Dear Friends and Colleagues,

2019 was another exciting year in the organic green industry! A decade ago when we started **GREEN EARTH Ag & Turf**® (or **GREEN EARTH Agriculture** as it was called at that time) I never could have, in my wildest dreams, imagined running the leading national organic supply company in the USA in such a rapidly growing industry. In 2009, I reinvented myself after a successful career as a research scientist in the biotech and pharmaceutical industries following the economic crash. I took a chance on a 180° life turn. We sold our first case of product, then filled our basement with too many products and had to open a warehouse. That space quickly doubled and will be tripled in 2020. This catalog now contains hundreds of product lines in all shapes and sizes, and we’re continually adding to this repertoire with the best organic products available!

With **GREEN EARTH Ag & Turf**, you and your company have access to the safest and most effective organic products available. These products have been selected based upon years of research, product vetting and feedback from the top professionals. We invite you to use these easy, safe and proven products to find organic solutions that really work for your professional or home needs. We sincerely look forward to working with you in the future - Your Success Is Our Goal!

Best wishes for a great 2020!

Joe Magazzi, MS
President, Founder and Owner
**GREEN EARTH Ag & Turf**
GROWITNATURALLY.com
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Thanks to Nate Hughart for the first design and continuing updates of the catalog.
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Photos by Catherine Kiernan.

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GREEN EARTH Ag & Turf is a family owned and operated wholesale company specializing in eco-friendly and organic products for plants, trees and turf. Our mission is to cultivate the widespread use of eco-friendly growing practices that reduce the use of harmful or toxic chemicals. We help our customers achieve their goals through practices that build plant and soil health by utilizing biologicals, organic fertilizers and a large selection of proven organic products.

We Specialize in Providing the Lowest Prices with the Best Technical Support.

As scientists and product experts, we can help you with every aspect of implementing hybrid or full organic treatment programs. This catalog is the culmination of almost a decade of product research and implementation; it only contains products that are scalable, stable, and easy to use. It does not contain products that require time consuming brewing or lots of preparation. These products were chosen to help you significantly reduce inputs and costs while improving your end results.

GREEN EARTH Ag & Turf
“Your R&D Department”

Landscape • Golf • Agriculture • Horticulture • Indoor Growing
Once Upon a Time...

Back in 2009, Emily and Joe Magazzi were both living happy lives as research scientists in the biotech industry, developing cures for a host of human diseases such as cancer and bird flu. Emily was 8 months pregnant with their only child (soon to be Marcus) and was planning on staying home after he was born, while Joe would continue as a project manager developing life-changing drugs. In one day, all of that changed. The markets crashed in 2009, and the company Joe worked for lost funding for his research projects. Emily came home that day, less than a month away from having a child, to find out that her husband was laid off. With no jobs available, Joe was now Mr. Mom and Emily would have to go back to work.

A month after Marcus was born, a friend of Joe’s contacted him to see if he would want to sell a biological product for plants, trees and turf because of his extensive background in microbiology. Without any type of background in business or sales, Joe thought, “Sure, it sounds like a good idea.” It is said that ignorance is bliss! Thankfully that ignorance paid off. Hence, with just one case of a novel biological product (Quantum Growth) and no idea what we were getting into...GREEN EARTH Ag & Turf was born. And we have not stopped growing and expanding ever since!

Now...

The scientists with no business background have grown into a second warehouse, expanded their online inventory and became the leading organic outlet with an ever-expanding catalogue of top products and a full crew to help you achieve your goals.

Passion combined with scientific expertise and an honest approach has led to client successes never before seen in the green industries. We invite you to use these proven products to bring your programs to the next level and to achieve the same amazing results that your colleagues have already discovered!

ORGANICS REALLY WORK!
Our Team

Joe Magazzi
President

Ally Gatcomb
Office Manager

Marcus Magazzi
Boss Man

Peter Bourdeau
Logistics Manager

AJ Gatcomb
Warehouse Assistant

Nathan Hughart
Website Specialist

Our Pledge
To our customers:

- We source organic products that work as well as or BETTER than synthetics, yet will not harm the environment, beneficial biology or insects.
- We identify the best solutions for our clients with a focus on their success.
- We offer the most competitive pricing in the green industries.
- We back our products with outstanding customer & technical support.

WE WILL TREAT YOU LIKE PART OF OUR FAMILY
GREEN EARTH Ag & Turf is a wholesale provider to professionals across the United States, including landscape professionals, golf course superintendents, greenhouse growers, farmers, garden centers and indoor growers. Our online store also delivers these same great products at retail prices to home owners.

Our pricing structure has evolved to serve the individual needs of our clients more precisely: For those that qualify, we now offer "Dealer" pricing for professionals re-sellers and “Front and Back” pricing for operations that both sell to retail customers (products in Front) and grow plants (in Back).

In addition to this catalog, GreenEarthAgAndTurf.com provides detailed product specific information and additional resources such as SDSs and labels to download.

Would you like an updated price sheet to go along with this catalog?

Have questions or need information you don’t see here or on the website?

Want to talk about our full programs?

Would you like a customized quote or delivery pricing and information?

Contact us for great technical and customer support - we’re happy to help!

We look forward to working with you... From our Family to You

Toll Free: (866) 374-5101
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GreenEarthAgandTurf.com
What is Quantum Growth and Why Are Soil Probiotics Important?

Soil contains nutrients, water, air, and organics (microbes). Traditionally, growers address the first three components through fertilization, irrigation and aeration. However, the most vital component of soil, the living part, is often neglected and sometimes even destroyed with pesticides. Quantum Growth and MicrobeLife contain live microbes (probiotics) to specifically address this critical part of soil that other treatments cannot. The tremendous benefits of probiotics for our own digestive health are well known. Plants are even more dependent on a strong and diverse microbial population for their nutritional and health needs than we are.

Quantum Growth is the original liquid probiotic for plants, trees and turf. In fact, Ecological Laboratories, the company and technology behind these products, has been the leader in fermentation for over 40 years. This consortium of beneficial microbes has been validated through scientific literature and field trials. These studies prove that Quantum Growth provides plants, trees and turf with numerous benefits including: better health, better yields and better aesthetics. In addition, applications of Quantum Growth will allow for reductions in fertilizer use, plants’ increased resistance to physical damage, better drought tolerance and a reduction in the need for watering.

Quantum Growth and MicrobeLife supplement and rebuild biology in ways that no other product can even come close to, and we have tested many others.

Of all the product lines in this catalog, Quantum Growth, and its sister brand MicrobeLife, remain the “game changers” that make all other products more effective!
Quantum Growth vs. Compost Tea
Quantum Growth is not a compost tea; in fact, it takes all the positives that you would try to get from a compost tea without the many negatives; and without any of the precious time needed to produce them. Quantum Growth is a controlled biological (that is, it is made with known natural strains and is not dependent on random biology) which is supported by guaranteed counts and analysis from third-party labs – so you know exactly what is in every bottle. Each batch is also tested for pathogens, so you also know exactly what is not in every bottle.

Stable, Concentrated, Cost Effective
Production is completed when the Quantum Growth has been concentrated and stabilized. One gallon of Quantum Growth covers an entire acre at about $1.00 per 1,000 square feet, and is shelf stable for over 3 years with no refrigeration required!

Proven Over 40+ Years and in Trials
Quantum Growth is produced in the USA and proven to work through 40 years of R&D. Used on high-value properties such as Disney, pro turf fields such as the Milwaukee Brewers, Miami Dolphins, Jacksonville Jaguars and PGA courses, and by trend-setting farmers and landscape professionals. Multiple university studies validate this technology - available on our website.

No other product on the market meets such stringent safety, quality & performance criteria.
Quantum Organic Total

The All-Purpose or “Total” product in the Quantum Growth series for full spectrum use! Can be applied on plants, turf, and trees; used as a foliar spray or drench as well as in hydroponic systems. For indoor or outdoor crops. Quantum-Total contains the widest variety of bacteria for a perfectly balanced microbial consortium plus organic humates.

- 8 Ounce (Makes 8 Gallons or Treats 3,000 sq. ft.)
- 1 Gallon (Makes 128 Gallons or Treats 1 Acre)
- Bulk Sizes: 5, 55 & 275 Gallon

Quantum-Organic Light

For those who need certified organic products, Quantum Organic-Light is OMRI Listed. Contains the core photosynthetic, nitrogen-fixing microbe *Rhodopseudomonas palustris* that is unique to the Quantum Growth series. Does not contain a humic acid component to allow for use in heavier foliar sprays as well as drenches.

- 1 Gallon (Makes 128 Gallons or Treats 1 Acre)
- Bulk Sizes: 5, 55 & 275 Gallon

Quantum-Orchid

Uses a similar formulation to Quantum-Total, specifically for use on orchids. Performs multiple key functions to enhance orchid growth, blooms, vigor and health.

- 8 Ounce  ·  32 Ounce

Hose-End Sprayers

Similar great formulation as Quantum-Total, but now in a convenient hose-end sprayer and the label of MicrobeLife. Same performance as our professional Quantum line.

- 32 Ounce  ·  1 Gallon Refill
Photosynthesis Plus
Same core technology as Quantum-Organic Light but adapted for smaller applications, hydroponics or aquaponics. With the same core photosynthetic, nitrogen-fixing microbes as Quantum-Organic Light, Photosynthesis Plus enhances plant functions in both soil and soil-less substrates. Enhanced photosynthesis allows the capture and utilization of energy more efficiently. Speeds uptake and distribution of essential nutrients to promote plant vigor and reduced input costs with better yields and quality.

16 Ounce • 32 Ounce • 1 Gallon

Foliar Spray & Root Dip
Very similar technology to Quantum-Total but adapted for smaller applications and hydroponics/aquaponics. Takes the photosynthetic cultures of Photosynthesis Plus or Quantum-Organic Light and adds organic humates and a wider array of microbial cultures. Great flexibility as a foliar or drench.

16 Ounce • 32 Ounce • 1 Gallon

Vegetable & Fruit Yield Enhancer
Same core technology as Quantum-Total, but designed specifically to enhance the yield of vegetable and fruit by aiding a plant’s ability to absorb nutrients more efficiently. Speeds seed germination, root development and shoot outgrowth.

16 Ounce • 32 Ounce • 1 Gallon

Nite-Out II
MICROBE-LIFT/Nite-Out II is specifically formulated for aquaponics. The highly-specialized microbial consortium of nitrifying cultures are specially formulated to eliminate toxic ammonia in tanks via a natural biological process termed nitrification. MICROBE-LIFT/Nite-Out II contains select strains of Nitrosomonas, Nitrospira and Nitrobacter. Speed up tank cycling and avoid dye-offs with this unique product line!

8 Ounce • 16 Ounce • 64 Ounce • 1 Gallon • 5 Gallon
Neptune’s Harvest fertilizers are formulated from fresh North Atlantic Fish and Kelp and processed with a unique cold process that protects the vitamins, amino acids, enzymes and growth hormones that naturally occur in sea life. University studies have shown Neptune’s Harvest outperforms 20-20-20 chemical fertilizers.

### 2-3-1 Fish & Seaweed Blend

An organic fertilizer made from a perfect blend of fish hydrolysate and seaweed (kelp) for a complete and effective organic fertilizer providing the best of both products. Growers using our Fish-Seaweed Blend fertilizer on a regular basis have reported increased marketable yields, improved shelf life on fruits and vegetables, and better quality plants and turf.

**18 Ounce** · **36 Ounce** · **1 Gallon** · **5 Gallon**

**Bulk Sizes:** 55 Gallon & 275 Gallon Tote

### 0-0-1 Seaweed Plant Food

An organic source of over 60 naturally occurring major and minor nutrients and amino acids. Seaweed has been found to increase plant hardiness and resistance to adverse environmental conditions. The naturally occurring growth-promoting substances (Auxins, Cytokinins, Gibberellins) enhance plant development, color and vigor, and, when used as a seed inoculant, seaweed fertilizer increases and accelerates germination, and enhances the rapid development of a healthy root system.

**16 Ounce** · **32 Ounce** · **1 Gallon** · **5 Gallon**

**Bulk Sizes:** 55 Gallon & 275 Gallon Tote

### 2-4-1 Fish Hydrolysate Fertilizer

Neptune’s hydrolyzed fish is processed by the same standard cold process to retain valuable nutrients in a form that is readily available for plants intake. Unlike fish emulsions, Neptune’s Harvest’s fish hydrolysate retains the natural fish proteins and oils and has no unpleasant odor.

**18 Ounce** · **36 Ounce** · **1 Gallon** · **5 Gallon**

**Bulk Sizes:** 55 Gallon & 275 Gallon Tote


2-0-2 Turf Formula

An environmentally-friendly fertilizer containing the perfect blend of nutrients for all your turf and soil needs. Specifically designed for areas where you can’t use phosphorus by law or by choice. This product is a storehouse of over 60 major and minor chelated nutrients plus amino acids. Turf Formula can be used on all grass types, as well as on ornamentals.

1 Gallon (Covers 1/2 Acre) • 5 Gallon (Covers 2 1/2 Acres)

Bulk Sizes: 55 Gallon & 275 Gallon Tote

2-3-2 Lawn Starter

Developed specifically for turf care professionals looking to build healthy turf with a wide spectrum of macro- and micro-nutrients, growth factors and organic matter. This formula contains phosphorus for establishing new lawns.

1 Gallon (Covers 1/2 Acre) • 5 Gallon (Covers 2 1/2 Acres)

Bulk Sizes: 55 Gallon & 275 Gallon Tote

2-6-4 Rose & Flowering Formula

A formula specifically designed to be balanced like the fish seaweed blend with extra phosphorous necessary for roses and flowering plants but can also be used on trees, shrubs, house plants and vegetables when extra Phosphorous is needed. Increases nutrient efficiency, helps soil retain water, and builds root mass and organic matter.

36 Ounce • 1 Gallon • 5 Gallon

Bulk Sizes: 55 Gallon & 275 Gallon Tote

2-4-2 Tomato & Vegetable Formula

Developed specifically for tomatoes and vegetable, this formula is balanced with fish and seaweed plus additional calcium and phosphorous and natural sticking agents for healthy tomato and vegetable growth. Tomato & Vegetable Formula increases nutrient efficiency, helps soil retain water, builds root mass and organic matter and stimulates beneficial microbial activity.

36 Ounce • 1 Gallon • 5 Gallon

Bulk Sizes: 55 Gallon & 275 Gallon Tote

Use with Quantum Growth for Optimal Results
Neptune’s Harvest Lobster & Crab Shell Liq. (2-0-2)

Lobster & Crab Shell liquid 2-0-2 option for applicators looking for an alternative to the existing granular formulation. Neptune’s Harvest crafts their lobster & crab shell liquid from lobsters and crabs sourced from cold, clean, dark mineral rich North Atlantic Ocean water near New England.

No Phos!

- 1 Pint (Covers 500 sq. ft.)
- 1 Quart (Covers 2,000 sq. ft.)
- 1 Gallon (Covers 8,000 sq. ft.)

2-0-6 PL-2 Fertilizer

PL-2 is derived from 100% organic ingredients (2-0-6). It can be used as an organic liquid feed to supplement potassium for any crop. The unique Low Salinity Index eliminates the chances of foliar burning at labeled rates.

No Phos!

- 1 Gallon (Makes 800 Gallons)
- 2.5 Gallon (Makes 2,000 Gallons)
- 30 Gallon (Makes 24,000 Gallons)

5-0-3 Chilean Nitrate & Potash

For a quick-hit of Nitrogen and Potassium, 5-0-3 is a convenient mixture of OMRI Listed Chilean Nitrates and OMRI Listed Potash. With the convenience of a liquid formulation, our 5-0-3 mixture means no more pre-dissolving messy powders!

No Phos!

- 1 Quart (Makes 32 Gallons)
- 1 Gallon (Makes 128 Gallons)
- 2.5 Gallon (Makes 320 Gallons)
- Bulk Sizes: 30, 55 & 275 Gallon
**Nourish-L Liquid Humic Acid & Fulvic Acid**

Nourish-L is a unique liquid soil conditioner derived from a highly decomposed organic humus deposit containing natural carbon compounds; this is not Leonardite and is unparalleled by other humates. Nourish-L contains a perfect blend of food for beneficial microbes, enhances nutrient absorption and water-binding capabilities.

- **1 Pint** (Makes 16 Gallons)
- **1 Gallon** (Makes 128 Gallons)
- **1 Quart** (Makes 32 Gallons)
- **5 Gallon** (Makes 640 Gallons)

**Molasses, Unsulfured Blackstrap**

Conventional Food Grade Molasses for your agricultural needs. Won’t clog spray tips like lower grade molasses does. Molasses is a microbial food substrate (pre-biotic) and can add much needed micronutrients to deficient soils. The brix content is 79.50.

- **1 Gallon** (Makes 128 Gallons)
- **5 Gallon** (Makes 640 Gallons)

**No Phos! 5-0-0 ON-Gard® Liquid Fertilizer**

ON-Gard is an innovative fertilizer that is 100% plant-derived, 100% water soluble, and consistent in composition. The novel Low Salinity Index eliminates the chances of foliar burning at labeled rates.

- **2.5 Gallon** (Treats 2.5 Acres)
- **30 Gallon** (Treats 30 Acres)
- **5 Gallon** (Treats 5 Acres)

**Yucca Extract ThermX®-70 (Wetting Agent)**

ThermX-70 is a concentrated plant extract containing steroid saponin from the yucca plant. Steroid saponin is a natural wetting agent that reduces surface tension. This action enhances better water penetration in soil and relieves compaction. The natural wetting abilities increase fertilizer and nutrient uptake.

- **1 Quart** (Treats 1 Acre)
- **1 Gallon** (Treats 4 Acres)

**PERpose Soil Oxygen Enhancer**

PERpose™ is a specially formulated 33% hydrogen peroxide that increases oxygen levels in soil, reducing problems associated with anaerobic conditions and helps to stimulate and maintain healthy root development. This oxygen also helps to loosen compacted soil. Same formulation as PERpose Plus without the EPA Registration Number.

- **5 Gallon** (Treats 3 Acres)
- **15 Gallon** (Treats 9 Acres)
- **5 Gallon** (Makes 640 Gallons)
Organic Approach manufactures multiple lines of granular and liquid fertilizers comprised of a wide variety of outstanding organic ingredients. Organic Approach’s top-quality granular fertilizers are homogeneously blended and pelleted (prilled) to create unique consistency with low dust. Organic Approach products do not contain any manures and are free from offensive odors.

### 5-2-4 Granular - Organic Approach

5-2-4 is a certifiable organic fertilizer with 13 different ingredients comprising a perfect biological substrate for soil microbes. The unique formulation contains a majority of water insoluble nitrogen so burning is nearly impossible. Acts equivalently to a standard 10-10-10.

*Ingredients:* Soybean Meal, Cottonseed Meal, Alfalfa Meal, Meat and Bone meal, Bone Char, Blood Meal, Fermented Corn Solubles, Vegetative Ash, Azomite, Soluble Seaweed and Humate Extracts.

### 9-0-4 Granular - Organic Approach

9-0-4 is a 100% organic slow-release fertilizer ideal to feed soil biology for better turf, plant and tree health. No-Phosphorous formulation allows for compliance with local fertilizer laws.

*Ingredients:* Feather Meal, Soybean Meal, Cottonseed Meal, Alfalfa Meal and Vegetative Ash.

### 10-0-5 Granular - Organic Approach

10-0-5 is the only homogeneous fertilizer on the market to contain natural nitrate of soda and 5% soluble humates to act as both a quick release and extended release for both immediate and sustained greening.

*Ingredients:* Feather Meal, Soybean Meal, Wheat Meal, Nitrate of Soda and Sulfate of Potash.
15-0-2 Allganic® Chilean Nitrates

Chilean Nitrates (Nitrate of Soda) is one of the only non-synthetic mineral sources of nitrogen. This product contains 15% Nitrate Nitrogen plus 2% Potassium derived from natural Potash. This unique product comes in a consistent prill that can be applied as a granular or is 100% soluble to apply as a liquid spray.

0-0-50 Vegetative Potash Potassium

This organic potash product provides vital Potassium (50%) and Sulfur (15%) to strengthen cell walls and increase plant and turf vigor. This great supplement can be applied as a granular or can be dissolved and applied with a sprayer - it is 100% soluble!

12-0-12 Chilean Nitrate & Potash

12-0-12 is an organically approvable water-soluble crystalline powder comprised of Chilean Nitrate and Potash for a quick greening and potassium supplement to strengthen cell walls. This granular can be applied with a spreader or is 100% soluble to apply as a liquid spray, offering flexibility for a great foliar and drench nutrient mix.

3-2-2 Alfalfa Meal - Organic Approach

Alfalfa Meal is a great soil amendment that adds vital plant nutrients and stimulates soil organisms with important nutrients (Pre-Biotic) such as Protein, Nitrogen and Fiber. This formulation contains 100% alfalfa meal, registered as a feed.

1-0-2 Kelp Meal Neptune’s Harvest

Neptune’s Harvest Organic Kelp Meal is made with the northern seaweed Ascophyllum Nodosum, widely recognized as one of the finest nutrient sources available. With 60+ micronutrients and natural growth factors, kelp is one of the best supplements for any treatment program.

4 lb. Bag  ·  12 lb. Pail  ·  50 lb. Bag

Soluble Seaweed Extract (Nature’s Essence SEP)

A soluble extract powder derived from raw seaweed. Its growth promoting substances (Auxins, Cytokinins, Gibberellins) enhance plant development, color and vigor. Seaweed has also been found to increase plant hardiness and resistance to adverse environmental conditions.

3 lb. Bag  (Covers 1.5 Acres)  ·  18 lb. Bag  (Covers 9 Acres)

55 lb. Box  (Covers 27.5 Acres)
Fertilizers & Amendments

Crab Flour (7-2-1)
Crab & Lobster Shell Pieces (5-3-0)

Neptune’s Harvest Organic Crab Shell is an excellent dry organic source of Nitrogen, Phosphorous and Potassium (NPK) plus a great source of Calcium and Magnesium for pH control. Crab Shell Flour can be spread or worked into soil.

**Pieces (5-3-0):**
- 4 lb. Bag
- 12 lb. Pail
- 50 lb. Bag

**Flour (7-2-1):**
- 44 lb. Bags (Pallets of 50x 44 lb. Bags)

Hum-Amend MAX

From TeraVita, another great soil restoration amendment that provides high levels of organic carbon and stable humus for soil biology food and better cation exchange capacity (CEC).

*Ingredients:* Raw Leonardite, Soluble Humate Extract, Raw Kelp Meal & Soluble Seaweed Extract.

Humate Concentrate Powder, TeraVita® SP-85 & SP-90

**SP-85 Humate** is a dried humate products containing a guaranteed 85% to 90% humic acids. Humates are a great, cost-effective source to build soil organic matter to help with the retention component of soil to keep nutrients (fertilizers) and water in close proximity to plant, tree and turf roots and helping to reduce environmentally harmful run-off.

**SP-90 Humate** is the same as above except with a guaranteed 90% humic acid content and is at least 98% soluble in water. Not routinely stocked in our warehouse, but available on request.

**3 lb. Bag** (Covers 1.5 Acres)  **18 lb. Bag** (Covers 9 Acres)  **55 lb. Box** (Covers 27.5 Acres)

GreenEarthAgAndTurf.com
**Azomite Micronized Powder**

Azomite is a natural, ultra-fine (-200 mesh), mineral product that Azomite Micronized Powder serves as an anti-caking agent and a unique re-mineralizer for soils. Azomite’s complex mix of naturally occurring minerals maximize germination and help plants grow to their full potential by aiding photosynthesis. Azomite also improves the Brix content.

**COMING SOON**

**Biochar & Soils**

GREEN EARTH Ag & Turf is always busy finding the best and most novel new products. In 2020, we will be introducing new organic biochar and soil.

**WORM CASTINGS & SOILS**

Worm Castings are a perfect soil amendment with superior biology and than standard compost. Worms have inoculated the media with beneficial microbial communities that are essential to establishing and maintaining healthy soils. GREEN EARTH Ag & Turf proudly offers both granular and raw worm castings to fit all of your needs and application equipment.

**Worm Power Worm Castings**

An easy-to-apply soil supplement that has been found effective by Penn State, Cornell, and Cal-Poly University. Worm castings improve seed germination, reduce transplant shock, and show improved plant growth. They also reduce the need for synthetic fertilizers and are OMRI Listed for Organic Production.

- 3 lb. Bag
- 15 lb. Bag
- 40 lb. Bag (Pallets of 25x Bags)

**Finesse GVH (Granulated Vermi-Humus)**

Organic Approach’s GVH is a premium high-biology soil supplement derived from homogeneously mixing and granulating earthworm compost, raw Leonardite humates, and soluble humates. GVH will increase biological activity in soil naturally. Apply 10-20 lbs. per 1,000 sq. ft.

- 50 lb. Bags (Covers 5,000 sq. ft.)
- Pallets of 40x 50 lb. Bags
Vitazyme® is one of the most profitable inputs available for plant, tree and turf care professionals who enjoy a large Return On Investment (ROI) from sheer yield increase and from improved quality parameters that command a higher market price for products or services, or in most cases all of these.

Organic and made from natural fermentation products, Vitazyme is thoroughly tested and proven with multiple scientific studies.

NEW PRODUCT: We are happy to introduce “Bio Shot” for 2020. This is a 10x concentrated version of Vitazyme for a more potent, cost effective way to dramatically increase yields.
Organic Growth Enhancers
Supplement Traditional Fertilization

KeyPlex 350 is a formulation of micronutrients most often found deficient in commercial crops and trees. Containing alpha-keto acids, which facilitate utilization of micronutrients, and increase resistance to environmental stress. Keyplex’s patented blend of micronutrients, yeast hydrolysate, and humic acid fuels the energy requirements for defense, growth, and reproduction necessary in plant production and stabilization. KeyPlex can be used across the spectrum for plants, trees and turf to improve turf quality and density, the quality of flowering, and even enhance stress tolerance against heat, cold, drought, pest, and disease.

KeyPlex® 350 G (formerly KeyPlex 350 DP)

KeyPlex 350 G is a formulation of the micronutrients most often found deficient in commercial crops and trees, amino acids, and humic/fulvic acids. This combination adds vital nutrients and organic matter for healthier and stronger growth.

KeyPlex® 350 OR

KeyPlex 350 OR will elicit production of defensive proteins in certain plants. EPA Registered and OMRI Listed, KeyPlex 350 OR is the choice for disease control and organic certifications.

All products available in 2.5 Gallon containers. Bulk sizes available. The full line of KeyPlex products are available upon request (not stocked).
Herbicides

NON - SELECTIVE WEED CONTROLS

Non-Selective Weed Killers

Non-selective, post-emergent organic herbicides safely kill weeds, grasses and broad leaves by removing the waxy plant cuticle causing dehydration and plant death. Alternatives to RoundUp® Weed Killer, these organic products can work quicker and more effectively for peace of mind.

Finalsan Non-Selective

A CHEAPER Non-Selective for professionals - Finalsan® Herbicide is a fast-acting weed, grass and algae killer and a RoundUp® alternative. Using a specially formulated, non-staining, ammonium soap of fatty acids, Finalsan is a non-selective herbicide that controls or suppresses many common annual, biennial, and perennial weeds.

2.5 Gallon (Covers 12,500 sq.ft.)
50 Gallon (Covers 70 Acres)

Pulverize Weed & Grass Killer

Pulverize® is manufactured by the same company that makes Finalsan using the same technology offered in smaller and ready-to-use sizes.

1 Gal. Conc. (Covers 6,000 sq. ft.)
1 Gal. RTU (up to 192 sq. ft.)
32 oz. RTU (up to 48 sq. ft.)
32 oz. Conc. (Covers 1,500 sq. ft.)

Avenger Organics Non-Selective

Avenger® offers a variety of ready-to-use and concentrated herbicides that use citrus oils for fast-acting and biodegradable results. Mix at a rate of 1:6 and use with any sprayer. 1 gallon covers approx. 8,800 sq. ft. NOTE: Based on feedback from our clients, we have switched our non-selective users to Finalsan. Avenger products are available while supplies last.

24 Ounce (RTU) . 1 Gallon (RTU)
1 Quart (Conc.) . 1 Gallon (Conc.) . 2.5 Gallon (Conc.)
Selective Post-Emergent Weed Killers

**Fiesta Selective Liquid Weed Killer**
Fiesta® Lawn Weed Killer is a selective, broadleaf weed killer that leaves lawns healthy and weed-free using a specially formulated iron chelate solution. Fiesta works quickly, delivering visible same-day results, even in cool weather. And since Fiesta is made from iron, it has no unpleasant odor during or after application, and pets and people can re-enter the treated area once the spray is dry.

- **1 Gallon** (Covers 10,000 sq.ft.)
- **2.5 Gallon** (Covers 25,000 sq.ft.)
- **30 Gallon** (Covers 7 Acres)
- **200 Gallon** (Covers 47 Acres)

**Pulverize Weed Killer for Lawns**
Pulverize® is manufactured by the same company that makes Fiesta and uses the same technology in a variety of ready-to-use and concentrated sizes. Apply ready-to-use products at a rate of 0.7 oz. to 1 oz. per square foot. Smaller RTU sizes are best used for spot treatment of landscapes and gardens!

- **1 Gal. RTU** (Covers up to 192 sq. ft.)
- **32 oz. HES** (Covers 2,500 sq. ft.)
- **32 oz. RTU** (Covers up to 48 sq. ft.)

Pre-Emergent Weed Killers

**Safer Play 10-0-2 w/ Weed Control (formerly ICT Pro Turf)**
Minimum Risk, 25(b) exempt from EPA pesticide registration

Combine your fertilizer and weed control in one convenient bag! Safer Play 10-0-2 is a granular fertilizer with a pre-emergent herbicide that provides superior greening on turf. It also will provide control of crabgrass and other grassy and broadleaf weeds. Safer Play with Weed Control is a novel, natural weed control product based on corn gluten steep that is not comprised of toxic synthetic chemistries.

- **50 lb. Bag** (Covers 10,000 - 16,000 sq.ft.)

**Branch Creek Crabgrass Shield (formerly ICT PRE-EMERG)**
Minimum Risk, 25(b) exempt from EPA pesticide registration

Pre-Emerg is a unique liquid product that selectively kills crabgrass, broadleaf and other grassy weeds by burning the seed hairs that are found on many types of weed seeds but not on the desired turf seeds; thus stopping germination. Because the active ingredients in Crabgrass Shield does not affect established turf or turf seeds, weeds are stopped before they start growing without harming established turf grasses.

- **1 Gallon** (Covers 4,000 sq.ft.)
Tick & Mosquito Control

**Tick Killz**
Minimum Risk, 25(b) exempt from EPA pesticide registration

The choice of organic professionals, Tick Killz is an all natural tick control made with organic ingredients that offers strong control against ticks and also some control against mosquitoes, fleas and gnats. Tick Killz uses a unique double mechanism of action: It kills on contact, then dries in an hour and becomes a strong repellent. Lasts an average of 4 weeks.

**Active Ingredients:** Cedar Oil, 2-Phenethyl Propionate (Guava Extract Based) and Peppermint Oil.

<table>
<thead>
<tr>
<th>Product</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose-End Sprayer</td>
<td>(Covers 10,000 sq. ft)</td>
</tr>
<tr>
<td>8 Ounce Conc.</td>
<td>(Covers 40,000 sq. ft.)</td>
</tr>
<tr>
<td>32 Ounce Conc.</td>
<td>(Covers 3.75 Acres)</td>
</tr>
<tr>
<td>64 Ounce Conc.</td>
<td>(Covers 7.5 Acres)</td>
</tr>
<tr>
<td>2.5 Gallon Conc.</td>
<td>(Covers 37.5 Acres)</td>
</tr>
</tbody>
</table>

Bulk Sizes Also Available

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**I Must Garden Mosquito, Tick & Flea Control**
Minimum Risk, 25(b) exempt from EPA pesticide registration

This product, designed for homeowner use, combines garlic and other natural ingredients to provide moderate control against both ticks and mosquitoes without specializing in either pest.

**Active Ingredients:** Cedarwood Oil, Lemongrass Oil, Thyme Oil, Garlic, Citronella Oil, Geraniol, Peppermint Oil, Rosemary Oil.

<table>
<thead>
<tr>
<th>Product</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 oz. Ready-to-Use</td>
<td>(Covers 250 sq. ft.)</td>
</tr>
<tr>
<td>32 oz. Conc.</td>
<td>(Covers 4,000 sq. ft.)</td>
</tr>
</tbody>
</table>

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**MosquitoCure™**
Minimum Risk, 25(b) exempt from EPA pesticide registration

MosquitoCure is manufactured from plant based extracts that directly affect a mosquito’s nervous system for fast knockdown and control of mosquitoes and some effect on ticks and other pests. These essential oils provide long lasting insect repellent action and effectiveness against mosquitoes with up to 4 week residual.

**Active Ingredients:** Lemongrass Oil, Citronella Oil, Cedarwood Oil, Rosemary Oil, Garlic Oil, Red Thyme Oil.

<table>
<thead>
<tr>
<th>Product</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gallon</td>
<td>(Covers 11 Acres)</td>
</tr>
</tbody>
</table>
Mosquito Barrier® Garlic
Minimum Risk, 25(b) exempt from EPA pesticide registration

Mosquito Barrier is a concentrated liquid garlic made from very strong garlic cloves; a variety which is much more potent than the garlic found in grocery stores. Garlic has a natural sulfur which repels insects, including mosquitoes, ticks and fleas. Garlic Barrier imparts no garlic taste on any crops or plants that are sprayed. The odor of garlic in the air or on the plant disappears in about 20 minutes.

Active Ingredients: Garlic Juice, 99.3%.

1 Quart (Covers 1.25 Acres) · 1 Gallon (Covers 5 Acres)

MicrobeLift® BMC (For Ponds & Sitting Water)
Specially Formulated for Hydroponics, Aquaponics and Decorative Water Features or any areas where standing water exists - kills developing mosquito larvae before they become breeding, biting adults. BMC can be applied to areas that contain aquatic life, fish and plants or where there is contact with humans, animals, livestock, pets, birds or wildlife.

Active Ingredients: Bacillus thuringiensis subspecies israelensis.

2 Ounce (Treats 2,000 Gals.) · 6 Ounce (Treats 6,000 Gals.) · 1 Gallon (Treats 128,000 Gals.)

PERSONAL INSECT REPELLENTS

Best Yet™ Biting Insect Spray
Minimum Risk, 25(b)

Best Yet from Neptune’s Harvest is a natural personal insect repellent effective against Mosquitoes, Fleas, Flies, Ticks, Green Heads, Chiggers, No-See-Ums and Gnats. It can be applied over clothing or directly to skin and is resistant to sweat.

Active Ingredient: Cedar Oil.

2.5 Ounce Sprayer

Nature’s Cloak Mosquito & Tick Repellent
 Minimum Risk, 25(b)

The CDC and Consumer Reports recommends natural repellents containing lemon eucalyptus oil! Nature’s cloak is pet and kid friendly. Its plant-based formula contains no chemicals. It is non-greasy.

Active Ingredients: Lemon, Eucalyptus, Lavender, Rose Geranium, Lemon Tea Tree, Cedarwood.

2.5 Ounce Sprayer
Beetle & Grub Control

Ecotrol® Plus
Minimum Risk, 25(b) exempt from EPA pesticide registration

Ecotrol attacks a beetle’s octopamine neuroreceptors, a key insect neurotransmitter that regulates movement, heart rate, behavior and metabolism. Ecotrol’s blockage of this insect receptor leads to toxicities such as excitation, immobilization and/or knockdown and ultimately death. Active Ingredients: Rosemary Oil, Geraniol, Peppermint Oil.

1 Gallon (Covers 2-8 Acres) • 2.5 Gallon (Covers 5-20 Acres)

Wettable Powder NOW FOR GRUBS as well as beetles

The first Btg (Bacillus thuringiensis galleriae) bio-insecticide to control adult beetles at a level of efficacy equivalent to chemical standards but without the side effects or off-target damage to beneficial insects, such as bees, butterflies and other pollinators.

beetleGONE! is the top effective control product that is approved for organic growers and not only kills adult beetles, but is now also approved as a liquid spray for grub (larval beetle) control!

beetleGONE! works against a broad range of scarab (pest) beetles without harm to beneficials:

Effective Against: Japanese, Asiatic, June and Oriental Beetles; European, Cupreous, Southern and Northern Masked Chafer.

Active Ingredient: Bacillus thuringiensis galleriae, Strain SDS-502.

4 Ounce Sachet
(Beetles 5,000 sq. ft. / Grubs 750 sq. ft.)

5 lb. Bag
(Beetles 2 Acres / Grubs 15,000 sq. ft.)
Game Changer!

**Grub GONE!**

The first organic control for turf grubs to confer control at a level of efficacy equivalent to or better than chemical standards. grubGONE! controls white grubs (scarab beetles) without the side effects or off-target damage to beneficial insects (bees, butterflies and other pollinators, for example) or against natural grub enemies such as beneficial nematodes. Unlike other biological or chemical beetle control products that are only effective against smaller 1st-instar pests, grubGONE! is an effective control of the larger, later 2nd- and 3rd-instar grubs, and can therefore be used as a curative treatment for grub control as well as a preventative treatment!

grubGONE! works against a broad range of scarab beetles including:

*Effective Against:* Japanese Beetle, Oriental Beetle, Asiatic Garden Beetle, European Chafer, Green June Beetle, May or June Beetle, Northern Masked Chafer, Southern Masked Chafer etc....

| 10 lb. Bag (Covers 4,500 sq. ft.) | 40 lb. Bag (Covers 17,500 sq. ft.) |
---|---|

**CedarCure**

Minimum Risk, 25(b) exempt from EPA pesticide registration

CedarCure will stifle the ability of an insects’ octopamine receptors and thus their ability to detect food, mates, and to reproduce. Insects become overwhelmed and relocate. Insect displacement interrupts the “egg laying cycle” eliminating a new generation of arthropod.

**16 Ounce bottle** (50,000 sq. ft.)

info@GreenEarthAgAndTurf.com
In our almost decade of researching products in this field, the greatest changes we have seen in organics are the advancements in disease and pest control; namely with the development of exciting new biologicals. At **GREEN EARTH Ag & Turf**, we aren’t just looking for organic solutions because organic does not always mean safe. In fact, some organic products can be just as harmful and toxic as a synthetic chemistry to the environment, to pollinators or to our own health. For that reason, we carry products that “target the pest, but not the rest.” We are excited to offer you a unique collection of the next generation biological products entering the market; products that are true “Silver Bullets” that kill or repel unwanted insects or disease-causing microbes without affecting beneficiais. In particular, biological technologies have changed the way we fight pests. Not only are organics no longer a compromise, some of the data on the products demonstrate that they work better than synthetics in term of efficacy and have no off-target effects, such as harming pollinators.

**Botanigard MAXX**

BotaniGard MAXX is a novel formulation based on the combination of Natural Pyrethrins and *Beauveria bassiana* strain GHA, formulated together in an emulsifiable dispersible oil and represent the latest generation of biorationals for insect control. The interaction between *Beauveria bassiana* strain GHA and natural botanical pyrethrins is synergistic. This combination results in multiple modes of action and pest control results comparable to those obtained when using chemical alternatives.

**Active Ingredients:** Pyrethrins and *Beauveria bassiana* strain GHA

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quart</td>
<td>1 Acre</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>4 Acres</td>
</tr>
<tr>
<td>2.5 Gallon</td>
<td>10 Acres</td>
</tr>
</tbody>
</table>
**Mycotrol® & BotaniGard® Biological Insecticides**

Mycotrol and BotaniGard are unique biological insecticides that are effective against a broad range of insects including white grubs, surface feeders, weevils, chinch bugs, and mole crickets. The mode of action of these products is unlike any other conventional insecticide. Spores of the beneficial microbes adhere to the host, germinate, and produce enzymes that attack and dissolve the insect’s cuticle. The *Beauveria* then penetrates the insect and grows into its body, leading to death. BotaniGard and Mycotrol have the exact same active ingredient and work the same way, but Mycotrol is organically labeled.  

*Active Ingredient: Beauveria bassiana, strain GHA*

**Mycotrol (Organic Beauveria bassiana)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Container</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mycotrol WPO</td>
<td>1 lb. Bag</td>
<td>(Covers 20,000 sq. ft.)</td>
</tr>
<tr>
<td>Mycotrol ESO</td>
<td>1 Quart</td>
<td>(Covers 1-2 Acres)</td>
</tr>
<tr>
<td></td>
<td>1 Gallon</td>
<td>(Covers 2-4 Acres)</td>
</tr>
</tbody>
</table>

**Botanigard (Beauveria bassiana)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Container</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botanigard 22WP</td>
<td>1 lb. Bag</td>
<td>(Covers 20,000 sq. ft.)</td>
</tr>
<tr>
<td>Botanigard ES</td>
<td>1 Quart</td>
<td>(Covers 1-2 Acres)</td>
</tr>
<tr>
<td></td>
<td>1 Gallon</td>
<td>(Covers 2-4 Acres)</td>
</tr>
</tbody>
</table>

**NemaShield® Beneficial Nematodes**

Minimum Risk, 25(b) exempt from EPA pesticide registration

A live nematode insecticide that can be used to boost biological activity in soil. The nematode species in NemaShield actively search out, infect and kill insect larvae such as thrips and fungus gnats.  

*Active Ingredient: Steinernema feltiae nematodes*

- **250 Million** (7,500 sq. ft.)  
- **500 Million** (15,000 sq. ft.)  
- **2 Billion** (1.3 Acres)
Molt-X®

Molt-X is an emulsifiable concentrate formulation containing 3% of the active ingredient azadirachtin - the most potent of the insect-active compounds from the neem tree, although it is not neem oil. Molt-X has multiple modes of action: Insect Growth Regulator (IGR) that disrupts the molting process in insects, insect repellent, anti-feedant, and ovipositional deterrent. 

Active Ingredient: Azadirachtin 3% (Derived from Neem Seed).

1 Pint (Covers 2 Acres) 1 Gallon (Covers 16 Acres)
1 Quart (Covers 4 Acres)

Ecotrol® Plus

Minimum Risk, 25(b) exempt from EPA pesticide registration

Ecotrol attacks an insect’s octopamine neuroreceptors, a key mite and insect neurotransmitter that regulates movement, heart rate, behavior and metabolism. Ecotrol’s blockage of this receptor leads to characteristic toxicities such as excitation, immobilization and/or knockdown and ultimately death. EcoTrol is formulated to deliver maximum performance with minimal environmental impact.

Active Ingredients: Rosemary Oil, Geraniol, Peppermint Oil.

1 Gallon (Covers 2-8 Acres) 2.5 Gallon (Covers 5-20 Acres)

Surround® Kaolin Clay Insecticide

Surround is a versatile organic product that increases yields and crop value and also adds protection to plants by: protecting against sunburn and heat stress damage; promoting plant health, which leads to higher yields under extreme light and heat, and reducing insect activity.

Active Ingredient: Kaolin, 95%.

25 lb. Bag (Covers 0.5 - 1 Acres)
PyGanic® EC 1.4 & PyGanic® EC 5.0

PyGanic is an organically approved, broad-spectrum contact insecticide with botanically-derived active ingredients from Chrysanthemum flowers. PyGanic controls a broad-spectrum of insects on virtually every type of crop and requires no pre-harvest interval or restrictions on the number of applications that can be made per year.

Active Ingredient (PyGanic 1.4 EC): Pyrethrins, 1.4%
Active Ingredient (PyGanic 5.0 EC): Pyrethrins, 5.0%

Note: Due to potential bee toxicity, PyGanic is only sold after other options are exhausted and consultation with the GREEN EARTH staff.

SuffOil-X®

SuffOil-X is a unique concentrate of pre-emulsified, highly refined, high paraffinic, low aromatic oil for effective insect, mite and disease control. 50 micron oil droplets assure a thin, uniform coating of oil is applied to the plant for a broad-spectrum insecticide that is highly effective at smothering and killing pests while maintaining plant safety.

2.5 Gallon (Covers 2.5 Acres) • 30 Gallon (Covers 30 Acres)

Grandevò® Biological Insecticide

Grandevò is a microbial-based insecticide that works to repel, stop feeding, reduce reproduction and induce mortality in damaging populations of insect larvae. Grandevò provides performance and flexibility for control of white grubs, chinch bugs, sod webworms, chafers, cutworms and other damaging pests.

Active Ingredient: Chromobacterium subtsugae, Strain PRAA4-1.

5 lb. Bag (Covers 20,000 sq. ft.)
Ant & Bed Bug Control

Ant Control RTU
Minimum Risk, 25(b) exempt from EPA pesticide registration

For direct spraying on ants, this product kills on contact. Great for use on insects indoors and when treating entryways. I Must Garden Ant Control can also be used as a soil drench to destroy ant colonies in gardens.

Ingredients: Peppermint Oil, Soybean Oil, Garlic, Vinegar, Molasses, Garlic, Potassium Sorbate, and Xanthan Gum

32 Ounce RTU Spray  ·  1 Gallon Refill

Insect Control RTU
Minimum Risk, 25(b) exempt from EPA pesticide registration

Can be sprayed directly on plants to repel and kill damaging insects. Great for spraying on potted plants before bringing indoors to prevent transfer of ants. This product is safe around children and pets when used as directed.

Ingredients: Peppermint Oil, Thyme Oil, Garlic, Rosemary Oil, Wintergreen Oil, Canola Oil, Garlic, Fish Oil, Potassium Sorbate, and Xanthan Gum.

32 Ounce RTU Spray

Bed Bug Killer, Avenger® Organics
Minimum Risk, 25(b) exempt from EPA pesticide registration

Avenger Organics Natural Bed Bug Killer is an all-natural solution that kills adult bed bugs by breaking down the protective layer (integument) of their exoskeleton, causing death through dehydration. Spray on mattresses, bedding, carpets, furniture, curtains, clothing and any other infested areas.

Active Ingredients: Clove Oil, Peppermint Oil

3 Ounce Travel Spray  ·  24 Ounce Spray  ·  1 Gallon RTU Spray
Antixx Plus Granular Ant Bait
Antixx Plus is an OMRI listed granular product that kills several species of ants, earwigs, cutworms, sowbugs, pillbugs, crickets, slugs, and snails. Its dual mode of action kills both protein and carbohydrate feeders and has an excellent safety profile. 1 lb. covers up to 4,000 linear feet and people and pets can enter the area after bait is applied. 
*Active ingredient:* Spinosad, Iron Phosphate

- **5 lb.** (Broadcast: Covers 10,000 sq. ft. / Perimeter: Covers 20,000 linear ft.)
- **25 lb.** (Broadcast: Covers 50,000 sq. ft. / Perimeter: Covers 100,000 linear ft.)

Antixx Liquid Ant Bait
Antixx Liquid Ant Bait (spinosad) kills within 48 hours several species of ants and is ideal for residential and industrial indoor and outdoor use in refillable bait stations. Antixx Liquid Ant Bait contains an effective attractant that kills the colony and queen while remaining effective for up to 4 weeks. 
*Active ingredient:* Spinosad

- **32 Ounces**
- **1 Gallon**

Antixx Liquid Ant Bait Stations
Convenient, disposable bait stations that are pre-packed with AntiXX Liquid Ant Bait (spinosad). Bait Stations for Ant Control are an easy and cheap added-on profit maker for lawn care professionals and Pest Control Operators.

*Active ingredient:* Spinosad

- **4 Ounces Pre-Loaded Stations**
CEASE®

Based on a naturally occurring patented strain of *Bacillus subtilis*, CEASE provides effective control of a wide array of both fungal and bacterial pathogens (especially soil-borne) while providing outstanding plant, human and environmental safety. With a 4-hour restricted entry interval and a 0-day preharvest interval, CEASE provides flexibility and labor costs savings. 

*Active Ingredient:* *Bacillus subtilis* (strain QST 713).

1 Gallon (Covers 1 Acre) • 2.5 Gallon (Covers 2.5 Acres)

BotryStop™

Developed specifically for the control of pathogens such as *Botrytiscinerea*, *Sclerotinia sclerotiorum* and *Monilinia* spp. BotryStop utilizes the natural fungus, *Ulocladium oudemansii* Strain U3, a new active ingredient unique to North America. When BotryStop spores are deposited on the dead and senescent plant debris they germinate and colonize.

*Active Ingredient:* *Ulocladium oudemansii* Strain U3.

12 lb. Bag (Covers 4 Acres)
Naturally protect plants from soil-borne diseases with the next generation of RootShield®, RootShield PLUS, which now contains two active ingredients - *Trichoderma harzianum* strain T-22, and *Trichoderma virens* strain G-41. RootShield PLUS provides preventative control of major root diseases including soil-borne *Phytophthora*, *Rhizoctonia*, *Pythium*, *Fusarium*, *Thielaviopsis*, and *Cylindrocladium* – with improved suppression of the aggressive hot-season *Pythium* (*P. aphanidermatum*).

RootShield confers protection for three months with just one easy, cost-effective application. Use on turf, greenhouse and nursery ornamentals, vegetables, herbs, and fruits. Much cheaper and easier (without off-target toxicities) than standard rescue fungicides, RootShield Plus is an integral part of any organic program!

**RootShield PLUS Granules**

- **OMRI Listed**
- **10 lb. Bag** (Covers 10,000 sq. ft.)
- **40 lb. Bag** (Covers 1 Acre)

**RootShield PLUS Wettable Powder**

- **OMRI Listed**
- **3 lb. Box** (Covers 30,000 sq. ft.)
- **30 lb. Box** (Covers 7 Acres)

**RootShield® Seed Treatment**

RootShield Seed Treatment naturally protects seeds and plants from soil-borne diseases such as *Phytophthora* as well as *Pythium*, *Rhizoctonia*, *Fusarium* and other plant diseases. Apply 1-10 ounces of RootShield Seed Treatment per hundred weight of seed via slurry, in coatings, in pelleting, or during seed priming. **Active Ingredient: Trichoderma harzianum** Rifai strain T-22.

- **OMRI Listed**
- **1 lb. Box**
- **3 lb. Box**
- **30 lb. Box**
PERpose Plus™

A broad spectrum, specially formulated hydrogen peroxide (or hydrogen dioxide) that prevents and controls diseases and algae on turfgrass and landscape plants, hard surfaces, and potting media. PERpose Plus has been verified by the EPA to provide safe, biodegradable, and sustainable protection without harming the environment, plants, animals, or people. Dilution and application rates vary based on use.

Active Ingredients: Hydrogen Peroxide/Hydrogen Dioxide, 33%.*

5 Gallon (Covers 3 Acres)  
15 Gallon (Covers 9 Acres)  
30 Gallon (Covers 18 Acres)  

Bulk Sizes: 55 Gallon & 275 Gallon

*Also available in the Liquid Amendments section as PERpose. PERpose has the same formulation as PERpose Plus but labeled for use as a soil oxygen enhancer without an EPA registration number.
**Sporan® EC2**

Sporan EC2 is a broad spectrum fungicide for use in agriculture, fruits, nuts, vegetables, ornamentals, landscapes, turf, greenhouses, and nurseries. It prevents fungal attacks on plant tissues and black spots on roses, anthracnose, rust and powdery mildew.

- 1 Gallon (Covers 4 Acres) • 2.5 Gallons (Covers 10 Acres)

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**Sulfur, Micronized (Acoidal or Kumulus®)**

Sulfur has multi-site activity against fungi including: inhibiting respiration, disrupting proteins, producing oxidation products etc... These fungicidal properties result in the inhibition of spore germination and hyphal growth. The fungicidal activity of Acoidal is thought to also be the result of a direct effect of sulfur contact with fungal cells. *Active Ingredient:* Sulfur, 80%.

- 30 lb. Bag (Covers 1 Acre)

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**MilStop®**

A foliar fungicide that kills powdery mildew on contact by pulling water from spores and their growing strands, providing 1-2 weeks of residual protection. Preventative control of foliar diseases controlled include: Alternaria blight, Anthracnose, black spot, Botrytis blight, Cercospora leaf spot, Downy Mildew, Phomopsis blight, and Septoria leaf spot. *Active Ingredient:* Potassium Bicarbonate, 85%.

- 5 lb. Bag (Covers 1 Acre) • 25 lb. Bucket (Covers 5 Acres)

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**SuffOil-X®**

SuffOil-X is a unique concentrate of pre-emulsified, highly refined, high paraffinic, low aromatic oil for effective disease control, including Powdery Mildew. 50 micron oil droplets assure a thin, uniform coating of oil is applied to the plant for a broad-spectrum insecticide that is highly effective at smothering and killing pests while maintaining plant safety. *Active Ingredient:* Mineral Oil, 80%.

- 2.5 Gallon (Covers 2.5 Acres) • 30 Gallon (Covers 30 Acres)
Optimal soil pH is a major factor in nutrient availability, microbial activity, soil structure and overall turf vigor. Maintaining the correct soil pH allows for the most efficient use of applied and soil stored nutrients. The Nutrite and SoluCal families of calcium and sulfur products allow turf managers to quickly and efficiently address soil chemistry problems. These Enhanced Calciums quickly raise soil pH using ¼ of product compared to traditional limes. Many products are available in both our micro/greens grades and standard coarse grades. All Nutrite products are powered by Activated Humic Acid Technology, which has been shown to increase nutrient uptake.

The Nutrite & Solu-Cal family of calcium products allow applicators to quickly, efficiently and affordably address soil chemistry issues.

**Solu-Cal / Nutrite EC+ with HUmoxy**

A quicker-acting lime equivalent: Nutrite EC+ with HUmoxy is a pelletized calcium carbonite that uses proprietary humic acid and fulvic acids to enhance a plant’s ability to convert both applied and stored calcium into an immediately available form for plant uptake and soil pH adjustment. Nutrite applications can adjust soil pH in just 6-8 weeks!

50 lb. bag (Covers 10,000 sq. ft.)

**Featured**

New Name
Same Great Product!
Nutrite, a calcitic lime, is four times more effective than regular lime. If a superintendent is told to use a ton of lime per acre, the same can be done with only 500 pounds of Solu-Cal!

Nutrite & Solu-Cal allow for labor and storage savings, fewer refills and less empty bags.

**Nutrite & SoluCal = Saving $$$**

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**Solu-Cal S / Nutrite EC+ Gypsum**

Nutrite EC+ Gypsum is an enhanced dihydrate gypsum that increases the aeration of soil to create pore space. It displaces sodium added by irrigation systems, dog urine, or other external sources. Solu-Cal S contains 2% PCHA organic humic and fulvic acids to deliver maximum calcium and sulfur to the plants.

50 lb. bag (Covers 10,000 sq. ft.)

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**Solu-Cal Humic Plus / Nutrite EC+ Carbon+ with HUmoxy**

Nutrite EC+ Carbon+ with HUmoxy is a phosphorus-free formulation that provides essential carbon forms for soil microbes. This product can be used to maximize the use of stored and applied nutrients such as nitrogen and phosphorus. It contains 6% activated humic and fulvic acids and 33% enhanced calcium.

50 lb. bag (Covers 11,000 sq. ft.)

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**Solu-Cal Peak Iron Plus / Nutrite 6-0-6 Reg Iron with Mag**

Nutrite 6-0-6 Reg Iron with Mag is a special formulation of Wolf Trax Iron, Magnesium, Nitrogen and Potash with soluble calcium from Solu-Cal containing polyhydroxycarboxylic acids (PHCA), which are derived from plant extracts in a patented process.

50 lb. bag (Covers 10,000 sq. ft.)

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info@GreenEarthAgAndTurf.com

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**New Name Same Great Product!**
Eco-Friendly Ice Melters

Featured

Groundworks Natural™ or Mountain Organic Natural™ Ice Melters

Our premium ice melter, made primarily from potassium salt and designed to powerfully melt down to -9°F (-23°C) while being eco-friendly, safe to handle and the safest for use around pets, plants, and children. Does not leave any oily residue, tracking, or soiling.

- **10 lb. Bag** (Pallets of 225x Bags)
- **12 lb. Jug** (Pallets of 160x Jugs)
- **22 lb. Bag** (Pallets of 100x Bags)
- **44 lb. Bag** (Pallets of 49x Bags)
- **50 lb. Pail** (Pallets of 48x Pails)
- **One Metric Ton Tote (2,200 lbs.)**

Arctic ECO Green® Ice Melter

A powerful all natural de-icer that is gentle on the environment, the surfaces it is applied to and harmless around children and pets. The green color helps prevents overspreading of the product.

Effective down to -20°F (-29°C)
Safer on Concrete.

- **10 lb. Bag** (Pallets of 225x Bags)
- **12 lb. Jug** (Pallets of 160x Jugs)
- **22 lb. Bag** (Pallets of 100x Bags)
- **44 lb. Bag** (Pallets of 49x Bags)
- **50 lb. Pail** (Pallets of 48x Pails)
- **One Metric Ton Tote (2,200 lbs.)**

All Ice Melters Should be Applied at 10 lbs. per 1,000 sq. ft. Unless Otherwise Noted.

GreenEarthAgAndTurf.com
True North™ Ice Melter

A basic chloride blend containing no magnesium chloride or other dangerous chemicals so it will not chemically harm concrete. Due to its granule format, True North Ice Melter provides instant traction and fast melting to temperatures as low as 5°F.

22 lb. Bag (Pallets of 100x Bags)
44 lb. Bag (Pallets of 49x Bags)
One Metric Ton Tote (2,200 lbs.)

Also available with blue dye - Arctic Blue™ Ice Melter

Arctic Orange™ Ice Melter

A powerful calcium chloride blend that melts to -24°C (-31°C) and generates heat on contact for faster melting.

22 lb. Bag (Pallets of 100x Bags)
44 lb. Bag (Pallets of 49x Bags)
One Metric Ton Tote (2,200 lbs.)

All Ice Melters Should be Applied at 10 lbs. per 1,000 sq. ft. Unless Otherwise Noted.
**Winter Warrior Enviro LEADer Ice Melter™**

Superior ECO de-icer, designed specifically to be used around all Green Buildings or Properties where there are environmental or corrosion concerns. Does not result in tracking. **LEED Building Compliant.** It can be applied in its solid granule form or dissolved in water and sprayed as a liquid. Effective to -6°F (-21°C).

Apply 4 to 8 lbs. per 1,000 sq. ft.

- **44 lb. Bag** (Pallets of 50x Bags)
- **One Metric Ton Tote (2,200 lbs.)**

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**Winter Warrior Runway Control®**

A special chloride and urea free formulation that is eco-friendly, biodegradable, non-corrosive de-icer, for use in highly sensitive areas, such as airports or delicate commercial institutions. This safe to handle product is effective to -6°F (-21°C), results in no tracking, and is safe for plants and soil structure.

Apply 10 lbs. per 1,000 sq. ft.

- **55 lb. Bag** (Pallets of 40x Bags)
- **One Metric Ton Tote (2,200 lbs.)**

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Also Available: Calcium Chloride & Winter Warrior CMA (100% CMA)
# Commercial Icemelt Product Comparison Chart

<table>
<thead>
<tr>
<th>Eco-Friendly Products</th>
<th>All Purpose</th>
<th>Specialty</th>
<th>General Products</th>
<th>Specialty Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective Melting Temperature</strong></td>
<td>-23°C (-9°F)</td>
<td>-29°C (-20°F)</td>
<td>-21°C (-6°F)</td>
<td>-12°C (10°F)</td>
</tr>
<tr>
<td>Color</td>
<td>Beige</td>
<td>Green</td>
<td>Green</td>
<td>Off White</td>
</tr>
<tr>
<td><strong>Effect on Environment</strong></td>
<td>SAFE</td>
<td>GENTLE</td>
<td>SAFE</td>
<td>SAFE</td>
</tr>
<tr>
<td><strong>Effect on Flooring</strong></td>
<td>SAFE</td>
<td>GENTLE</td>
<td>SAFE</td>
<td>SAFE</td>
</tr>
<tr>
<td><strong>Effect on Vegetation / Landscaping</strong></td>
<td>Nutrient for plants</td>
<td>Safe on plants</td>
<td>Safe on plants</td>
<td>Safe on plants</td>
</tr>
<tr>
<td><strong>Effect on Soil Structure</strong></td>
<td>Repairs and improves soil structure</td>
<td>Gentle on soil structure</td>
<td>Safe on soil structure</td>
<td>Safe on soil structure</td>
</tr>
<tr>
<td><strong>Effect on Water Table</strong></td>
<td>Safe - more neutral pH balance</td>
<td>Gentle on water table</td>
<td>Safe on water table</td>
<td>Safe on water table</td>
</tr>
<tr>
<td><strong>Tracking &amp; Soiling</strong></td>
<td>NONE</td>
<td>VERY LITTLE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td><strong>Safe to Handle</strong></td>
<td>SAFE</td>
<td>SAFE</td>
<td>SAFE</td>
<td>SAFE</td>
</tr>
<tr>
<td><strong>Extends Freeze Thaw</strong></td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Health Hazard</strong></td>
<td>Safe - in fact, used in pet foods</td>
<td>SAFE</td>
<td>SAFE</td>
<td>SAFE</td>
</tr>
<tr>
<td><strong>Safe around Children</strong></td>
<td>Safe, will not harm skin</td>
<td>Safe, will not harm skin</td>
<td>Safe, will not harm skin</td>
<td>Safe, will not harm skin</td>
</tr>
<tr>
<td><strong>Safe around Pets</strong></td>
<td>SAFE, will not harm paws</td>
<td>SAFE</td>
<td>SAFE</td>
<td>SAFE</td>
</tr>
<tr>
<td><strong>Corrosion Inhibitor</strong></td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Shelf Life</strong></td>
<td>VERY LONG</td>
<td>LONG</td>
<td>AVERAGE</td>
<td>AVERAGE</td>
</tr>
<tr>
<td><strong>Caking (When exposed to humidity)</strong></td>
<td>NO</td>
<td>VERY LITTLE</td>
<td>LITTLE</td>
<td>LITTLE</td>
</tr>
<tr>
<td><strong>Completely Chloride and Urea Free</strong></td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>LEED Building Compliant</strong></td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

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**Animal Repellents**

**Please note:** We have recently switched our entire line of animal repellents from Epic’s Animal SCRAM products to I Must Garden repellents. At **GREEN EARTH Ag & Turf**, we are always looking for the best solution to our customers' needs. We have determined that I Must Garden’s repellents have a higher concentration and a lower cost than other natural alternatives!

**General Animal Repellent**
Herbivores Including Deer & Rabbits

I Must Garden Granular Animal Repellent contains a complex blend of natural ingredients and botanical oils that form an odor barrier to protect plants from Deer, Rabbits, Groundhogs, Woodchucks and other herbivores. Contains Dried Blood, Garlic, White Pepper, Peppermint Oil, and Lemongrass Oil.

- **5 lb. Shaker** (Covers 3,000 sq. ft.)
- **20 lb. Pail** (Covers 12,000 sq. ft.)

**Liquid Deer Repellent**
Mint & Spice Scent Concentrates

I Must Garden liquid deer repellents come in two scents both pleasant to humans, but repulsive to deer. **Spice** has a cinnamon-clove scent while **Mint** has a mint-lemongrass scent. Contains peppermint, rosemary, cloves, cinnamon, lemongrass, eggs, fish oil, garlic, and kelp.

- **32 Ounce** (Covers 10,000 sq. ft.)
- **1 Gallon** (Covers 40,000 sq. ft.)
Mole & Vole Granular Repellent

I Must Garden Mole & Vole Repellent is used to rid moles and voles from lawns, gardens, flower beds, and more. It works by making the food source and environment of burrowing animals smell and taste unpleasant, causing the animals to leave the treated area. Super strong formula contains 20% Castor Oil along with Mint and Cedar Oils.

10 lb. Bag (Covers 10,000 sq. ft.)
25 lb. Bag (Covers 25,000 sq. ft.)

Liquid Mole & Vole Repellent

I Must Garden also offers a liquid variant of its Mole & Vole Repellent for treatment of larger areas. The liquid version works just like the granular version. It coats the pests’ food source, making the area unpleasant, and forcing them to relocate without poison or toxic chemicals. Super strong formula contains 20% Castor Oil along with Mint and Cedar Oils.

1 gallon bottle (Covers 40,000 sq. ft.)

Ready-to-Use Squirrel Repellent

I Must Garden Squirrel Repellent is an environmentally safe, humane, and effective way to deter squirrels from damaging plants, furniture, decking/housing, hoses, and flower beds/pots. It uses botanical oils that smell and taste bad to squirrels, repelling them without toxins, poisons, or harmful chemicals. This product is biodegradable.

32 Ounce RTU Sprayer (Covers 500 sq. ft.)

Groundhog Repellent Concentrate

I Must Garden Groundhog Repellent is an environmentally safe, humane, and effective way to deter groundhogs from eating plants, flowers, and bark. It combines natural ingredients and botanical oils from plants that groundhogs naturally avoid – giving you maximum protection against the specific threat of groundhog damage. Contains rosemary, thyme, mint, fish oil, eggs, and wintergreen.

32 Ounce (Covers 10,000 sq. ft.)

All of our animal repellents are Minimum Risk, 25(b) exempt from EPA pesticide registration.
Goose Liquid Repellent Concentrate
Also works for Turkeys & Ducks

I Must Garden Goose Repellent is formulated to repel geese by smell and taste with Wintergreen Oil, Peppermint Oil, Clove Oil, White Pepper, and Vegetable Oil. Available in a liquid spray that is perfect for keeping water fowl off targeted areas and turf.

32 Ounce (Covers 5,000 sq. ft.)

Dog & Cat Repellent

I Must Garden Dog and Cat Repellent is an environmentally safe, harmless way to deter pets and stray animals from entering applied areas like flowerbeds, garbage cans and lawns with natural ingredients that smell and taste bad to dogs and cats.

32 oz. Ready-to-Use Spray (Covers 1,000 sq. ft.)
1 Gallon Ready-to-Use Spray (Covers 4,000 sq. ft.)

Snake Repellent

I Must Garden Snake Repellent uses environmentally safe oils that confuse snakes’ senses and encourages them to leave the area. As a granular repellent, it can be applied as a barrier around a property or sprinkled throughout an area to provide complete coverage. Contains: cedarwood oil, clove oil, cinnamon oil.

4 Pound Shaker (Covers 400 sq. ft.)

*All of our animal repellents are Minimum Risk, 25(b) exempt from EPA pesticide registration
As a wholesale distributor, we were often asked why home lawn and garden enthusiasts can’t have the same great organic products as professionals. Well, now you can! GROWITNATURALLY.com was started by the founder of GREEN EARTH Ag & Turf to provide that same great customer service, technical support and professional products with the convenience and security of online shopping.

GROWITNATURALLY.com customers now have access to the same proven and easy products that were previously available only to professionals through GREEN EARTH Ag & Turf! Feel confident with the results and service.

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PROUD DISTRIBUTOR OF THESE LEADING BRANDS