Welcome to the 2019 GREEN EARTH Ag & Turf Catalog!

A LETTER FROM THE PRESIDENT

Dear Friends and Customers,

As we finish our second catalog and a new website, it is amazing to reflect on where we are right now and how we have arrived here. Nine years ago, we could never in our wildest dreams have expected to be running a national horticultural supply company that’s expanding at such a fast rate! After the economic crash of 2009, we found ourselves looking for new jobs. Instead, we took a leap of faith by starting GREEN EARTH Ag & Turf®. We sold our first case of product, then filled our basement with many cases and eventually opened a warehouse 3 years ago that we have already doubled in size. Now there are 100s of product lines in this catalog of all shapes and sizes, and we’re continually adding to the repertoire of items.

With GREEN EARTH Ag & Turf, you and your company now have access to the best and most novel organic products available. These products have been selected based upon years of research, product vetting and feedback from our customers. We invite you to use these easy, safe and proven products to find organic solutions which 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 Regards,

Joe Magazzi, MS
President, Founder and Owner
GREEN EARTH Ag & Turf
### Table of Contents

<table>
<thead>
<tr>
<th>Page Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-8</td>
<td>About Our Company</td>
</tr>
<tr>
<td>9-12</td>
<td>Probiotics / Inoculants</td>
</tr>
<tr>
<td>13-19</td>
<td>Organic Fertilizers</td>
</tr>
<tr>
<td>20</td>
<td>Worm Castings &amp; Medias</td>
</tr>
<tr>
<td>21-22</td>
<td>Growth Enhancers</td>
</tr>
<tr>
<td>23-24</td>
<td>Organic Herbicides</td>
</tr>
<tr>
<td>25-26</td>
<td>Tick &amp; Mosquito</td>
</tr>
<tr>
<td>27-28</td>
<td>Beetle &amp; Grub Control</td>
</tr>
<tr>
<td>29-34</td>
<td>General Pest &amp; Ant Control</td>
</tr>
<tr>
<td>35-38</td>
<td>Disease Control</td>
</tr>
<tr>
<td>39-42</td>
<td>Animal Repellents</td>
</tr>
<tr>
<td>43-44</td>
<td>Soil pH Control</td>
</tr>
<tr>
<td>45-48</td>
<td>Eco-Friendly Ice Melt</td>
</tr>
</tbody>
</table>

### 2019 Catalog Credits

Thanks to Nate Hughart for the first design and continuing updates of the catalog.
Thanks to Mindy Kerivan for designing and completing the catalog.
Photos by Catherine Kiernan.

Contact Info: **GREEN EARTH Ag & Turf®**

53 East Industrial Road, Suite C4, Branford, CT 06405 | 866-374-5101 | info@GreenEarthAgAndTurf.com
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 Serve Many Markets Within the Green Industry Including:

Landscape • Golf • Agriculture • Horticulture • Indoor Growing

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 any products that you need to spend time producing or brewing yourself. These products were chosen to help you significantly reduce inputs and costs while improving your end results.

Let GREEN EARTH Ag & Turf Be Your “R&D Department”
Our Team
We Make Customer Care and Satisfaction Our Top Priority

Mike  Nate  Ally  Marcus  Joe  CAT

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 TREAT YOU LIKE PART OF OUR FAMILY

Advantages
Of working with GREEN EARTH Ag & Turf:

- No minimum orders or full cases / pallets required.
- We will mix and match any quantity or variety of items for your orders.
- Quick turn-around on orders without any additional fees or markups.
- Our new online store, GROWITNATURALLY.com, provides retail-friendly versions of the same products professionals use but for home lawn and garden enthusiasts; with the ease, convenience and security of online ordering.

info@GreenEarthAgAndTurf.com
Back in 2009, Emily and Joe were both living happy lives as research scientists in the biotech industry, researching a host of human diseases such as cancer and the bird flu. Emily was very pregnant with their only child (soon to be Marcus) and was planning on staying home after the baby 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. Poor Emily came home one day, less than a month from having a child, to find out that her husband was laid off. With no jobs available at that time, Joe was going to be Mr. Mom and Emily would have to go back to work.

A month after Marcus was born, a friend of Joe’s that also happened to manufacturer organic products (biologics) contacted Joe to see if he would want to sell a biological product for plants, trees and turf because of his extensive background in microbiology. With no business or sales background Joe though, “Sure, it sounds like a good idea.” It is said that Ignorance is bliss. With that first case of Quantum Growth...GREEN EARTH Ag & Turf was born! When clients started approaching us with specific problems, we would research products, find them an organic solution, and set up vendor relationships and add to our inventory. Using our unique scientific background, we were able to deliver effective and novel options to help their programs. These individual product lines evolved into what are now turn-key programs utilized by many of the top professionals in the country and this ever expanding catalog.
Now...

... the scientists with no business background and the “little company that could” have become the leading organic outlet for the top organic products available; now with a warehouse and a full crew to help you out.

Passion combined with our 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 your colleagues have already discovered!

ORGANICS REALLY WORK!
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, indoor growers as well as our online store for home lawn and garden enthusiasts.

Our pricing structure has evolved to serve the individual needs of our clients more precisely: For those that qualify, there is now “Dealer” pricing for professionals that re-sell products 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, our new website provides more detailed product specific information and additional resources such as SDSs and labels to download.

Would you like to request a 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
info@GreenEarthAgAndTurf.com
Get started today!

GreenEarthAgAndTurf.com
As a wholesale distributor, we were often asked why can’t home lawn and garden enthusiasts have the same great organic products as professionals? Well now you can! GROWITNATURALLY.com, our new online store, provides retail-friendly versions of our professional products with the convenience and security of online ordering.

Visit GROWITNATURALLY.com for all your home organic needs!
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.
Probiotics & Soil Inoculants

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

Quantum-Orchid

Similar formulation to Quantum-Total but specific for use on orchids. Performs multiple key functions to enhance orchid growth, blooms, vigor and health.

- 8 Ounce · 32 Ounce

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 Gal. or Treats 1 Acre)
- Bulk Sizes: 5, 55 & 275 Gallon

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

info@GreenEarthAgAndTurf.com
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 which are naturally occurring in sea life. University studies have shown Neptune’s Harvest to outperform 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
Use with Quantum Growth for Optimal Results

2-0-2 Turf Formula (No Phosphorous 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 · 5 Gallon
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 · 5 Gallon
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

info@GreenEarthAgAndTurf.com
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)

2-0-6 PL-2 Liquid 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. Low Salinity Index eliminates the chances of foliar burning at labeled rates.

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

5-0-3 Chilean Nitrate & Potash Liquid Fertilizer

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!

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

Nourish-L is a unique, liquid conditioner derived from a highly decomposed organic humus deposit that contains natural marine animal carbon and vegetative carbon compounds; this is not Leonardite and is unparalleled by any other source of humates. Nourish-L also contains an amazing wealth of Cypress lignin - a high-level food source for the beneficial fungi and bacteria - which strengthens plant cell walls and enhances nutrient absorption and water-binding capabilities.

1 Pint     (Makes 16 Gal.)  2.5 Gallon  (Makes 320 Gal.)
1 Quart    (Makes 32 Gal.)   5   Gallon  (Makes  640 Gal.)
1 Gallon   (Makes 128 Gal.) Bulk Sizes: 30, 55 & 275 Gallon

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 Gal.)  · 5 Gallon (Makes 640 Gal.)

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) 55 Gallon  (Treats 220 Acres)
1 Gallon    (Treats 4 Acres)

PERpose Plant and 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) 55 Gallon  (Treats 33 Acres)
15 Gallon   (Treats 9 Acres) 275 Gallon (Treats 165 Acres)
Organic Approach manufactures several lines of granular 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 and 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, 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 and Sulfur (15%) to strengthen cell walls and increase plant and turf vigor. This granular can be applied with a spreader or is 100% soluble to apply as a liquid spray.

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.

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.

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

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: 4 lb. Bag · 12 lb. Pail · 50 lb. Bag
Flour: Available in 44 lb. Bags (Pallets of 50x 44 lb. Bags)
Humate Concentrate Powder, TeraVita® SP-85 & SP-90

**SP-85 Humate** is a dried humate product 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)

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)

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.

- **Available in 50 lb. Bags** (Makes 10 Gallons)
- **Pallets of 40x 50 lb. Bags**

GreenEarthAgAndTurf.com
Worm Castings are a perfect soil amendment! Better 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 25 Bags)
- Bulk Sizes: 1 & 2 Cubic Yard Sacks

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

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.

- Available in 50 lb. Bags (Covers 5,000 sq. ft.)
- Pallets of 40x 50 lb. Bags

**Coming in 2019 - More Amendment & Soil Offering:**

Check our on-line catalog for continuous, live updates
Organic Growth Enhancers

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 scientifically studies available.

Vitazyme is available in the following sizes:

1 Gallon (Treats 10 Acres)
2.5 Gallon (Treats 25 Acres)
Organic Growth Enhancers  
Supplement Traditional Fertilization

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 (For PROs)**

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)

**Avenger Concentrate (For Home)**

The concentrated formula is made from citrus oil and carries a pleasant aroma. It is fast acting and biodegradable making it safe to use around pets, children, and wildlife. Mix at a ratio of 1:6 and use with any sprayer. Once diluted, 1 gallon of the mixture covers approximately 8,800 sq. ft.

- 1 Quart (Makes 1.5 Gallons)
- 2.5 Gallon (Makes 15 Gallons)
- 1 Gallon (Makes 6 Gallons)
- 5 Gallon (Makes 30 Gallons)

**Avenger Ready-To-Use Spray**

The RTU option provides a convenient pre-diluted version of the concentrate with the weed killing power of D-Limonene.

- 24 Ounces (Covers 1,650 sq.ft.)
- 1 Gallon (Covers 8,800 sq. ft.)
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.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Coverage Area</th>
</tr>
</thead>
</table>
| 1 Gallon        | 10,000 sq.ft.
| 2.5 Gallon      | 25,000 sq.ft.
| 30 Gallon       | 7 Acres       
| 200 Gallon      | 47 Acres      |

**Branch Creek Weed Shield Selective (Formerly ICT HALO)**
Minimum Risk, 25(b) exempt from EPA pesticide registration

Weed Shield is a selective natural herbicide that can be used in a variety of settings including turf, landscapes, beds, and agriculture. This unique post-emergent herbicide kills weeds without affecting desired turfgrass. Made with Eugenol and Clove Oil with a unique Mechanism of Action.

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<thead>
<tr>
<th>Volume</th>
<th>Coverage Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gallon</td>
<td>12,000-17,000 sq. ft.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Coverage Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 lb. Bag</td>
<td>10,000-16,000 sq.ft.</td>
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</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Coverage Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gallon</td>
<td>4,000 sq.ft.</td>
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</tbody>
</table>

New Product!
Tick Killz
Minimum Risk, 25(b) exempt from EPA pesticide registration

Tick Killz is an all natural tick control product, made with organic ingredients, that will eliminate not only ticks but also some mosquitoes, fleas and gnats. Tick Killz has a unique double mechanism of action: It kills on contact, then dries in an hour and becomes a strong repellent. This residual benefit against these insects last for an average of 4 weeks. *Active Ingredients*: Cedar Oil, 2-Phenethy Proprionate (Guava Extract Based) and Peppermint Oil.

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. These essential oils provide long lasting insect repellent action. Extremely effective against mosquitoes with up to 4 week residual. *Active Ingredients*: Lemongrass Oil, Citronella Oil, Cedarwood Oil, Rosemary Oil, Garlic Oil, Red Thyme Oil.

1 Gallon (Covers 11 Acres)
Mosquito Barrier® Garlic

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

Mosquito Barrier is a very strong liquid garlic made from very potent 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 (Biological Mosquito Control)

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 (Makes 2,000 Gal.) • 6 Ounce (Makes 6,000 Gal.)

Best Yet™ Biting Insect Spray

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

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
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)

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beetleGONE! tlc

Wettable Powder

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. Unlike other biological or chemical beetle control products that are only effective against smaller 1st-instar larvae, beetleGONE! is an effective control of the larger, later 2nd- and 3rd-instar beetles, and can therefore be used as a curative treatment for beetle control as well as a preventative treatment! beetleGONE! TLC works against a broad range of scarab beetles:

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

*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!

GrubGONE!®
Granular

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.)

Grandevo® PTO Biological Insecticide

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

Active Ingredient: Chromobacterium subsugae, Strain PRAA4-1.

- 5 lb. Bag (Covers 20,000 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 oz 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 beneficials. 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 biorational 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

1 Quart (1 Acre) · 1 Gallon (4 Acres) · 2.5 Gallon (10 Acres)
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*)

**Mycotrol WPO**
- (Wettable Powder)
  - 1 lb. Bag
  - (Covers 20,000 sq. ft.)

**Mycotrol ESO**
- (Emulsifiable Suspension)
  - 1 Quart
  - (Covers 1-2 Acres)
  - 1 Gallon
  - (Covers 2-4 Acres)

### BotaniGard (Beauveria bassiana)

**BotaniGard 22WP**
- (Wettable Powder)
  - 1 lb. Bag
  - (Covers 20,000 sq. ft.)

**BotaniGard ES**
- (Emulsifiable Suspension)
  - 1 Quart
  - (Covers 1-2 Acres)
  - 1 Gallon
  - (Covers 2-4 Acres)

### 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 Quart (Covers 4 Acres)
- 1 Gallon (Covers 16 Acres)

Ecotrol® Plus

Ecotrol attacks an insect’s octopamine neurotransmitter, 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® 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.*

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**Grandevo**

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

**Active Ingredient:** *Chromobacterium subsugae*, Strain PRAA4-1.  

5 lb. Bag (Covers 20,000 sq. ft.)

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**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)

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**PyGanic® EC 1.4 & PyGanic® EC 5.0**

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

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**info@GreenEarthAgAndTurf.com**
**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

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**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

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**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
Antixx Plus Granular Ant Bait Product!
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 Product!
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

New Product!

- 4 Ounces

info@GreenEarthAgAndTurf.com
Disease Control
Fungal & Bacterial

**BIOLOGICAL FUNGICIDES & BACTERICIDES**

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**BioWorks®**

How You Grow Matters™

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**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)

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**BotryStop™**

Developed specifically for the control of pathogens such as *Botrytis cinerea*, *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**
- 10 lb. Bag (Covers 10,000 sq. ft.)
- 40 lb. Bag (Covers 1 Acre)

**RootShield PLUS Wettable Powder**
- 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.
- 1 lb. Box
- 3 lb. Box
- 30 lb. Box

info@GreenEarthAgAndTurf.com
**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.*
**PreFence™**

PreFence is an excellent product that provides added efficacy against root diseases in programs with RootShield®PLUS+. PreFence contains mycelium and spores of the naturally occurring bacterium *Streptomyces* sp. strain K61.

- **0.176 oz. (1.3 Gall.)**
- **0.88 oz. (6.3 Gall.)**
- **3.53 oz. (25 Gall.)**

**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.

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

**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.

- **30 lb. Bag** (Covers 1 Acre)

**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.

- **2.5 Gallon** (Covers 2.5 Acres)
- **30 Gallon** (Covers 30 Acres)

info@GreenEarthAgAndTurf.com
**Animal Repellents**

**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.)

**DEER REPELLENTS**

**Deer SCRAM Granular Repellent**

Safely and effectively repels deer. It contains dried blood, garlic, cloves, red pepper, and meat meal. This specific formula fools deer into believing that there is a dead deer or rabbit on the other side of the repelling barrier, instilling a fear in them, training them not to return to treated areas.

- **2 lb. Bag** (Covers 1,280 sq. ft.)
- **2.5 lb. Shaker** (Covers 1,600 sq. ft.)
- **6 lb. Bucket** (Covers 5,400 sq. ft.)
- **25 lb. Pail** (Covers 32,460 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.)

Mole SCRAM Granular Repellent

Mole Scram keeps moles away from your lawn and garden without the hassle of traps and tunnel fillers. Made with castor oil, citronella oil, garlic oil, and peanut hulls,

4.5 lb. Jug (Covers 3,375 sq. ft.)
10 lb. Bag (Covers 7,500 sq. ft.)

Vole SCRAM Granular Repellent

Safely and effectively repels voles. Contains castor oil, dried blood, thyme oil, rosemary oil, clove oil, garlic oil, & peppermint oil. Product works by both taste and smell. The product is simply sprinkled on the ground or applied with a rotary spreader. As a bonus to both you and your customer, there is no bad odor during or after application.

6 lb. Bag (Covers 3,600 sq. ft.)

All of our animal repellents are Minimum Risk, 25(b) exempt from EPA pesticide registration.
Animal Repellents

RODENT REPELLENTS

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

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.)

Rabbit SCRAM Granular Repellent

Repels the animal before they nibble on plants. Rabbit SCRAM has no unpleasant odor to humans, but discourages the unwanted animals from returning to the protected area. Contains dried blood, white pepper, garlic, and cloves.

2.5 lb. Shaker (Covers 1,350 sq. ft.)
6 lb. Bucket (Covers 4,560 sq. ft.)
25 lb. Pail (Covers 27,900 sq. ft.)
Snake SCRAM
An excellent natural repellent for can protect you, your children and your pets from unwanted contact with snakes located in stone piles, wood piles, around foundations of homes, garages, barns, sheds, in gardens, flower beds and landscaping, and near pools. Snake Scram can be applied anywhere snakes tend to lurk. Contains clove oil, cedar oil, cinnamon oil, and oil of rosemary.

3.5 lb. Shaker (Covers 2,100 sq. ft.)

Cat SCRAM
Specially formulated to naturally repel cats. Tested and proven to successfully repel and train cats from entering or digging in treated areas. Contains dried blood, garlic oil, cedar oil, citronella oil, and rosemary oil.

3.5 lb. Shaker (Covers 2,100 sq. ft.)

Dog SCRAM
A repellent and training aid for intruding animals. Will safely prevent dogs from digging holes in gardens or near fences and mask odors that attract dogs to habitually visited areas for urinating, etc.

3.5 lb. Shaker (Covers 2,100 sq. ft.)

Armadillo SCRAM
The ONLY natural repellent designed and labeled specifically for prevention of armadillo damage. Contains castor oil, thyme oil, rosemary oil, white pepper, garlic oil, and citronella oil.

6 lb. Bag (Covers 3,600 sq. ft.)

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.)
Solu-Cal

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. Solu-Cal’s family of calcium and sulfur products allow turf managers to quickly and efficiently address soil chemistry problems. Solu-Cal Enhanced Calcium quickly raises soil pH at ¼ the application rate of traditional liming material. Many products are available in both our micro/greens grades and standard coarse grades. For liquid applications in either spray programs or hydro-seeding, Solu-Cal L provides available calcium in a clear no grit liquid. All Solu-Cal products are Powered by Activated Humic Acid Technology, which has been shown to increase nutrient uptake.

The Solu-Cal family of calcium and sulfur products allow turf managers to quickly and efficiently address soil chemistry problems.

Solu-Cal

Solu-Cal 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. Solu-Cal applications can adjust soil pH in only 6-8 weeks!

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

New Product!
**Solu-Cal, a calcitic lime, is four times more effective than regular lime. If a superintendent is told to use a ton of lime per acre, he can do the same thing with 500 pounds of Solu-Cal.**

**Solu-Cal allows for labor savings, storage savings, fewer refills and less empty bags.  
Solu-Cal = Saving $$$**

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**Solu-Cal S**

Solu-Cal S 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.) New Product!*  

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**Solu-Cal Humic Plus**

Solu-Cal Humic Plus 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. Solu-Cal Humic Plus contains 6% activated humic and fulvic acids and 30% Solu-Cal soluble calcium.

*50 lb bag (Covers 11,000 sq. ft.) New Product!*  

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**Solu-Cal Peak Iron Plus**

Solu-Cal Peak Iron Plus 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.) New Product!*
Eco-Friendly Ice Melters

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

Also available with blue dye - **Arctic Blue™ Ice Melter**

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

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

info@GreenEarthAgAndTurf.com
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 50 Bags)
One Metric Ton Tote (2,200 lbs.)

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 40 Bags)
One Metric Ton Tote (2,200 lbs.)

Also Available: Calcium Chloride & Winter Warrior CMA (100% CMA)
All Ice Melters Should be Applied at 10 lbs. per 1,000 sq. ft. Unless Otherwise Noted.