



SOIL & PLANT NUTRIENT SOLUTIONS

SOIL AMENDMENT • FERTILITY • MICRONUTRIENTS • NUTRIENT MANAGEMENT • SPECIALTY



The Monty's Brand

Trusted Advisors. Proven Solutions.

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MONTY'S MEANS... TRUSTED ADVISORS, PROVEN SOLUTIONS.

Farmers care about high quality, higher yields, every time. They care about the health of their plants. They care about soil quality and sustainability.

As a farmer, there's a lot on your plate and so many things to do to bring your crops from seed to market. There are so many variables from season to season that can affect the quality and volume of your yield. As a farmer, you need products that replace the guesswork with scientifically proven, dependable formulations to help ensure those high quality, higher yields and the best bottom line, season after season.

Monty's plant and soil products do just that, and the secret to their success is not a secret at all, it's simply science: Monty's Activated Humic Technology.

Based on the foundation that healthy soil produces higher quality and higher yields, we've created a complete line of products powered by activated humics. While humic products aren't new to agriculture, what makes Monty's plant and soil products superior is our proprietary process that activates the humics, unleashing their soil enriching capabilities and maximizing the soil's potential, while simultaneously optimizing the effectiveness of your other inputs. And our highly concentrated formula, containing the perfect ratio of humics and fulvics, provides high efficacy and targeted results.

Monty's scientifically formulated Humic Technology has been proven effective on all soil types, and are specifically engineered not to clog or damage equipment.

But at Monty's we're so much more than just the most effective products on the market. We're a friend to farmers, trusted advisors who take a hands-on approach, and go the extra mile to help ensure our customers understand how to use our products to maximize yields and minimize headaches.

From service to sales, and from the lab to the field, our Trusted Advisors are there for you at every step. No matter the issue, we'll always provide options that fit your need and we're constantly innovating to anticipate your future needs.

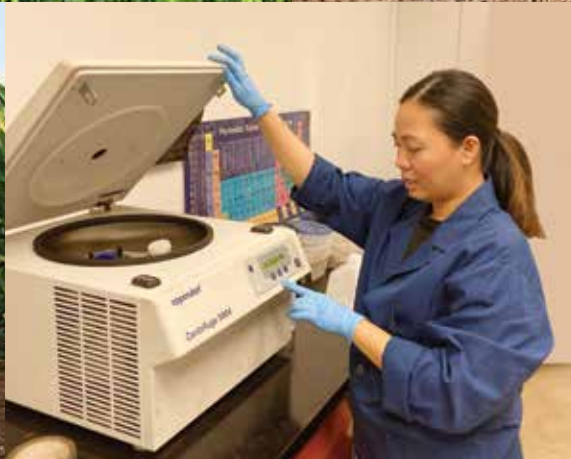
As a family-owned business with a tight-knit work culture, our Monty's Trusted Advisors will treat your farm like their own. And they'll always do the right thing, every time.



**TRUSTED ADVISORS.
PROVEN SOLUTIONS.**

"I work very closely with Monty's team to achieve my record yields."

TERRY VISSING, MACC Group. National Corn Yield Contest Winner.



MONTY'S FAMILY OF HUMICS

Healthier soil. Healthier
crops. Higher yields.

The Humic Advantage.

Humics stimulate microbial activity, help break up compaction, assist in transferring micronutrients from the soil to the plant, enhance water retention, increase seed germination and improve the breakdown of plant residue.

Monty's proprietary humic technology makes our product the most active and soluble available in the marketplace, and is formulated to the ideal humic to fulvic ratio to maximize yields and success.



SUCCESS STARTS WITH HEALTHY SOIL!

The health of your soil will have a significant impact on the quality and quantity of your yield.

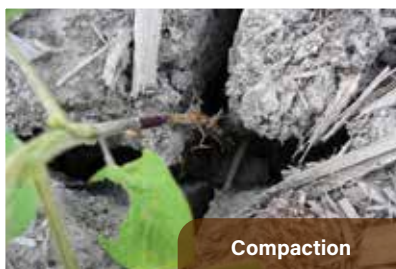
Poor imbalanced soil can negatively impact your crops and rob you of yield.

WHAT IS IMBALANCED SOIL?

If you have imbalanced soil it means there is a biological, chemical, and geological imbalance in the soil. Our soils today are NOT as productive as they once were. Weather, insects, erosion, over-production, and high salt products have led to imbalanced soil robbing your yield potential.

Out of balance soil:

- Reduced biological life
- Erosion
- Crusting, cloddy, hard to work soil
- Little or no earthworm activity
- Water logging, poor drainage
- Compacted, poor root systems
- Insect and disease problems
- Poor organic matter decomposition
- High salt
- More fertilizer/chemicals needed
- High weed pressure



Compaction



Minimal Life



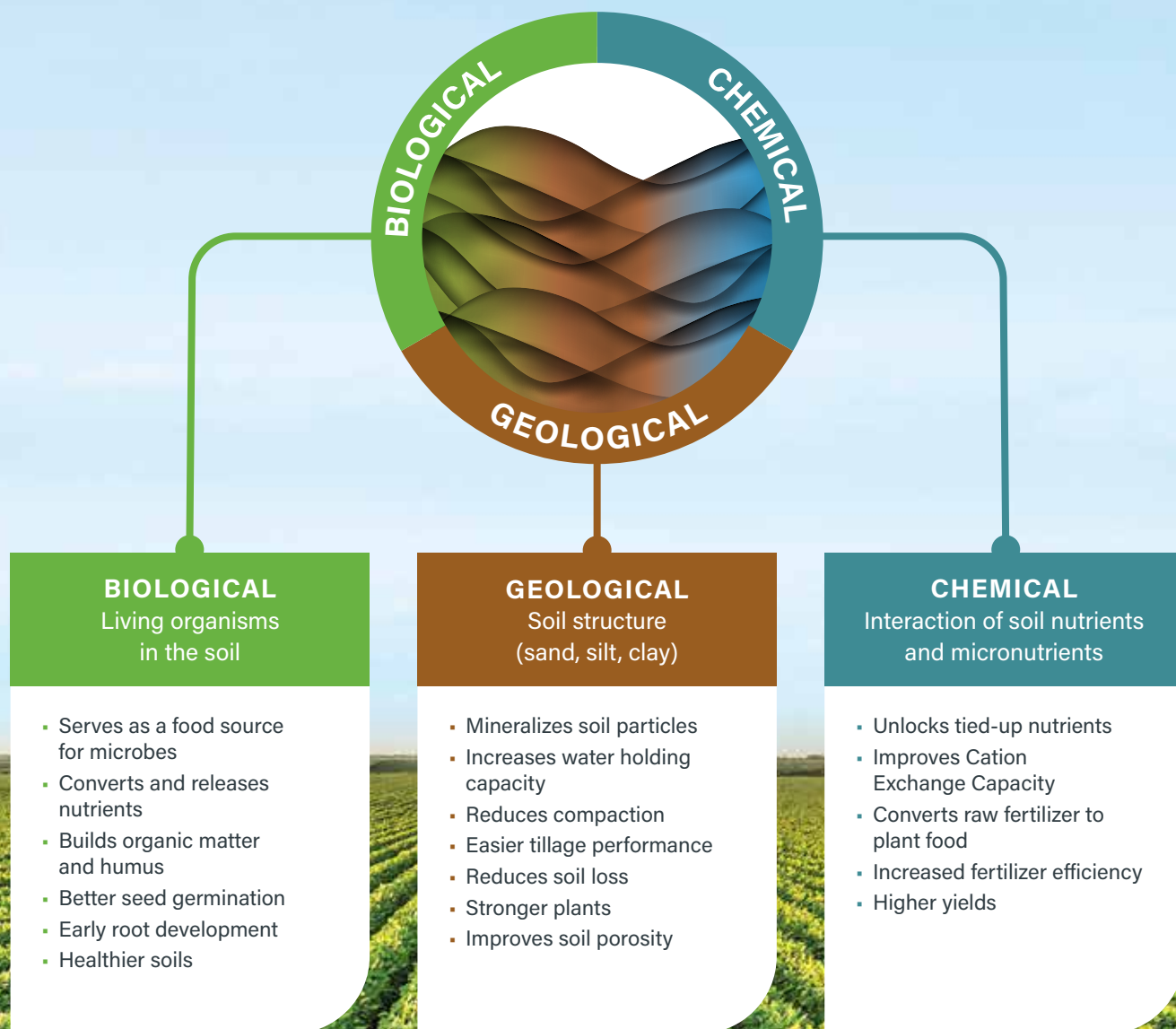
High Salt



Poor Drainage

THE KEY TO SUCCESSFUL ROI IS HEALTHY, BALANCED SOIL.

Three Soil Health Properties



The right humic substances can be the key to addressing this soil imbalance. ► ► ►

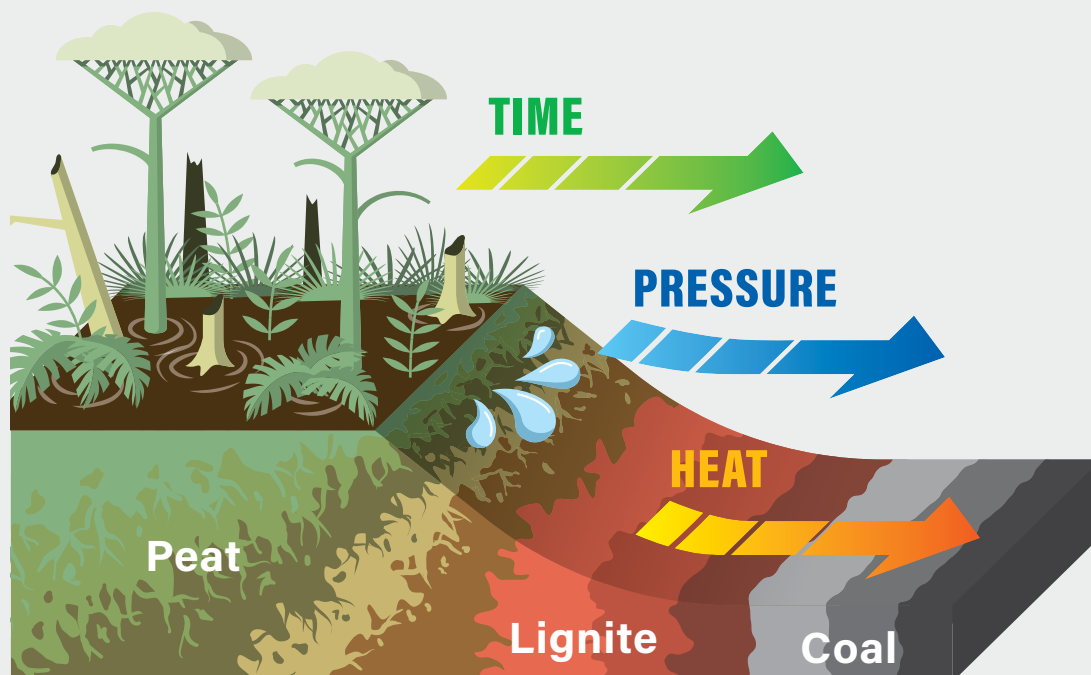
WHAT ARE HUMIC SUBSTANCES?

Humics are the major organic components of soil (humus), peat and coal.

Humic substances are formed by the microbial degradation and decomposition of organic (plant) matter.

The industry-wide standard is to use a variety of starting material like brown coal (Lignite, Leonardite) or peat to extract humic substances. Starting material is crushed, converted to granules, liquefied, and/or pelletized. In this state, it remains an **inactive** and **insoluble** humic product.

1 Decomposed matter (with time, pressure, and heat) forms brown coal



2 Brown coal (Lignite, Leonardite) is mined from the ground



3 It is then dried, crushed and screened to form granules

Humics on the market today are mined, dried, crushed (or liquefied), and remain in their natural state.



Composition of Mined Brown Coal (Lignite, Leonardite)

BROWN COAL:

75% of raw brown coal is organic matter

Minerals

ORGANIC MATTER:

Of that 75% organic matter, **80%** is humic substances

Other
Compounds

HUMIC SUBSTANCES (HUMIC/FULVIC ACIDS AND HUMIN)

75% is INSOLUBLE humic substances

Soluble
Humic
Substances

75% of the humic substances are in their natural state: **INSOLUBLE** and biologically inactive.

What does **INSOLUBLE** mean?

Humic products remaining in their natural state are insoluble, meaning they do not dissolve in a water or soil solution, thereby having little impact on the health of the soil. See page 9.

This is where many competitors stop!



Many competitive products are insoluble, inactive, and bio-inhibiting substances. When applied to the field, they have little to no impact on the soil and its biology.

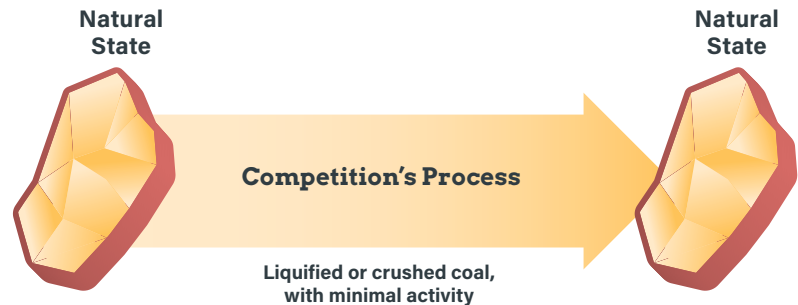


How are Monty's humics different? ► ► ►

HOW ARE MONTY'S HUMICS DIFFERENT?

Competition's Process

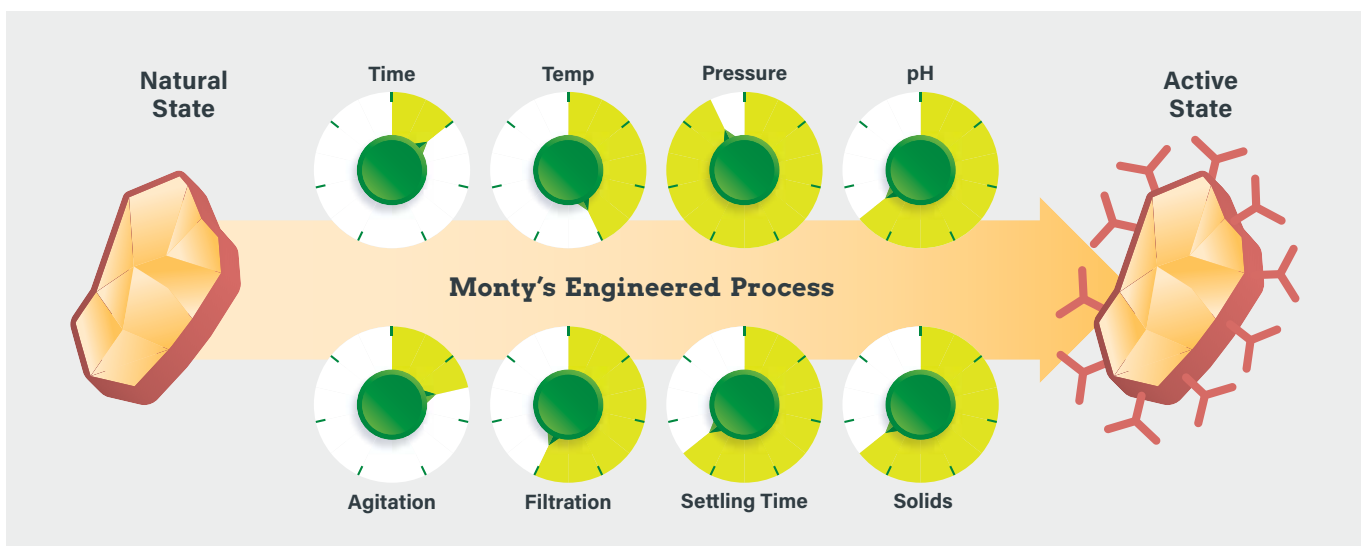
Some competitors process their material with an incorrect combination of chemicals, temperature, and/or other processes. These processes can cause their humics to be bio-inhibitive and significantly less beneficial to the plant and soil.



Monty's Engineered Process

Monty's takes the process even further with our proprietary humic technology. The unique, engineered process converts the inactive humic molecule to an open, activated soluble state.

This proprietary, patented process optimizes pH, temperature, pressure, time, solids, and agitation, creating a chemical reaction, converting humics substance to their active state. This results in a more soluble and biologically active humic product... maximizing efficiency and ultimately maximizing yields.

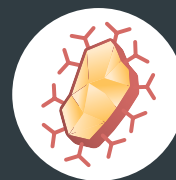


MONTY'S HUMICS PERFORM BETTER THAN THE REST!



Competition's humic molecule:

- ✗ Insoluble
- ✗ Inactive
- ✗ Less effective
- ✗ Prone to clog
- ✗ Bio-inhibitive



Monty's open, activated humic molecule is now a natural catalyst which is:

- ✓ Highly Soluble
- ✓ Highly Active
- ✓ Highly Effective
- ✓ Reduces Clogging
- ✓ Purest Humic Form
- ✓ Clean Humic Catalyst

Compare Monty's to the competition

The competition's insoluble humics will not dissolve, having little to no impact on the soil. **Monty's activated humics go to work in the soil immediately!**



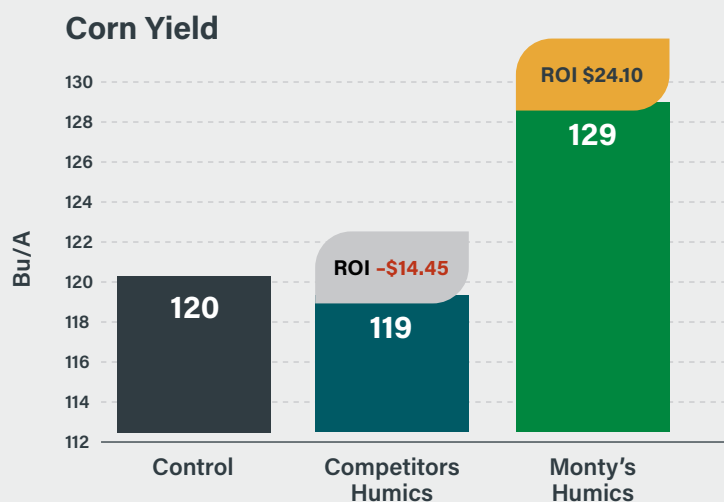
Competition's Non-activated Humics



Monty's Activated Humics

Farmers can see a difference in their yield!

Replicated field trials comparing Monty's Humics to the competitor's Humic product. Both applied at 0.5 gal/A in-furrow. Monty's Humics produced 10 bu/A more than the competitor's product, and had an ROI of \$24.10 over the control plot.



How do Monty's humics impact the plant and soil? ►►►

HOW DO MONTY'S ACTIVATED HUMICS IMPACT THE PLANT AND SOIL?

Our engineered humics allow for the selection of the optimum molecule size and humic to fulvic acid ratio for increased solubility and maximum performance.

Monty's engineered humics have the optimum concentration for peak biological, chemical, and geological activity (See page 5). This results in lower dosing rates, higher efficiency, and a wide variety of benefits to the soil and plant.

PHYSICALLY

- ✓ Decreases soil compaction
- ✓ Increases water holding capacity
- ✓ Increases aeration of soils

CHEMICALLY

- ✓ Improves Cation Exchange Capacity (CEC)
- ✓ Buffers soil pH
- ✓ Makes nutrients available to the plant

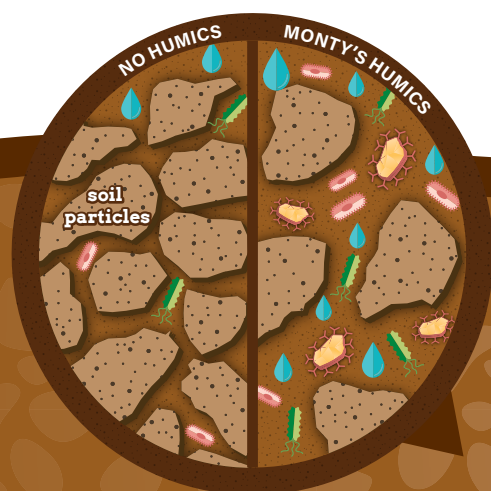
BIOLOGICALLY

- ✓ Acts as catalyst in numerous biological processes
- ✓ Stimulates plant growth
- ✓ Stimulate root growth for increased nutrient uptake
- ✓ Increases soil microbial communities

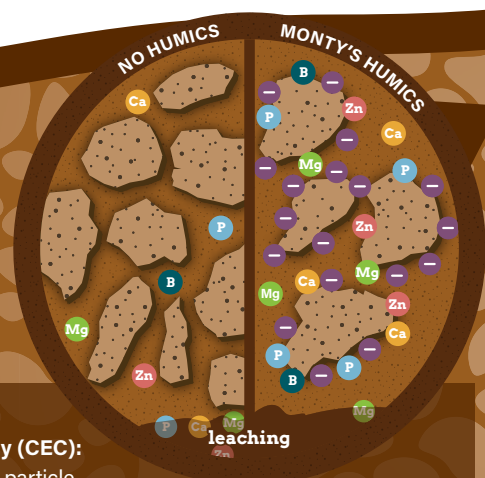
HUMIC SUBSTANCES

HUMIC ACID		FULVIC ACID
High	Molecular Weight	Low
Low	Plant Nutrient Delivery	High
High	Soil Amendment Properties	Low

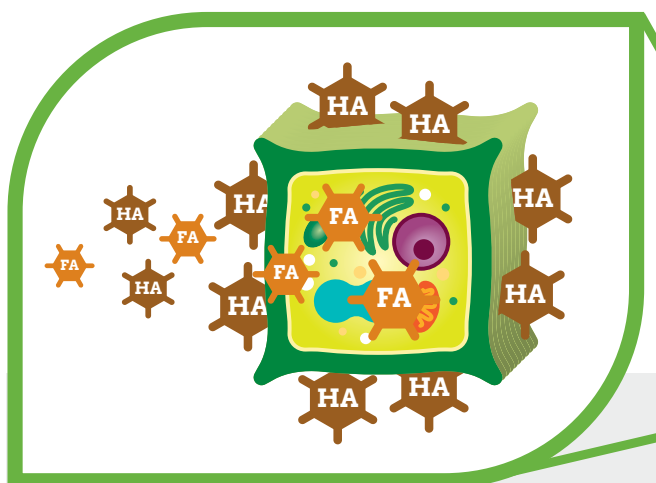
Monty's humics are unique in that we engineer each product with a specific humic acid to fulvic acid ratio dependent on desired functions. Fulvic acids have a lower molecular weight to help drive nutrients into the plant cells. Humic molecules have a higher molecular weight aiding soil microbe stimulation, increasing CEC, and chelating nutrients.



Decreases soil compaction and increases water holding capacity: Humics create space between soil particles allowing for increased water penetration and holding, aerate and increase oxygen content, and create a reservoir for nutrients. These benefits increase soil microbe populations and create an overall healthy soil structure.



Improves Cation Exchange Capacity (CEC): Humics create clay particle complexes which are negatively charged. These complexes bind positively charged (cations) nutrients including Ca, Mg, K, Zn, Cu, Mn, Fe, and B. These nutrients are then released into the soil and delivered to the plant, preventing nutrient leaching.



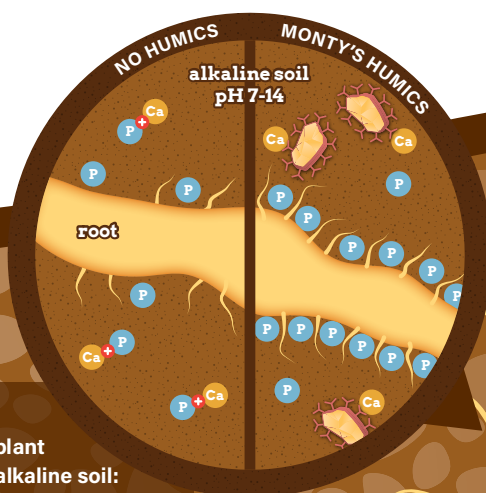
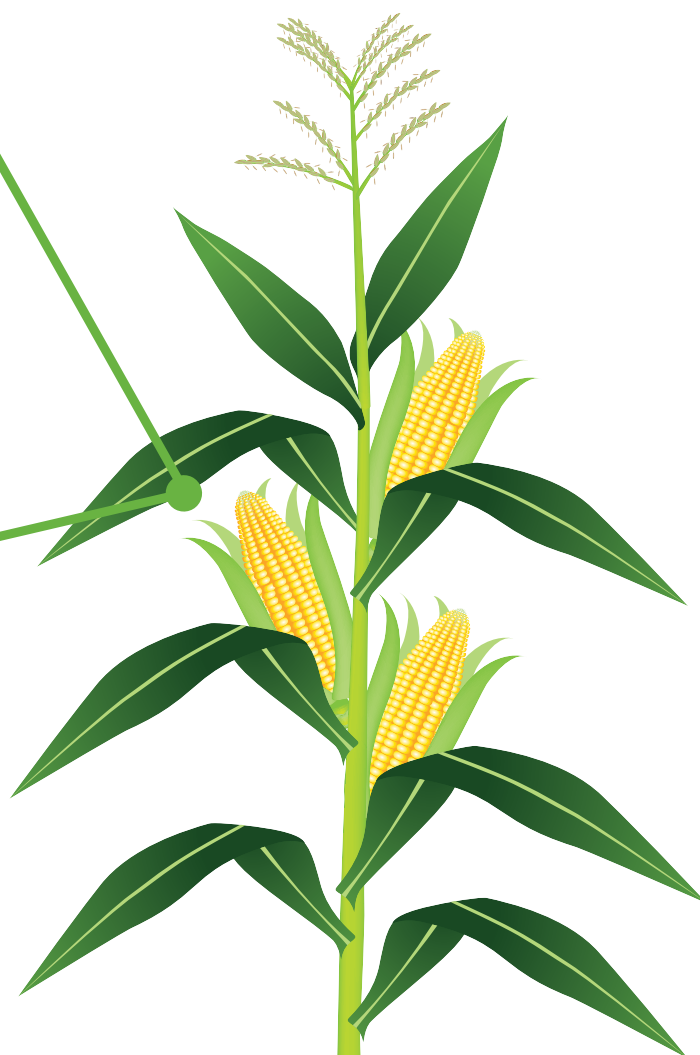
Humic acids are able to:

- ✓ Penetrate cell walls
- ✓ Attach to the outside of the cell membranes
- ✓ Protect the cell from toxins, pathogens and other stressors



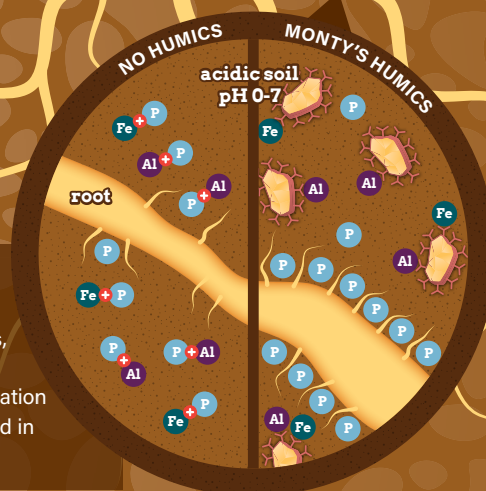
Fulvic acids are able to:

- ✓ Penetrate cell membranes due to their small molecular size
- ✓ Transport nutrients into the cell



Increases nutrient availability to the plant and buffers pH in alkaline soil:

In alkaline soils, calcium is bound with phosphate. Humics form complexes where phosphates are released into the soil along with other nutrients, making them readily available for root uptake. This process neutralizes soil pH.



Increases nutrient availability to the plant and buffers pH in acidic soil: Under acidic conditions, humics bind heavy metals making them immobile, promoting the formation of the clay-humic complexes that aid in neutralizing acidic soil.

Why is Monty's your trusted humics leader? ▶ ▶ ▶

MONTY'S: YOUR TRUSTED HUMICS LEADER

Monty's humics can improve your soil and maximize your yields year after year. Once applied to the soil, our humics technology provides a catalyst that makes everything you apply work better.

✓ PURITY

Highly soluble and clean = No clogging of sprayers, nozzles, or hoses.

✓ ACTIVITY

High efficacy, efficiency, and results = Lower dosing rates and higher yields.

✓ CONCENTRATION

Peak biological, chemical, and geological activity = humic molecules actively perform their function quickly and effectively for maximum performance.

✓ COMPATIBILITY

Tank mixable = Flexibility in mixing with nutrients, fungicides, herbicides, and pesticides.

BALANCED SOIL:

- Active biological life
- Reduced erosion
- Good tilth, loose soil
- Many earthworms
- Increased water intake & retention
- Reduced compaction
- Larger root systems
- Fewer pests & diseases
- Rapid organic matter conversion
- Reduced salt in the soil
- Fewer chemical inputs
- Fewer weeds

THE TRUTH ABOUT HUMICS

A little dose of truth is all your crops want. The truth...

- Monty's humic technology is proprietary. There is nothing else like it, or proven as effective on the market.
- Monty's highly concentrated formulas allow for lower application rates—providing better value to the producer.
- Monty's humics have been used successfully on soils ranging from heavy clay to light sand.
- Monty's products have a proven track record of improving grower's plants, soil, and increasing their yields since 1985.
- Monty's humics are uniquely designed to meet your farming challenges, focusing on soil health and sustainability.

And that's the truth. Don't be fooled by others who tell you differently. A little dose of truth is all your crops want. Talk to your dealer or Monty's representative, or go to TheTruthAboutHumics.com for more information.





Monty's is a proud member of the Humic Products Trade Association (HPTA). HPTA works to promote commercial trade of Humic Products through scientific cooperation while addressing regulatory issues and is responsible for a new standard for measuring humic substance content in products.



Monty's employs numerous patented processes in its unique humic technology. Monty's liquid humics, dry humics, and humic coating technologies are patented.



Monty's is proud to be involved with...

Agribusiness Industry Network
Agricultural Media Summit
Association of American Plant Food Control Officials (AAPFCO)
Corn Growers' Association
Fertilizers & Supplements Advisory Committee, Canada
FFA
Humic Products Trade Assn (HPTA)

Kentucky Ag Council
Kentucky Agricultural Science and Monitoring Committee (KASMC)
KY Proud
Noble Foundation
NRCS State Technical Committee
Soil Health Initiative
Soybean Growers' Association
Wheat Growers' Association

"We could tell a huge difference in the treated and untreated area of that field the first year. We repeated the test the second year and were blown away. The corn was almost twice as tall and the yield was over 50 bushels more where we applied Monty's Liquid Crabon for just two years ."

BEN HUSHON
 THE MILL

MONTY'S: YOUR TRUSTED HUMICS LEADER



The benefits of humic technology and why Monty's is the best in the industry

What are humics?

Humic substances can be broken down into Humic Acids and fulvic acid. Humic Acids is a principal component of humic substances. Humic substances are the major organic constituents of soil (humus), peat, and coal. They are also found in upland streams, lakes, and ocean water. Humic substances are produced by the decomposition of organic matter.

How can humics help me to increase my yield?

Humics stimulate microbial activity in soil, help break up compacted soil, assist in transferring micronutrients from the soil to the plant, enhance water retention, increase seed germination, and improve the breakdown of plant residue.

How can Monty's lower % humic be better than the competition's higher % humic?

Whether its 50%, 25%, or 12.6%, humics in their natural state are insoluble. This means they cannot disperse effectively through the soil profile. Monty's proprietary processing technology makes our product the most active and soluble available. Our humics are more pure and have the ideal humic-to-fulvic ratio to provide for maximum yield and success. We understand the right concentration of humic substances to maximize biological stimulation. This is why our lower concentrations are more effective. This is our advantage.

What are the advantages of using Monty's products throughout the year?

Monty's humic products are continuously working when used throughout the year. Monty's recommended programs can improve your soils and maximize your yields year after year, providing the most cost-effective solution available.

How do you show/know it's active?

Activity is measured in the soil and plants. Soil testing will show the results: reduced soil compaction, improved overall soil health, enhanced micronutrient uptake, and enhanced breakdown of plant residue. Results may include increased root mass, healthier plants and ultimately a higher yield. As an example, a recent study* by North Carolina State University found a 12% average increase in yield over untreated soil.

*NC STATE UNIVERSITY, DEPARTMENT OF CROP SCIENCE, COLLEGE OF AGRICULTURE AND LIFE SCIENCES.

How can you apply two quarts to an acre and get results?

Our proprietary humics are purified and activated, have the correct humic-to-fulvic ratio, and are applied at the optimum humic concentration. Therefore we have a lower rate of application and can achieve greater results by stimulating the soil's natural biology in the most effective way.

Why are you telling me to add carbon, when I have plenty of carbon in my soil?

Carbon has many forms, but stable, organic carbon is our priority. Monty's Liquid Carbon is the product name for our active humic products. Monty's Liquid Carbon contains highly purified and activated humic substances with carbon in their molecular structure. This type of carbon is stable and organic.

Does Monty's activated humic technology work in all soil types?

Yes. Whether you have clay soils and compaction or sandy soils, Monty's Liquid Carbon and Monty's Dri-Carbon™ can provide benefits to the soil.

How does Monty's humic increase microbial activity?

Humic products increase microbial activity by providing optimum conditions for microbial life and protecting microbes from adverse external conditions.

Do humics increase Cation Exchange Capacity (CEC) in the soil?

Humic substances by themselves have a very high CEC. When added to soil, humic substances stimulate soil organic matter production, which is rich in humus. Humus has a high CEC, which raises CEC levels on the soil test.

How does your cost/acre compare to other humic products?

Our cost per acre is generally lower because our humics are purified and activated, have the correct humic-to-fulvic ratio, and are applied at the optimum humic concentration. Although our cost/gallon may be greater, our cost/acre is generally less because of our lower application rates.

Visit www.montysplantfood.com for more questions and answers about the impact humics can have on soil and plant health.



Is your soil healthy enough for next season's **CHALLENGES?**

Remediation today is the key to a successful yield next season! Monty's offers solutions each fall for healthier crops the next season.

ISSUE	SOLUTION
Soil compaction, residue buildup, high salt levels, tied-up and imbalanced nutrients, and herbicide carry-over	Monty's® Liquid Carbon™ is a unique, activated humic technology designed to reduce compaction and improve overall soil health (including texture, structure, and helps break down plant residue. Also available in dry format! > Apply at 2 quarts/ac (Pg 26)
Residue build-up, especially from stacked hybrids; soil compaction; mold, fungi, and disease carry-over; high salt levels; tied-up and imbalanced nutrients; and herbicide carry-over	Humi-Till® is a unique blend of specific microbes and activated humics designed to decompose crop residue. Digesting residue helps eliminate the mold, fungi, and disease that exists on the residue. Humi-Till significantly reduces your planting problems and makes the nutrients in crop residue available. Works great on all types of residue including corn, wheat, soybeans, cotton, peanuts, and canola. > Apply at 4 quarts/ac* (Pg 30)
All nitrogens (dry or liquid), as well as phosphorus and potash, have high salt indexes. These high indexes contribute to issues with germination and root development. The heavier the application of fertilizers, the greater the negative impact on the soil and biology	Humihance® is a humic-based fertilizer coating that addresses fertilizer salt indexes by coating each granule with Monty's activated humic substances. Humic substances buffer fertilizer salt, reducing damage to seed germination and root development. Humihance is designed to increase the efficiency of each fertilizer granule. It is ideal for use when blending granular fertilizer, and is compatible with micronutrients and pre-treated fertilizers. Non-corrosive. Contains 1% Nitrogen. > Apply at 1/2 gallon/ton of fertilizer (Pg 56)



PRODUCTS

Monty's provides solutions!

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Monty's offers a unique package of products - including soil amendment, fertility, micronutrients, nutrient management, and specialty - all designed to help our growers be more successful.





MONTY'S MEANS... SOLUTIONS!

Monty's offers a variety of solutions to address growers challenges!

	Monty's® Liquid Carbon™ (26)	Monty's® Dri-Carbon™ (28)	Nanobind™ (29)	Humi-Till® (30)	Humi-Till® Activator (31)	Premium Blend (34)	Seed Starter/Foliar (35)	All-Purpose Growth (36)	Root & Bloom (37)	Hay-Now® (38)	C795 Plus™ (39)	Agri-N™ (40)	Midnight® (41)	Microhance® (42)	Nauxin™ (43)	Agrihance®-S (44)	Agrihance®-V (44)	Agrihance®-R (44)	K28™ (46)	Sulfur 15™ (47)	Calcium Plus™ (48)	Micronutrients (52-53)	Humihance® (56)	Surge™ XD (57)	Agri-Sweet™ FG (60)	Turf Power SRN™ (61)	Calesco™ (62)	Multiplicity™ (63)	Nanobost® (64)	Sludge Relief® (65)	Specialty Brands (66-67)		
Soil Health	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓	—	✓	✓	—	—	—	—	—	✓	✓	✓	✓	✓	—	—	✓	—	✓	—		
Soil Compaction	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓	—	✓	—	—	—	—	✓	—	✓	—		
Soil Salinity	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓	—	✓	—	—	—	—	✓	—	✓	—		
Litters & Manure	✓	✓	✓	✓	✓	✓	—	—	—	✓	✓	✓	—	—	—	—	—	—	—	—	✓	—	✓	—	✓	—	—	✓	—	✓	—		
Remediation	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓	—	✓	—	—	—	—	✓	—	✓	—		
Residue Digestion	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓	—	—	—	—	—	—	—	—	✓	—	✓	✓	✓	✓	✓	—	✓	—	✓	—	
Seed Treatment	✓	—	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	—	✓	—	✓	✓	✓	✓	—	✓	—	—	✓	—	
Planting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓	—	✓	—	
Micronutrient Deficiency	—	—	—	—	—	✓	✓	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓	—	—	✓	—	
Crop Stress Relief	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓	✓	✓	—	✓	✓	—	✓	—
Starter Boost	✓	✓	✓	✓	—	—	—	—	—	—	—	✓	—	✓	✓	—	—	—	✓	✓	✓	✓	—	✓	✓	—	✓	✓	—	—	—	—	
Vegetative Boost	—	—	✓	—	—	✓	—	✓	—	✓	✓	✓	✓	✓	✓	—	✓	—	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	—	—	✓	—
Reproductive Boost	—	—	✓	—	—	✓	—	—	✓	✓	✓	✓	—	✓	✓	—	—	✓	✓	✓	✓	✓	—	✓	✓	—	✓	✓	—	—	—	✓	—
Weed Control Enhancement	✓	—	✓	✓	—	—	—	—	—	—	—	✓	✓	✓	✓	—	—	—	—	—	✓	—	—	✓	✓	—	✓	✓	✓	✓	—	—	—
Fertilizer Enhancement	✓	✓	✓	✓	✓	—	—	—	—	—	—	✓	—	✓	✓	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—
Lagoon & Tank Enhancement	✓	—	✓	✓	—	—	—	—	—	—	—	✓	—	—	—	—	—	—	—	—	✓	—	—	—	✓	—	—	—	—	—	✓	—	—

NUTRIENT ROLES

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

PRIMARY NUTRIENTS

SECONDARY NUTRIENTS

MICRONUTRIENTS

PRIMARY NUTRIENTS

Nitrogen (N)

- Essential for plant growth
- Nitrogen is essential in photosynthesis
- Directly responsible for creating protein content
- Nitrogen increases bushels of corn per inch of available water

Monty's Products (Catalog Page): Humihance (56), Hay-Now (38), Agrihance (44), Seed Starter (35), All-Purpose (36), Root & Bloom (37), Midnight (41), Microhance (42), Nauxin (43), Agri-N (40), and Sulfur 15 (47)

Phosphorus (P)

- Plants absorb most of their P as their primary ortho-phos. (H_2PO_4)
- Plays a role in photosynthesis, respiration, energy storage and transfer, cell division and enlargement, and several other processes in the living plant
- Improves the quality of fruit, vegetable, and grain crops
- Helps roots and seedlings develop more rapidly
- Hastens maturity

Monty's Products (Catalog Page): Hay-Now (38), Agrihance (44), Seed Starter (35), All-Purpose (36), Root & Bloom (37), Midnight (41), Microhance (42), Nauxin (43), and Sulfur 15 (47)

Potassium (K)

- Has a great impact on crop quality, kernel weight, kernels per ear, improved oil and protein content
- Influences water-use efficiency and improves drought-tolerance
- Essential for protein-synthesis
- Is involved in the activation of more than 60 enzyme systems (which regulate the rates of major plant growth reactions)
- Helps the plant overcome the effects of disease

Monty's Products (Catalog Page): Hay-Now (38), Agrihance (44), Seed Starter (35), All-Purpose (36), Root & Bloom (37), Midnight (41), Microhance (42), Nauxin (43), and Sulfur 15 (47)

SECONDARY

Calcium (Ca)

- Stimulates leaf and root development
- Strengthens plant structure
- Activates several plant enzyme systems
- Improves root growth conditions

Monty's Products (Catalog Page): Calcium Plus (48)

Magnesium (Mg)

- Involved in photosynthesis
- Affects seed development
- Aids in phosphate metabolism, plant respiration, and the activation of many enzyme systems

Monty's Products (Catalog Page): Magnesium (52)

Sulfur (S)

- Constituents of two of the 21 amino acids which form proteins
- Helps to develop enzymes and vitamins
- Aids in seed production
- Promotes nodulation for N fixation by legumes
- Is present in organic compounds
- Helps to avoid thin-stemmed and spindly plants

Monty's Products (Catalog Page): Hay-Now (38), Midnight (41), Microhance (42), Nauxin (43), and Sulfur 15 (41)

MICRONUTRIENTS

Boron (B)

- Essential for germination of pollen grains
- For seed and cell wall formation
- Associated with sugar translocation and protein formation
- Helps to avoid stunted growth

Monty's Products (Catalog Page): Microhance (42), Nauxin (43), and Boron (52)

Cobalt (Co)

- Is a trace element in plants
- Is a component of a number of enzymes
- Increases drought resistance of seeds
- Is important for nitrogen fixation in legumes
- Helps ensure maximum efficiency of plant activity

Monty's Products (Catalog Page): CoMoB (52)

Copper (Cu)

- Necessary to chlorophyll formation in plants
- Catalyzes several other plant reactions
- Helps avoid sickly plants and failure to flower

Monty's Products (Catalog Page): Copper (52)

Iron (Fe)

- A catalyst to chlorophyll formation
- Acts as an oxygen carrier
- Helps for certain respiratory enzyme systems

Monty's Products (Catalog Page): Iron (52), Hay-Now (38), Agrihance (44), Seed Starter (35), All-Purpose (36), Root & Bloom (37), Midnight (41), Microhance (42), Nauxin (43), and Manganese (52)

Manganese (Mn)

- Plays a direct role in photosynthesis by aiding the plant's chlorophyll synthesis
- Accelerates germination and maturity while increasing the availability of P and Ca
- Deficiency symptoms appear on younger leaves
- Deficiencies may result from an imbalance with other nutrients such as Ca, Mg, and Fe

Monty's Products (Catalog Page): Hay-Now (38), Microhance (42), Nauxin (43), and Manganese (52)

Molybdenum (Mo)

- Vital for the process of symbiotic nitrogen (N) fixation by rhizobia bacteria in legume root nodules
- Is needed to convert inorganic P to organic forms in the plant
- Is required for the synthesis and activity of enzymes

Monty's Products (Catalog Page): CoMoB (52) and Molybdenym (52)

Zinc (Zn)

- Deficiencies tend to occur early in the growing season when soils are cold and wet
- Deficiencies will cause shortening of inner nodes and stunting of leaf nodes
- Aids in enzyme systems and is essential for certain metabolic reactions
- Aids synthesis of plant growth substances

Monty's Products (Catalog Page): Hay-Now (38), Seed Starter (35), All-Purpose (36), Root & Bloom (37), Midnight (41), Microhance (42), Nauxin (43), and Zinc (52)

Nutrient information: Soil Fertility Manual, Potash and Phosphate Institute. Cobalt information: The Effects of Cobalt, Copper, and Chromium in the Garden, Monica Mansfield, 2017

SOIL AMENDMENT

Better soils, better crops

Monty's Soil Amendment products are designed to improve the overall health and vitality of the soil.

Products impact conditions such as compaction, aeration, organic matter levels, moisture management, and the breakdown of plant residue.

- **Monty's® Liquid Carbon™** helps improve and maintain the condition of your soil
- **Monty's® Dri-Carbon™** improves your soil in an affordable, low-dose, dry formulation
- **NanoBind®** works to give you rapid results and high microbial populations, while addressing salinity issue
- **Humi-Till®** helps break down crop residue, releasing nutrients for crop uptake, creating a more healthy soil
- **Humi-Till® Activator** for residue management

Growers have used Monty's Soil Amendment products on soils ranging from heavy clays to light sand. This season, treat your soil in the spring before planting for results you will notice all season long.

**"I would not have the success I've had
without Monty's Liquid Carbon."**

KEVIN KALB

14-TIME NATIONAL CORN YIELD WINNER,
CORN WARRIOR, AND MACC GROUP FOUNDER



SOIL AMENDMENT





MONTY'S[®] LIQUID CARBON[™]

Proprietary Activated Humic Technology

Monty's Liquid Carbon is a soil conditioner designed to reduce soil compaction and improve overall soil health. It can be easily applied all year round, especially during pre-chemical application or burn down. Liquid Carbon enhances micronutrient uptake and breakdown of plant residue. Improve the health and vitality of your soil, and maximize your yields with Monty's Liquid Carbon (MLC).

- Reduces soil compaction
- Improves overall soil health
- Easy application during burn down
- Enhances micronutrient uptake
- Enhances breakdown of plant residue
- Tank-mix flexibility for year-round use

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Ingredients:

Humic Acids*2%

Derived from: Brown Coal

APPLICATION RATES

GENERAL: Apply at varying rates depending on purpose or desired result. For general soil conditioning, apply 2 quarts per acre directly to soil in fall and early spring. May also be applied at the same rate at pre-plant, planting, or for Residue Management. Apply 1 quart per acre when foliar applying with liquid nitrogen or other fertility products.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre directly to soil in fall and early spring. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

** According to both the HPTA (Humic Products Trade Association) and California methods of testing humics. There are different methods for measuring humic substances. Ask your Monty's representative for more information.*



The 5 Main Applications for Monty's Liquid Carbon

- Pre-plant or burn down: ½-1 gallon/acre
- At planting in a 2x2 starter program: ½ gallon/acre
- Added to any liquid nitrogen application: 1-2 quarts/acre
- Added to any other foliar applied nutrient product: 1 quart/acre
- Residue management: ½-1 gallon/acre



"My fall treated plants are 6-12 inches taller than my untreated fields. Anytime you are running your sprayer across your fields for any reason, add Monty's to the mix. It is definitely worth it."

DARWIN OTT, Farmer

"Using Monty's on my tobacco has gained us about 200-300 pounds per acre; last season my son used it and raised 3,400 pounds and the plot right next to it only raised 2,900 without Monty's."

ANDY NEWTON, Farmer

"I have 8,000 acres of corn, wheat, soybeans, and barley, as well as 600 head of beef cattle. I have been using Monty's for the past 5 years. I use Monty's Liquid Carbon in the row. I am very pleased with increased production and how my crops look. I have seen increased bushels, more drought tolerance, and better root development. Monty's Liquid Carbon has been a good investment. It really helps on lower producing soils and lower organic matter soils. It helps loosen soil. I have noticed the roots branch out more, are more vigorous, and penetrate the soil deeper. I have seen a 10-15 bushel increase in corn yields. I would recommend Monty's to everyone."

ZACH ROSE, Farmer

"Sprayed MLC on wheat in the fall. Probably had the best tillering we have ever had. Unbelievable tillering we have had and that has never happened."

JOHN SMITH, Farmer

"We farm about 650 acres of corn, soybeans, wheat, and pasture. We use Monty's Liquid Carbon on our corn to reduce compaction and breakdown residue. It has given us higher yields and better soil health. Monty's products mix well, are cleaner, and are better products. Monty's has been a great return on our investment."

COLEY ROGERS, Farmer





MONTY'S® DRI-CARBON™

Liquid Carbon in Dry Form

Monty's Dri-Carbon offers the same benefits growers have relied on from Monty's Liquid Carbon, only in a granulated product.

- Enhanced micronutrient uptake
- Improved soil-moisture retention
- Catalyst for microbial activity
- Readily soluble with moisture

Available in 50 and 2,000 lb sizes. For more information, contact your Monty's representative, dealer, or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Ingredients:

Humic Acids*49%
36% Organic Carbon

Derived from: Brown Coal

APPLICATION RATES

GENERAL: Apply at 10 pounds per acre. Can be applied with dry fertilizer. For crop specific application information, contact your representative.

HIGH YIELD: Apply at 20-30 pounds per acre. Can be applied with dry fertilizer. For crop specific application information, contact your representative.

***The California method of testing humics.** There are different methods of measuring humic substances. Monty's uses the California method because it is accepted by most states. Ask your Monty's representative for more information.

"We can sell Monty's Dri-Carbon with confidence. There is more soil activity; more life in the soil. The soil is more workable. It will raise organic matter and shows on a soil test. For soybeans and corn it helps the roots spread out more and helps soil use the nutrients. It adds pounds to tobacco. And it adds leaf structure, quantity and size. Monty's Dri-Carbon definitely works on pastures. They are green longer and more vibrant and they won't dry down as fast. People who use it come back and ask for it the next year!"

LELAND GLASS, Dealer



NANOBIND™

Microbial Enhanced Soil Remediation

Nanobind offers the same effectiveness and results as Monty's Liquid Carbon, enhanced with a microbial package and the science of nanotechnology.

- Proprietary 1,000,000 + CFU beneficial microbial package
- Lowers salt build-up
- Remediate troubled fields
- Advanced nanotechnology

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Active Ingredients:

Lactobacillus culture	1,000,000-cfu/ml
Saccharomyces Boulardii culture	3,000,000-cfu/ml

APPLICATION RATES

GENERAL: Applied at various rates for different purposes; typically 2 quarts per acre at pre-plant or for Residue Management. For crop specific application information, contact your representative.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I use traditional fertilizers and I found that I could put more down but I wasn't getting higher yields, so I started looking at alternatives. I looked at different ideas and I use all liquids, so Monty's products made sense. I apply Nanobind in the spring when applying my starter formula, which includes [Seed Starter/Foliar] and Agri-Sweet. I started out buying 2.5 gallons of products and now I only buy totes. Since using Monty's, I have seen better quality. The weights went up and the protein of the wheat has gone up as well."

DUANE TEMPAS, Farmer



SOIL AMENDMENT





HUMI-TILL[®]

Crop Residue Management

Humi-Till is a unique blend of specific microbes and activated humics designed to decompose cellulose, lignin, and keratin in crop residue. Humi-Till breaks down crop residue—significantly reducing your planting problems and making the nutrients in crop residue available.

- Unlocks nutrients in crop residue
- Works to decompose cellulose, lignin, and keratin in crop residue
- Can be applied pre-plant or post-harvest, and with fall herbicide
- Minimize planting issues due to crop residue
- Works great on all types of residue including corn, wheat, soybeans, cotton, peanuts, and canola

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Active Ingredients:

Bacillus amyloliquefaciens 2.2 x 10⁷ CFU/ml

Bacillus subtilis 4.4 x 10⁷ CFU/ml

Humic Acids 1%

Derived from: Brown Coal

APPLICATION RATES

GENERAL: Mix 3-4 quarts of Humi-Till in a minimum of 10 gallons of water per acre. Application rates and the number of applications necessary will vary with soil conditions and the amount of crop residue. Once diluted, product must be used within 24 hours. If soil temperature is below 45°F, performance is significantly reduced. For faster results, apply with 1-3 gallons of liquid nitrogen per acre.

HIGH YIELD: Apply 2-4 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I tried Humi-Till for the first time last fall on my corn stubble. This spring I saw the benefits they were talking about. My planter had no clogging issues. Humi-Till has made me a believer and I will definitely use it again this fall."

GIL TUCKER, Farmer

HUMI-TILL[®] ACTIVATOR

Crop Residue Management

Humi-Till Activator offers all the benefits of Humi-Till...just add Monty's Liquid Carbon. It is a unique blend of specific microbes and activated humics designed to decompose cellulose, lignin, and keratin in crop residue. Humi-Till Activator breaks down crop residue—significantly reducing your planting problems and making the nutrients in crop residue available.

- It's convenient and flexible: Just add Monty's Liquid Carbon
- Unlocks nutrients in crop residue
- Works to decompose cellulose, lignin, and keratin in crop residue
- Can be applied pre-plant or post-harvest, and with fall herbicide
- Minimize planting issues due to crop residue
- Works great on all types of residue including corn, wheat, soybeans, cotton, peanuts, and canola

Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Active Ingredients:

Bacillus Amyloliquefaciens	2.2 x 10 ⁷ CFU/ml
Bacillus Pumilis	2.2 x 10 ⁷ CFU/ml
Bacillus Megaterium	2.2 x 10 ⁷ CFU/ml
Bacillus Subtilis	2.2 x 10 ⁷ CFU/ml
Bacillus Licheniformis	4.4 x 10 ⁷ CFU/ml

APPLICATION RATES

GENERAL: Add entire packet to 275 gallons of Monty's Liquid Carbon and agitate until well mixed. Apply at the rate of 2 quarts per acre mixed in a minimum 15 gallons of water. Application rates and the number of applications necessary varies with soil conditions and the amount of crop residue. For faster results, apply with 1-3 gallons of liquid nitrogen per acre. If soil temperature is below 45°F, performance is significantly reduced.

HIGH YIELD: Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"Before I left, the farmer also reported emergence was quicker in the areas treated with [Humi-Till], especially where the planted soybean rows crossed the old corn rows."

JEFF PLENTY, Branch Manager/Certified Crop Specialist



SOIL AMENDMENT



FERTILITY

Results from over the top application

Monty's plant foods are designed to be used in conjunction with your current nutrient management program.

Each formula is specifically designed to provide the nutrients needed at particular growth stages: planting, vegetative, and reproductive. Whether you need to address specific nutrient deficiencies, combat heat, weather, or insect stress, or maximize production while keeping costs in check, Monty's has a foliar product for you.

- **Premium Blend** the key to success is the choice of phosphate
- **Seed Starter/Foliar** for quick emergence and early season vigor
- **All-Purpose Growth** for vigorous plant growth and crop stress management
- **Root & Bloom** root growth and seed and fruit development
- **Hay-Now®** hay and pasture liquid fertilizer
- **C795 Plus™** multi-use product ideal for seed and plant success
- **Agri-N™** foliar enhancement for green-up and energy
- **Midnight™** unique blend ideal for plant growth
- **Microhance®** is a nutrient package with six important nutrients
- **Nauxin™** essential nutrient package
- **Agrihance®** plant food for the starting, vegetative, or reproductive stages of growth
- **K28™** liquid potash nutrient supplement
- **Sulfur 15™** nutrient supplement
- **Calcium Plus™** nutrient supplement that provides chelated calcium directly to the plant

**"My fall treated plants are 6-12"
taller than my untreated field."**

MIKE OTT
FARMER



FERTILITY





Ask about our other starters including: 9-24-3 and 11-26-0-1S. Or we can formulate products specific to your needs.

The key to success is the choice of phosphate! Monty's Premium Blend uses only orthophosphate and not a synthetic blend of orthophosphate and polyphosphate. The difference? Orthophosphate is the most efficient form of phosphate, while a blend can reduce efficiency by as much as 20%.

PREMIUM BLEND

The Key to Success is the Choice of Phosphate

Premium Blend is a pop-up designed to get the seed out of the ground quickly to maximize a plant's development. Consider the advantages:

- Uses 100% orthophosphate for rapid plant availability and a quicker start.
- Contains Monty's unique, activated humic technology.
- 6-24-6 with 1% Sulfur and .05% EDTA Zinc.
- Helps address stress earlier in the season leading to higher yields.
- Easier on your soil – contains no urea.
- Sulfur and Zinc help increase the plant's stamina.
- Complete package of nutrients, for fewer mixing issues and more value.
- Can be applied in-furrow, 2x2, foliar or y-drop on corn, beans, and other crops.
- Won't damage the seed when applied according to label.

Available in 275 gallon and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

* The addition of a compatibility agent may be required when mixing with Liquid Nitrogen or Potassium Carbonate at a high ratio. Monty's recommends administering a jar test prior to mixing. Contact your sales representative or dealer for more information.

ACTIVE INGREDIENTS

Total Nitrogen (N)	6%
6% Ammoniacal Nitrogen	
Available Phosphate (P_2O_5)	24%
Soluble Potash (K_2O)	6%
Sulfur (S)	1%
1.0% Combined Sulfur	
Zinc (Zn)	0.05%
0.05% Chelated Zinc	

Non-Plant Food Ingredients:

Humic Acids	0.25%
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Derived from Ammonium Hydroxide, Ammonium Thiosulfate, Phosphoric Acid, Potassium Hydroxide, and Zinc EDTA

APPLICATION RATES

GENERAL: At planting: 2-3 gallons per acre for maximum efficiency. Early growth or with herbicides: foliar apply 2-4 quarts. Available in 275 gallon totes and bulk.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 4-5 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

Do not mix with UAN.

"Applying Premium Blend at planting boosted root growth, emergence, and health that has been clearly visible during the whole season."

AUSTIN HEIL, Farmer

SEED STARTER / FOLIAR

For Quick Emergence and Early Season Vigor

Seed Starter/Foliar is a versatile liquid plant food that can be used at planting and as a foliar on any crop, enhancing plant development from germination through emergence.

- Can be applied at planting in-furrow or 2x2
- Can be foliar applied to address crop stress
- May be used with other nutrient products for additional crop response
- Tank-mix flexible—can be applied with most herbicides, pesticides, and fungicides
- Low salt, pH balanced, safe and easy to apply. Will not burn and is non-corrosive
- Designed utilizing orthophosphoric acid (phosphoric acid) for rapid availability

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	4%
1.4% Ammoniacal Nitrogen	
2.6% Urea Nitrogen	
Available Phosphate (P_2O_5)	15%
Soluble Potash (K_2O)	12%
Iron (Fe)	0.30%
0.30% Chelated Iron	
Zinc (Zn)	0.05%
0.05% Zinc	

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, Iron EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Standard dilution for both starter and foliar applications is 1-2 quarts per acre diluted in water. Tank-mix flexible—can be applied with other fertility products and most pesticides, herbicides, and fungicides. The product can be applied through overhead and drip irrigation systems.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre diluted in water. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.



FERTILITY



ALL-PURPOSE GROWTH

Vigorous Plant Growth and Crop Stress Management

All-Purpose Growth is a versatile liquid plant food that can be used at planting and as a foliar on any crop when plant growth is desired, whether it is during the vegetative or reproductive growth stages.

- Can be applied at planting in-furrow* or 2x2
- Can be foliar applied when overall plant growth is desired or to address crop stress
- May be used with other nutrient products for additional crop response
- Tank-mix flexible: can be applied with most herbicides, pesticides and fungicides
- Low salt, pH balanced, safe and easy to apply. Will not burn and is non-corrosive
- Designed utilizing orthophosphoric acid (phosphoric acid) for rapid availability

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	8%
3% Ammoniacal Nitrogen	
5% Urea Nitrogen	
Available Phosphate (P_2O_5)	16%
Soluble Potash (K_2O)	8%
Iron (Fe)	0.30%
0.30% Chelated Iron	
Zinc (Zn)	0.05%
0.05% Zinc	

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, Iron EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Standard dilution for both starter and foliar applications is 1-2 quarts per acre diluted in water. Tank-mix flexible—can be applied with other fertility products and most pesticides, herbicides, and fungicides. The product can be applied through overhead and drip irrigation systems.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre diluted in water. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

*Sensitive seeds may react adversely to the higher nitrogen content of this product. Consult your dealer or Monty's representative for more information.

"We use Premium Growth to give the plant a boost. Se have had the best results from Monty's and we have tried several different products."

DANIEL FISCHER, Dealer

ROOT & BLOOM

Root Growth & Seed and Fruit Development

Root & Bloom is a versatile liquid plant food that can be used at planting and as a foliar on any crop. Use when quality and yield are the goals at bloom stage, on soybeans, with sucker control on tobacco, and on all root crops during all growth stages.

- Can be applied at planting in-furrow or 2x2
- Can be foliar applied when overall plant growth is desired or to address crop stress
- May be used with other nutrient products for additional crop response
- Low salt, pH balanced, safe and easy to apply
- Will not burn and is non-corrosive
- Tank-mix flexible—can be applied with most herbicides, pesticides, and fungicides
- Designed utilizing orthophosphoric acid (phosphoric acid) for rapid availability

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	2%
0.5% Ammoniacal Nitrogen	
1.5% Urea Nitrogen	
Available Phosphate (P_2O_5)	15%
Soluble Potash (K_2O)	15%
Iron (Fe)	0.30%
0.30% Chelated Iron	
Zinc (Zn)	0.05%
0.05% Zinc	

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, Iron EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Standard dilution for both starter and foliar applications is 1-2 quarts per acre diluted in water. Tank-mix flexible—can be applied with other fertility products and most pesticides, herbicides, and fungicides. The product can be applied through overhead and drip irrigation systems.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre diluted in water. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"Monty's Root & Bloom consistently makes my plants produce more blooms and better looking flowers than other brands."

REGINA SCHULTZ, Dealer



FERTILITY





HAY-NOW®

Hay and Pasture Liquid Fertilizer

Hay-Now is a foliar applied liquid fertilizer containing N, P, K with Sulfur, Iron, and Zinc. It is specifically formulated to deliver readily available nutrients during the vegetative growth stages to enhance growth and root development. Hay-Now assists your hay crops and pastures during periods of stress to maximize production. Hay-Now is easy to use and can be tank-mixed with herbicides and pesticides. When diluted in water, Hay-Now is safe to apply to fields where animals are present.

- Works on all grasses and legumes
- Can be applied with herbicides
- Easy to use and won't clog spray nozzles
- Enhances growth and root development

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	7%
1.9% Ammoniacal Nitrogen	
51% Urea Nitrogen	
Available Phosphate (P ₂ O ₅)	.9%
Soluble Potash (K ₂ O)	.5%
Sulfur (S)	4.5%
4.5% Combined Sulfur	
Iron (Fe)	0.2%
0.2% Chelated Iron	
Zinc (Zn)	0.5%
0.5% Chelated Zinc	

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, Ammonium Thiosulfate, Iron EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Foliar apply Hay-Now anytime from early spring green-up through fall. If cutting, apply Hay-Now after every cutting with 2-3 inches of re-growth. If grazing, apply Hay-Now every 30-45 days. Suggested application rate is 1-2 quarts per acre. For use on all grass hays and legumes. Winterize your hay and pasture fields with 2 quarts in the late fall.

HIGH YIELD: Apply 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I started using Hay-Now this year. With the drought here in southwest Michigan this year, my hay has done tremendous. I'm now going to get a 5th cutting here weather dependent. I keep bale data from year to year and have increased production each year."

DAVID KROA, Farmer

C795 PLUS™

Multi-Use Product Ideal for Seed and Plant Success

C795 Plus is a concentrated, versatile liquid plant food with NPK and other essential nutrients that can be used at planting and as a foliar on any crop when plant growth is desired—during any growth stage.

- Can be applied at planting in-furrow or 2x2
- Can be foliar applied when overall plant growth is desired or to address crop stress
- May be used with other nutrient products for additional crop response
- Tank-mix flexible—can be applied with most herbicides, pesticides, and fungicides
- Low salt, pH balanced, safe and easy to apply. Will not burn and is non-corrosive
- Designed utilizing orthophosphoric acid (phosphoric acid) for rapid availability

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	7%
1.9% Ammoniacal Nitrogen	
5.1% Urea Nitrogen	
Available Phosphate (P_2O_5)	.9%
Soluble Potash (K_2O)	.5%
Sulfur (S)	4.5%
Iron (Fe)	0.2%
Zinc (Zn)	0.5%

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, Ammonium, Thiosulfate, Iron EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Standard dilution for both starter and foliar applications is 32-64 ounces diluted in a minimum of 15 gallons of water per acre. Product can be applied through overhead and drip irrigation systems. Sensitive seeds may react adversely due to the higher level of nitrogen.

HIGH YIELD: Apply 1-2 gallons per acre diluted in water. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"Monty's is so easy to use since it mixes with several products. I have done several field trials and have made Monty's one of my staple products, especially Now!"

SCOTT SAXBERG, Farmer



FERTILITY





AGRI-N™

Foliar Enhancement for Green-Up and Energy

Agri-N is a natural product that provides nitrogen for green-up and energy—without the nozzle problems caused by other sugars! Monty's Agri-N may be blended with many chemicals, including other liquid fertilizers, herbicides, insecticides, and fungicides. Monty's Agri-N may be foliar, applied as a side dress or in fertigation and chemigation. Consider these advantages:

- Quick plant energy
- Fast green-up
- Enhanced growth
- Reduced plant stress
- Can be tank-mixed with farm chemicals
- Complements other Monty's products
- 14-0-0

Available in 2.5, 30, and 275 gallon sizes. Please check with your dealer for availability and application rates or visit www.montyplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	14%
14% Urea Nitrogen	
Sugar	26%

APPLICATION RATES

GENERAL: Row crops: Apply 1-3 quarts per acre for green-up and energy.

Hay fields and pastures: Apply 1-2 gallons per acre as a nitrogen source during the growing season.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

For a sugar source less nitrogen, refer to Pg 60 for Agri-Sweet FG: Monty's sugar product without 14% added nitrogen.

"Agri-N is a product you can add to any application for a quick burst of energy and green-up at any growth stage."

GARY COUGHLIN, Agronomist

MIDNIGHT[®]

Unique Blend Ideal for Plant Growth

Monty's Midnight increases plant growth with our unique blend of NPK and micronutrients. Its balanced blend helps boost the plant's ability to maximize nutrient uptake and root development.

- Most effective when applied during the reproductive stage of soybeans or corn
- Provides additional energy
- May also be applied to address crop stress

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	10%
3.75% Ammoniacal Nitrogen	
6.25% Urea Nitrogen	
Available Phosphate (P ₂ O ₅)	8%
Soluble Potash (K ₂ O)	4%
Sulfur (S)	3%
Iron (Fe)	0.45%
0.30% Chelated Iron	
Zinc (Zn)	0.4%
0.4% Chelated Zinc	

Derived from Ammonium Thiosulfate, Urea, Phosphoric Acid, Potassium Hydroxide, Iron EDDHSA, and Zinc EDTA

APPLICATION RATES

GENERAL: Monty's Midnight is most effectively applied during stages R1 and R2 on soybeans and V4 to V5 on corn. For other crops, apply during the early reproductive stage. Application guidelines for one growing season in the absence of a soil test or plant tissue test: 1 to 2 quarts per acre. Do not mix or apply Midnight with other products which contain plant nutrients. Can be applied with most pesticides. Talk to your representative for additional application information.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 3-4 quarts per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I used Monty's Midnight during the early reproductive stage of my soybeans. I saw an increase in pod set at the top of the plant, in pod development throughout the plant, and overall pod growth. I am very happy with the response and yield I saw from this product."

ED STANFIELD, Farmer



FERTILITY





MICROHANCE[®]

Nutrient Package - Six Important Nutrients

Microhance offers a unique blend of Monty's technology designed to provide nutrients to the plant at any stage of growth, helping maximize the plant's yield potential.

- For the prevention and correction of micronutrient deficiencies
- Foliar apply at any stage of growth
- Apply to any crop being grown
- Great tank-mix flexibility with herbicides, insecticides, or fungicides
- 5 micronutrients used by the plant to enhance metabolism
- Nitrogen to enhance growth and green-up
- Apply during growing season to help prevent stress

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	3%
2.04% Aqueous Ammonia	
0.96% Urea Nitrogen	
Sulfur (S)	1%
Boron (B)	0.25%
0.25% Water Soluble Boron (B)	
Iron (Fe)	0.15%
0.15% Chelated Iron (Fe)	
Manganese (Mn)	0.25%
0.25% Chelated Manganese (Mn)	
Zinc (Zn)	0.25%
0.25% Chelated Zinc (Zn)	

Derived from Aqueous Ammonia, Urea, Sulfuric Acid, Boric Acid, Iron EDTA, Manganese EDTA, and Zinc EDTA

APPLICATION RATES

GENERAL: Foliar apply 1-2 quarts per acre. Can be applied by itself, in addition to a starter, or with many other products including herbicides, insecticides, and fungicides. For crop specific application information, please contact your representative.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 3-4 quarts per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"We recommend using Monty's Microhance on our tobacco. It has a lot of micronutrients for plant health—we can see it in the field. Yields on our tobacco were very noticeable at harvest—we saw a very significant difference. I have seen results from Monty's products. They just work. Competitors' products just did not stand up, it was obvious. I believe Monty's Microhance allowed our tobacco plants to better use the major nutrients."

JOSH BRIGGS, Dealer

NAUXIN™

Essential Nutrient Package

Monty's Nauxin offers a unique blend of Monty's technology that is approved for use with dicamba herbicide applications. It is designed to provide nutrients to the plant at any stage of growth, helping maximize the plant's yield potential. Nauxin is recommended for the prevention and correction of micronutrient deficiencies in all crops.

- Foliar apply to any crop, at any stage of growth
- Nutrients used by the plant to enhance metabolism
- Nitrogen to enhance growth and green-up
- Apply during growing season to help prevent stress
- Tank-mix flexibility with insecticides, fungicides, and herbicides, including Engenia®, Enlist™ and XtendiMax®

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	3%
3% Urea Nitrogen	
Soluble Potash (K_2O_5)	4%
Sulfur (S)	1%
1% Combined Sulfur	
Boron (B)	0.25%
0.25% Water Soluble Boron	
Iron (Fe)	0.25%
0.25% Chelated Iron	
Manganese (Mn)	0.25%
0.25% Chelated Manganese	
Zinc (Zn)	0.25%
0.25% Chelated Zinc	

Derived from Urea, Potassium Thiosulfate, Potassium Acetate, Boric Acid, Iron EDDHSA, Manganese EDTA, and Zinc EDTA

Contains Non-Plant Food Ingredients:

Glucose	6.5%
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APPLICATION RATES

GENERAL: May be applied in water, liquid fertilizers and suspensions, or with most herbicides and pesticides. Application rates and dilution factors depend on crop sensitivity, the amount of foliage to be sprayed and the application method. Application guidelines for one growing season in the absence of a soil test or plant tissue test: 1-2 quarts per acre.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 3-4 quarts per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"More consistent pod-fill with the Nauxin. More pods by a long shot. Great investment on soybeans."

J. R. PERLEBERG, Farmer



FERTILITY

APPROVED
FOR USE WITH

Engenia®

Enlist®

XtendiMax®



AGRIHANCE®-S

Seed Starter

Agrihance-S is a seed starter that is applied on seed in-row. It provides key nutrients needed for germination and early growth. Agrihance-S is designed to enhance plant emergence and root development.

- Nutrient management program
- Provides key nutrients needed for germination and early growth
- Seed started applied on seed in-row
- Designed to enhance plant emergence and root development
- Helps maximize yield

AGRIHANCE®-V

Vegetative Stage

Agrihance-V is foliar-applied, during the plant's vegetative growth stage giving your crop the specific nutrients it needs from post-emergence to reproduction. The unique no-burn formula and tank-mix flexibility boosts performance without crop injury or making an extra pass through the field.

- Nutrient management program
- Provides key nutrients during vegetative stage
- Improves stress management
- Use with any pass through the field
- Helps maximize yield

AGRIHANCE®-R

Reproductive Stage

Agrihance-R is foliar applied and provides key nutrients during your crops' reproductive stage. Agrihance-R delivers the best possible finish to your crops—enhancing the quality of grain, fruit, and vegetables.

- Nutrient management program
- Provides key nutrients during reproductive stage
- Enhances quality of grain, fruit, and vegetables
- Delivers the best possible finish for your crop
- Helps maximize yield

Agrihance products are available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.



ACTIVE INGREDIENTS

Total Nitrogen (N)	4%
1.4% Ammoniacal Nitrogen	
2.6% Urea Nitrogen	
Available Phosphate (P_2O_5)	5%
Soluble Potash (K_2O)	7%
Iron (Fe)	0.2%

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, and Iron EDTA

Non-Plant Food Ingredients:

Humic Acids	1%
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APPLICATION RATES

GENERAL: Apply Monty's Agrihance-S in furrow on the seed, or as a 2x2 at a rate of ½-1 gallon mixed in 3-8 gallons of a carrier (water) per acre. Can also be foliar applied with Agrihance-V (Vegetative) or Agrihance-R (Reproductive) at 1-2 quarts per acre. May be applied with most chemical applications. For crop specific application information, contact your representative.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 quarts per acre.

ACTIVE INGREDIENTS

Total Nitrogen (N)	6%
2.1% Ammoniacal Nitrogen	
3.9% Urea Nitrogen	
Available Phosphate (P_2O_5)	11%
Soluble Potash (K_2O)	5%

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, and Potassium Hydroxide

Non-Plant Food Ingredients:

Humic Acids	0.8%
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APPLICATION RATES

GENERAL: Apply Monty's Agrihance-V (Vegetative) at 1-2 quarts per acre. Can also be applied as a program with Agrihance-S and Agrihance-R. May be applied with most chemical applications. For crop specific application information, contact your representative. **HIGH YIELD:** Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 quarts per acre.

ACTIVE INGREDIENTS

Total Nitrogen (N)	2%
0.5% Ammoniacal Nitrogen	
1.5% Urea Nitrogen	
Available Phosphate (P_2O_5)	4%
Soluble Potash (K_2O)	9%
Iron (Fe)	0.2%

Derived from Ammonium Hydroxide, Urea, Phosphoric Acid, Potassium Hydroxide, and Iron EDTA

Non-Plant Food Ingredients:

Humic Acids	1%
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APPLICATION RATES

GENERAL: Apply Monty's Agrihance-R (Reproductive) at 1-2 quarts per acre. Can also be applied as a program with Agrihance-S and Agrihance-V. May be applied with most chemical applications. For crop specific application information, contact your representative. **HIGH YIELD:** Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 quarts per acre.



K28™

Liquid Potash Nutrient Supplement

K28 Liquid Potash is a liquid form of potash designed to be a supplement for potassium deficient plants. Monty's nearly pH balanced formula can be applied 2x2 at planting and safely added to nitrogen solutions as well as most herbicides and fungicides for foliar application. Potassium is:

- Essential in photosynthesis
- Involved in regulating the opening and closing of leaf stomata
- Regulates CO₂ uptake
- Involved in the regulation of water in plants
- Component of the plant's protein and starch synthesis
- Important in the activation of many growth related enzymes in plants

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soluble Potash (K₂O)28%

Derived from: Potassium Acetate

APPLICATION RATES

GENERAL: Mix in a minimum 10 gallons of water per acre when applying.

- Corn: Early vegetative stage—1-2 quarts per acre
- Cotton: 1 quart per acre with any application from bloom through boll set. May be applied 3-5 times per season
- Soybeans: 3rd to 4th trifoliolate—1 quart per acre; Early Pod set—1 quart per acre
- Wheat: Apply 1-2 quarts per acre prior to heading

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 2-4 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"Potassium deficiencies, often evidenced by the yellowing and wilting of leaves, are common in crops during the early stages of growth. With K28, we are able to offer growers a product that helps with the regulation and uptake of water within plants, as well as the activation of growth related enzymes in plants."

DENNIS STEPHENS, Monty's President

SULFUR 15™

Nutrient Supplement

Sulfur 15 is an 8-0-0 foliar fertilizer with 15% sulfur. Sulfur activates the enzyme and hormone systems for plant growth. Sulfur 15 is easy to mix, simple to use, and readily available. Consider the advantages of adding sulfur:

- Helps develop enzymes and vitamins in plant
- Promotes nodulation for nitrogen fixation by legumes
- Aids in seed production
- Is necessary in chlorophyll formation
- Is present in several organic compounds
- Sulfur and Nitrogen are both constituents of proteins and are associated with chlorophyll formation

Available in 2.5, 30, 275 gallon—and bulk sizes. Also available in dry format. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	8%
Total Sulfur (S)	15%
15% Combined Sulfur	

Derived from Liquid Ammonium Thiosulfate

APPLICATION RATES

GENERAL: Mix in a minimum 10 gallons of water per acre when applying.

- Corn: Early vegetative stage—1-2 quarts per acre
- Cotton: 4-5 node stage or 1st or 2nd glyphosate application—1 quart per acre; 9th node or after—1 quart per acre
- Rice: Flag leaf—1 quart per acre
- Soybeans: 3rd to 4th trifoliate—1 quart per acre; Early pod set—1 quart per acre
- Wheat: Dormancy break—1 quart per acre

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I applied Sulfur 15 with my Liquid Nitrogen at pre-plant 2x2. We harvested the corn plots this week and had a consistent 2.5 bushel increase where we used it."

JONATHAN AYERS, Farmer



FERTILITY



CALCIUM PLUS™

Nutrient Supplement

Calcium Plus provides chelated calcium directly to the plant. Calcium has been shown to aid in developing improved cell function and strength which may improve standability and nitrogen utilization.

- Chelated calcium readily available to plant
- Available calcium in plants to assist with nitrogen utilization
- Tank-mix flexibility

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Calcium (Ca) 1%
1% Chelated Calcium
Derived From: Calcium EDTA

APPLICATION RATES

GENERAL: Foliar or soil applied at 1-2 quarts per acre. For crop specific application information, contact your representative.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"I definitely saw a difference in my corn. Corn yields are up—I attribute my higher yields to the use of the Monty's products. One of the easily recognizable affects of the products is the health of the plant. Especially the quick start the plant seems to have coming out of the ground. You can definitely see a difference in root mass—the plants on the trial side of the field look much healthier."

MICHAEL GREY, Farmer



I put Monty's Liquid Carbon with every application."

KEVIN KALB, MACC Group, Corn Warrior.

National Corn Yield Contest Winner

"I'm happy with the results of Nauxin I have seen on hail recovery, two years in a row. I've had it on 4 different farms with hail and the recovery has been impressive to say the least. I definitely will be selling more in years to come."

ZACH PERLEBERG, Dealer

We are now firm believers in Monty's Agrihance-S. We used a starter in setting watermelon plants over the past week, and thus far have had great results. We have had a lot of rain, but we needed to get the plants in the ground before they got too big. So we pegged them in the ground (on plastic). When it was dry enough to get the tractor in the field, we used the setter with Agrihance-S in the water tank. The plants that got Monty's starter are off to a much better start, opened up quicker, and seem to be growing better. We have about 20 acres of watermelons set out.

DON GOODIN, Farmer

"We applied Monty's (Hay-Now program) to our 5 acre hay field and within 2 weeks saw a real noticeable increase. First cutting we added granular fertilizer, then 2 quarts Hay-Now. The second cutting was five weeks later... we saw 14 more bushel than the first cutting. First cutting we used granular fertilizer, and the grass was about 5" tall. We applied 2 quarts per acre of Hay-Now prior to the second cutting. Two weeks later the grass was knee deep... 18-19" tall. Everyone loves it!"

JEFF HARDEGREE, Dealer

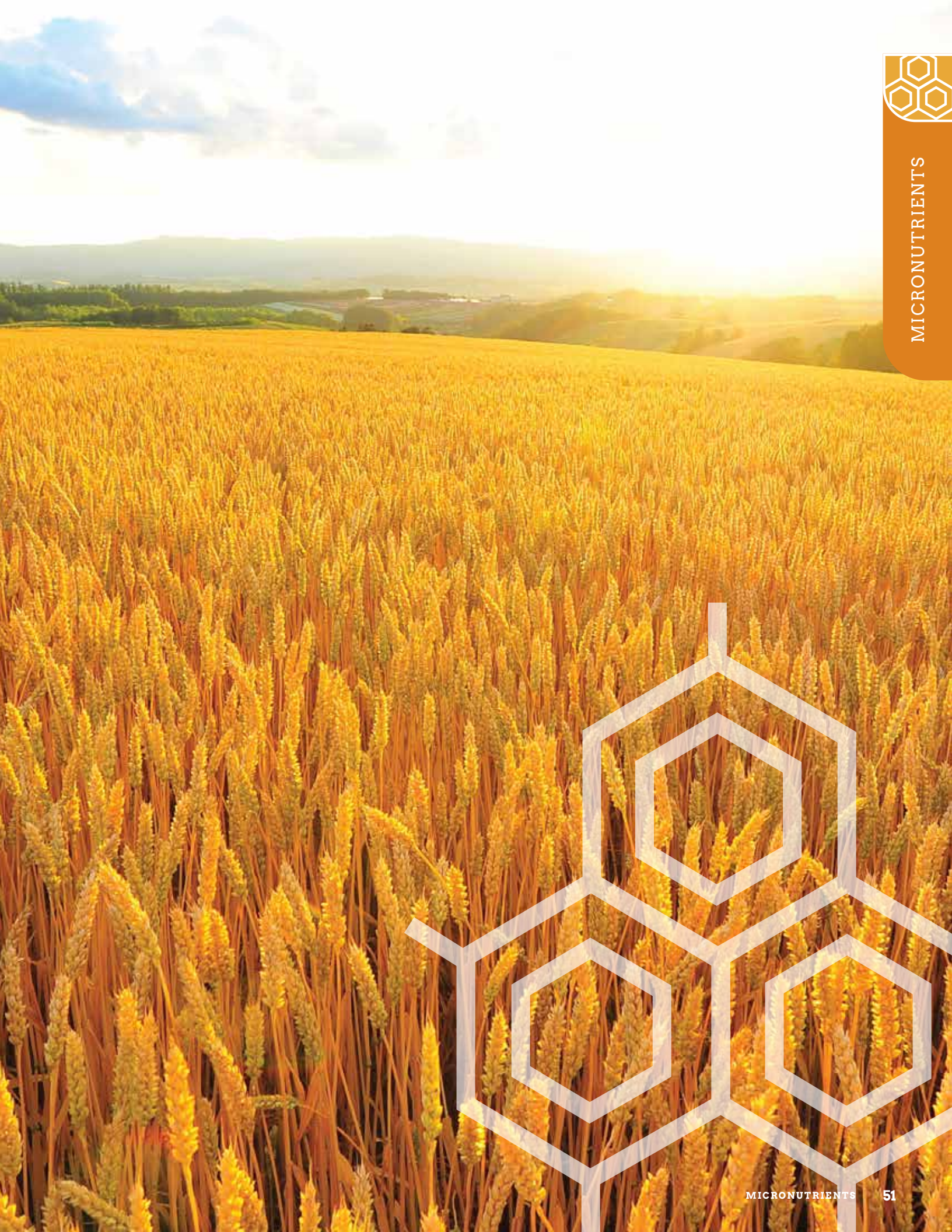
MICRONUTRIENTS

Nutritional boost for your crops

Monty's secondary and micronutrients are designed to supplement traditional nutrient management programs and to assist in addressing specific micronutrient deficiencies.

Each formula is designed to overcome specific plant stresses associated with nutrient uptake. By applying these foliar or soil applied micronutrients you can address deficiencies rapidly to speed recovery and reduce yield drag.

- **Boron** for protein synthesis, cell division and root development
- **CoMoB** a unique blend of Cobalt (CO), Molybdenum (MO), and Boron (B)
- **Copper** activates plant enzymes required in growth process
- **Iron** for the prevention and correction of iron chlorosis in all crops
- **Magnesium** activates plant enzymes required in growth process
- **Manganese** essential for cell oxidation and sugar absorption
- **Molybdenum** supplement to a regular fertilization program to prevent and correct deficiencies
- **Zinc** increases availability of Calcium (Ca) and Phosphorus (P)



BORON (B)

For Protein Synthesis, Cell Division, and Root Development

- Moves plant sugars up and down the plant daily
- Is essential for germination of pollen grains and growth of pollen tubes, and for seed and cell wall formation
- Forms sugar-borate complexes associated with sugar translocation and is important in protein formation
- Available in 10% concentration

ACTIVE INGREDIENTS

Boron (B) 10%
10% Water Soluble Boron
Derived from Boric Acid

CoMoB

Cobalt (Co), Molybdenum (Mo), and Boron (B)

A unique blend of micronutrients geared for maximizing plant growth

- Boron supports plant structure
- Molybdenum supports Nitrogen fixation in legumes
- Cobalt is important for growth and metabolism

ACTIVE INGREDIENTS

Boron (B) 0.50%
Cobalt (Co) 1.75%
1.75% Chelated Cobalt
Molybdenum (Mo)..... 3.00%
3% Chelated Molybdenum
Derived from Boric Acid, Cobalt EDTA,
and Molybdenum EDTA

COPPER (Cu)

Activates Plant Enzymes Required in Growth Process

- Necessary to chlorophyll formation in plants
- Catalyzes several other plant reactions
- Helps avoid sickly plants and failure to flower

ACTIVE INGREDIENTS

Nitrogen (N) 4.0%
4.0% Ammoniacal Nitrogen
Copper (Cu)..... 7.5%
7.5% Chelated Copper
Derived from Copper Diammonium EDTA

IRON (Fe)

For the Prevention and Correction of Iron Chlorosis in All Crops

- A catalyst to chlorophyll formation
- Acts as an oxygen carrier
- Helps for certain respiratory enzyme systems

ACTIVE INGREDIENTS

Iron (Fe) 4.5%
4.5% Chelated Iron
Derived from Iron EDTA

For Micronutrient application rates, visit montysplantfood.com or contact your Monty's representative.



MAGNESIUM (Mg)

Activates Plant Enzymes Required in Growth Process

- Essential for photosynthesis
- Activator for many plant enzymes required in growth processes
- Acts as a carrier of phosphorus in the plant
- Necessary for protein formation and in cell division

ACTIVE INGREDIENTS

Magnesium (Mg) 2.5%
2.5% Water Soluble Magnesium
Derived from Magnesium EDTA

MANGANESE (Mn)

Essential for Cell Oxidation and Sugar Absorption

- Assists in chlorophyll production
- Affects lignin-building and is critical in preventing lodging/disease
- Accelerates germination and maturity, while increasing P and Ca
- Activates several important metabolic reactions and plays a direct role in photosynthesis by aiding chlorophyll synthesis
- Functions primarily as part of the enzyme systems in plants
- Also available with Iron (Fe). Contact your representative for more information

ACTIVE INGREDIENTS

Manganese (Mn) 6%
6% Chelated Manganese
Derived from Manganese EDTA

MOLYBDENUM (Mo)

Supplement to a Regular Fertilization Program to Prevent and Correct Deficiencies

- Vital for the process of symbiotic nitrogen (N) fixation by rhizobia bacteria in legume root nodules
- Is needed to convert inorganic P to organic forms in the plant
- Is required for the synthesis and activity of enzymes

ACTIVE INGREDIENTS

Molybdenum (Mo) 10%
10% Water soluble Molybdenum
Derived from Sodium Molybdate

ZINC (Zn)

Increases Availability of Calcium (Ca) and Phosphorus (P)

- Improves assimilation of CO₂ in photosynthesis
- Improves the plant's metabolism and uptake of nitrogen
- Chelated for rapid absorption and utilization
- Aids synthesis of plant growth substances and enzyme systems
- Is essential for promoting certain metabolic reactions

ACTIVE INGREDIENTS

Zinc (Zn) 9%
9% Chelated Zinc
Derived from Zinc EDTA



NUTRIENT MANAGEMENT

Improve the efficiency of your farming products

These products are designed to increase the efficiency of the products they are combined with, making nutrients more available to the soil and plant. Efficient mobilization of nutrients into the plant means healthier soil and plants and higher yields!

- **Humihance®** is Monty's easy-to-apply, humic-based fertilizer coating—designed to improve your fertilizer
- **Surge XD™** Unique formulation of fulvic/humics to maximize delivery of nutrients





HUMIHANCE[®]

Monty's Innovative Fertilizer Coating

Humihance is a humic-based fertilizer coating that will quickly and efficiently provide nutrient management benefits without inhibiting the activity of the soil's natural bacteria. Humihance also provides all the natural benefits of Monty's proprietary, activated humic technology to the plant and soil. It is ideal for use when blending all granular fertilizers, and is compatible with a variety of micronutrients and pretreated fertilizers.

- Can decrease nutrient loss, while increasing nutrient efficiency availability
- Does not inhibit the activity of the soil's natural bacteria
- Can help reduce fertilizer salt toxicity
- Can improve overall soil health with every granule
- Can improve organic matter conversion
- Can reduce soil compaction for better root development and planting conditions
- Can assist with moisture retention and improve nutrient uptake
- Is non-corrosive
- Can be used to stabilize Anhydrous Ammonia
- Can be used through Anhydrous Inductors

Available in 2.5, 55, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N) 1%
 .55% Ammoniacal Nitrogen
 .45% Urea Nitrogen
Derived from Ammonium hydroxide, Urea

Non-plant food ingredients:
Humic Acids 6%
Derived from Lignite

APPLICATION RATES

GENERAL: During the last step of the blending process, apply ½ gallon of Humihance per ton on the fertilizer. This product may be applied to fertilizer pretreated with Avail[®], NutriSphere-N[®], or Agrotain[®]. For crop specific application information, contact your representative.

Avail and NutriSphere-N are registered trademarks of Verdesian Life Sciences, LLC. AGROTAIN is a trademarks of Koch Agronomic Services, LLC.

HIGH YIELD: Apply 1-2 gallons of Humihance per ton on fertilizer. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

After more than nine years of research with humics, I have found that applying Humihance with Monty's innovative humic technology directly on the fertilizer, increases the fertilizer's efficiency. Farmers can see as much as 20% more efficiency out of their fertilizer application.

DR RON HEINIGER, N.C. State University

SURGE XD®

Extreme Delivery of Nutrients

Surge XD is a unique form of humics and fulvics, designed for use with liquid fertilizers to facilitate nutrient uptake through the plant tissues.

- Designed to enhance nutrient uptake into the plant
- Apply directly to the plant
- Contains Monty's proprietary humics and fulvics
- Foliar apply with liquid macro and micronutrients
- Foliar apply with herbicides, fungicides, and insecticides
- Tank-mix flexible

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com. Not available in all states.

ACTIVE INGREDIENTS

Fulvic Acid.....	0.45%
Humic Acids.....	1%
Derived from Brown Coal	

APPLICATION RATES

GENERAL: Foliar apply at a rate of 1-2 quarts per acre. Surge XD may be mixed with any grade of liquid fertilizer. Consult your local dealer for recommended rates for your particular region, soil type, fertilizer type and grade, and specific usage.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 1-2 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

I purchased a tote of Surge XD last year and applied it to a portion of my corn and bean acres. I saw a significant response when applying my fungicides. I plan to use Surge XD on all of my acres this year and definitely recommend it for any farmer to try.

DAVID WOMACK, Farmer



NUTRIENT MANAGEMENT



SPECIALTY

Unique products and brands for unique needs

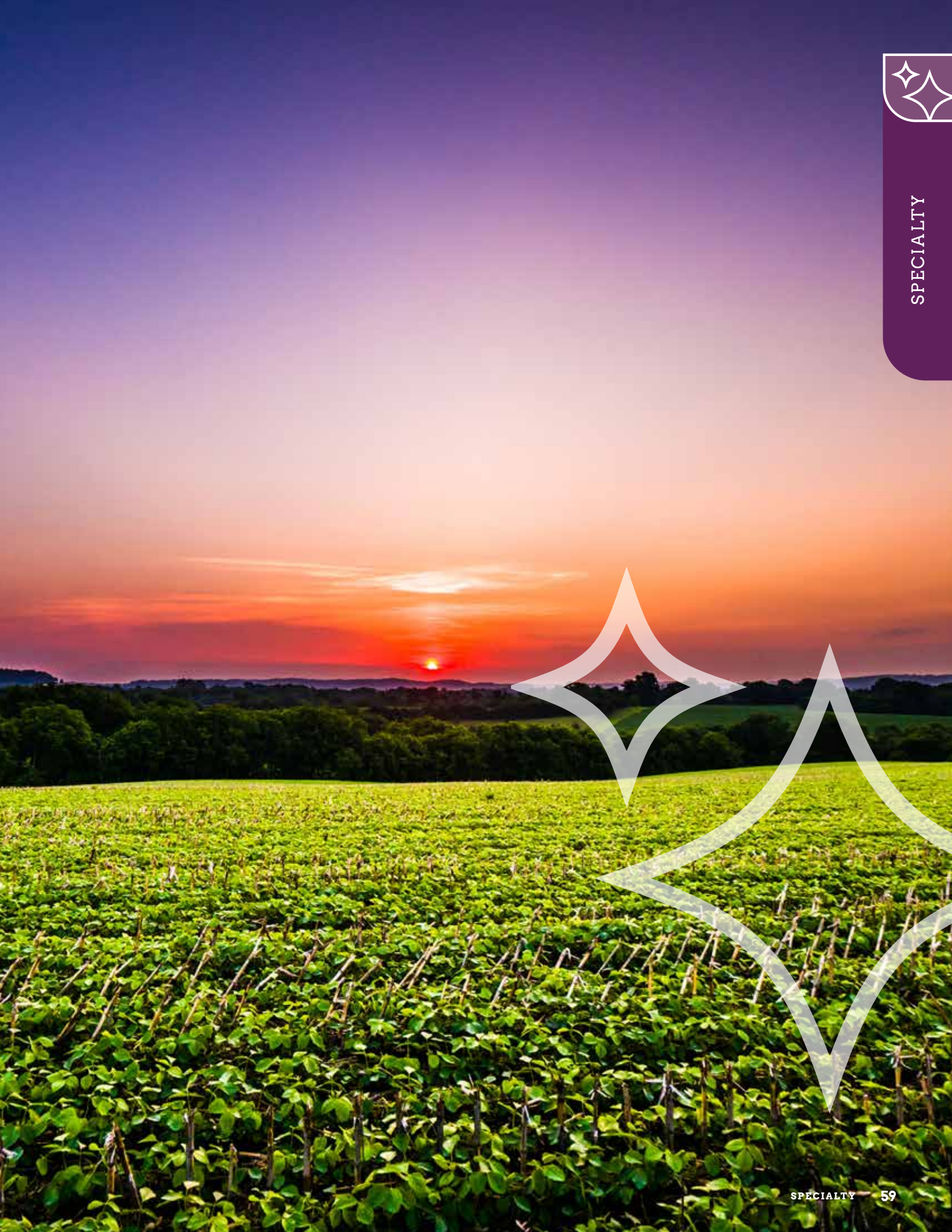
Monty's is in business to solve farmers' crop issues.

Our specialty products are designed to address specific issues and needs of today's innovative farmers in the quest for maximum yield. Talk to our team if you encounter a new problem and need a solution.

- **Agri-Sweet FG™** refined sugar
- **Turf Power SRN™** 13-2-6 with micronutrients and humics
- **Calesco** a water treatment for fertilizer, herbicide, pesticide, and/or fungicide applications
- **Multiplicity™** a dry source of microorganisms designed to help crops reach their full potential
- **NanoBoost®** assists herbicides by using the advanced science of nanotechnology
- **Sludge Relief** digestion aid

Specialty Brands

- **Hemp Pro®** includes proven quality products for today's hemp professional
- **PlantVantage®** is a product line ideal for lawn and garden applications





AGRI-SWEET™ FG

Refined Sugar

Agri-Sweet can be used for any application where you are currently using molasses or sugar.

- Tank-mix flexibility with farm chemicals
- Food source for soil microbes
- Quick, no-mess dilution
- Reduced nozzle problems
- Enhanced release of soil nutrients through microbial activity
- All-natural product

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Soil Amending Active Ingredients:

Fructose.....	24%
Glucose	31%

Derived from Corn Starch

APPLICATION RATES

GENERAL: Mix 2-4 quarts in a minimum of 15 gallons of water per acre. For crop specific application information, contact your representative.

HIGH YIELD: Apply in-furrow, 2x2, or Y-drop at a rate of 2-4 gallons per acre. Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

For a sugar source plus nitrogen, refer to Pg 40 for Agri-N: Monty's sugar product with 14% added nitrogen.

"[Agri-Sweet FG] provides energy for the corn, much like a candy bar gives you and me energy to keep going. Of course, the plants' response determines when we would apply the next application, but we tend to apply as many as 4-12 applications throughout the growing season. You can really see the plants respond to the sugar—they green up really quickly."

RALPH HAUGEN, Farmer

TURF POWER SRN™

13-2-6 with Micronutrients & Humics

Turf Power SRN includes slow-release nitrogen and other important nutrients - not typically found in conventional fertilizers...plus Monty's activated humics!

- Apply to any plant, at any stage of growth
- Can be used on all varieties of cool, transitional, and warm season turf in all growth phases
- Provides extended plant nutrition for controlled growth
- Slow release allows more balanced long-term benefits
- Industry-leading activated humic technology

Available in 2.5, 30 and 275 gallon sizes. For more information, contact your Monty's representative, dealer, or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Total Nitrogen (N)	13%
6.5% Ammoniacal Nitrogen (Ammonium Hydroxide)	
6.5% Urea Nitrogen	
Available Phosphate (P ₂ O ₅) (Phosphoric Acid)	2%
Soluble Potash (K ₂ O) (Potassium Hydroxide)	6%
Sulfur (S) (Ammonium Thiosulfate)	1%
1.0% Combined Sulfur	
Iron (Fe) (EDTA)	0.15%
0.15% Chelated Iron	
Manganese (Mn)	0.25%
0.25% Chelated Manganese	
Zinc (Zn) (EDTA)	0.1%
0.10% Chelated Zinc	

Non-Plant Food Ingredients:

Humic Acids (derived from oxidized lignite)	0.75%
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APPLICATION RATES

General: Turf Power SRN is compatible with most herbicides and pesticides but should be jar tested prior to mixing in the tank. Do not mix concentrated components together prior to mixing with the appropriate amount of water. For specific application information, contact your representative.

HIGH YIELD: Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.

"Great product, My customers are very surprised at how well it works. I hear comments like easy to use and really like the low use rate."

GRAUERHOLZ, Dealer



SPECIALTY





CALESCO™

Specialty Water Conditioner

Calesco is a specialty water conditioner designed to prevent hard water scale build-up in pivot and drip irrigation systems. Common hard water scale formation is commonly the result of calcium carbonate precipitation and accumulation in equipment employing hard water.

- Will bind with calcium, magnesium, and iron, preventing the formation of common hard water scale
- Can also be used to treat water prior to diluting fertilizers, herbicides, and pesticides; and minimizing insoluble solids that can form when minerals precipitate with phosphates (precipitated solids can inhibit uniform application rates and/or plug sprayer nozzles)
- Creates a stronger bond with Ca and Mg than typical AMS treatment
- The bond formed is water soluble and does not form a sulfate precipitate like AMS
- Unlike AMS, will bond with and remove interference from Fe
- Unlike AMS, forms a strong enough bond to stop Ca, Mg, and Fe precipitation with orthophosphate fertilizers
- Does not contain ammonia and is approved with Dicamba mixes

Available in 2.5 and 265 gallon sizes. For more information, contact your Monty's representative, dealer, or visit www.montysplantfood.com.

APPLICATION RATES

GENERAL: For most applications, a rate of 8 oz. per 100 gallons of water is sufficient. Use the chart to determine precise application rates.

SUGGESTED GUIDELINES

Calcium (PPM)	OZ / 100 GA
100	1
200	2
300	4
400	5
500	7
600	8
700	10
800	11
900	13
1,000	15
1,100	16
1,200	18

MULTIPLICITY™

A Dry Source of Microorganisms to Help Crops Reach Their Full Potential

Multiplicity is a dry package of microbial strains designed to promote early root development, plant stamina, and the overall health of the crop throughout the growing season.

- Can be used across a wide-range of agricultural settings
- Brings atmospheric nitrogen to the root area where it can become available to the plant
- Can solubilize insoluble forms of phosphorus making it available to the plant
- Enhance rhizosphere activity for better root development
- Synergizes the interactions between beneficial bacteria and fungi to do their best work
- A formulation of billions of microbes ready to help your crops reach their full potential

Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Azospirillum Brasilense	1 x 10 ⁷ CFU/ml
Bacillus Altitudinis	1 x 10 ⁸ CFU/ml
Bacillus Amyloliquefaciens	1 x 10 ⁷ CFU/ml
Bacillus Licheniformis	1 x 10 ⁷ CFU/ml
Cellulomonas Cellasea	1 x 10 ⁷ CFU/ml
Pseudomonas Fluorescens	1 x 10 ⁷ CFU/ml
Pseudomonas Putida	1 x 10 ⁸ CFU/ml
Pseudomonas Stutzeri	1 x 10 ⁸ CFU/ml
Streptomyces Albido flavus	1 x 10 ⁵ CFU/ml

APPLICATION RATES

GENERAL: Multiplicity should be applied at the rate of one teaspoon per acre. Mix the required number of teaspoons of Multiplicity in one gallon of water. For example: to treat 25 acres, mix 25 teaspoons of Multiplicity in one gallon of water. After mixing, add to your tank. Multiplicity is tank-mix flexible with most agricultural products, and can be used as a pre-plant or pre-emergence soil spray, applied in furrow or foliar applied with chemicals and/or fertilizers. For foliar applications, final dilution rate should be 10-20 gallons of liquid per acre. For application through irrigation systems, contact your Monty's representative for more information.

HIGH YIELD: Monty's high yield program can vary for crops, application rates and timing. If you are interested in a high yield program, contact your Monty's representative.



SPECIALTY



NANOBOOST®

Herbicide Booster

Nanoboost assists herbicides by using the advanced science of nanotechnology to bind with herbicides and deliver them into the plant for a rapid, effective kill of troublesome weeds.

- Maximize effectiveness of your current herbicide/adjuvant program
- Low application rates for cost-effective use
- Better absorption performance
- Ideal complement for both burn-down and post-applied herbicides
- May prove beneficial when dealing with hard to control weeds such as marestail
- Tank-mix flexible—can be applied with most crop protection applications

Available in 2.5, 30, and 275 gallons. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

ACTIVE INGREDIENTS

Proprietary blend of elemental compounds and derivatives . . .8%
Linear Ethoxylated Compound 1.5%

APPLICATION RATES

GENERAL: Nanoboost is tank-mix flexible and can be used with most herbicides once compatibility is confirmed with a jar test. For burn-down and post-applications use 3-5 ounces per acre. For hard to control weeds, use a minimum of 4-6 ounces per acre.

“I have used Nanoboost when spraying for Roundup® resistant marestail. The performance that I have seen shows that it works better than where it wasn’t used. I would not spray soybeans that had Roundup® resistant marestail without using Nanoboost.”

MIKE ROBERTS, Farmer

SLUDGE RELIEF®

Microbial Agent for Organic Waste

Sludge Relief is specifically formulated to help treat and maintain superior performance in waste lagoons, effluent tanks, or septic systems on your farm. Sludge Relief™ is capable of performing in a broad range of conditions, including anaerobic or aerobic situations and maintains a broad range of degradation capabilities to keep up with modern animal-agriculture needs. Sludge Relief contains beneficial, natural bacterial strains which produce key enzymes to target and consume organic waste.

- Consumes sludge and breaks down solids
- Controls odors
- Effective at 38° – 145° and in pH 5.0-5.9
- Reduces need for pumping
- Helps reduce BOD levels
- 1 trillion cfu formula

Available in 5 gallon buckets. Please check with your dealer for availability and application rates or visit www.montysplantfood.com.

APPLICATION RATES

GENERAL: 10 gallons of Sludge Relief and 10 gallons of Monty's Liquid Carbon per 1,000,000 cubic feet as an initial treatment. After initial treatment, calculations will be required to determine a maintenance application of both products. Please refer to the Sludge Relief label or consult your representative.

"We are seeing taller, greener, healthier corn crops thanks to the higher concentration of available nutrients. It broke down the manure, the sludge, and even the foaming ... the manure seems to be way more available to the crops right away. And even when we spread between 200,000 and 300,000 gallons of manure in 90-degree heat, we haven't gotten one complaint."

MIKE HEIMBACH, Dairy Farmer



SPECIALTY





SPECIALTY BRAND



HEMP PRO[®]

Proven Products for Today's Hemp Professional

Monty's products have been used by hemp growers across the country with great success. Monty's offers specific products to maximize hemp production. These are products you can utilize with confidence throughout the growing season—from pre-planting to harvest.

- Contain Monty's proprietary formulations
- Are low salt and pH balanced
- Are safe and easy to apply
- Will not burn and are non-corrosive
- Are readily available for rapid plant response
- Can be foliar applied or through drip irrigation
- Can be applied with most herbicides, pesticides, and fungicides

Available in 2.5, 30, 275 gallon—and bulk sizes. Please check with your dealer for availability and application rates or visit www.montyshemppro.com.

✓ **Hemp Pro Starter** (5-16-12): Is ideal for quick emergence and early season vigor. It is a versatile liquid plant food that can be used at planting and as a foliar, enhancing plant development from germination to early vegetative.

✓ **Hemp Pro Early Vegetative** (7-9-5): A foliar applied liquid fertilizer containing N, P, and K with Sulfur, Iron, and Zinc. It is specifically formulated to deliver readily available nutrients during the vegetative growth stages to enhance growth and root development.

✓ **Hemp Pro Late Vegetative** (10-8-4): Increases plant growth with our unique blend of NPK and micronutrients. Its balanced blend helps boost the hemp plant's ability to maximize nutrient uptake and plant development.

✓ **Hemp Pro Bloom & Flower** (3-15-16): For application during reproductive/bloom stages. It is specifically designed to maximize hemp plant performance during bloom stage.



PLANTVANTAGE®

Ideal for Home and Garden Applications

Monty's PlantVantage is a unique line of home and garden products, including an activated humic soil conditioner and low rate foliar plant foods, to meet your growing needs. PlantVantage is ideal for use:

- In landscape beds with varying soil types
- On all landscape plants
- In all flower and vegetable gardens
- On new plantings of flowers, trees, and shrubs

Most products available in 8, 16, 32 ounce, and 1 gallon sizes. Please check with your dealer for availability and application rates or visit www.myplantvantage.com.

✓ **PREP IT: Premium Soil Conditioner:** Monty's proprietary, activated humics can improve moisture retention, assist in breakdown of organic matter, and enhance nutrient availability. It can be applied over large areas or at the base of all trees and shrubs or in flower beds, landscape beds, and in gardens. Works great during seeding. Is easy to apply, and can be used on all soil types. Improve your soil for healthier plants!

✓ **START IT: Premium Indoor/Outdoor** (4-15-12): Monty's Premium Indoor/Outdoor can be used on all flowering or non-flowering indoor plants to promote moderate plant growth. It is also effective when starting flower or vegetable seeds, plant cuttings or transplanting. Can also be used on trees, shrubs, flowers, and vegetables.

✓ **GROW IT: Premium Growth** (8-16-8): For promoting growth with larger leaves and stronger stems. Can be used on all plants including trees, shrubs, flowers, and vegetables from emergence to bloom stage, or maturity in non-blooming plants, when overall plant growth is desired.

✓ **SHOW IT: Premium Root & Bloom** (2-15-15): Helps plants above and below the ground. Ideal for promoting abundant and vibrant blooms. Can be used on all flowering plants including trees and shrubs. Use at planting and transplanting for enhanced root development. Can also be used on house plants and ferns.



SPECIALTY BRAND



TRUSTED ADVISORS. PROVEN SOLUTIONS.

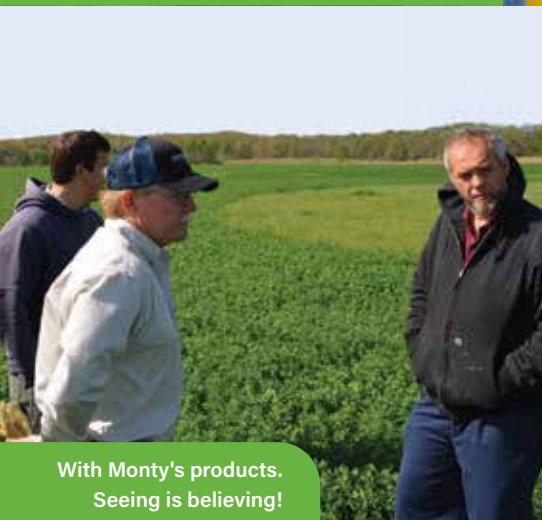
Continuous training and research is the key to success



Success you can see!



Monty's has a nationwide team of CCAs, Agronomists, and Territory Managers working with farmers to maximize yields.



With Monty's products.
Seeing is believing!

Dennis Stephens, Monty's President, up to his elbows in training!



Continuous training in the office and in the field.

One of Monty's primary goals has always been to help farmers be more successful. We achieve this goal by first testing and evaluating our products through research—both in the lab and on the farm. Next, we take our products to Certified Crop Advisors, agronomists, and growers nationwide for further testing and evaluation. Finally, our progressive products are made available to farmers who understand knowledge through a dealership network that understands education is key to success. In order to create continuous educational opportunities, and to discuss the issues and practices which are relevant to every farmer who makes his living off the land, Monty's hosts countless farmer and dealer training meetings and exhibits at trade shows all across the country. Success you can see!



Monty's offers a wide variety of innovative products designed to address specific issues growers face all season—ultimately improving soil health and maximizing yields.



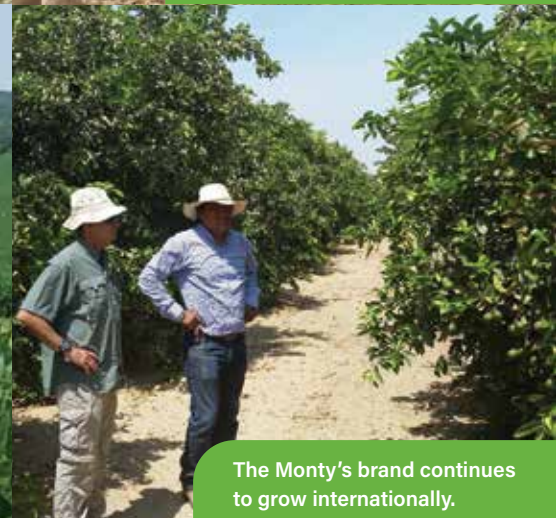
Monty's reps work hand-in-hand with our customers each and every day.



Working closely in the field with our customers.



Independent research and on-the-farm trials.



The Monty's brand continues to grow internationally.

MONTY'S® CONVERSIONS & MEASUREMENTS

Length or Row Equal to 1/1000th Acre

Row Width (Inches)	Length of Single Row Equal to 1/1,000 th of an Acre
6	87 Feet, 1 inch
7	74 feet, 8 inches
8	65 feet, 4 inches
10	52 feet, 3 inches
15	34 feet, 10 inches
20	26 feet, 2 inches
28	18 feet, 8 inches
30	17 feet, 5 inches
32	16 feet, 4 inches
36	14 feet, 6 inches
38	13 feet, 9 inches
40	13 feet, 1 inch

Rates for Maximum Return to N (MRTN) for Corn After Soybean

N cost per Lb	Corn Grain Price per Bushel							
	\$2.00	\$2.50	\$3.00	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50
	MRTN Rate (Lbs N/A)							
\$0.30	160	165	169	171	173	175	175	176
\$0.40	144	152	158	161	164	167	169	170
\$0.50	152	159	163	166	169	170	172	173
\$0.60	135	145	152	157	160	163	165	167
\$0.70	127	139	147	152	156	159	162	164
\$0.80	119	132	141	147	152	156	159	161
\$0.90	111	126	135	143	148	152	155	158
\$1.00	102	119	130	138	144	148	152	155
\$1.10	94	112	124	133	140	145	149	152

Recommendations based on field research conducted throughout Indiana 2006-2008. These rates assume N management practices that minimize the risk of early-season N loss.

Calibration Equation for Liquid Applications

$GPA = \frac{GPM \times 5940}{MPH \times W}$
$GPM = \frac{GPA \times MPH \times W}{5940}$
$OPM = GPM \times 128$
$MPH = \frac{\text{Feet traveled} \times 60}{\text{seconds to travel} \times 88}$
$W = \frac{\text{Row spacing in inches}}{\# \text{ nozzles / row}}$
$\text{Amount of Product} = \frac{\text{Amount of a.i.} \times 100}{\% \text{ a.i.}}$
$\text{Lbs of a.i. Per Acre} = \frac{\text{Formula rate}}{\text{acre}} \times \frac{\text{lbs. a.i.}}{\text{formulation}}$

GPA= Gallon per acre
GPM= Gallon per minute
OPM= ounces per minute
MPH= miles per hour
a.i.= active ingredients

W= width; nozzle spacing (inches) broadcast, or band width (band spraying), or for directed or drop nozzle spraying (inches).

Note: Pressure should only be used to make minor, not major, changes in rate due to nozzle wear and other factors. Doubling the ground speed of a sprayer reduces the GPA by half. Doubling the effective spray width per nozzle decreases the GPA by half

Liquid Volume Measure (U.S.)

1 milliliter (ml)	0.03 fl oz	0.001 L			
1 fluid ounce (fl oz)	6 teaspoons	2 tablespoons	29.57 ml		
1 cup (C)	8 fl oz	16 tablespoons	236.58 ml		
1 pint (pt)	16 fl oz	2 cups	946.35 ml		
1 quart (Qt)	32 fl oz	4 cups	2 pt	946.35 ml	0.9463 L
1 liter (L)	33.814 fl oz	2.11 pt	1.05 Qt	1,000 ml	0.26 Gal
1 gal (Gal)	128 fl oz	8 pt	4 Qt	3,785.41 ml	3.785 L
1 quart/25 gallons = 1.28 fl oz/1 Gal					

Linear Measure

1 foot (ft)	30.48 cm	12 in		
1 yard (yd)	36 in	3 ft	.91 M	
1 meter (m)	39.37 in	3.28 ft	100 cm	.001 km
1 kilometer (Km)	3,280.84 ft	1,093.61 yd	1,000 m	0.6214 mi
1 mile (mi)	5,280 ft	1,760 yd	1,609.34 m	1.609 km

Weight Equivalent

1 ounce (oz)	28.349 g		
1 pound (lb)	16 oz	453.59 g	0.454 kg
1 kilogram (kg)	35.27 oz	1,000 g	2.204 lb
1 ton (U.S) (t)	2,000 lb	907.19 kg	
1 metric ton (mt)	2,204.6 lb	1,000 kg	
1 part per million = 1 milligram/kilogram			

Square Measure

1 square inch (sq in)	6.45 sq cm	
1 square foot (sq ft)	929.03 sq cm	144 sq in
1 square yard (sq y)	1,296 sq in	9 sq ft
1 square meter (sq m)	10.76 sq ft	1.196 sq y
1 acre (ac)	43,560 sq ft	0.405 ha
1 hectare (ha)	107,639 sq ft	2.471 ac
1 square mile (sq mi)	640 ac	258.99 ha

Cation Exchange Capacity (CEC)

Soil Type	Approx. CEC Range Meq/100g
Sand, Loamy Sand	1-4
Sandy Loam	3-8
Silt Loam	6-20
Silty Clay Loam	15-30
Clay	20-40
Muck and Peat	30-80

1 gallon/minute (gal/min)	0.00223 cu ft/sec	0.00221 ac in/hour	0.00442 ac ft/day	1 ac/450 hours	1 ac ft/226.3 days
1 cubic foot/minute (cu ft/min)	450 gal/hr	1 ac in/1 hour	1 ac ft/12 hours	2 ac ft/24 hours	
1 million gal/day (Mgal/d)	695 gal/hr	1.547 cu ft/sec			

1 dry pint (dry pt)	33.60 cu in				
1 dry quart (dry qt)	67.2 cu in	2 dry pt	0.0199 cu ft		
1 peck	537.61 cu in	16 dry pt	8 dry qt	0.31 cu ft	
1 cubic foot (cu ft)	1,728 cu in	51.3 dry pt	25.71 dry qt	3.21 peck	0.804 bu
1 bushel (bu)	2,150.42 cu in	74.47 dry pt	32 dry qt	4 peck	1.24 cu ft

Crop	lbs	% Moisture	Factor
Corn	56	15	109.815
Soybean	50	15	100.138

Bu/Ac = (100-% moisture) x lbs of grain x (factor)/Harvest length (ft)/Harvest width (in)
Corn Example: 30" Rows, 2,000' length, six rows: Bu/Ac = (100-15) x 6,700 x 109.815 ÷ 2,000 ÷ 30 ÷ 6 = 173 bu/ac@15% moisture

Material	Salt Index	Salt Index Per	Unit of Plant Food
28% UAN		63	2.25
30% UAN		67.5	2.25
30% UAN		67.5	2.25
34% Ammonium Nitrate		104	3.06
46% Urea		75	1.63
82% Anhydrous Ammonia		47	0.57
28% CoRon Nitrogen		36	1.29
21% N – 24% S Am Sulfate		69	3.29
12% N – 26% Thio Am Sul		90.4	7.53
10% N – 34% P		20	2.00
18% N – 46% P – Dap		34	1.89
11% N – 52% P – Map		30	2.73
52% P – 35% K – Mono Pot P		8.4	0.16
62% K Pot Chloride 47%		120	1.94
50% K – 18% S Pot Sulfate		42.6	0.85
25% K – 17% S Pot ThiSulfate		68	2.72
3-18-18		8.5	2.83
6-24-6		11.5	1.92
4-10-10		27.5	6.88
7-21-7		27.8	3.97

$$\text{GDD} = \left(\frac{\text{Daily High Temp (F}^\circ\text{)} + \text{Daily Low Temp (F}^\circ\text{)}}{2} \right) - 50^\circ\text{F}$$

1 lb of phosphate (P_2O_5) = 0.43 lb of phosphorus (P)
1 lb of potash (K_2O) = 0.83 lb of Potassium (K)

Commodity*	lb	kg
Alfalfa	60	27.22
Barley	48	21.77
Buckwheat	48	21.77
Canola	50	22.68
Corn	56	25.4
Flax	56	25.4
Lentils	60	27.22
Millet	50	22.68
Mustard	50	22.68
Oats	34	15.42
Peas	60	27.22
Rye	56	25.4
Sorghum	56	25.4
Soybean	60	27.22
Sunflower	30	13.61
Tomato	60	27.22
Wheat	60	27.22

Notes

CONVERSIONS & MEASUREMENTS | **TRUSTED ADVISORS. PROVEN SOLUTIONS.** 71



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PROVEN SOLUTIONS.**

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