high cation exchange capacity (CEC), about 4x that of humic acids
- · Enhanced 3D polymer structure

### IMPROVED FORMULATION AND APPLICATION

- · Improved efficacy across range of soil pH and more consistent across all soil types
- · Better handling, storability, and ease-of-use
- · Use to treat broadcast, banded, and in-furrow Phosphorus applications
- · Available in both liquid and granular formulations



REGION Midwest



Corn, cereals, soybeans and cotton



TIMING
Pre-season, Planting, In-Season



Granular: 2 qt./ton Liquid: 2 qt./100 Gal.





**ASK US ABOUT THE VERDESIAN** 



800-868-6446 | vlsci.com

### AVAIL T5 G: USE GUIDELINES FOR GRANULAR P FERTILIZER AT FULL RATE

-11	SOIL TEST PHOSPHORUS RATING				
рН	Very Low	Low	Medium	High	Very High
< 5.0	5	5	4	3	3
5.1-5.7	5	5	4	3	2
5.8-6.2	5	4	3	2	2
6.2-6.8	3	3	3	2	1
6.8-7.4	5	4	3	2	2
7.4-8.0	5	5	4	3	2
> 8.0	5	5	4	3	3

FULL RATE PHOSPHORUS			
AVAIL T5 ROI Rating	Expected Probability of Positive ROI	Expected ROI	
5	>95%	5x +	
4	>90%	3x-5x	
3	>80%	2x-4x	
2	>60%	1.5x-2x	
1	> 40%	.5x-1.5x	

### 2018 CORN DEMO TRIALS FROM 30 SITES (79% WIN RATE):









PERFORMANCE
GUARANTEE

800-868-6446 | vlsci.com

Important: Always read and tollow label use directions.

All trademarks and registered trademarks © 2019 Verdesian Life Sciences.

All rights reserved. VLS 19.0183





MicroSync Pro™ Granular Micronutrient Fertilizer is formulated for use in broad acre crops and designed to be blended with NPK granular fertilizer programs. This combination micronutrient formulation is a free flowing, low dust, and uniform granular fertilizer, which contains a unique combination of Sulfates and Sucrates for enhanced microbial activity and bioavailability. MicroSync Pro boosts soil fertility programs by providing a superior balance of nutrients precisely formulated to prevent or correct micronutrient deficiencies.

#### WHY MICROSYNC PRO?

- Verdesian Polymer Technology and carboxylates synergize micronutrient and sulfur availability for plant uptake
- Nutripaction® Technology Uniformly blended combinations of finely divided particles compacted together produces homogeneous granules consistent in particle size and analysis. In the soil, Nutripaction® granules are activated by soil moisture creating millions of particles within the root zone for conversion and uptake
- Balanced nutrient formulations designed with your crop in mind, delivering three critical micronutrients and sulfur
- Ideal for blending with NPK fertilizers with an ideal spread pattern at 10-40 lbs. per acre
- Matches particle size and bulk density of most dry fertilizers for a more uniform distribution of critical nutrients

### **DIRECTIONS FOR USE:**

MicroSync Pro is intended for use in mixing or blending with other fertilizer materials. This product is recommended for correction of multiple deficiencies, as determined by tissue analysis and soil testing, on any agricultural or horticultural crop where a deficiency of Boron, Manganese and/or Zinc may exist. When deficiencies exist, use the following table or consult your local agricultural extension professional or your local professional consultant. This product is for soil application only.

#### Amount of MicroSync Pro per Acre will provide "x" lbs of nutrient per acre

	10 Lbs/Acre	20 Lbs/Acre	30 Lbs/Acre	40 Lbs/Acre
Sulfur	0.95	1.90	2.85	3.80
Zinc	0.75	1.50	2.25	3.00
Manganese	0.50	1.00	1.50	2.00
Boron	0.12	0.25	0.37	0.50



#### **GUARANTEED ANALYSIS:**

Calcium (Ca) 7.0%
Sulfur (S)9.5%
Boron (B) 1.25%
Manganese (Mn)5.0%
Zinc (Zn)

Derived from: Ammonium Sulfate, Calcium Sulfate, Sodium Borate, Manganese Sucrate, Manganese Sulfate, Zinc Sucrate and Zinc Sulfate

### APPLICATION RATES PER ACRE:

MILD deficiency 10-15 lbs.

MODERATE deficiency 15-25 lbs.

SEVERE deficiency 25-40 lbs.

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein.

NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

Micro Products, Macro Results®

vlsci.com | 800.883.0010

#### Tomorrow's Science Delivering Today's Returns

WARNINGI Excessive amounts of Boron may cause injury to crops. This product is intended for use in further blending with agricultural grade fertilizers and should be applied evenly. Application equipment should be calibrated to insure targeted rates of application. Information regarding the contents and levels of metals in this product is available on the internet at http://www.aapfco.org/metals.htm MicroSync Pro is a trademark and Nutripcation is a registered trademark of Verdesian Life Sciences. Important: Always read and follow label use directions. © 2017 Verdesian Life Sciences. All rights reserved. VLS 17.0391





# Take Off LS

BUILD BIGGER PLANTS FROM THE INSIDE OUT



Plant health is the key to higher yields.

Set your crop up for success with our revolutionary new nutrient management technology that helps build bigger, stronger plants from the inside out.

# **ENERGIZE YOUR CROPS WITH TAKE OFF LS**

It works inside the plant to increase nutrient uptake, resulting in:



Faster germination and emergence



Stronger, healthier plants



More efficient use of nutrients



Greater yield potential

# Take Off LS



#### HOW IT WORKS

By mimicking a naturally-occurring molecule that optimizes a plant's nitrogen acquisition, Take Off LS allows plants to more efficiently assimilate nitrogen and carbon to build a bigger, more vigorous plant. The end result is more overall nutrient uptake and nutrient use efficiency, leading to more bushels per acre produced per unit of nutrients applied to or present in the soil.

#### BENEFITS

A stronger, more uniform crop emergence and more rapid early growth, resulting in treated plants that have more biomass and that are one or more growth stages ahead of untreated plants by mid-season (IN-FURROW APPLICATION)

Greener, taller plants with more leaf area than untreated counterparts (FOLIAR APPLICATION)

Vigorous, darker green corn that reaches reproductive stage several days before untreated plants (SIDEDRESS-APPLIED WITH UAN)

#### PROVEN RESULTS





Trials conducted in 2016 in IA, IL, TN and WI found that soybeans and corn treated with a foliar application of Take Off LS at post-emergence yielded significantly more bushels per acre than their untreated counterparts.

### APPLICATION GUIDELINES

In-furrow applications	Foliar	Side-dress/ layby fertilizer
~	~	~
~	~	
	~	
~	~	
	~	
	~	
	Action to the second second	

Take Off LS is a flexible nutrient use efficiency product that can be applied at multiple timings, either alone or in a tank mix with commonly-used fertilizers or crop protection products.

Our data shows that the most consistent yield performance and ROI has come from applications made at planting to mid-season, regardless of the crop.

While you don't need to apply more than once per season, field experience and trial data indicate that multiple applications throughout the year can provide additional benefits in plant health and yield.

#### RECOMMENDED APPLICATION RATES

	Single application	Multiple applications
Low rate: 1 pt/ac		~
High rate: 2 pt/ac	<b>~</b>	<b>✓</b>

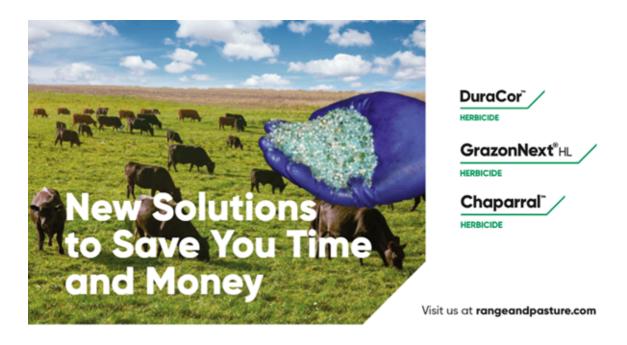


# Fall Spraying Recommendations

# **Pasture**

Remedy Ultra 1 pt/ac
Milestone 5 oz/ac
Pasturegard HL 1½ pt/ac
Grazon P+D 1 qt/ac
Tordon 1 pt/ac
Grazon Next HL 2 pt/ac
Chaparral 3 oz/ac

All products should be mixed with surfactant.













# The Proof is in the Pasture.

Fertilizer alone grows pounds of grass, but it also grows pounds of weeds. Now you can stop those weeds using UltiGraz pasture weed & feed with DuraCor\* herbicide.

It's the one-two punch for one less trip across the pasture, saving time and money.

Visit **UltiGraz.com** to learn more and find an UltiGraz retailer near you. Take advantage of the win-win you get from both technologies today.



To find your local Corteva Range and Pasture Specialist visit rangeandpasture.com/specialist



Combine Ult-Graz\*\* with your weed control solutions! For more information contact us at (785) 242-1032.

### Visit us at rangeandpasture.com

\*\*\* Insternal is of Outera Agestionor in any dissist for injuries. Under no monitoring bary cours, horses (Including a Posting and making processed in any dissist of Breaked, including a processed and making manufacture in any dissist in any diss

# **Corn Recommendations**



# **Starter for Grain**

100 bushel removal	15-38-30-10-3 with AVAIL
120 bushel removal	18-46-36-10-3 with AVAIL
140 bushel removal	21-53-42-15-3 with AVAIL
160 bushel removal	24-61-48-15-3 with AVAIL
180 bushel removal	26-68-54-15-3 with AVAIL
200 bushel removal	30-76-60-15-3 with AVAIL

# Starter for Silage

10 ton/ac 10-27-65-9-3 with AVAIL 20 ton/ac 21-54-130-18-3 with AVAIL 30 ton/ac 31-80-195-27-3 with AVAIL

# Fall Spraying

Atrazine 4L 1 qt/ac
Atrazine 90 DF 1.1 lbs/ac
Autumn Super .5 oz/ac
Valor SX 2 oz/ac
Basis blend .825 oz/ac

All products to be applied with 1 pt/ac of Dicamba or 1 qt/ac 24D LV6.

A soil sample is highly recommended to achieve the appropriate fertilizer recommendation.

# Soybean Recommendations



# **Starter**

40 bushel removal 12-32-56-10 with AVAIL 50 bushel removal 15-40-70-11 with AVAIL 60 bushel removal 19-48-84-13 with AVAIL

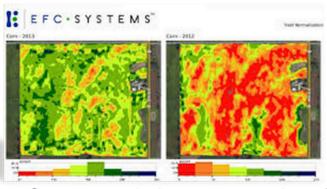
# Fall Spraying

Sonic 5-6 oz/ac
Valor XLT 3 oz/ac
Metribuzin 16 oz/ac
Blanket 4F 4-6 oz/ac
Autumn Super .5 oz/ac

All products to be applied with 1 pint/acre Dicamba or 1 quart/acre 24D LV6.

A soil sample is highly recommended to achieve the appropriate fertilizer recommendation.



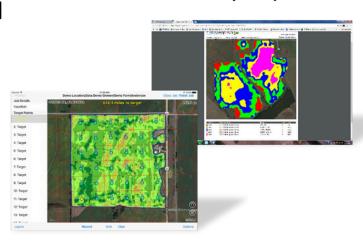


# Why Precision Farming?

- -Take inventory of fertility on each field.
- -Stop throwing fertilizer \$ where it is not needed.
- -Variable rate application technologies allow you to place the products only where needed to maximize crop productivity.
- -Utilize Yield data and make it useful in fertility, seed, and production.
- -Know the right placement of seed hybrids for maximum profitability.
- -To be an overall better manager of all farming practices.

# Solutions for Better Decision making.

- -Maximize economic yields by utilizing information based on sound decision making.
- -Utilized multi years of information trends for decision making.
- -Make hybrid/variety decisions based on your operations performance.
- -Utilize multi-layers of information in analysis process.



# **Seed Brands**















# **Cover Crops**



# **Product Options**

Cereal Rye, Turnip, Radish, Red Clover, Forage Oats 50lb bags available

# **Custom Mixes**

We can supply your seed needs for your NRCS recommendation to meet their program requirements. Contact us for pricing on your custom cover crop mix.

We can coordinate application of cover crops blended with fertilizer or stand alone either through a Ground Rig or Aerially. Application charges may apply.

Cal Wenger Seed Manager calw@ottawacoop.com 620-504-2135

# Corn Seed Treatment

Any amount of corn can be treated. All treated corn will be delivered in a black box even if only a small amount is treated.

All treated corn is non-returnable.

# **Tripidity**

- Blend of growth additives, sugars, amino acids, and micronutrients
- Enhances uniformity and quickness of germination
- Offsets early season nutrient deficiencies
- Contains an optimal combination of nutrients and plant hormones
- Reduces negative effects caused by environmental stresses
- Boosts early plant grown and development for higher yield potential

\$18/unit (Approx \$6/acre depending on plant population)

Cal Wenger Seed Manager calw@ottawacoop.com 620-504-2135



# TRIPIDITY ST

Tripidity ST biostimulant is a uniquely designed seed treatment that provides essential nutrients and biostimulant additives which can maximize early seedling vigor and crop development, for maximizing yield potential.

- Tripidity ST is a unique blend combining essential macro and micro nutrients and a proprietary blend of plant extracts to stimulate seed germination and to maximize early seedling growth and vigor. Tripidity ST also includes a balanced ratio of three hormones designed to work together to enhance seed germination and seedling establishment, provide stress reduction in cold soils, enhance cell elongation, and increase nutrient uptake for higher yield potentials.
- Multiple factors start affecting yield the moment the seed is planted. Treating seeds with an industry leading fungicide and insecticide, coupled with effective biostimulants will drive and increase yield.
- Germinating seedlings can only draw from the energy within the seed until the start of photosynthesis. Tripidity ST provides the building blocks for cell walls, membranes, and the components of key growth processes before the plant can create its own.

# **Balanced Ratio of Hormones**

Cytokinin (Kinetin)

Stimulates cell division, involved in shoot growth, delays leaf senescence and activates dormant buds.

### Gibberellic Acid (GA)

Stimulates seed germination, shoot elongation, flowering, and regulates production of hydrolytic enzymes in grains.

### Indole-3-Butryic Acid (IBA)

IBA is an auxin that enhances root growth; involved in apical dominance, stimulates cell elongation, enhances fruit and seed development.

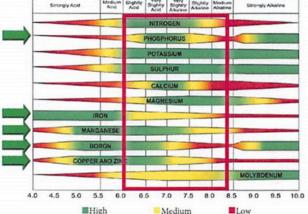
# GUARANTEED ANALYSIS 0-0.70-0

Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	0.70%
Manganese (Mn)	
0.05% EDTA Chelated Manganese	
Boron (B)	0.50%
Iron (Fe)	0.10%
0.10% EDDHA Chelated Iron	
Zinc (Zn)	0.50%
0.50% EDTA Chelated Zinc	

Derived from: Diammonium phosphate, Manganese EDTA, Boron ethanolamine, Ortho-Ortho Iron EDDHA & Zinc EDTA.

EDTA is ethylenediaminetetraacetic acid.

# Plant Nutrient Uptake in Relation to Soil pH Strongly Acid Modum Brighny Styley Styley Madeum Strongly Alasine Assaltee Strongly Alasine Assaltee



Biostimulants can increase yield by allowing the crop to perform at an optimum level, even under stress.



# Merchandise-

# HISTORY OF THE COOP DOUBLE CIRCLE





Formed Union Oil Company



# 1935

Renamed as Consumer Cooperative Association (This was the first logo used)



# 1957

New Logo unveiled at annual meeting at Memorial Hall in Kansas City.



# 1966

CCA renamed to Farmland Industries Inc. New logo added but continued to use double circle logo until bankruptcy filed May 31, 2002.



# 2019

The Ottawa Cooperative Association trademarked the double circle logo.



# 2023

The Ottawa Coop started offering COOP branded merchandise with proceeds benefiting 4H and FFA programs.



# SHOP EXLCUSIVE COOP MERCH NOW

www.ottawacoop.com







