

HUMA BLENDS

BIO GRO

“Our Soil is Our Strength”

“All Products start with Humic and Fulvic Acid base, essential soil bacteria, seaweed cytokinins and an aerobic enzyme system.”

Like our logo says, without a strong and versatile soil our production is just not what it should be. Our soil is a marvelous and complex part of creation and should be crafted into a living medium that produces wholesome food and at higher yields.

We developed a system that will increase the health of the soil and the plant with LESS input. We will provide you with some guidelines to help you on your way to understanding and utilizing the Huma-Blend farming system.

You are interested in results, not products. You are interested in solutions to challenges that you face within your agriculture operation.

Our goal is to provide solutions that will help you achieve healthier soils, healthier plants and better yields in your production.

The Huma-Blend farming system is a complex whole synergistic system connected together by a carbon base to help you achieve the benefits of healthier soils and plants. A system defined is as a complex whole; a set of connected things or parts.

This system is not designed to replace your current practices, but rather to supplement and enrich your end results.



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The Foundation:

Humic and Fulvic Acids are biologically active and are crucial to life on Earth because they provide a bio chemical bridge between minerals and living plant matter. In other words they are powerful chelators and help increase nutrient absorption.

Humate Chemistry:

Humates can be fractionated to yield in three major components, based on the solubility in acids, bases, and molecular weight (size).

- **Fulvic Acid** – Has a light molecular weight and is soluble in both acids and bases. Fulvic stays in solution, even in strongly acidic conditions. The molecules are smaller than humic acid molecules, and can be absorbed by plants and soil microorganisms.
- **Humic Acid** – Are larger organic molecules that are not soluble in strongly acid solutions but become more soluble as pH increases.

Humic Acids have a high cation exchange capacity. In other words they can hold a lot of nutrients in reserve and release them slowly but continuously into the soil solution for the uptake by plants.

Humic Acids increase soil aggregate stability, improve water infiltration, aeration, soil tilth and work ability.

Large Humic Acid molecules also reduce toxicities from metals and pesticides by removing them from soil solution.

Humic Acid is Soil Active.

- **Humin** – is not soluble in acids or bases.

Humin improves soil structure (aeration and percolation), increases water holding capacity, increases nutrient holding capacity and absorbs toxic compounds.

Humin is **Soil Active**.

These acids increase the ability to exclude salt ions by increasing control over the stomates; it chelates the sequesters salts rendering it harmless.

Humates help the plant create heat shock proteins to provide structural support for cell plasma membranes.

All Bio-Gro Products start with Humic and Fulvic Acid base, essential soil bacteria, seaweed cytokinins and an aerobic enzyme system.



Four Characteristics of an Optimum Soil:

- **Soil Energy** – simply this is the soil's ability to grow a crop and bring it to maturity. Soil energy occurs when fertilizers come into contact with the soil.
- **Foundational Minerals** – the adequate and available calcium and phosphorous.
- **Soil Biology** – the living breathing soil. As microbes proliferate they leave behind organic residues. These residues increase the Humus content of the soil. As they decompose, these organic compounds give off carbon dioxide, which plants use to produce carbohydrates and the cycle repeats itself.
- **Soil Biology** – the living, breathing soil. As microbes proliferate, they leave behind organic residues. These residues increase the Humus content of the soil. As they decompose, these organic compounds give off carbon dioxide, which plants use to produce carbohydrates and the cycle repeats itself.
- **Trace Elements**

“By giving soil proper stewardship and learning from generations past, we hold within our hands the power to help the generations yet to come and our own.” Jon Frank

The Bio-Gro farming system has four components. Below is a brief explanation of the components.



Four Components of the Bio-Gro Farming System

1. Step One: Preparation

70% Dry Humic Acid – best for improving soil properties and making nutrients soluble.

Application rate: 75-150 pounds per acre broadcast, or can be added to timik boxes and applied to the seed furrow. Applied post harvest or early spring.

2. Step Two: The Beginning

Bio-Gro A.C.E – ACE is our flagship soil product and functions as a complexing agent for the soil nutrients and maintains the soil nutrients in forms that are readily available to the plants. ACE also stimulates the microbes that rare in the root zone. ACE works extremely well mixed with your nitrogen usage.

Other Soil Products:

- **Bio-Gro 0-0-30**, supplies nutrition for carbohydrate translocation, movement of water and the plant, formation of sugars, increased disease and insect resistance, and production of high yielding high quality crops. Bio-Gro 0-0-30 is organically complexed.
- **Bio-Gro 0-30-0**, supplies nutrition for increased plant growth, seed set and yield, It is a highly stable source of phosphorus that resists chemical tie up in the soil and is leaf-friendly when used in foliar applications.
- **Bio-gro Ag Magic**, helps prevent hydrophobic soil conditions or aids in curing them if they should occur. Ag Magic surfactant maximized water penetration throughout the root zone when used routinely in a balanced fertility program.

3. Step Three: Continuous Support – Foliar Nutrition

The nutrients available to the plant are mobilized into the leaves. This is the chief purpose of fertilization in the first place.

The term “foliar feeding” implies uptake and utilization of nutrient materials applied to the plant leaves. Foliar intake of nutrients is similar to absorption by the root system except that foliar applied nutrients are readily available and more readily utilized by the plant when applied to the soil. That is why our foliar products play an important role in the Bio-Gro farming system.

Foliar Products:

- **Bio-Gro Take-Off**, is a foliar specially formulated to aid the plant in recovery from stress caused by nutrient deficiencies, insects, disease, and weather or chemical/mechanical damage. Take-Off will improve the overall health and vigor of the plant and stimulates root growth in seedlings and transplants.
- **Bio-Gro Bio Burst**, is specially formulated to provide extra energy and nutrition needed to push bud break evenly and accelerate the emergence of fruiting buds.

4. Step Four: Finishing and Preparing for New Cycle

Finishing the crop is important in overall yield of the crop. Bio-Gro Finisher. Finisher is designed to provide immediately exchangeable Potassium, calcium and Boron to the growing plants, thus assuring strong plants whose cells have abundant Calcium and Boron for the last phase of the cropping cycle. This will augment even maturity and assure quality of fruit produced. Bio-Gro Breakdown, is a complexed fertilizer containing nutrients and enzyme systems, which help speed up the aerobic decomposition of crop residues.

From preparation to finish, Bio-Gro can compliment your entire program.

Bio-Gro Take-Off

Low Analysis Fertilizer

Total Nitrogen (N).....8.00%

- 0.89% Amonia Nitrogen
- 7.11% Urea Nitrogen

Available Phosphate (P2O5).....16.00%

Soluble Potash (K20).....4.00%

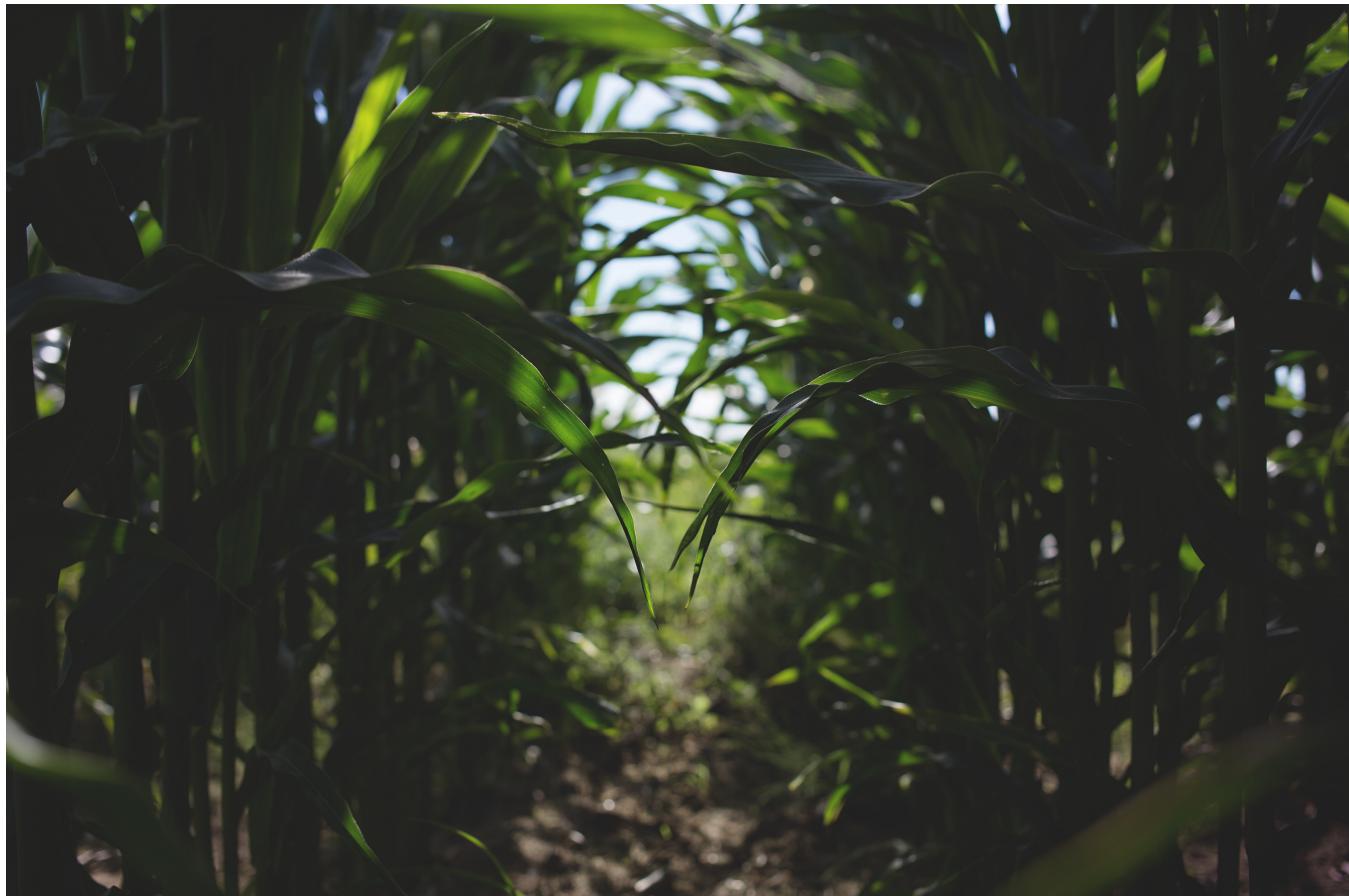
Derived From: Urea, Phosphoric Acid, Potassium Hydroxide

Directions: Shake well. Apply 32 ounces per acre per application. May be water run, side dressed or broadcast sprayed independently or mixed with other fertilizers or herbicides. Dilute foliar products with sufficient water to achieve uniform coverage without running off of leaf surfaces.

Condition of Sale: Manufacturer's and Seller's obligation is limited to the replacement for the quantity of defective product only. Neither Seller nor Manufacturer shall be liable for any damages directly or consequently arising from the use of Bio-Gro products. Buyer assumes all responsibilities other than stated label guarantees.

5 Gallons, Liquid • Net Wt. 53.40 Lbs./24.24 Kg

10.68 Lbs. Per Gal, @ 68°F.



Technical Sheet

Take-Off is a foliar nutrient concentrate containing organically "complexed" Nitrogen, Phosphorous, Potassium, Sulfur and MicroNutrients. It is specially formulated to aid plant recovery from stress caused by nutrient deficiencies, insects, disease, weather or chemical/mechanical damage. It improves the overall health and vigor of the plant and stimulates root growth in seedlings and transplants.

Take-Off provides essential plant nutrients in a foliar formation that is quickly absorbed and translocated, yet is "leaf friendly" which minimizes the occurrence of phytotoxicity (leaf burn). It can be used to acidify/buffer spray solutions.

Plant/Soil Dynamics - Take-Off provides essential plant nutrients in a foliar formation that is quickly absorbed. It improves overall plant health and vigor through increased phosphorous levels, which promote flowering and fruit set. Take-Off promotes balanced fertility within the plant.

Take-Off:

- Promotes seedling growth.
- Faster recovery from weather/insect induced stress.
- Quicker recovery from diseases induced by weather/insects.
- Produces healthier plants.
- Aids in transplant shock.

Personal Protection Information

Eyes: Plastic goggles or full face shield required. In case of contact, flush eyes immediately with much water for at least 15 minutes. Hold eyelids apart intermittently for 10 to 15 seconds during flushing to insure contact of the water with all accessible tissue of the eyes and the lids. Seek medical attention if irritation persists. MSDS should be made available to attending First-Aid personnel.

Skin: Impervious gloves strongly recommended. In case of contact, rinse with cold water. If irritation develops, seek medical attention. MSDS should be made available to attending First - Aid personnel.

Ingestion: Avoid swallowing this or any fertilizer product. If ingested, do not induce vomiting. See medical attention. Drink large amounts of clean water while waiting for help. MSDS should be made available to emergency personnel.

Ventilation: Good ventilation practices encouraged.

The use of common sense when using this and/or any other agricultural material should be a rule of thumb which should always be followed!

Health Information

This product is intended for the use of persons having adequate training in the handling of agricultural fertilizers. Please follow instructions carefully.

Physiological and Health Effects: Accidental health effects which could occur:

Eyes: Irritation can occur on contact with concentrated product.

Skin: Prolonged contact of the concentrated product with skin may cause irritation.

Inhalation: Not likely to occur.

Ingestion: Not likely to occur. Nonetheless, in case of accidental ingestion, some gastrointestinal disturbances may occur. Seek medical assistance.

EMERGENCY AND FIRST AID PROCEDURES: Please refer to Section II: Personal Protection Information for Details.

Reactivity Data

Stability: Stable

Incompatibility: Strong alkali.

Conditions to Avoid: Incompatible materials

Hazardous Decomposition Products: None Known

Hazardous Polymerization: Will not occur

Physical and Chemical Properties

Solubility in Water: 100%

Appearance: Amberline liquid.

Boiling Point: ND

Melting Point: ND

Specific Gravity: 1.2534 @ 68 F

pH: 7.2 @ 32 C

Weight: 10.68 lbs per gallon

Vapor Density: ND

Vapor Pressure: ND

Special Precautions

Handling and Storage Precautions: Store in cool, dry place away from excessive heat. No other special precautions necessary. Very stable product.

Fire Protection Information

Flash Point: N/A

Flammable Units: N/A

Explosive Units: Lower: N/A Higher: NA

Extinguishing Media: Water or Foam

Special Firefighting Procedures: Full protective clothing face mask and SCBA strongly encouraged.

Transportation Requirements

DOT Classification: Product not classified as a hazardous material.

DOT Proper Shipping Name: N/A

Spill and Leak Procedures

Environmental Impact: Material is a soil amendment. If large amounts of product spill or leak and are not watered down or cleaned up, some vegetation damage is likely to occur.

Precautions to Take if Spilled or Released: Spilled material should be watered down with large amounts of water. Prevent large quantities of concentrated material from contact with waterways.

Waster Disposal Methods: If uncontaminated recover and reuse. If contaminated, the nature and extent of contamination may require specialized disposal methods. Consult State or Federal environmental regulatory agencies.

WAIVER

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Bio Gro 0-30-0

Low Analysis Fertilizer

Available Phosphate (P2O5).....16.00%

Derived From: Phosphoric Acid

Directions: Shake well. Apply 1 Quart to Gallon per acre per application. May be water run, side dressed or broadcast sprayed independently or mixed with other fertilizers or herbicides. Dilute foliar products with sufficient water to achieve uniform coverage without running off of leaf surfaces.

Condition of Sale: Manufacturer's and Seller's obligation is limited to the replacement for the quantity of defective product only. Neither Seller nor Manufacturer shall be liable for any damages directly or consequently arising from the use of Bio-Gro products. Buyer assumes all responsibilities other than stated label guarantees.

5 Gallons, Liquid • Net Wt. 53.40 Lbs./24.24 Kg

10.68 Lbs. Per Gal, @ 68°F.



Technical Sheet

Bio-Gro 0-30-0 is a foliar fertilizer concentrate containing organically complexed Phosphate. Bio-Gro 0-30-0 supplies nutrition for increased plant growth, seed set and yield. It is a highly stable source of Phosphorus that resists chemical "tie up" in the soil and is leaf friendly when used in foliar sprays. Bio-Gro 0-30-0 can be applied alone or tank mixed with other foliar nutrients or liquid fertilizer solutions.

Bio-Gro 0-30-0 is organically complexed and salt buffered to ensure maximum uptake and translocation. The occurrence of leaf burn or phytotoxicity is minimized.

Benefits of Soil Applied Bio-Gro 0-30-0:

- Resists tie-up with calcium or aluminum and remains water soluble for increased availability.
- Provides quick crop response and can be applied just prior to actual crop need.
- Moves with irrigation water to aid in proper placement.
- Can be tanked mixed to improve availability of other phosphate solutions.
- Is non salt forming.
- Is useful in the cleaning and maintenance of drip irrigation systems.
- Aids Phosphorous uptake in high pH or calcareous soils.
- Promotes early root development.

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- Can be tanked mixed to improve availability of other phosphate solutions.
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- Is useful in the cleaning and maintenance of drip irrigation systems.
- Aids Phosphorous uptake in high pH or calcareous soils.
- Promotes early root development.

Benefits of Foliar Applied to Bio-Gro

- Can be applied to increase phosphorus levels or may be used in combination with other foliar products to "balance" crop nutrients.
- Promotes bud formation, flowering, and fruit sets.
- Provides a highly available phosphorus source which can be applied directly to leaf tissue.
- Can be used to acidify/buffer spray solutions.
- It improves seed germination.

Personal Protection Information

Eyes: Plastic goggles or full face shield required. In case of contact, flush eyes immediately with much water for at least 15 minutes. Hold eyelids apart intermittently for 10 to 15 seconds during flushing to insure contact of the water with all accessible tissue of the eyes and the lids. Seek medical attention if irritation persists. MSDS should be made available to attending First-Aid personnel.

Skin: Impervious gloves strongly recommended. In case of contact, rinse with cold water. If irritation develops, seek medical attention. MSDS should be made available to attending First - Aid personnel.

Ingestion: Avoid swallowing this or any fertilizer product. If ingested, do not induce vomiting. See medical attention. Drink large amounts of clean water while waiting for help. MSDS should be made available to emergency personnel.

Ventilation: Good ventilation practices encouraged.

The use of common sense when using this and/or any other agricultural material should be a rule of thumb which should always be followed!

Bio-Gro Bio-Burst

Low Analysis Fertilizer

Total Nitrogen (N).....4.00%

- 0.89% Amonia Nitrogen
- 3.11% Urea Nitrogen

Available Phosphate (P2O5).....14.00%

Soluble Potash (K20).....2.00%

Derived From: Urea, Phosphoric Acid, Potassium Hydroxide

Directions: Shake well. Apply 1 Quart per acre per application. May be water run, side dressed or broadcast sprayed independently or mixed with other fertilizers or herbicides. Dilute foliar products with sufficient water to achieve uniform coverage without running off of leaf surfaces.

Condition of Sale: Manufacturer's and Seller's obligation is limited to the replacement for the quantity of defective product only. Neither Seller nor Manufacturer shall be liable for any damages directly or consequently arising from the use of Bio-Gro products. Buyer assumes all responsibilities other than stated label guarantees.

5 Gallons, Liquid • Net Wt. 51.90 Lbs./23.56 Kg

10.38 Lbs. Per Gal, @ 68°F.



Technical Sheet

Bio-Burst is a foliar nutrient concentrate containing organically complexed N-P-K, micronutrients and material sugars. Bio-Burst provides the extra energy and nutrition needed to push “bud break” evenly and accelerate the emergence of fruiting buds.

Bio-Burst foliar nutrients are “leaf friendly”. They are organically complexed and salt buffered to ensure maximum uptake and translocation. The occurrence of leaf burn and phytotoxicity is minimized.

Bio-Burst:

- Stimulates bud emergence, flowering and fruit set.
- Aids in transition from vegetative to reproductive growth.
- Provides complexed N,P,K and micronutrients directly on the leaf tissue where it can be quickly absorbed and translocated.
- Can be used to acidify / buffer spray solutions.
- Provides a nutrient package to complement PIX or other plant growth regulators. Promotes uniform flowering and crop development.
- Provides nutrition to minimize early fruit drop.
- Can be applied to all flowering and fruiting crop

Personal Protection Information

Eyes: Plastic goggles or full face shield required. In case of contact, flush eyes immediately with much water for at least 15 minutes. Hold eyelids apart intermittently for 10 to 15 seconds during flushing to insure contact of the water with all accessible tissue of the eyes and the lids. Seek medical attention if irritation persists. MSDS should be made available to attending First-Aid personnel.

Skin: Impervious gloves strongly recommended. In case of contact, rinse with cold water. If irritation develops, seek medical attention. MSDS should be made available to attending First - Aid personnel.

Ingestion: Avoid swallowing this or any fertilizer product. If ingested, do not induce vomiting. See medical attention. Drink large amounts of clean water while waiting for help. MSDS should be made available to emergency personnel.

Ventilation: Good ventilation practices encouraged.

The use of common sense when using this and/or any other agricultural material should be a rule of thumb which should always be followed!

Health Information

This product is intended for the use of persons having adequate training in the handling of agricultural fertilizers. Please follow instructions carefully.

Physiological and Health Effects: Accidental health effects which could occur:

Eyes: Irritation can occur on contact with concentrated product.

Skin: Prolonged contact of the concentrated product with skin may cause irritation.

Inhalation: Not likely to occur.

Ingestion: Not likely to occur. Nonetheless, in case of accidental ingestion, some gastrointestinal disturbances may occur. Seek medical assistance.

EMERGENCY AND FIRST AID PROCEDURES: Please refer to Section II: Personal Protection Information for Details.

Reactivity Data

Stability: Stable

Incompatibility: Strong alkali.

Conditions to Avoid: Incompatible materials

Hazardous Decomposition Products: None Known

Hazardous Polymerization: Will not occur

Physical and Chemical Properties

Solubility in Water: 100%

Appearance: Amberline liquid.

Boiling Point: ND

Melting Point: ND

Specific Gravity: 1.2534 @ 68 F

pH: 7.2 @ 32 C

Weight: 10.68 lbs per gallon

Vapor Density: ND

Vapor Pressure: ND

Special Precautions

Handling and Storage Precautions: Store in cool, dry place away from excessive heat. No other special precautions necessary. Very stable product.

Fire Protection Information

Flash Point: N/A

Flammable Units: N/A

Explosive Units: Lower: N/A Higher: NA

Extinguishing Media: Water or Foam

Special Firefighting Procedures: Full protective clothing face mask and SCBA strongly encouraged.

Transportation Requirements

DOT Classification: Product not classified as a hazardous material.

DOT Proper Shipping Name: N/A

Spill and Leak Procedures

Environmental Impact: Material is a soil amendment. If large amounts of product spill or leak and are not watered down or cleaned up, some vegetation damage is likely to occur.

Precautions to Take if Spilled or Released: Spilled material should be watered down with large amounts of water. Prevent large quantities of concentrated material from contact with waterways.

Waster Disposal Methods: If uncontaminated recover and reuse. If contaminated, the nature and extent of contamination may require specialized disposal methods. Consult State or Federal environmental regulatory agencies.

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A.C.E. Activated Carbon Enzymes

Low Analysis Fertilizer

Total Nitrogen (N).....0.20%

- 0.05% Amonia Nitrogen
- 0.15% Urea Nitrogen

Available Phosphate (P2O5).....0.25%

Soluble Potash (K20).....0.95%

Derived From: Urea, Phosphoric Acid, Potassium Hydroxide, Ammonium sulfate.

Directions: Shake well. Apply 3 to 5 gallons per acre per application. May be water run, side dressed or broadcast sprayed independently or mixed with other fertilizers or herbicides. Dilute foliar products with sufficient water to achieve uniform coverage without running off of leaf surfaces.

Condition of Sale: Manufacturer's and Seller's obligation is limited to the replacement for the quantity of defective product only. Neither Seller nor Manufacturer shall be liable for any damages directly or consequently arising from the use of Bio-Gro products. Buyer assumes all responsibilities other than stated label guarantees.

5 Gallons, Liquid • Net Wt. 42.90 Lbs.

8.58 Lbs. Per Gal, @ 68°F.



Technical Sheet

A.C.E. is manufactured using Don's Ag Service's unique Bio-Bond process. The Bio-Bond process lays a carbon foundation. We blend with this dynamic organic carbon system three forms of humic acid, essential soil bacteria, seaweed cytokinins and an aerobic enzyme system.

A.C.E functions as a complexing agent for the soil nutrients and maintains the soil nutrients in forms that are readily available to the plants.

A.C.E. is also believed to be a good source of metabolic energy for the soil microbes that are in the Rhizosphere.

A.C.E. works in the rhizosphere or root zone of the plant. There are many complex interactions that are constantly occurring between the plant roots and the soil microbes. These soil microbes oxidize the availability of the organic carbon that is in the soil, therefore utilizing it as a food source. In turn the microbes convert and transfer the energy (nutrients) that are in the soil back to the plants, therefore creating an environment that is more conducive to strong and sustainable root growth.

A.C.E Benefits:

- It improves soil structure
- It provides more living Soil Organisms. It stimulates microbial
- It enhances root growth
- It reduces nitrogen usage
- It increases stress tolerance
- It improves seed germination

A.C.E. is best used at 3-5 gallons per acre in the fall and the spring. It can be water run, side dressed or broadcast sprayed independently or mixed with other fertilizers or herbicides.

Personal Protection Information

Eyes: Plastic goggles or full face shield required. In case of contact, flush eyes immediately with much water for at least 15 minutes. Hold eyelids apart intermittently for 10 to 15 seconds during flushing to insure contact of the water with all accessible tissue of the eyes and the lids. Seek medical attention if irritation persists. MSDS should be made available to attending First-Aid personnel.

Skin: Impervious gloves strongly recommended. In case of contact, rinse with cold water. If irritation develops, seek medical attention. MSDS should be made available to attending First - Aid personnel.

Ingestion: Avoid swallowing this or any fertilizer product. If ingested, do not induce vomiting. See medical attention. Drink large amounts of clean water while waiting for help. MSDS should be made available to emergency personnel.

Ventilation: Good ventilation practices encouraged.

The use of common sense when using this and/or any other agricultural material should be a rule of thumb which should always be followed!

Health Information

This product is intended for the use of persons having adequate training in the handling of agricultural fertilizers. Please follow instructions carefully.

Physiological and Health Effects: Accidental health effects which could occur:

Eyes: Irritation can occur on contact with concentrated product.

Skin: Prolonged contact of the concentrated product with skin may cause irritation.

Inhalation: Not likely to occur.

Ingestion: Not likely to occur. Nonetheless, in case of accidental ingestion, some gastrointestinal disturbances may occur. Seek medical assistance.

EMERGENCY AND FIRST AID PROCEDURES: Please refer to Section II: Personal Protection Information for Details.

Reactivity Data

Stability: Stable

Incompatibility: Strong alkali.

Conditions to Avoid: Incompatible materials

Hazardous Decomposition Products: None Known

Hazardous Polymerization: Will not occur

Physical and Chemical Properties

Solubility in Water: 100%

Appearance: Amberline liquid.

Boiling Point: ND

Melting Point: ND

Specific Gravity: 1.2534 @ 68 F

pH: 7.2 @ 32 C

Weight: 10.68 lbs per gallon

Vapor Density: ND

Vapor Pressure: ND

Special Precautions

Handling and Storage Precautions: Store in cool, dry place away from excessive heat. No other special precautions necessary. Very stable product.

Fire Protection Information

Flash Point: N/A

Flammable Units: N/A

Explosive Units: Lower: N/A Higher: NA

Extinguishing Media: Water or Foam

Special Firefighting Procedures: Full protective clothing face mask and SCBA strongly encouraged.

Transportation Requirements

DOT Classification: Product not classified as a hazardous material.

DOT Proper Shipping Name: N/A

Spill and Leak Procedures

Environmental Impact: Material is a soil amendment. If large amounts of product spill or leak and are not watered down or cleaned up, some vegetation damage is likely to occur.

Precautions to Take if Spilled or Released: Spilled material should be watered down with large amounts of water. Prevent large quantities of concentrated material from contact with waterways.

Waster Disposal Methods: If uncontaminated recover and reuse. If contaminated, the nature and extent of contamination may require specialized disposal methods. Consult State or Federal environmental regulatory agencies.

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Bio-Gro Finisher

Low Analysis Fertilizer

Soluble Potash (K20).....11%

Derived From: Potassium Hydroxide

Calcium.....1.30%

Derived From: Lignosulfonate

Boron.....0.05%

Directions: Shake well. Recommended foliar application is 2 quarts to 1 gallon. Dilute with sufficient water to achieve uniform coverage. Possible irritation to skin or eyes. If contact is made, flush promptly with water.

Condition of Sale: Manufacturer's and Seller's obligation is limited to the replacement for the quantity of defective product only. Neither Seller nor Manufacturer shall be liable for any damages directly or consequently arising from the use of Bio-Gro products. Buyer assumes all responsibilities other than stated label guarantees.

5 Gallons, Liquid • Net Wt. 48.90 Lbs

9.78 Lbs. Per Gal, @ 68°F.



Technical Sheet

Finisher is a biologically active Potassium, Calcium, Boron solution. Finisher is readily available to the growing crop.

Finisher is designed to provide immediately exchangeable Potassium, Calcium and Boron to the growing plants, thus assuring strong plants whose cells have abundant Calcium and Boron for the last phase of the cropping cycle. This will augment even maturity and assure quality of fruit produced.

Finisher is the fertilizer used to finish your crop where exchangeable Calcium and Boron are required for rapid uptake into the plant. It is one of the tools you can use to achieve soil and plant balance during and especially in the final phase of plant growth.

Finisher:

- Increases Solubility of Calcium and Boron.
- Better quality and appearance of the plant.
- Healthier Plants.
- Uniformity in plant growth and maturity.
- Greater profit for the grower.

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Corn Farming System

Stage One

Spring Pre-Plant or Post-Plant, Irrigated

Nitrogen-based on \$270/Ton.....	15Gal = \$24.75
ACE Concentrate.....	2Gal = \$12.50
Zinc.....	8OZ = \$4.00
0-30-0.....	1Gal = \$11.50
Total.....	\$52.75/Acre

Stage Two

Foliar Applications

Take-Off (Before 1st 25 days).....1Qt = \$7.50

Stage Three

After 1st 25 Days - Before 50 Days

Nitrogen-based on \$270/Ton.....	15Gal = \$24.75
ACE Concentrate.....	2Gal = \$12.50
Zinc.....	8OZ = \$4.00
0-30-0.....	1Gal = \$11.50
Total.....	\$52.75/Acre

Stage Four

Foliar Applications

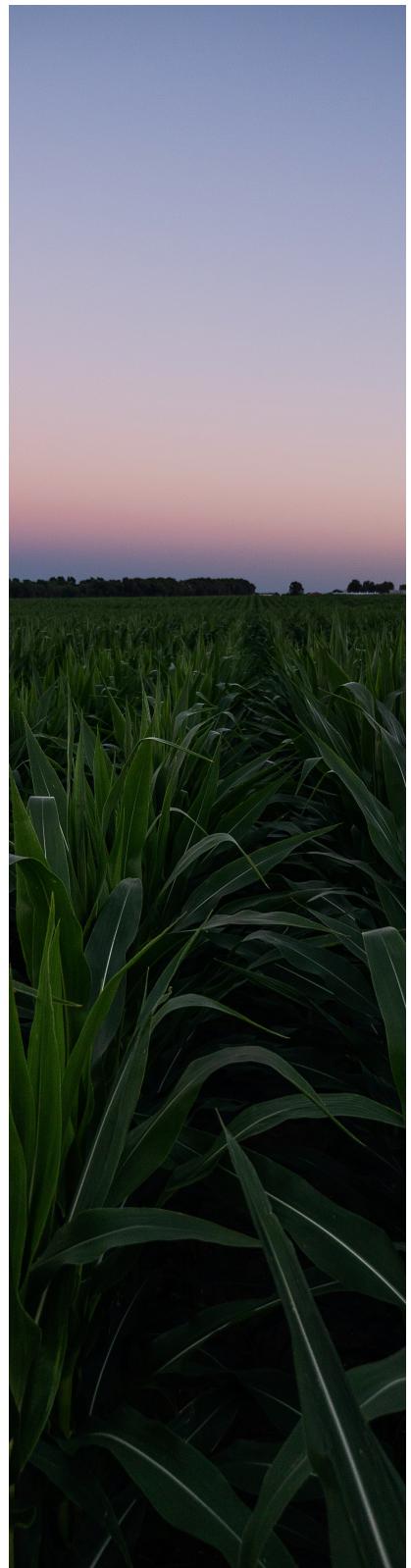
Ultra Trace.....1Qt = \$7.50

Triple Six.....1Qt = \$7.50

Total.....\$128.00

THIS IS THE APPROXIMATE MAXIMUM COST PER ACRE FOR
THE CORN FERT PROGRAM FOR THE ENTIRE YEAR.

THERE MAY BE YEARS WHEN THE LAST "STAGE FOUR"
FOLIAR FEEDS ARE NOT USED DEPENDING ON THE PETIOLE
SAMPLES TAKEN BEFORE THIS STAGE.
IF STAGE FOUR IS NOT NEEDED THEN THE COST WOULD BE
APPROX \$113.00 FOR THE ENTIRE YEAR.



Cotton Farming System

Stage One

Spring Pre-Plant or Post-Plant, Irrigated

Nitrogen-based on \$270/Ton.....	10Gal = \$13.50
ACE Concentrate.....	2Gal = \$12.50
Zinc.....	16OZ = \$8.00
0-30-0.....	1/2Gal = \$5.50
Total.....	\$39.50/Acre



Stage Two

Foliar Applications

Take-Off (3rd to 5th True Leaf Stage).....	1Qt = \$5.50
Bio-Burst (Match Head SQ Before Bloom)....	1Qt = \$5.50
Total.....	\$11.00/Acre

Stage Three

In Season Side Dressing to Get the Total Units Out Needed For the Year After First Bloom and Before Peak Bloom

Nitrogen Follow-up.....	10Gal = \$13.50
ACE Concentrate.....	2Gal = \$12.50
Total.....	\$26/Acre

Stage Four

Foliar Applications

Possible Products Needed After SideDressing Or Petiole Sampling and For PGR Control

Ultra Trace/T6-Plus.....	1Qt = \$7.00
Pentia (If Extra PGR is Needed).....	12OZ = \$5.00
Total.....	\$12.00/Acre

Stage Five

End of the Year - Approx 2 Weeks Before Defoliation

Finisher.....1/2Gal = \$6.00

Total (for Irrigated Land).....\$94.50/Acre

***Very Maximum Cost. If All Products Are Used.

If Less Products Are Needed

If no Foliar-Take-Off is used.....5.50 Less

If no Foliar-Bio-Burst is used.....5.50 Less

If no Foliar-T6 Plus is used.....7.00 Less

Total.....18.00 Less

***Will be determined by weekly scouting and in season petiole samples to see if extra products are needed.

Estimated Cost.....\$68.50/Acre

***Still Includes pentia during the year and Finisher at the end of the year.

Compared to what an average sample shows, for a 1500lb yield.

160lbs of NIT.....50Gal of 30-0-0

NIT \$270/ton (approx \$67.50 For NIT).....\$13.50/100

90lbs of PHOS.....30Gal of 10-34-0

PHOS \$370/ton (approx \$55.00).....\$18.00

Approx \$122.50 for NIT/PHOS per Acre

The savings go up more if you are tying for a 3.5 to 4.0 bale per acre yeild

1750lb yield

210 Unit 65 Gallons of 32-0-0.....Approx \$87.75 for Nitrogen

110 Phos, 35 Gal of 10-34-0.....Approx \$65 for Phos

Aprox \$152.00 for Nit/Phos

A.C.E Program.....Approx \$90 per Acre with foliar feeds. Approx \$50-\$55/acre savings.

Dryland

5Gal of NIT.....\$6.75

1Gal of A.C.E.....\$6.25

0.5Gal of 0-30-0.....\$5.50

4OZ of Zinc.....\$2.00

\$20.50/Acre