

H NATURALS QUICK REFERENCE GUIDE

PAGE	BRAND	CATEGORY	RATE	PRODUCT COMPONENTS AND BENEFITS			
9	Nutri-Shield	Talc Additive	Container Treats 50 Units Corn or 90 Units Soybeans	Dry Heat Shield and Nutri-Cycle bonded to talc. Designed to give growers without in-furrow capabilities the ability to apply these products to seed.			
10	Cereal NS+	Talc Additive	Container Treats 240 Acres Wheat	Dry Heat Shield and Nutri-Cycle bonded to talc. Formulated with higher talc ratio for proper coverage on the smaller seeds of cereal grain crops.			
11	Maxx NS Corn	Talc Additive	Container Treats 50 Units Corn	Nutri-Cycle, Heat Shield, a carbon technology, Zinc, Iron, and Manganese all in a ready-to-use 80/20 talc/graphite box for corn.			
12	Alpha Complete	In-Furrow Box	Package Treats 40 Acres	5 Naturals products in one box: Nutri-Cycle, Nutex EDA, Boost 10, Water-Rite, and Bio-Prep. For use in a wide array of crops. Pack is designed to simplify use of Hefty Naturals in-furrow.			
14	Nutri-Cycle	Biology	Container Treats 40 Acres	Standard component of Hefty Complete Seed Treatment. A diverse combination of 26 nutrient-solubilizing bacteria that aid nutrient availability.			
15	Heat Shield	Biology	4 oz. Treats: 40 Acres In-Furrow 40 Acres Broadcast 80 Acres On Seed	Standard component of Hefty Complete Seed Treatment. 6 strains of microbial endophytes. Helps with P availability, as well as heat, cold, and stress. One 4 oz. bottle covers 40 acres, or 80 acres as a seed treatment.			
16	ROOTastic	Inoculant	1.5 fl oz. per cwt 15 fl oz. per Acre	Industry's highest rhizobia bacteria count soybean inoculant. Bacteria colonize on roots, creating nodules that produce Nitrogen for the plant.			
17	AMASS	Plant Growth Hormone	16 oz. per Acre	Kinetin, GABA, and Choline Chloride. For post-emerge broadcast applications in a wide array of crops. Aids in reproductive efficiency.			
18	MegaGro	Plant Growth Hormone	2 oz. per Acre	Patented glyphosate safener. Plant growth hormone package containing kinetin and IBA to aid in plant growth during season.			
20	Nutex EDA	Organic Acid	6-8 oz. per Acre	Chelated Zinc with patented transporting agent. Helps move nutrients from root zone to individual plant cells. Great addition to fungicides and micronutrients to assist in getting them into plant tissues.			
22	Reverb	Organic Acid	32 oz. per Acre	Chelated Manganese product that also has complexing abilities for fertilizer. Place in-furrow when O.M. under 2.5% or in all sidedress N applications.			
23	ExtraCate	Organic Acid	20 oz. per Acre	Organic acid complex that targets nutrients tied up in soil profile. Used where nutrients are high on soil test but not represented on tissue sample Applications can be in-furrow or in a 2 x 2 in corn.			
24	FulFour	Organic Acid	6-8 oz. per Acre	Chelated Zinc, Iron, Manganese, and Copper with proprietary transporting technology that helps move nutrients into plant tissues. Works well with the fungicide pass and where additional micronutrients are needed.			
25	NutriCharge	Polymer	3.2 oz. per Acre	Patented technology that enhances the efficiency of existing Phosphorus fertilizer programs by reducing soil fixation, making applied Phosphorus available to the plant.			
26	Boost 10	Amino Acid	8-10 oz. per Acre	Amino acid package that directly aids photosynthesis. Also assists plant in sugar storage and usage. Can be applied on a wide array of crops.			
27	Photo-N	Amino Acid	16 oz. per Acre	Unique amino acid that aids in Nitrogen uptake and efficiency. Can be mixe with herbicides and fungicides.			
28	N-Tercept	Manure Digester	Varies	Manure management product for manure in containment. Liquefies manure reduces flies, and reduces smell. Captures nutrients in liquid to minimize volatility.			
29	D-Comp Dry	Biology	1.2 oz. per Acre	Biological consortium that aids in breaking crop residue down and assists i cycling nutrients from organic matter in the soil. Great for in-furrow, in crop or broadcast in fall or early spring to help with breakdown of crop residues			
30	Water-Rite	Water Additive	8 oz. per 100 gal water	Chelating agent that neutralizes hard water minerals, lowers pH, and protects natural microbes. Use every time spray applications are made.			
31	Bio-Prep	Water Additive	2 oz. per 100 gal water	Chlorine neutralizer. Takes Chlorine from treated water and converts it to Chloride. Product must be used if biology is incorporated in a treated water source.			

APPLICATION TIMING

IN-FURROW	PLANTER BOX ADDITIVE	SEED APPLIED	EARLY POST	LATE POST	EARLY REPRODUCTIVE	LATE REPRODUCTIVE	END OF SEASON	OTHER
	Nutri-Shield							
	Cereal NS+							
	Maxx NS Corn							
Alpha Complete								
Nutri-Cycle		Nutri-Cycle	Nutri-Cycle	Nutri-Cycle				
Heat Shield		Heat Shield	Heat Shield	Heat Shield	Heat Shield	Heat Shield		
ROOTastic		ROOTastic						
				AMASS	AMASS			
MegaGro			MegaGro	MegaGro				
Nutex EDA			Nutex EDA	Nutex EDA	Nutex EDA	Nutex EDA		
Reverb			Reverb	Reverb	Reverb	Reverb		
ExtraCate								
FulFour			FulFour	FulFour	FulFour	FulFour		
NutriCharge			NutriCharge	NutriCharge	NutriCharge			
Boost 10		Boost 10	Boost 10	Boost 10	Boost 10			
			Photo-N	Photo-N	Photo-N			
								N-Tercept
D-Comp			D-Comp	D-Comp			D-Comp	D-Comp
Water-Rite		Water-Rite	Water-Rite	Water-Rite	Water-Rite	Water-Rite	Water-Rite	
Bio-Prep		Bio-Prep	Bio-Prep	Bio-Prep	Bio-Prep	Bio-Prep	Bio-Prep	

YIELD RESULTS PROVE

Hefty Complete Corn Seed Treatment is our proprietary blend of fungicides, insecticide, and Hefty Naturals containing over 37 active ingredients proven to increase your net income.



REMAINING COMPONENTS

A proprietary blend of more than 26 biologicals. Depending on your soil conditions, this combination can help you in a number of ways. We have seen higher levels of N, P, & K in plants, as well as better plant health through challenging environmental conditions. Our data is showing this boosts yield by 10+ bushels.

ETHABOXAM FUNGICIDE -

An exciting new active ingredient that is producing significantly enhanced control of pythium and other diseases. Pythium is often corn's number one enemy in cold, wet soils. On average, we are seeing a 9-bushel advantage in corn with ethaboxam.

_ _ INSECTICIDE

Protects the seed and seedling from early season insect pressure such as seed corn beetles, seed corn maggots, and wireworms to help give your plant a strong start to the season.

HEAT SHIELD - - -

Heat Shield contains 6 beneficial fungi. Heat Shield lives inside plants, changing the plant's water balance and increasing tolerance to stress caused by heat, cold, and salt.

FOUNDATIONAL FUNGICIDES

In addition to ethaboxam, Hefty Complete includes another fungicidal package with a track record of success protecting seedlings from soil and seedborne diseases such as pythium, fusarium, and rhizoctonia.



COMPETITOR

VISIT HEFTYSEED.COM TO LEARN MORE ABOUT HEFTY COMPLETE



HEFTY COMPLETE CORN



FASTER EMERGENCE ADVANTAGES OF HEFTY COMPLETE CORN

FASTER EMERGENCE

The longer your crop has to grow and mature after emergence, the higher your yield potential. In all of our trials, corn treated with Hefty Complete comes out of the ground 10 GDUs faster than standard treatments. Especially earlier in the season during cool days when GDU accumulates more slowly, this can mean emerging days faster, giving your crop more time to fully develop, unlocking your yield potential.

BETTER STAND ESTABLISHMENT

Plants that emerge later often remain a crop stage or two behind, and you can see the difference in stalk diameter and strength all throughout the season and past harvest. Also, late-emerging corn plants won't make a full ear, and plants on either side of the late-emergers can't make up for that yield loss.

BROADEST-SPECTRUM DISEASE PROTECTION AND STRESS TOLERANCE

Two components of Hefty Complete Corn that boost your crop's defenses are Heat Shield and ethaboxam fungicide. Heat Shield contains 6 microbes that improve the plant's tolerance to both cold soils and heat, as well as drought conditions. In addition to the protective benefits provided by the standard fungicides in Hefty Complete, ethaboxam grants a significant improvement of disease protection, especially in cold, wet soils.





CORN TREATED WITH HEFTY COMPLETE LEADS TO:

- Faster emergence
- Increased stand count
- Greater disease protection
- Better cold tolerance
- Better pythium control
- Increased root mass
- More nutrient uptake
- Better drought tolerance

HOW MANY SEED TREATMENTS DOES YOUR CORN HAVE?

HEFTY BRAND CORN COMES STANDARD WITH 37 TREATMENTS



^{*2024} CruiserMaxx Corn 250 **2024 LumiGEN Standard Corn Rootworm Package

CORN

EFTY

HEFTY COMPLETE SOYBEANS

SOYBERNS

COMPLETE

EFTY



COMPLETE SEED TREATMENT

A seed treatment that gives you free replants, 2 free resprays for certain insects, 4 fungicides with 4 different modes of action, 26 nutrient solubilizers, 6 strains of beneficial fungi for help with seasonal stresses, an inoculant with an extender, and a polymer to help with flowability. THAT'S 40 COMPONENTS TO PROTECT YOUR SOYBEANS WELL INTO THE SEASON!

NUTRI-CYCLE ST - ·

Nutri-Cycle ST accounts for over 26 active, beneficial strains of bacteria and fungi. The bacteria and fungi begin working in the soil right away to make the most vital nutrients readily available for the young soybean. Increased cold, salt, and drought tolerance, more developed root systems, and improved nutrient uptake are other benefits we have seen from Nutri-Cycle.

FUNGICIDES - /

Four systemic fungicides equip the seed for long-lasting protection. Using multiple fungicide modes of action means your seedlings are protected well past emergence and into the season.

INOCULANT + EXTENDER

Including both ROOTastic inoculant and extender in Hefty Complete gives your treated seed the best opportunity to increase nodulation and nitrogen uptake, even when planting is delayed.

- POLYMER

Smooth flowability through seed tenders, trucks, and your planter leads to better and more even stands, all while reducing your planter downtime.

- HEAT SHIELD

The 6 beneficial fungi in Heat Shield have shown increased tolerance to cold and salty soils, drought, and heat, along with general plant health enhancements. In normal conditions, Heat Shield has demonstrated a yield advantage in many of our trials, but in fields under severe stress, we have seen huge gains.

– INSECTICIDE

A broad-spectrum, early-season insecticide protects against bean leaf beetles, cutworms, grasshoppers, soybean aphids, and other insects for as long as 2 to 3 months, giving your plants a healthy habitat during the most critical growth stages.



UP TO 2 FREE RESPRAYS WITH HEFTY COMPLETE!



We challenge you to plant Hefty Brand Soybeans treated with Hefty Complete in side-by-sides with untreated planted the same day on your farm. *Here are some of the things to look for:*

FASTER EMERGENCE

If you can be out there the day the treated beans pop out of the ground, you will almost certainly see the treated seed emerging hours, if not days, sooner than the untreated beans.

BETTER STANDS

Within a few days after emergence, please do stand counts. Most of the time, we find thicker stands where Hefty Complete has been used.

CHECK YIELD VERY CLOSELY

The cost of Hefty Complete is less than 2 bushels of soybeans. Do you see 2-bushel yield differences show up on your yield monitor? How about 4 bushels? Of course not. It usually takes 8, 10, or 12-bushel yield differences to even register on your yield monitor. Our request if you aren't a believer in seed treatments, is to weigh each pass because we are extremely confident that on average, you'll get more than 2 bushels of soybeans back each fall.



If Hefty Complete Soybean is applied by a Hefty Store, receive free insecticide if economic threshold is reached for the following insects:



UP TO 2 FREE RESPRAYS WITH HEFTY COMPLETE*

- Soybean aphid: R2 = 10 aphids/plant, R3 = 20, R4 = 40, R5 = 100, R6 = no respray offered
- Bean leaf beetles: 1/plant up to 30 days prior to harvest
- Grasshoppers: 1/square foot up to 30 days prior to harvest
- Cutworms: 1/20 plants up to 30 days prior to harvest
- Spider mites: No respray offered

Respray product will be 3.84 oz of Silencer (or equivalent). If you want any other product, you must pay full price for the other product and receive credit for that day's price of 3.84 oz of Silencer. No credit is given if field is not resprayed with product purchased from Hefty's.

FREE HEFTY COMPLETE ON REPLANTS

- First planting on the same acre must have been a Hefty Brand Soybean variety treated with Hefty Complete.
- Replant seed must be a Hefty Brand Soybean variety.



AS THE USE AND PROMOTION OF BIOLOGICALS – OR NATURALS, AS WE CALL THEM – CONTINUES TO GROW, SO DOES THE CONFUSION AROUND WHAT THEY ARE AND WHAT THEY DO.

Naturals can be living or non-living, are often non-crop specific, and they can influence crops in numerous ways. With so many options, it's not always clear how best to use them. That's why we created Hefty Naturals – to simply give you the best options available.

Generally, Naturals products fall within one or more of these five categories: living microorganisms, amino acids, organic acids and polymers, plant growth hormones, and water treatments.

LIVING MICROBES

Living microbes are the most commonly available type of

Naturals. They are naturally derived. Living organisms in this category can be either bacterial or fungal. These species are likely already found in your environment, and largely are used to make nutrients more available to plants and improve their nutrient use efficiency. In the Hefty Naturals portfolio, Nutri-Cycle does exactly that. With 26 biological components, Nutri-Cycle aids nutrient availability as a seed treatment, planter box product, or in the furrow.

<u>Amino acids</u>

Amino acids are critical to how plants survive stress, and they help with nitrogen efficiency and storage of sugar and carbohydrates. In order for plants to grow and reproduce, protein synthesis must occur. Protein synthesis begins with amino acid production, which is driven by photosynthesis. Boost 10 is a great example of an in-season product that can influence amino acid production and improve photosynthesis efficiency, which in turn generates more sugars and carbohydrates needed for essential plant processes and yield generation.

ORGANIC ACIDS AND POLYMERS

Nearly all products in this category are non-living and aid with nutrients in the soil or within plants. As soil organic matter breaks down and cycles nutrients, it creates organic acids that increase nutrient retention and mobility within plants. Humic and fulvic acids in this category are naturally produced by your soil, and humics can be applied to low CEC soils to help increase nutrient holding capacity. On the other hand, a polymer product like NutriCharge aids in separation of phosphorus from calcium in soil, which is especially helpful for improving phosphorus availability in high calcium soils.

PLANT GROWTH HORMONES

Plant growth hormones (PGRs) have some of the broadest application potential, as throughout the entire growth cycle, various hormones influence how plants consume energy. One of most important products in the Naturals portfolio is MegaGro, which is patented as a glyphosate safener. When herbicides are sprayed in-season, the plant must spend energy deciding if the herbicide is a toxin that will kill it or not. By adding a PGR like MegaGro to the tank, you can speed up this process to gain significant recovery and ROI. Reproduction is another critical timing for PGRs, and kinetin is a key driver for plant reproduction. Amass is a kinetin PGR that helps keep the plant focused on using its energy for reproduction and yield.

WATER TREATMENT

This may be the most important category within the Naturals portfolio. Water isn't just water! For example, if you are using chlorinated water as a carrier for any living microorganism, it will likely be dead within one hour. Bio-Prep is essential for converting chlorine to chloride and making water safe.

This is just a summary of your options in the Naturals space. If you raise grain and row crops, this Naturals Guide contains the industry's best lineup of biological products and is sure to provide several options that can increase your profitability. As always, your best bet is to try these products yourself. Reach out to us! We're happy to help you find success with Naturals on your farm.

NUTRI-SHIELD

NUTRI-SHIELD

Nutri Shield

PLANTER BOX ADDITIVE

THE BUILDING BLOCKS OF HEFTY COMPLETE SEED TREATMENT IN ONE SIMPLE APPLICATION.

WHAT IS NUTRI-SHIELD?

Nutri 🗑 Shield

NUTRI-SHIELD combines talc and graphite with two foundational products found in Hefty Complete: Nutri-Cycle and Heat Shield. Previously, this technology was available only as part of Hefty Complete Seed Treatment or with in-furrow systems.

NUTRI-SHIELD accesses pure talc as a carrier mechanism to add Nutri-Cycle and Heat Shield directly into the planter box.

Hefty Naturals products are built for application to a wide array of crops. You can simply apply **NUTRI-SHIELD** right to the seed as it's being loaded into the planter box – the simplest way to apply biology to your fields!

COMPONENTS:

26 nutrient solubilizers and 6 strains of Trichoderma that break minerals down into plant-available nutrient form.

BENEFITS:

Phosphorus and Potassium are key to early development, and NUTRI-SHIELD helps unlock these nutrients.

APPLICATION GUIDELINES:

- A 4.3-pound container treats 50 units of corn or 90 units of soybeans.
- Dump contents of NUTRI-SHIELD into central fill planter or individual planter box units.
- Can be mixed in with the seed tender, or as seed is being filled into planter units.
- If additional talc or graphite is needed. add at the same time as **NUTRI-SHIELD** is being mixed in.

YIELD RESULTS SHOW





PLANTER BOX ADDITIVE

THE BUILDING BLOCKS OF HEFTY COMPLETE SEED TREATMENT FOR CEREAL GRAIN CROPS

CERERL NS+

WHAT IS CEREAL NS+?

CEREAL NS+ combines talc with Nutri-Cycle and Heat Shield, two foundational products found within Hefty Complete Seed Treatment. This technology was previously only available in Nutri-Shield for row crops or as a seed treatment on Hefty Brand Corn and Soybeans.

CEREAL NS+ is specifically built for cereal grain crops. Unlike Nutri-Shield, **CEREAL NS+** has a higher talc ratio for proper coverage of cereal grain seed.

You can simply add **CEREAL NS+** to any drill or air drill system for improved flowability, more even emergence, and stronger stand establishment early in the season.

DESIGNED FOR CEREAL GRAIN CROPS!

COMPONENTS:

- Talc
- 26 nutrient solubilizers that break minerals down into plant-available nutrient form, also found in Nutri-Cycle.
- 6 strains of Trichoderma that help plants manage heat and drought stress, also found in Heat Shield.

APPLICATION GUIDELINES:

 One 20-pound container of Cereal NS+ covers 240 acres of cereal grain crops.



MAXX NS

CORN



BIO-CAPSULE TECHNOLOGY

ENSURES BIOLOGY STAYS ALIVE

Best-inclass talc/graphite

80/20 BLEND OF TALC &

GRAPHITE

combination ensures

optimum flowability performance in today's high-speed planters. The addition of iron and manganese

Fe

provides a boost to crop emergence and seedling health.

Мn

Maxx

Nutri - Cycle

Heat Shield & Nutri-Cycle Bio-Capsules allow a novel inoculant combination for seed treating that protects plants against abiotic stress and improves nutrient use efficiency.

18% ACTIVE CARBON IONLOCK ~ ZINC

respiration and function.

This unique active carbon feeds and energizes

microbial communities while increasing plant

IONLOCK Zinc provides the equivalent of one quart of 9% EDTA zinc per acre.

WHAT IS MAXX NS?

MAXX NS combines Nutri-Cycle, Heat Shield, a carbon technology, Zinc, Manganese, and Iron all into an 80/20 blend of talc and graphite. What sets **MAXX NS** apart from the rest of what's offered in the marketplace is its Bio-Capsule technology. This ensures the microbes in Nutri-Cycle and Heat Shield are protected and stay alive until you need them to perform at planting time.

MAXX NS is specifically designed to provide critical products you need at planting time mixed right into the planter box. If you do not have an in-furrow system, this product is made to fit your needs.

COMPONENTS:

Maxx

- 80/20 Talc Graphite base
- 1.35 pounds IONLOCK Zinc
- Nutri-Cycle
- Heat Shield
- Manganese and Iron
- 18% Active Carbon

- One *MAXX NS* container covers 50 units of corn.
- Storage: Keep in a cool, dry place. Keep out of direct sunlight. Do not store in conditions 77°F and above for an extended period of time. *Do not freeze product.*
- **Disposal:** Dispose of all waste in accordance with local, state, and federal regulations.
- You can mix *MAXX NS* into the seed box or as the seed is flowing into planter boxes. Add one scoop of *MAXX NS* per unit of seed.



ONE BOX. FIVE PRODUCTS. ONE COMPLETE SOLUTION.

While some companies are making natural products complicated with multiple applications throughout the season, we've made it simple with Alpha Complete. Alpha Complete is specifically designed for in-furrow systems. By using Alpha Complete, you can simplify your in-furrow mix to one simple 40-acre box.

With one application, give your crops the extra boost they're looking for!



The Hefty Naturals products within Alpha Complete have delivered ROI across the country. By combining their strengths into one 40-acre box, we're simplifying the complexity of the naturals market.

Water-Rite and Bio-Prep are included in every 40-acre pack. These water conditioning agents must be used to keep biology alive in applications.

WATER TREATMENT

Water typically contains harmful additives and/or contaminants that damage the survivability of biological components and reduce the effectiveness of crop protection products.



WATER-RITE negates contaminants and neutralizes high pH, preventing the water in your applications from acting against products you apply, allowing them to perform as intended.

BIO-PREP nullifies the anti-biological chlorine found in water, keeping your natural products alive and working for you.

NATURAL BIOLOGY

Applied in-furrow or early post, the biological components of Alpha Complete rev up your crop's ability to make yield all season long!



NUTRI-CYCLE breaks down minerals in your soil to available nutrients your root system can absorb.



800SŶ

NUTEX EDA greatly enhances nutrient delivery, increasing the speed of vital nutrients as they move from the roots and into individual plant cells.

BOOST 10 makes photosynthesis more efficient, allowing plants to create more vital carbohydrates and sugars with less sunlight energy.



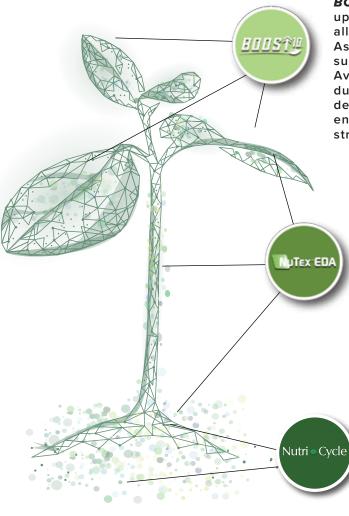
WATER-RITE is a water treatment designed to reduce the negative effects calcium, magnesium, iron, and copper have on fertilizer, herbicides, and pesticides. These contaminants alter water pH and tie up products, preventing them from being effective.



WATER-RITE

BIO-PREP is a water treatment that neutralizes chlorine, preventing it from negatively affecting biological products by transforming it into the safer chloride form, which is an essential plant nutrient.

When used in combination, these two products are the ideal solution for keeping beneficial biology safe in tank mixes while enabling them to better infiltrate crops.



BOOST 10 is a combination of amino acids that ramps up the natural photosynthetic process of plants, allowing them to harness more energy from the sun. As a result, crops are able to produce more of the sugars and carbohydrates needed for growth. Availability of these nutrients is especially important during reproductive stages when yields are determined, as crops use a significant portion of their energy to fill seeds, pods, and other procreative structures.

> **NUTEX EDA** is a proprietary technology that assists in nutrient transport within plants. Once roots take in available fertility, this chelated zinc product acts on the cellular level, allowing plants to more quickly and efficiently move nitrogen, phosphorus, potassium, calcium, magnesium, zinc, manganese, and boron to where they are needed most. This is especially important during critical developmental stages when plants accelerate vegetative growth to reach reproductive maturity. **NUTEX EDA** improves your yield potential season-long by increasing root proliferation and chlorophyll density.

NUTRI-CYCLE made up of 26 nutrient solubilizers that break down unavailable minerials into nutrient form. Immediately after application, these solubilizers begin transforming existing soil fertility into a form your crop can use. As the season continues, the biological components of **NUTRI-CYCLE** will reproduce within soils, providing these solubilizing benefits to your crop long after the initial application. NUTRI-CYCLE

Nutri Cycle

IMPROVING NUTRIENT UPTAKE

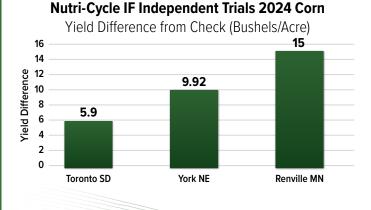
THE BIOLOGICAL FOUNDATION OF CROP PRODUCTION

WHAT IS NUTRI-CYCLE?

NUTRI-CYCLE is a proven foundational product in the Hefty Naturals product line. This unique combination of microorganisms contains 26 active, beneficial strains of bacteria and fungi specifically selected for their ability to increase yield by improving nutrient uptake and promoting faster emergence.

COMPONENTS:

Biologicals – 26 strains of diverse biologicals for soil health.



BENEFITS:

TREATED

UNTREATED

Nutri • Cycle

On the seed (*NUTRI-CYCLE* is a key component of Hefty Complete) or in-furrow.

- Foundational product that increases yield in crops and creates synergy with the rest of the Hefty Naturals line, taking results beyond their solo performance!
- Delivered in spore form for extended viability in the bag and on the seed.
- Strains begin to hatch in water within hours.
- Biologicals protect and defend the root rhizosphere from diseases and pests.
- Performs best as a seed treatment but is 100% compatible with insecticides and fertilizers.

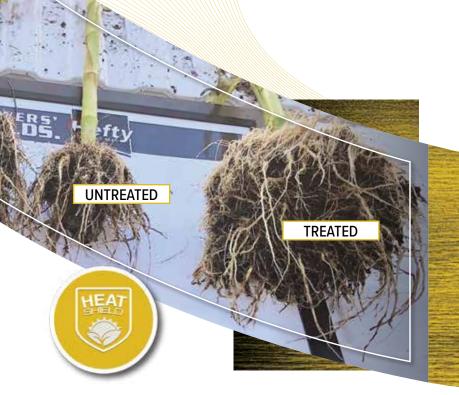
APPLICATION GUIDELINES:

If using water as part of the carrier, use Water-Rite (8oz./100) and Bio-Prep (2 oz./100) to protect microbials in solution.

- Apply a single 55-gram bag to 40 acres in all cropping systems.
- Can be applied to seed and is compatible with all seed treatments.
- Compatible with pop-up fertilizers, allowing in-furrow use.



HEAT SHIELD



STRESS MITIGATION

IMPROVES CROP PERFORMANCE AND YIELD

WHAT IS HEAT SHIELD?

HEAT SHIELD is designed to increase your crop's tolerance to extreme field situations like salt, drought, cold, and heat. **HEAT SHIELD** can be included in your program as a seed treatment, applied in-furrow, or as a foliar option to prevent in-season stresses. **HEAT SHIELD** is a fungal blend that lives and works inside the plant to increase its ability to withstand difficult growing environments.

COMPONENTS:

HEAT SHIELD is made up of six strains of Trichoderma Harzianum fungi, providing efficacy in a variety of extreme conditions.

BENEFITS:

HEAT SHIELD is also a critical component of Hefty Complete Seed Treatments. It has exhibited additional synergistic benefits when combined with Nutri-Cycle and other biological products that promote plant health and increased nutrient efficiency.

APPLICATION GUIDELINES:

HEAT SHIELD can be applied as a seed treatment, mixed with fertilizer for in-furrow application, and as a foliar stress reduction product.

- An application of a 4 oz. bottle covers 40 acres in-furrow or foliar and 80 acres as a seed treatment.
- Keep product out of sunlight.
- Use in conjunction with Water-Rite and Bio-Prep to preserve efficacy.

COOLER CROPS MAKE HIGHER YIELDS



RDDTRSTIC

RDDTRSTIC



SOYBEAN INOCULANT

FOR NITROGEN FIXATION IN SOYBEANS

WHAT IS ROOTASTIC?

ROOTastic inoculant boosts your soybean yields by enhancing Nitrogen uptake, even where soybeans are planted often. The active ingredient in **ROOTastic** is a naturally occurring bacterium that grows on plant roots, forming root nodules that help plants convert Nitrogen from the air into forms the plant can use.

COMPONENTS:

- Contains multiple strains of the naturally occurring bacterium, Bradyrhizobium japonicum.
- Minimum guarantee of 1 x 10¹⁰ colony forming units per milliliter of solution.
- Applying this solution on seed at the labeled rate provides the industry's highest on-seed microbial rate.

APPLICATION GUIDELINES:

Hesty

BOOTASTIC

Herry Endo Prime

DeKall

TER

DIRECTIONS FOR ON-SEED USE

- Shake well before use. Open package only when ready to use. Pull bag cap through the circular opening and close lid.
- Measure the appropriate rate for the quantity of seed being inoculated, pour over the seed at 1.5 fl. oz. per cwt (with extender), and stir well until all seeds glisten.
- Protect inoculated seed from sunlight and drying winds.
- Plant inoculated seed within 4 days for greatest bacterial survival and yield gain.



5*58WB*

5*58WW*B

COMPONENTS:

MASS

PLANT

GROWTH

HORMONES

TO STIMULATE PLANT REPRODUCTION

Kinetin (0.12%)

Promotes flowering and pollen viability; increases pollination and seed retention.

GABA (0.98%) and Choline Chloride (1.95%) Promotes chlorophyll development; drives sugar production to feed growth.

BENEFITS:

Influence Reproductive Stages

• Early reproductive application increases branching, flowering, and fruiting sites.

Optimize Plant Metabolism

 Strengthens plant cell structures and maintains photosynthesis, even in stress conditions.

Produce Larger Yields

 Boost yield potential by increasing pod/grain size and reducing incidence of flower abortion.

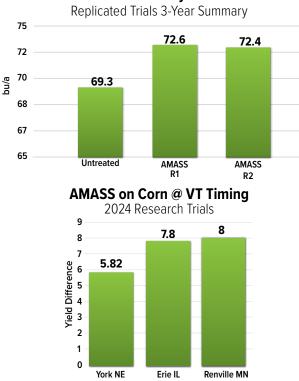
APPLICATION GUIDELINES:

During early reproductive stages, use 19.2 oz. per acre in 15 gpa (100:1 dilution). Min (aerial) is 12.3 oz. per acre.



WHAT IS AMASS?

AMASS is a fortified cytokinin designed to increase pollination and support photosynthesis during fruit or grain fill. This unique combination produces more flowering/fruiting sites and, more importantly, increases the plant's net capture of solar energy to help drive sugar production.



AMASS on Soybeans

MEGAGRO

MEGRGRO[™] L

MEGRGROTM L



ROOT GROWTH & EARLY PLANT VIGOR

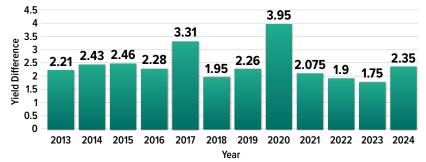
WITH PATENTED GLYPHOSATE SAFENING TECHNOLOGY

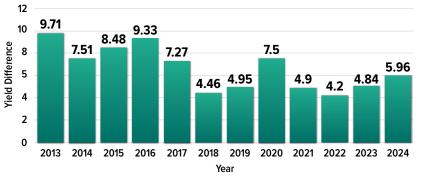
WHAT IS MEGAGRO™ L?

MEGAGRO[™] *L* is designed as a specialty foliar and in-furrow PGR biostimulant that helps to increase the plant's metabolism and develop root structure and root hairs.

With a patented, ideal ratio of phytohormones IBA and Kinetin, **MEGAGRO™ L** helps establish a strong foundation with extended vigor for continued success through harvest.

MegaGro Foliar Herbicide Treatments - Soybean





MegaGro Foliar Herbicide Treatments - Corn

MEGRGRO[™] L



COMPONENTS:

MegaCirol

PGR biostimulant liquid formulation containing IBA (0.85%) and Kinetin (0.15%).

BENEFITS:

Promoting Root & Shoot Development

 Optimum ratio of plant hormones drives cell division, maximum root growth, and early season vigor.

Better Nutrient Uptake & Stress Tolerance

 Improved root structure increases the ability of plants to access soil nutrients and withstand environmental and chemical stress.

Wide Range of Compatibility

- Ability to tank mix with most fertilizers and pesticides.
- Patented as a Glyphosate safener (US8,153,559,B2).

APPLICATION GUIDELINES:

- Ideal timing: In-furrow and early post.
- In-furrow 2 oz. to the acre.
- Early post with herbicide or micronutrients 2 oz. to the acre in up to 15 gallons of spray solution.

INCREASE ROOT GROWTH



www.heftyseed.com/naturals 19

VUTEX" EDA

NuTex[™]**EDA**

THE NEXT GENERATION IN **TRANSPORTER TECHNOLOGY**



WHAT IS NUTEX ™ EDA?

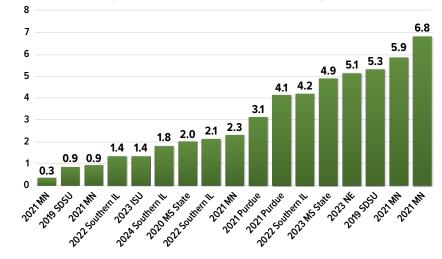
NUTEX[™] EDA is a micronutrientbased transporter catalyst for all liquid nutrient sprays and crop protection products.

NUTEX™ EDA offers versatility across both foliar & soil applied applications.

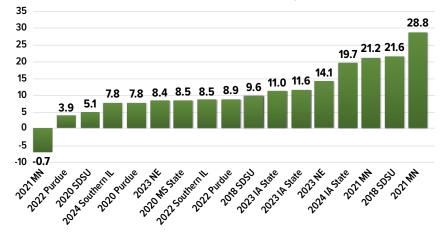
NUTEX[™] EDA has over a decade of positive yield responses across a multitude of crops, soil types, and nutritional products.

With broad tankmix compatibility and ultra-low use rates, **NUTEX™ EDA** provides flexibility and an optimal return on your investment.

Soybean Foliar Nutex EDA University Trials



Corn VT Nutex EDA University Trials



NuTex EDA

COMPONENTS:

NUTEX[™] EDA is a proprietary formulation with a guaranteed analysis of 0.5% Zinc.

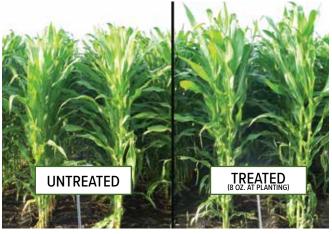
BENEFITS:

- Supports plant nutrient uptake efficiency for better root growth and function.
- Increases plant nutrient assimilation throughout the plant.
- High activity of performance with low dosages.
- Compatible with all fertilizer solutions, including Calcium and acidic pH fertilizers.
- Supports stomatal regulation for improved transpiration and adsorption in hot summer conditions.
- Enhances and supports microbial populations in the planting zone when used with starter fertilizers.
- Improves abiotic stress tolerance.

APPLICATION GUIDELINES:

- In-furrow or foliar applications at 6-8 oz. per acre.
- Can be included as part of the following applications:
 - In-Furrow/Starter Blends
 - All Foliar Nutrition Sprays
 - Post Herbicide Sprays
 - Early Fungicide Sprays
 - Late Fungicide Sprays
- Apply up to three times per season and achieve positive return on investment.





NUTRIENT	% EFFICIENCY IMPROVEMENT		
Nitrogen (N)	10-20%		
Phosphorus (P)	12-22%		
Potassium (K)	15-22%		
Ca & Mg	20-40%		
Zn & Mn	20-50%		
Boron (B)	15-22%		

More than 70 bio-assay & greenhouse trials have been conducted to determine the nutrient uptake efficiency benefits of adding **NUTEX™ EDA** to soil and foliar nutrient applications.

The results compiled across all crops, fertilizers, applications, and timings are shown in the chart above.

Reverb[™]

NUTRIENT ENHANCER & EARLY PROMOTER

UNTREATED

REVERB CROP RESIDUE MANAGEMENT TRIAL - Illinois 2017.

WHAT IS REVERB™?

REVERB[™] is a next-generation micronutrientbased fertilizer catalyst for soil-applied fertilizers and stalk decomposition.

When applied with starter fertilizers and in-season Nitrogen applications, *REVERB*[™] enhances the uptake and utilization of applied nutrients.

When applied in conjunction with liquid Nitrogen, *REVERB*[™] works synergistically with soil microbes to break down crop residue and debris, providing more soil nutrients for the next crop.

COMPONENTS:

REVERB[™] is a proprietary formulation containing Manganese derived from Manganese sulfate with a guaranteed analysis of 0.5%. It is usable for all liquid starter and Nitrogen fertilizer applications, as well as crop residue management.

Reverb

TREATED

BENEFITS:

- Suspension concentrate of micronized leonardite.
- Unique, non-chemical extraction process for superior bioavailability.
- Reduces nutrient tie-up, resulting in increased nutrient availability.
- Increases water retention and cation exchange capacities in the zones where *REVERB*[™] is applied.
- Enhances uptake of N, P, K, and micronutrients.
- Easy to use: low rates, immediate solubility, and low-acid pH for tankmix compatibility.

APPLICATION GUIDELINES:

• Use 32 oz. per acre as part of in-furrow, foliar, or sidedress applications.

EXTRAGATE

ExtraCate"

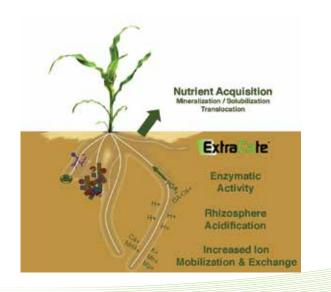
ExtraCate

WHAT IS EXTRACATE™?

EXTRACATE[™] works with your liquid starter fertilizer applications or by itself to help unlock soil nutrients, specifically Calcium and Magnesium, that will benefit your crops.

EXTRACATETM works especially well in making Calcium more available to plant roots by solubilizing soil Calcium (CaCO₃) and other nutrients tied up in the soil. It is formulated with a naturally derived complex of organic acids, providing a one-two punch to soil nutrition. **EXTRACATE**TM supports the solubility, availability, and uptake of a broad range of nutrients across all types of soil.

Formulated with a safe-to-use acidic pH solution, **EXTRACATE**[™] may help with tankmix compatibility in some situations.



INNOVATION FOR ENHANCED SOIL NUTRITION

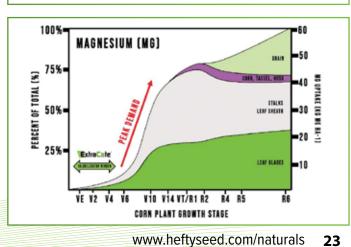
NATURALLY POWERFUL. UNIQUELY EFFECTIVE.

BENEFITS:

- Can be added to liquid fertilizers or applied alone.
- Solubilizes soil nutrients for increased availability to plants.
- Solubilized Calcium replaces Hydrogen ions on soil exchange sites, reducing soil acidity.
- Can be used in all soil pH's and types.
- Supports yield and crop quality potential.

APPLICATION GUIDELINES:

• Mix with row starter at 20 oz. for in-furrow applications in corn or soybeans.



FulFour

PROPRIETARY *FOLIAR NUTRIENT CATALYST*

ULFOUR

FULFDURTM

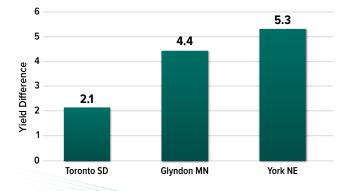
WHAT IS FULFOUR™?

FULFOUR[™] is formulated to act as a catalyst for critical crop inputs to improve their effectiveness. **FULFOUR**[™] helps stimulate root growth when applied at planting and aids in leaf penetration when applied foliar.

COMPONENTS:

FULFOUR[™] contains the main four micronutrients that are cations: Zinc, Iron, Manganese, and Copper.

FulFour VT Timing Corn Independent Trials 2024



BENEFITS:

FulFour

- Improves crop input utilization.
- Stimulates growth and improves plant health.
- Can improve yield and crop quality.
- Supports chlorophyll production and leaf growth.
- Flexible application methods.

APPLICATION GUIDELINES:

FULFOUR[™] offers several distinct usage opportunities:

- In-furrow
- As a foliar application
- Through fertigation

This product is for use in soil and foliar applications and is intended as a supplement to a fertility program. Always monitor crop nutrient needs and responses with soil, leaf tissue, and irrigation water analysis programs.

NUTRICHARGE

NUTRI CHARGE

POLYMER TECHNOLOGY

ENHANCING PHOSPHORUS FERTILIZER EFFICIENCY

WHAT IS NUTRICHARGE °?

UTRI CHARG

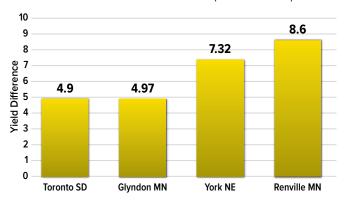
NUTRICHARGE[®] is a patented liquid that helps deliver the maximum amount of Phosphorus to plants over an extended period.

It extends the release of Phosphorus fertilizer by reducing soil fixation and works best with the plant to extract Phosphorus that is fixed in the soil.

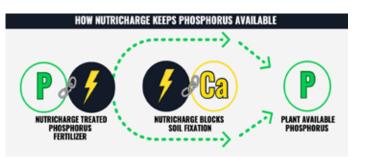
By binding to Calcium, Aluminum, and Iron ions in the soil, **NUTRICHARGE**[®] prevents these elements from reacting with the Phosphorus.

Nutri-Charge In-Furrow Independent Trials 2024

Yield Difference from Check (Bushels/Acre)



- Can be mixed with water and in-furrow starter fertilizer mixes.
- Use 3.2 oz. per acre in-furrow.
- Use 6.4 to 9.6 oz. per acre in side-dress Y-Drop applications.



m01 15008

BOOSTU

IMPROVES PLANT METABOLISM



WHAT IS BOOST 10™?

BOOST 10[™] works in three ways to improve plant health and bridge the gap between inorganic fertilizers and the proteins plants create. Made of more than 35 organic and amino acids, **BOOST 10[™]** promotes photosynthesis, generates more plant energy, and increases the uptake and organic conversion of nutrients within the plant.

BOOST 10[™] applications can also improve the plant's metabolism, allowing it to better adapt to environmental stresses like heat and drought.

The influence **BOOST 10**[™] has internally on your crop often results in larger leaf sizes, stronger stands, increased seedling vigor, and impressive root development.

COMPONENTS:

4-0-0 fertilizer ingredient derived from vegetal protein hydrolysate. Contains more than 35 organic and amino acids.

BENEFITS:

- Increases the plant's ability to uptake and assimilate nutrients from the soil.
- Improves early stand and vigor; encourages better rhizobia colonization on legumes.
- Contains a unique blend of organic acids that supports photosynthetic activity and high-yielding genetics.
- Improves plant metabolism, allowing it to adapt to environmental conditions, leading to a stronger stand, greater seedling vigor, and enhanced root development.
- Augments nutrient intake, allowing plants to better respond to abiotic stresses, and increases nutrient transport during peak demand.

- As a seed treatment, it is stable alongside seed-applied technologies. Seed treatment application rates vary by crop.
- Application rate of 10 fl. oz. per acre with fertilizer as a foliar spray or in-furrow application.

PHOTO-N"

PHDŶD-N

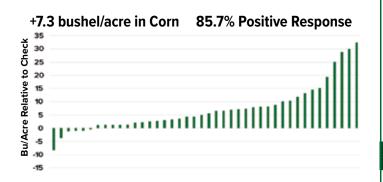
NITROGEN EFFICIENCY SOLUTION

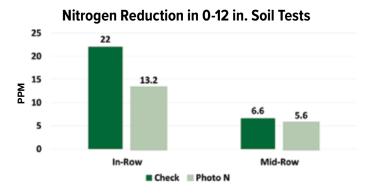
WHAT IS PHOTO-N[™]?

PHOŶO-

PHOTO-N[™] is a novel protein hydrolysate that maximizes the ability of plants to uptake applied and residual Nitrogen from the soil profile.

PHOTO-N[™] is applied foliar and gives plants the tools they need to be more efficient with the Nitrogen that comes into the plant.





COMPONENTS:

A collection of amino acids that can be applied to corn, wheat, soybeans, and sugarbeets.

BENEFITS:

- Treated plants get the tools they need to absorb more Nitrogen into their tissues, leaving less Nitrogen in the soil profile.
- Documented post-harvest studies show fewer nitrates left over in the soil when *PHOTO-N*[™] is applied.

- Use one pint of product per acre.
- Best application timings are:
 - Corn: V4 V8
 - Soybeans: R1 R2
 - Sugarbeets: 5 Leaf
 - Wheat: Boot Stage



LIQUID MANURE MANAGEMENT

WHAT IS N-TERCEPT?

N-TERCEPT is made of a liquid base with biological components. The liquid base is the energy source keeping the biologicals alive and providing them with the energy they need to work through the pile.

COMPONENTS:

The Liquid Base

- Elevates biological counts and keeps them there (unique to this product; most boost and then crash).
- Very high affinity for stabilization of ammonia and hydrogen sulfide.

Biologicals

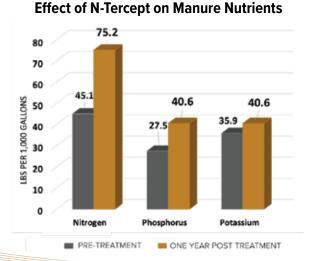
- Bacteria and fungi in the composition, including some specific to decomposing DDGs, are unique to *N-TERCEPT*.
- Organic decomposers that break down lignin and cellulose.
- Multi-faceted digestive enzyme production.

BENEFITS:

N-TERCEPT

- Reduced emissions, odors, and solids.
- Increased fertilizer value.
- Better mixing and even distribution.
- Easier emptying of tanks and pits.
- No flies.
- Compatibility with all manures.

- Use 5 gallons per 800 sows per month.
- Use 2.5 gallons per 800 finishers per month.
- Use 10 gallons per 800 cows per month.
- Shock treatment on lagoon 250 gallons per 5 million gallons.
- For best results allow 30 days after treatment before ANY removal.





BIOLOGICAL AND ENZYME PACKAGE

WHAT IS D-COMP DRY?

D-COMP is designed to break down residue and dry manure to help cycle nutrients back into an available form.

COMPONENTS:

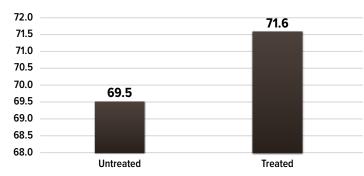
Biologicals - 70 unique species with biodiversity.

- Nitrogen fixers make adding N to balance the Carbon-to-Nitrogen ratio a non-issue, which saves money.
- Organic decomposers break down lignin and cellulose.
- Enzyme production.

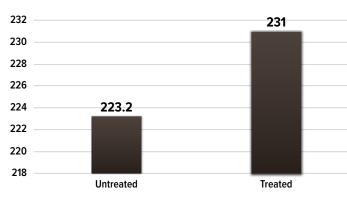
APPLICATION GUIDELINES:

- Apply 1.2 oz per acre with minimum of 10 gallons of water per acre for residue breakdown situations.
- Apply 1.2 oz per acre with spring burndown pass ahead of crops.
- Apply 1.2 oz per acre in-furrow or as a foliar application.
- Use Water-Rite and or Bio-Prep to ensure water is correct for D-Comp application.

D-Comp Dry Foliar Spring Pre Soybean 2024 Nebraska



D-Comp Dry In-Furrow Corn 2024 Baltic SD





D-COMP DRY

WATER-RITE

WATER PRE-TREATMENT

WRTER-RITE

WHAT IS WATER-RITE?

WATER-RITE is a specialty water pretreatment designed to bind Calcium, Magnesium, Iron, and Copper in order to neutralize their negative effects on biological ingredients.

This binding action will also prevent the formation of common hard water scaling in pivot and drip irrigation systems.

BENEFITS:

- **WATER-RITE** can also be used to treat water prior to diluting fertilizers, herbicides, and pesticides.
- Promotes maximum efficacy of glyphosate and other applied chemistry while minimizing insoluble solids that can form when minerals precipitate with phosphates. (Precipitated solids can inhibit uniform application rates and/or plug sprayer nozzles.)

APPLICATION GUIDELINES:

WATER-RITE

Application rates vary based on water source and hardness.

Rural Water Systems:

• For rural water systems, use Water-Rite at 4 oz. per 100 gallons. If biological components are included in the tank mix, adding Bio-Prep as a Chlorine neutralizer at 2 oz. per 100 is also necessary.

Well Water Systems:

• For well water systems shallow and deep, add 8 oz. per 100 gallons. If water is extremely hard or contains significant levels of heavy metals like Copper, a use rate of 12 oz. per 100 gallons is recommended.

WRTER-RITE

BIO-PREP

CHLORINE NEUTRALIZER

BIO-PREP

HEP

BIO-PREP

WHAT IS BIO-PREP?

BIO-PREP is a water pre-treatment that reverses the negative effects Chlorine has on biological products. Chlorine is added to rural and municipal water sources to kill microbes, making those sources safe for drinking. When you use Chlorinetreated water to fill your sprayer, it will kill any beneficial microbes you might be applying for your crops.

BIO-PREP transforms Chlorine into the safer form, Chloride, which is an essential plant nutrient and no longer harmful to beneficial microbes.

BENEFITS:

• **BIO-PREP** is a specialty water pretreatment solution designed to counter the effects of Chlorine in city water, rural water, or any other Chlorine-treated water supply. This product is intended to neutralize Chlorine's negative effects on biological ingredients.

APPLICATION GUIDELINES:

• For most applications, a rate of 2 to 4 oz. per 100 gallons of water is sufficient.

MAKE YOUR WATER WORK FOR YOU.





heftyseed.com/naturals

heftyseed@heftyseed.com (800) 274-3389