



SAVE!
Early Order
Discount
Program on
Back Cover

**PRODUCT
PERFORMANCE
Starts With QUALITY
INGREDIENTS**

Cold Processed Ascophyllum Nodosum Seaweed
Leonardite Humic Acid • Endo-EctoMycorrhiza • Alginic Acid
BioCHAR • PGI-Microorganisms • Fish Hydrolysate • Fulvic Acid
L-Amino Acid • Polyols Sugar Alcohols • Polysaccharides
Polymer GEL • Chitosan • Oil Seed Extract • Black Strap Molasses
Maltodextrin • Compost • Mannitol • Complex Sugars • Vitamin B1
Nitrogen Fixing Bacteria • Yucca Extract • Carbon • D-glucitol • Poly Aspartic
Acid Polymer • Cocodiethanolamide • Carboxylic Acid • Vitamin B-Complex

PRODUCT GUIDE

Supplying Landscapers, Tree Movers, Nurseries, Growers and
Golf Courses for 32 Years

**The BEST Products – BEST Tech Support
BEST Value – BEST CHOICE**



*Not ALL BioPlex product labels may be registered with your States Dept. of Ag. We invite you to make contact to confirm State product approval prior to ordering.

MAXIMUM TURF GRASS HEALTH

Is Unsustainable with an NPK Fertilizer Diet Alone!



BioPlex Organics POWER+ Turf Grass Dietary Fertilizer Supplements

- Supplies Sustainable Pathways to the “Invisible” Nutritional Inputs
- Supplies Sustainable Pathways to the Direct & Indirect Plant Health Enhancements
- Supplies the Next-Generation Carbon-Hydrate Turf Grass Nutritional Fertilizer Inputs



20 TURF GRASS DIETARY & NUTRITIONAL INPUTS

BioPlex Organics POWER+ Product Analytics Overview

	DIETARY PATHWAYS			WATER... H ₂ O				CARBON DIOXIDE... CO ₂					
	BioPlex Fulvic POWER+	BioPlex Turf POWER+	BioPlex Lawn POWER+	BioPlex Total Amino POWER+	BioPlex 808 Green POWER+	BioPlex H ₂ O POWER+	BioPlex Stress POWER+	BioPlex LCO 24-0-22 POWER+	BioPlex Root Res-Q POWER+	BioPlex Pathogen POWER+	BioPlex ACTIVATE SP	BioPlex Thatch POWER+	BioPlex BioCHAR Bios +PUMS
PRODUCT INGREDIENTS													
Alkyl Block Polymer						X	X						
Alkyl Sulfonic Acid						X							
BioCHAR													X
Black Strap Molasses			X		X								
Calcined Diatomaceous Earth													X
Calcium	X								X				X
Digestible Carbon	X	X	X		X	X	X	X					X
Carboxylic Acid						X							
Cellulose Digesting Bacteria	X		X				X						X
Cocodiethanolamide						X							
Cold Processed Seaweed	X	X	X		X		X	X					X
D-Glucitol						X							
Dextrose	X												
Endo-Ecto Mycorrhiza							X						X
Free Amino Acid				X									
Fulvic & Humic Acid	X		X				X	X					X
L-Amino Acid	X			X	X								
Micronutrients	X	X	X		X		X	X					X
Nitrogen (N)				X	X		X	X					
Nitrogen-Fixing Bacteria	X						X						X
Organic Acids	X												
PGIR Bacteria - Microbial Culture	X						X		X		X		X
Phosphorous (P)		X		X			X						X
Poly Aspartic Acid Polymer			X										
Polymethylsiloxine Wetting Agent							X		X				
Polymetric Acid Surfactants									X				
Polyols Sugar Alcohols		X	X		X								
Polysaccharides		X			X								
Potassium (K)		X		X	X		X	X					X
Vitamin B Complex	X												
Vitamin B-1			X										
Wetting Agent	X			X	X	X		X					
QUICK REFERENCE	PLANT RESPONSE and APPLICATION RESULTS												
Anti-Fungal & Anti-Bacterial	X						X			X	X		X
Bio-Feeder	X	X	X		X	X	X	X				X	X
BioStimulant	X	X	X		X		X	X		X		X	X
Color, Green-up & Chlorophyll	X	X	X	X	X			X					X
Improved Air, Water Infiltration	X		X		X	X			X			X	X
Increase Soil Hydration Capacity	X		X	X	X	X	X		X			X	X
Increase Turf Density	X				X			X				X	X
Micronutrients		X		X	X		X	X					
Nutrient Mobility	X	X	X	X	X	X	X		X				X
Plant Function	X		X				X		X	X	X	X	X
Reduce Isolated Dry Spots	X			X	X	X	X				X	X	X
Reduce Stress Symptoms	X	X	X	X	X	X	X		X	X	X	X	X
Reduce Insect Damage	X	X	X				X		X			X	
Rhizosphere Health	X	X	X	X		X	X	X	X		X	X	X
Root Fibrosity	X	X	X	X	X		X		X			X	X
Root Zone Health	X	X	X	X		X				X	X	X	X
Root Zone Hydration	X					X							
Soil & Root Inoculate	X		X				X				X	X	X
Thatch Decomposition	X		X				X					X	
Water Use Efficiency	X					X	X						X
NUTRITIONAL PATHWAYS	CELLULOSE... NUTRITIONAL DIGEST						CARBON... C						



BioPlex Organics Plant Health & Survival Solutions give green industry professionals a wide range of cost effective, environmentally sensitive solutions for difficult plant and soil related problems. When you see the **BioPlex Organics** logo on a product, you can TRUST that you have selected a product that delivers the scientifically proven plant support necessary to address the agronomic and environmental challenges you face each day.

No matter whether you are growing ornamentals in a nursery or greenhouse, installing trees at a project, maintaining fine turf grass at a golf course, maintaining ornamentals at residential clients, **BioPlex Organics** remains the leading brand and **#1 CHOICE** for Green Industry Professionals. **BioPlex Organics Plant Health & Survival Solutions** product portfolio helps deliver the added measure of plant support necessary to achieve and sustain **MAXIMUM PLANT & SOIL HEALTH**.



ATTENTION: All rights reserved. Product logos, names, descriptions and other written or graphic content contained herein are copyrighted and remain the exclusive property of BioPlex Organics/Turf Chemicals Plus, Inc. Any type use, reproduction or facsimile thereof without the express written consent of Turf Chemicals Plus, Inc. is expressly prohibited.

TABLE OF CONTENTS

BioPlex NEW PRODUCTS - POWER+ Fertilizers.....	Pages 2-3
BioPlex FULVIC POWER+	Page 5
BioPlex TURF POWER+	Page 6
BioPlex LCO LAWN POWER+	Page 7
BioPlex 808 GREEN POWER+	Page 8
BioPlex Total AMINO POWER+	Page 9
BioPlex STRESS POWER+	Page 10
BioPlex H ₂ O POWER+	Page 11
BioPlex ROOT Res-Q POWER+	Page 12
BioPlex THATCH POWER+	Page 13
BioPlex PATHOGEN POWER+.....	Page 14
BioPlex Actinovate® SP Bio-Fungicide.....	Page 15
BioPlex Water Soluble LCO 24-0-22 Fertilizer.....	Page 16
BioPlex ALL OCEAN 3-3-2.....	Page 17
BioPlex Fertile FUSION 12-4-6.....	Page 18
BioPlex Kick STARTER 5-10-5	Page 19
BioPlex Foliar FUSION BIOS.....	Page 20
BioPlex pH Power-Down Soil Modifier	Page 21
BioPlex 8 Application ORGANIC Lawn & Land Care 8-2-4.....	Page 22
BioPlex ULTIMATE Plant Maintenance Granules.....	Page 23
BioPlex BioBASIC Natural-Based Fertilizers: 5-3-1 12-3-5 4-6-4 20-4-5.....	Pages 24-27
BioPlex Healthy 4-SEASON Landscape Granules.....	Page 28
BioPlex BioCHAR Bios plus PGIR.....	Page 29
BioPlex GCarbon Compost Plus.....	Page 30
BioPlex Easy Spread BASIC BioCHAR.....	Page 31
BioPlex BULK BioCHAR	Page 32
BioPlex Emerald GREEN 5 Iron	Page 33
BioPlex "ORIGINAL DIGGING" Transplant Concentrate & Plant Enhancer	Page 34
BioPlex "TOTAL INSTALLATION" Transplant Concentrate & Plant Enhancer.....	Page 35
BioPlex ULTIMATE ORNAMENTAL INSTALLATION G	Page 36
BioPlex 5-in-1 COMPLETE Planting Granules	Page 37
BioPlex Wilt-STOPPER Foliage Film.....	Page 38
BioPlex TREE INSTALLATION ACCESSORIES	Page 39
BioPlex TREE RING & WATER-IT-WELL (Slow Drip Watering Devices)	Page 40
BioPlex 12-8-8 BIO-MYCORRHIZAL Fertilizer Tablets.....	Page 41
BioPlex ULTIMATE PLANT HEALTH 4-3-4 plus BIO-MAXX Fertilizer Tablets	Page 42
BioPlex 20-10-5 Root MAXX Planting Tablets.....	Page 43
BioPlex Water Soluble Endo-EctoMycorrhizal Soil & Root Inoculants	Page 44
BioPlex (Multi Purpose) Granular Endo-EctoMycorrhizal Soil & Root Inoculants	Page 45
BioPlex 1-2-3 Bareroot GEL.....	Page 46
BioPlex Advanced Polymer GEL Crystals	Page 47
BioPlex COMPLETE Compost TEA BAGS & BIO-BREW	Page 48
BioPlex ROOT to SHOOT Bud to Bloom	Page 49
BioPlex HydroMAXX VGS Fertilizers.....	Pages 50-51

For one-on-one assistance with our products or to discuss the best recommendations for your next project, call our **24/7 Technical Support & Customer Care Team** at 800-441-3573. Ask about our high-volume discount purchasing programs for dealers and distributors.

www.BIO-PLEX.com

BioPlex[®] FULVIC POWER+

GREENS - TEES - FAIRWAY - ORNAMENTALS - CANNABIS -
LAWN CARE - DEEP ROOT FEEDING - HYDROSEEDING



Maximize SOIL, ROOT, PLANT and BIOLOGY Function

Bio-Stimulant, Soil Amendment, Soil & Root Inoculate, 18 L-Amino Acids, Wetting Agent, Carbon, Vitamin B-Complex

Benefits:

- Improved Air-Water Infiltration
- Increased Nutrient & Oxygen Uptake
- Increased Root Function
- Increased Chlorophyll Content
- Increased Auxin & Cytokinin Activity
- Deeper More Fibrous Roots
- Reduced Disease Pressure
- Reduced Black-Layer Symptoms
- Reduced Thatch
- Anti-Fungal / Anti-Bacterial
- Enhanced Rhizosphere
- Elevated Health and Vigor
- More Efficient Water Usage
- Increased Nutrient Holding Capacity
- Enhanced Microbial Life-Cycling
- Improved Biodiversity
- Natural Chelated Micronutrients

Formulation and Active Ingredient Profile

NON PLANT FOOD INGREDIENT(S):

PGIR (12 Microbe Species).....	0.055%
Digesting Bacteria (9 Microbe Species).....	0.045%
Nitrogen Fixing Bacteria (13 Species).....	0.050%
Carbon.....	3.0%
Amino Acids (18).....	2.5%
Alanine, Arginine, Aspartic, Cystine, Glutamic Glycine, Histidine, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Theronine	
Vitamin B-Complex.....	0.05%
Dextrose.....	5.0%
Fulvic Acid.....	8.0%
Humic Acid.....	6.0%
Yucca Extract Wetting Agent.....	10.0%
Organic Acids (12).....	0.9%
Gallic, Caffeic, Fumaric, Shimimic, Cinnamic, Ferulic, Benzoic, Protocatechuic, Acetic, Malic, Succinic, Lactic	

PHYTOCHEMICALS

Natural Sterols - Hormones - Fatty Acids - Ketones - Polyphenols
Flavonoids (Flavones, Flavins, Vanillin-catechins, Tannins, Quinones, Isoflavones, Tocopherols)

MINERALS - ELEMENTS - ACIDS

70 Trace Minerals & Elements
22 Terpenoids/Flavonoids
Macro Minerals - 13 Carboxylic Acids
38 Antioxidants

NITROGEN FIXING BACTERIA

Bacillus Cereus - B. licheniformis
B. pasteurii - B. subtilis
B. amyloliquiformis - B. magaterium
B. pumilis - Pseudo Polymyxa
P. Fluorescens - P. Putita
Nitrosomonas erupaea
Nitrobacter winogradskyi -
Paenibacillus azotofixans

Product Description:

The humates used in **BioPlex FULVIC POWER+** are sourced from humic-rich, isolated prehistoric deposits over 30 million years old. A proprietary chemical free extraction process is utilized to ensure predictable product release and viability characteristics all the way from our labs to your tank-mix. The ingredient index list includes *nitrogen fixing rhizobacteria, digesting bacteria, plant growth bacteria, carbon, minerals, dextrose, amino acids, humic and fulvic acid, phytochemicals, organic acids, wetting agent and vitamin B-Complex.*

Our unique, bio-effective fulvic and humic acids are naturally “power packed” with 70 trace minerals and elements, macro minerals, 13 carboxylic acids, 18 amino acids, 22 Terpenoids/Flavonoids and 38 antioxidants. In addition, there are 13 Phytochemicals critical to plant defense, enhanced immune response and metabolic stimulation. Our nutrient density (20-30X) easily surpasses that of other competitive fulvic acid products. Because of our product concentration density, our low, cost effective application rates range from 1 pint to 2 quarts per acre per application.

BioPlex FULVIC POWER+ is quite different than most fulvic acid products. First, our molecular size is readily absorbed into root hairs by cation exchange, diffusion and active mobility. More concentrated trace element nutrition facilitates deeper, denser root structures. Trace minerals are available in both ‘chelated and free-form’ to optimize plant metabolism and other critical plant functions. Twelve organic acids perform specialized plant functions ranging from *biological survival - root development - nutrient uptake - reduced stress response from drought to elevated cell wall integrity and more efficient mineral mobility.*

Finally, product applications are non-phytotoxic and can be effectively combined with other spray tank-mixes to save time, labor and delivery cost. Benefits summary includes: *increased plant metabolism-nutrient absorption-water uptake and stress mitigation, deeper, more fibrous root structures, reduced mineral and nitrogen requirements, reduced pesticide use, less thatch, reduced water requirements, fewer localized dry spots, anti-fungal, anti-bacterial inputs and more, BioPlex FULVIC POWER+ supplies the added measure of plant and soil support required to recover, restore, prevent and maintain optimal plant and root vigor necessary for MAXIMUM PLANT HEALTH. Consultations are FREE - NO OBLIGATION.*

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case



THE FUSION OF NATURAL CARBOHYDRATE NUTRITION - NO NITROGEN



Built on New No-Nitrogen - Polysaccharide, Sugar-Alcohol & Carbohydrate Technology!
Contains 20% Cold Processed Seaweed for Plant-Root-Soil Support

Benefits:

- Quick Green-Up Response
- Increase Health-Vigor-Roots
- Prevents Plant Stress
- Decreases Plant Stress Symptoms
- Increases Nutrient Mobility
- Increases Chlorophyll Production
- Increases Photosynthetic Capacity
- Increases Plant Hydration
- Carbohydrate Input
- Increase Oxygen Uptake
- Carb Stimulant
- Decrease Thatch
- Decreased Insect-Disease Call Backs
- Increases Air-Water Infiltration
- Biostimulant
- Slow Release
- Non-Burning

Product Description:

BioPlex TURF POWER+ is a new generation plant nutrient FERTILIZER SUPPLEMENT fueled by new, **BioPlex** proprietary carbohydrate formulation technology. It is formulated from a polysaccharide and sugar alcohol base. Polysaccharides are known to be long chains of linked sugar molecules and function to provide energy and structure to the entire plant, root zone and soils.

Professionals do not dispute the important role sugars play in optimizing microbial populations and elevating threshold levels of stored energy resources (carbohydrates or carbs) in plants. Specifically, those very carbohydrates can make a critical performance difference in turf grass color, health, and vigor (photosynthetic capacity) in highly managed, stress intensive growing conditions like those found with golf course, sports turf and lawn care maintenance. University studies have long since established that polysaccharides have the ability to move effortlessly from the soil into and within plant tissues. **BioPlex TURF POWER+** has the biochemical compatibility necessary to translocate nutrient ions via both xylem and phloem plant structures. The xylem delivers nutrients to root structures, and phloem vascular structures facilitate the intake and translocation of foliar applications to BOTH vegetative and root associated structures.

BioPlex TURF POWER+ is well-suited to maximize turf and ornamental health and performance during all environmental conditions encountered throughout the entire active growing season. Spring, Summer and dormant root stimulating applications are particularly effective in reducing turf thinning and root decline under periods of harsh, extreme environmental stress such as heat, drought and cold freezing conditions. **BioPlex TURF POWER+** is quite versatile and can be used as a stand-alone or supplemental nutrient application in annual turf grass maintenance, deep root ornamental feeding programs as well as both turf and ornamental foliar feed applications. **BioPlex TURF POWER+** can be effectively tank mixed with other fertilizers and pesticides. Safe and effective for use on all type of cool and warm season turf grasses plus established and transplanted ornamentals.



Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Nitrogen (N) 0%
Soluble Phosphate (P₂O₅)..... 2.0%
Soluble Potash (K₂O) 5.0%

Derived from: Phosphoric acid, Potassium hydroxide, Potassium sulfate

NON PLANT FOOD INGREDIENT(S):

Sugar Alcohols 10%
Polysaccharides 20%
Ascophyllum nodosum Seaweed 20%

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case

BioPlex[®] LCO LAWN POWER+

FOOD FOR THE LAWN, SOIL, AND BIOLOGY



THE NEXT-GENERATION CARBON-HYDRATE LAWN CARE FERTILIZER

Superior Color - Decrease Thatch - Fix-Nitrogen - Improve Turf & Soil Health

Benefits:

- Superior Color Response
- Access FREE FOOD (NPK)
- Deeper, Denser Roots
- Improve Nutrient Mobility
- Improve Nitrogen Regulation
- Less Disease
- Less Insect Damage
- 4-6 Week Release
- Feeds Plant-Root-Soil
- Add 10 Nutritional Pathways



BEFORE



AFTER

Product Description:

BioPlex LCO LAWN POWER+ is a new generation stand alone turf grass FERTILIZER that is formulated for the high volume Lawn Care Operator seeking an efficient “one-step” product application that taps into up to 10 nutritional pathways to feed the lawn and soil. It is fueled by new BioPlex proprietary, bio-enhanced carbon-hydrate formulation technology. The humic and fulvic acid used in **BioPlex LCO LAWN POWER+** is quite unique, sourced from humic-rich, isolated prehistoric deposits over 30 million years old. The composition and ingredient index list includes nitrogen-fixing rhizobacteria, nitrogen from seaweed, natural minerals, black strap molasses, Polyols (sugar alcohols), Vitamin B-1 plus a patented polymer nutrient enhancer. This patented, biodegradable nutrient enhancer protects nutrient ions from interactions, antagonisms, and as a result tie-up in the soil. It unlocks the tied-up nutrients that already exist in the soil and enhances nutrient utilization by protecting the nutrients and keeping them in a stable, plant-usable form. The net result is increased nutrient uptake by as much as 30-50%, enhanced color, deeper, stronger roots, and improved plant resilience.

Professionals do not dispute the important role sugars and carbon play in optimizing microbial populations and elevating threshold levels of stored energy resources (carbohydrates or carbs) in turf grasses. Specifically, those very carbohydrates can make a critical performance difference in turf grass color, health, and vigor (photosynthetic capacity) in highly managed, stress-intensive lawn care maintenance conditions.

Our nutritional technology also extends into the physical properties of the product as well. For example, our nutrient density (20-30X) easily surpasses that of other competitive specialty turf grass fertilizers along with our molecular size. Why does this matter? Our unique molecular associations allows carbon-hydrate nutritional inputs to move effortlessly from the soil directly to plant tissues while maintaining the biochemical compatibility necessary to translocate nutrient ions via both xylem and phloem plant structures. Xylem mobilize nutrients to root structures while phloem facilitates translocation of foliar nutrition to critical growth points and vegetative turf grass structures.

When considering **BioPlex LCO LAWN POWER+**, keep in mind that your “cost-results” valuation requires an additional “X-Nutritional-Factor” to account for the resulting (very significant) on-site FREE FOOD nutritional inputs that will also be simultaneously feeding the lawn for the interim 4-8 week application period.

PACKAGE SIZE:

55 Gallon Drum • 250 Gallon Bulk Tote (Special Order Only)

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Nitrogen (N)4.0%

4.0% Water Soluble Nitrogen

Soluble Potash (K₂O)2.0%

Derived from: Cold processed Ascophyllum nodosum seaweed extract and soy protein hydrolysate

NON PLANT FOOD INGREDIENT(S):

Aspartic Acid Polymer (Nutrient Enhancer) 10%
 Black Strap Molasses (Carbohydrate)7%
 Fulvic Acid (Nutrition)5%
 Seaweed Extract (Micronutrients)3%
 Humic Acid (Biostimulant)1%
 Polyols (Sugar Alcohols)5%
 Vitamin B-1 (Root Mass) 0.4%
 Total Other Inert Ingredients68.6%

BIOLOGICAL:

Bacillus licheniformis: 1,100,000 cfu/ml
 Bacillus pasteurii: 1,100,000 cfu/ml
 Bacillus subtilis: 1,100,000 cfu/ml
 Paenibacillus azotofixans: 1,100,000 cfu/ml

BioPlex®
808 GREEN POWER+

THE FUSION OF NUTRIENTS, MOLASSES, 18 AMINO ACIDS, SEAWEED, WETTING AGENT



**Great Green-Up, Carb Booster, Manages & Prevents Seasonal STRESS SYMPTOMS!
S, Fe, Mn, Zn, Amino Acid, Cold Processed Seaweed, Wetting Agent**

Benefits:

- Quick Green-Up Response
- Increased Stress Tolerance
- Carbohydrate Input
- Carb Stimulant
- Decrease Thatch
- Increased Insect-Disease Tolerance
- Increases Air-Water Infiltration
- Bio-stimulant
- Slow Release
- Non-Burning
- Bio-Blend Complex
- Probiotic

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	8.0%
5.0% Urea Nitrogen 3.0% Nitrate Nitrogen	
Soluble Potash (K₂O)	8.0%
Sulfur (S)	1.0%
1.0% Combined Sulfur (S)	
Iron (Fe)	1.0%
1.0% Water-Soluble Iron (Fe)	
Manganese (Mn)	0.5%
0.5% Water-Soluble Manganese (Mn)	
Zinc (Zn)	0.5%
0.5% Water-Soluble Zinc (Zn)	

Derived from: Potassium Nitrate, Urea, Ferrous Sulfate, Manganese Sulfate, Zinc Sulfate.

NON-PLANT FOOD INGREDIENT(S):

Cold Process Seaweed Extract (Root Growth)	2.5%
L-Amino Acid (Build Proteins)	2.5%
Polymethylsiloxane (Nutrient Translocation)	5.0%
Molasses (BIO Feeder Substrate)	1.0%

Derived from: Ascophyllum Nodosum, Black Strap Molasses, Protein Hydrolysate, Non-Ionic Wetting Agent.

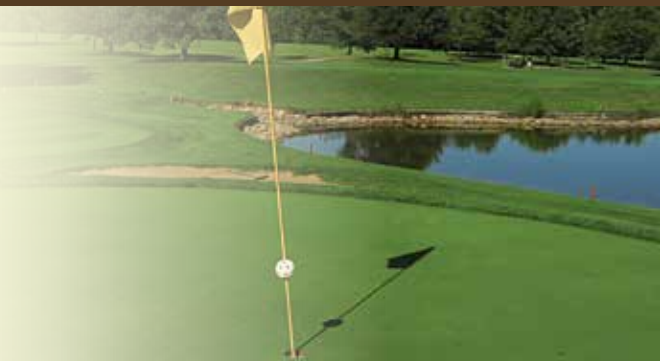
Product Description:

BioPlex 808 GREEN POWER+ is like no other competitive T/O carb booster fertilizer. Cold processed seaweed, 18 Amino Acids, Molasses, Micronutrients and a Wetting Agent boosts color, vigor and hydration capacity to provide the added measure of plant-root-soil support required to offset the typical plant symptoms most often associated with extreme heat and drought stress. It can be used as a supplement or a stand-alone application for fairway, rough, tee use or ornamental deep root or foliar feeding. **BioPlex 808 GREEN POWER+** offers important agronomic benefits including but NOT limited to: elevated chlorophyll synthesis, photosynthesis, increased carbohydrate levels, increased cell wall turgidity and permeability, increased mobilization of macro and micronutrients, superior color response, increased microbial activity and thatch reduction.

BioPlex 808 GREEN POWER+ supplies critical cellular protein building blocks to help prevent and/or repair and revegetate plant tissues and root structures typically damaged by environmentally induced stress extremes. Powerful biostimulant responses energize the repair of turf grass roots subjected to high heat and drought, extreme cold, excess moisture, pathogen stress, insect damage, construction damage and compaction that most often results in the ugly, visible symptoms associated with plant decline and mortality. **BioPlex 808 GREEN POWER+** can be effectively tank mixed with other fertilizers and pesticides. Safe and effective for use on all types of cool and warm season turf grasses plus established and transplanted ornamentals.

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case



**Nitrogen Source, Critical for Nutrient Mobility & Metabolic Functions
Prevents Plant Decline During Seasonal Extremes and SUMMER STRESS**



Benefits:

- Prevents Plant Stress
- Decreases Plant Stress
- Increases Nutrient Mobility
- Increases Carbohydrate Production
- Increases Photosynthetic Capacity
- Increases Plant Hydration

**Stop Stress & Plant Decline
Before it Starts!**

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Nitrogen (N)	3.0%
2.89% Soluble Organic Nitrogen	
0.11% Nitrate Nitrogen	
Magnesium (Mg)	0.5%
Manganese (Mn)	0.1%

Derived from: Protein hydrolysate, Magnesium nitrate, Manganese EDTA

NON PLANT FOOD INGREDIENT(S):

Free Amino Acids	15.5%
Natural Amino Acids	20.0%

Derived from: Protein hydrolysate malt extract

Product Description:

BioPlex TOTAL AMINO POWER+ is an effective tool for: (1) preparing for and surviving anticipated periods of extreme environmental stress, (2) greening-up turf grasses emerging from dormancy, (3) speeding up rooting and establishment of new or over sown greens, tees or fairway renovations, (4) use during early spring, mid-summer or fall, delivering a natural source of efficiently mobilized nitrogen throughout period of high heat stress or while seasonal chemotropic and phototropic plant responses are LESS optimal.

BioPlex TOTAL AMINO POWER+ is an efficient, easily mobilized nutrient supplement built on new proprietary plant fermentation technology and has a 35.5% amino acid ingredient content that delivers the biochemical and bio-mechanical chemistries critical to active growth points. Naturally occurring nitrogen can be found in MANY places within the plant. Amino acids constitute the most abundant forms of soil nitrogen and also join with soil colloids to form stable unions that initiate improvements in the air and water infiltration characteristics of poorer and compacted soils. In addition, they help in the more rapid and efficient mobilization and translocation of nutrients - making 'amino acid' the ultimate foliar nutrient and carbohydrate activator and mobilizer. Not only are amino acids a great nitrogen source, they also affect the efficiency of other nutritional assets, in particular, micro-nutrients and trace minerals. Even the slightest micro-nutrient deficiency will affect the entire nutritional impact on plant health, growth and vigor (Liebig's Law).

Amino acids form the cellular building blocks that perform critical structural, transport and metabolic functions within the plant. As a result of elevated carbohydrate levels, turf grasses better tolerate: compaction, drought, disease, heat and accumulated soluble salts. University testing has shown that frequent low-dose foliar amino acid applications result in more predictable growth characteristics that results in more consistent putting green speeds.

For best results, **BioPlex TOTAL AMINO POWER+** should be utilized as part of a well-balanced fertility and/or affiliated biostimulant (humic acid, fulvic acid, seaweed) maintenance program. Safe and effective on all types of cool and warm season grasses.

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case

BioPlex[®] STRESS POWER+

PREVENTIVE & CURATIVE SYMPTOM MANAGEMENT



Complete STRESS MANAGEMENT – PREVENTATIVE & CURATIVE Effective on Turf, Established Ornamentals & Transplants

Benefits:

- Soil Amendment & Root Inoculant
- Easily Digested Organic Nutrition
- Stops Stress & Plant Vegetation Decline
- Initiates Cell Wall Repair
- Increases Photosynthesis
- Root & Soil Inoculants
- Bio-Feeder & Root Inoculant

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Nitrogen (N)	1.0%	Boron (B).....	0.03%
Available Phosphate (P ₂ O ₅) ..	2.0%	Iron (Fe).....	0.09%
Soluble Potash (K ₂ O).....	2.0%	Manganese (Mn)	0.04%
Copper (Cu)	0.05%	Molybdenum (Mo)	0.002%
Magnesium (Mg).....	0.05%	Zinc (Zn).....	0.04%

NON-PLANT FOOD INGREDIENT(S):

Fulvic Acid.....	2.0%	<i>Derived from: Fish hydrolysate, Potassium nitrate, Monopotassium phosphate, Magnesium EDTA, Sodium borate, Copper EDTA, Iron EDTA, Manganese EDTA, Zinc EDTA</i>
Ascophyllum nodosum Seaweed.....	5.5%	
L-Amino Acid	2.5%	
Polymethylsiloxane Wetting Agent	2.0%	
Alkyl Block Polymer	2.0%	

BIOLOGICAL ACTIVE INGREDIENT(S):

EctoMycorrhiza (7)	7600 cfu/g	Bacillus subtilis.....	1230 cfu/g
EndoMycorrhiza (9)	466 cfu/g	Bacillus thuringiensis	1230 cfu/g
Bacillus megaterium	1230 cfu/g	Nitrosomas eurpoea.....	563 cfu/g
Bacillus cerus.....	1230 cfu/g	Nitrobacter winogradsky	563 cfu/g
Bacillus licheniformis	1230 cfu/g	Paenibacillus azotofixans	1230 cfu/g
Bacillus pasteurii.....	1230 cfu/g		

Product Description:

Stopping plant stress and rehabilitating weakened or damaged turf or specimen ornamental plants pose unique challenges that require both a strategic and scientific understanding of the causal pathology that induces plant decline related to stress.

BioPlex STRESS POWER+ utilizes multiple plant pathways to stop and reverse plant symptoms induced by stress. (1) **Bio-stimulation** [seaweed, fulvic acid, amino acid L-18], (2) **Bio-nutrient stimulation** [N, P, K, micronutrients], (3) **Soil amending** [seaweed, fulvic acid, endo and ectomycorrhizae], (4) **Soil structure modification** [wetting agent, alkyl block polymer], and (5) **Bio-remediation** [9 microbial and biological probiotics].

BioPlex STRESS POWER+ measures successful turf and ornamental rehabilitation through strategic ingredient inputs and formulation technology. Whether used on turf or ornamentals, **BioPlex STRESS POWER+** has proven to be predictable, dependable, safe and cost-effective! It can be utilized quite effectively as a preventative or part of daily maintenance practices or in conjunction with curative maintenance protocols and objectives. Results are dependable, predictable and ultraeffective. Use as a preventative or curative. Safe and effective on all types of cool and warm season grasses.

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case • 2 Gallons, 2 x 2 Gallons/Case



BIODEGRADABLE SOIL PENETRANT & HYDRATION AGENT



USE LESS WATER – GET BETTER RESULTS
Better Infiltration – Root Zone Flush – Root Zone Hydration

Benefits:

- Improve Air & Water Infiltration
- Healthier Root Zone
- Less Stress & Disease
- Neutralize Bicarbonates & Soluble Salts
- Increase Root Zone Hydration
- Optimize Moisture Balance
- Decrease Isolated Dry Spots
- Eco-Safe & Biodegradable

Product Description:

BioPlex H₂O POWER+ is a multi-functional, biodegradable wetting agent, root zone flush, root zone hydration formulation that works with the soil ecology and basic ionization properties to affect the optimization of turf grass and ornamental health, vigor and stress tolerance.

BioPlex H₂O POWER+ is a proprietary formulation that contains designed-for-environment sulfonic and carboxylic acids that reduce soil surface tension and improve water infiltration allowing water and nutrients to reach the root zone.

BioPlex H₂O POWER+ is especially useful in areas that deal with bicarbonate and sodium issues as the anionic sulfonic and carboxylic acids work to help break down the bicarbonates and pull the sodium through the soil profile.

BioPlex H₂O POWER+ contains coconut and sugar-based compounds that work to maintain optimal hydration levels in the root zone.

BioPlex H₂O POWER+ works to improve the moisture balance in the root zone through a combination of biodegradable penetration and patented hydration agents, ultimately improving oxygen, proteins and microbial population and activity levels.

BioPlex H₂O POWER+ makes every gallon of water applied to “post transplant” trees far more effective. Treated water will penetrate sun-baked and compacted soils more effectively while making more available “tied-up” NPK. At the same time you are temporarily elevating the hydration capacity in the root zone. Three reactions are effectively “set into motion” simultaneously with one watering event. (1) Nutrient availability is increasing (2) moisture is localizing within the root zone and (3) built up soluble salts from previous chemical fertilizations are flushed thru the functioning root zone area. This is extremely beneficial if you are attempting to stabilize newly transplanted ornamental trees into clay, alkaline or poor top soil backfill. The net result, less stress symptoms and a healthier root zone. Watering frequency can be reduced in many ornamental transplant projects by up to 30-60%.

PACKAGE SIZE:
 1 Gallon, 4 x 1 Gallon/Case

Formulation and Active Ingredient Profile

NON-PLANT FOOD INGREDIENT(S):

Alkyl Sulfonic Acids	20%
<small>(Flush & Bond Soluble Salts)</small>	
Carboxylic Acids	20%
<small>(Break Down Bicarbonates)</small>	
Cocodiethanolamide	15%
<small>(Optimal Root Zone Hydration)</small>	
D-glucitol	5%
<small>(Ionization Catalyst)</small>	
Surflex LMN 100	5%
<small>(Water Infiltration Soils)</small>	
Total Other Inert Ingredients	35%



Optimize Root Zone Growth Points – Improves Nutrient Mobilization
A HEALTHY, PATHOGEN FREE Root Zone is CRITICAL for OPTIMAL PLANT HEALTH



Benefits:

- Nutrient Mobilization
- Neutralize Soluble Salt Build-up in Soil
- Essential to Fibrous Root Development
- Essential to Cellular Health
- Required Where Plants are Watered Frequently
- Critical for Protein Synthesis
- Critical for Carbohydrate Transfer

Product Description:

BioPlex ROOT RES-Q POWER+ is formulated for use both as a calcium nutrient supplement and/or a soil and root wash or flush. As calcium plays a critical role in plant-root and soil health, you should never underestimate its importance. Golf course turfgrasses and containerized plant materials are subject to intense fertilization and frequent watering and often experience degradation of their root zone chemistries, resulting in limited calcium availability and uptake. Depending on soil health and soil infiltration metrics, optimal root zone environments can quickly degrade. Plant stress resulting from a degraded root zone critically restricts Calcium uptake. Unfortunately, all too often plant decline issues are incorrectly attributed to other unrelated causes and are often left unattended. With **BioPlex ROOT RES-Q POWER+**, you can effectively remediate the debilitating side effects of frequent inputs of water (high moisture) and fertilizers (high soluble salt and chlorides) to restore a more optimal root zone environment.

A Healthy Root Zone - Critical to PLANT HEALTH & VIGOR

First Product Objective: BioPlex ROOT RES-Q POWER+'s first goal is to remove accumulated build-up of residual fertilizer and pesticide contaminants from the root zone or root system. It accomplishes this by flushing, neutralizing and eliminating problematic residues from soluble salts, nutrients and pesticides that have built up in the root zone from past fertilization and maintenance practices. The root wash induces hydrophobic coatings within soil structures, effectively reducing water infiltration repellency. Significantly improved water infiltration dynamics physically flush and free molecular contaminants while naturally neutralizing and detoxifying the root zone.

Second Product Objective: BioPlex ROOT RES-Q POWER+'s second goal is to rehabilitate root zone and rhizosphere growth points in turf and ornamental outplantings and/or sub-optimal soil substrates commonly found in greenhouse container production. This involves restoring the calcium that's so vital to the growth of turf and ornamental plants. Calcium ions function as a mechanism of transport that carries ions across cell membranes and into the plants vascular system, affecting nutrient uptake and mobilization. Calcium is unique in that it plays a multifaceted role in the renewal of the root zone. Calcium is also critical for protein synthesis and carbohydrate transfer, as well as cell mitosis, division and elongation. Relative to plant growth and development, calcium plays an even more important role in cellular integrity and cell wall permeability. Without these essential cellular level plant benefits, healthy growth and efficient plant and root development are virtually impossible. The bottom line, you don't have to look too long or hard to understand the importance of calcium to plant health and vigor throughout all growth and maturity stages. Some **typical plant symptoms** that might indicate a calcium deficiency include: lack of plant vigor, stems lacking turgor or rigidity, turf not mowing cleanly and plants failing to demonstrate timely developmental growth, flower, bloom or bud characteristics. You'll benefit from the restorative advantages of **BioPlex ROOT RES-Q POWER+** anywhere your maintenance protocols require concentrated nutrient loads in combination with frequent watering.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Calcium (Ca) 6.0%

Derived from: Calcium Citrate

NON-PLANT FOOD INGREDIENT(S):

Organic and Polymetric Acid Surfactants 23.5%

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case



Safe and Effective on Greens, Tees, Fairways and Lawns



Digests Thatch & Releases Soil & Fertilizer Phosphate in ALL Cool and Warm Season Turf Grasses



Product Description:

#1 Application = #2 Results
 Digests Thatch and Mobilizes
 Soil and Fertilizer Phosphate

What is Biorational Technology?

The term “Biorational” describes a broad range of products that have a reduced environmental impact for the green industries including agriculture, horticulture, forestry, plant health, and others. These products are typically biologically-derived or, if synthetic, structurally similar and functionally identical to a biologically occurring material. These products give turf and ornamental professionals the ability to treat pests and maximize plant performance with products that are safer than hard chemistry and have fewer environmental side effects.

Benefits of Biorationals:

- Many Biorational Products are OMRI Listed
- Consistent with Evolving Consumer Preferences
- Conform to Environmental Stewardship Goals
- Shorter 4 Hour Restricted-Entry Intervals (REI)
- Shorter Preharvest Intervals (PHI)
- Reduced Risk of Phytotoxicity
- Reduced Risk of Pesticide Resistance
- Reduced Health Risks to Plant Professionals
- Key Components to IPM Protocols
- Compatible with Mycorrhizal Inoculant Products
- 4 Hours to Rainfastness

Thatch is a mixture of dead grass including mowed grass, old dead or alive grass stems, clippings, roots and soil which exists between grass and soil surface. Excess thatch creates many serious issues for turf grass managers if not effectively managed and controlled. Everything from declining playing conditions to inefficient pesticide performance, fungal and insect habitat, increased stress, inefficient air and water in and exfiltration and more.

BioPlex Thatch POWER+ initiates the synthesis of organics acids such as oxalic and citric acid. These organic acids subsequently activate microbial populations that target and digest lignin and cellulose commonly found in soil and thatch.

BioPlex Thatch POWER+ is not only a thatch management product but also is a phosphate efficiency tool. The active ingredient is *Penicillium bilaii*, a naturally occurring fungus that has dual modes of action; thatch decomposition and increasing the availability of both soil and fertilizer phosphate.

Phosphate commonly forms bonds with calcium, magnesium, aluminum and iron with the type of bond varying according to soil type. **BioPlex Thatch POWER+** bioactivity breaks the bonds that form between elements within the root zone freeing up the phosphate so it is available to the plant.

Formulation and Active Ingredient Profile

ACTIVE INGREDIENT:

Penicillium bilaii	0.037%
OTHER INGREDIENTS	99.963%
TOTAL 100.000%	

* End-use product contains not less than 10 million (1 X 10⁹) colony forming units per ml [cfu/ml] *Penicillium bilaii*

PACKAGE SIZE:

Bottle - 150 ml (5.07 fl oz)
 Application Rate: 6 to 8 ml per Acre
 Treats 18.75 to 25 Acres

BioPlex[®] PATHOGEN POWER+

REDUCE DISEASE PRESSURE & SPEED RECOVERY



Reduce Disease Pressures – Speed Recovery Disease Damage
Elevate Natural Disease Protection for Turf & Ornamental Plants

Benefits:

- T/O Disease Management
- Ornamental Anti-Transpirant
- IPM Anti-Fungal
- IPM Anti-Bacterial
- IPM Barrier Film Protection
- Pesticide Extender
- Anti-Desiccant

Product Description:

BioPlex PATHOGEN POWER+ is formulated from processed exoskeleton's of insects and crustaceans. There is a naturally occurring substance (Poly-D-Glucosamine) found in the cell walls of all crustaceans, most fungi, and the exoskeletons of most insects that can be highly beneficial in the annual maintenance of turf grass and ornamental plants. Prior to the EPA FIFRA, 40 CFR exemption, Poly-D-Glucosamine was previously registered with EPA as a fungicide, antimicrobial agent and plant growth regulator that boosts the ability of plants to defend against fungal infections.

BioPlex PATHOGEN POWER+ (Poly-D-Glucosamine) is a natural plant elicitor because the exoskeletons of all insects are made of the same thing (chitin). When it comes in contact with plant vegetation, it "signals" the plants into responding as if they are being infested and the plant's natural immune response is stimulated and set in motion in order to survive.

Due to the unique molecular chemistry of **BioPlex PATHOGEN POWER+** (Poly-D-Glucosamine), it possesses excellent clear film forming, shield-like residual properties or barrier protection when solubilized in water and applied to turf grass leaf tissue. Poly-D-Glucosamine in a water soluble form, when applied foliar, results in a durable, clear and opaque protective film barrier that significantly minimizes involuntary plant transpiration.

BioPlex PATHOGEN POWER+ (Poly-D-Glucosamine) physical properties provides a clear and transparent antimicrobial-antifungal film barrier that helps discourage mold, bacterial and fungal growth. It elicits a natural physiological reaction that also improves the immune system sensitivity of turf grasses to many common disease pathogens. This unique similarity of Poly-D-Glucosamine to natural plant sugars is what encourages the natural bioactive signaling effect that takes place at the molecular level.

BioPlex PATHOGEN POWER+ (Poly-D-Glucosamine) is a natural biomolecule which improves turf grass health and potentially reduces the need for synthetic pesticides.

PACKAGE SIZE:
1 Gallon, 4 x 1 Gallon/Case



BEFORE



AFTER

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

SOIL AMENDING INGREDIENT(S)

Poly-D-Glucosamine (Chitosan): 3.0%
(Anti-Fungal)

Total Other Ingredients:..... 97.0%
Derived From: Processed Insect Exoskeletons, Crustacean Shells

TURF & ORNAMENTAL
Actinovate® SP
Bio-Fungicide - Bacteriacide
 OMRI Listed and 2 Year Shelf-Life

EPA Reg. No.: 73314-20 EPA Est. 73314-WI-002 Actinovate® is a registered TM of Novozymes A/S.

Excellent Control of Dollar Spot, Brown Patch, Take-All Patch, Powdery Mildew, Downy Mildew, Botrytis, Sclerotinia, Xanthomonas, Alternaria, Aphanomyces, Armillaria, Fusarium, Phytophthora, Pythium, Rhizoctonia and Verticillium

What is Biorational Technology?

The term "Biorational" describes a broad range of products that have a reduced environmental impact for the green industries including agriculture, horticulture, forestry, plant health, and others. These products are typically biologically-derived or, if synthetic, structurally similar and functionally identical to a biologically occurring material. Biorationals include botanical insecticides, microbial pesticides, plant growth regulators (PGRs), essential oils, minerals, and insect growth regulators. These products give growers the ability to treat pests and maximize plant performance with products that are safer than hard chemistry and have fewer environmental side effects.

Benefits:

- Many Biorational Products are OMRI Listed
- Consistent with Evolving Consumer Preferences
- Conform to Environmental Stewardship Goals
- Shorter 4 Hour Restricted-Entry Intervals (REI)
- Shorter Preharvest Intervals (PHI)
- Reduced Risk of Phytotoxicity
- Reduced Risk of Pesticide Resistance
- Reduced Health Risks to Plant Professionals
- Key Components to IPM Protocols
- Compatible with Mycorrhizal Inoculant Products
- 4 Hours to Rainfastness



Product Description:

WHY Rotate Actinovate® SP Bio-Fungicide into Your Spray Program?

- Multi-Site MOA
- Safe on Beneficials
- Resistance Management
- Residue Management

CONTROLS DISEASE 3-WAYS

PARASITISM & PREDATION of Disease Pathogens
 Works by ANTI-FUNGAL METABOLITES - Chitinases
 EXCLUSIONISM by OUTCOMPETING Disease Pathogens

Actinovate® Biological Fungicide

Actinovate® offers Golf Course and Other Professional Turf Managers, Nursery and Greenhouse Growers, Arborists, Property Managers and Home Gardeners a powerful and versatile OMRI Listed tool to control fungal pathogens.

- The active ingredient is *Streptomyces lydicus* WYEC 108.
- Actinovate® is water soluble and can be applied as a foliar spray or a growing media drench to suppress or control a broad range of soil-borne and foliar diseases across multiple crops.
- The active ingredient in Actinovate® is a microbe that colonizes the root system and foliage of the plant and protects it from harmful bacteria and fungi.
- Plants treated with Actinovate® as a soil drench will become hardier, more vigorous, and will have a robust and protected root system.
- Actinovate® utilizes multiple modes of action, reducing the risk of pesticide resistance.
- Actinovate® is a great addition to any IPM program, and can be used effectively alongside other biorational, traditional, and microbial plant support products including mycorrhizal fungi.

Formulation and Active Ingredient Profile

ACTIVE INGREDIENT: (% w/w)

Streptomyces lydicus WYEC 108*	0.037%
OTHER INGREDIENTS	99.963%
TOTAL 100.000%	

* End-use product contains not less than 10 million (1 X 10⁷) colony forming units per gram [cfu/g] *Streptomyces lydicus* WYEC 108

PACKAGE SIZE:

Bag - Net Weight 18 oz (510 g), 12 x 18 oz Bags/ Cs

BioPlex® Water Soluble LCO 24-0-22

With Micronized, Greenhouse Grade Solubility



EXCELLENT TURF GRASS RESPONSE ALL GROWING SEASON – 99.99% MICRONIZED GREENHOUSE GRADE SOLUBILITY

Benefits:

- Excellent Color Response
- Phosphate Free
- Nutrition for Soil Biology
- Decrease Thatch
- Chelated Micronutrients
- Increase Nutrient Mobility
- No-Clog 99.99% Solubility Technology
- Cost-Effective

Product Description:

BioPlex Water Soluble LCO 24-0-22 is the “professional choice” to maintain your turf to be both green and healthy. You can use any time of the year, no matter the weather conditions. Formulated to work great on any kind of turf, be it residential lawns, golf courses, parks, or corporate grounds. Due to the particle size and molecular density of the formulation, turf grasses will rapidly absorb (foliar & root) these nutrients in a noticeably shorter time than with conventional fertilizers.

BioPlex Water Soluble LCO 24-0-22 fertilizer is manufactured in North America and feature the highest quality components. It is one of our most popular water soluble formulations and is formulated with our NO-CLOG, 99.99% SOLUBILITY TECHNOLOGY.

It is virtually 4 products in one. First, it is a both a concentrated Nitrogen and Potash source. Next, it is packed with a full compliment of chelated micronutrients. Couple this with Humic Acid to stimulate greater nutrient absorption, mobility and cellular metabolism and Seaweed Extract to further stimulate the biological activities of the turf and also as a feeder substrate for existing beneficial microbial populations.

Our nutritional technology also extends into the physical properties of the **BioPlex Water Soluble LCO 24-0-22** as well. For example, our nutrient density easily surpasses that of other competitive specialty turf grass fertilizers along with our molecular size. Why does this matter? Our unique molecular associations and chemistry allows the nutritional inputs to move more efficiently from the soil directly to plant tissues while maintaining the biochemical compatibility necessary to translocate nutrient ions via both xylem and phloem plant structures. Xylem mobilize nutrients to root structures while phloem facilitates translocation of foliar nutrition to critical growth points and vegetative turf grass structures.

When considering **BioPlex Water Soluble LCO 24-0-22**, this product not only results in greener and healthier turf grass, but also in healthier soils and beneficial microbe populations to reduce thatch and fix-nitrogen. Excellent and safe for use on both cool and warm season grass. Feeding frequency expectation for this product ranges from a 4-8 week application window throughout the active growth cycle.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	24.0%
6.3% Nitrate Nitrogen	
2.7% Ammoniacal Nitrogen	
15.0% Urea Nitrogen	
Soluble Potash (K₂O)	22.0%
Sulfur (S)	3.0%
Boron (B)	0.02%
Copper (Cu) 0.05% Chelated Copper (Cu)	0.05%
Iron (Fe) 0.10% Chelated Iron (Fe)	0.10%
Manganese (Mn) 0.05% Chelated Manganese (Mn)	0.05%
Molybdenum (Mo)	0.0005%
Zinc (Zn) 0.05% Chelated Zinc (Zn)	0.05%

Derived From: Potassium Nitrate, Urea, Ammonium Sulfate, Potassium Sulfate, Disodium Octaborate, Copper EDTA, Iron EDTA, Manganese EDTA, Sodium Molybdate, Zinc EDTA

NON-PLANT FOOD INGREDIENT(S):

Humic Acid (Biology Food)	1.5%
Seaweed Extract (Micro-Nutrients)	2.0%

Derived From: Ascophyllum Nodosum Seaweed Extract and Leonardite Humic acid

PACKAGE SIZE:

25 lb Bag, 80 Bags per Pallet (Special Order Product – Minimums Apply)



“I began using your organic fertilizers plus BioPlex to treat English boxwoods and camellias. In the course of one growing season I noticed a significant improvement in leaf color, thickness, and flexibility. Compared to a control group, the treated plants were clearly superior in leaf, flower bud, and root development.” - **Goodhart's Gardens**



100% Natural Organic Nutrients from the SEA
Highly Digestible, Great FOLIAR & ROOT ABSORBED Nutrient Mobility for T/O

Benefits:

- Slow Release
- Safe, Non-Burning
- Root Stimulant
- Foliar Spray or Root Drench Feed

ALL OCEAN Facts:

- N per Gallon = 0.285 lbs, Wt. per Gallon = 9.5 lbs, pH = 4.5
- Biostimulant response reduces environmentally induced Summer stress symptoms
- Elevated photosynthesis threshold increases health and vigor
- Natural plant extracts combine with L-Amino acids resulting in optimal cell nutrition
- Contains L-Aminos for stress resistance and fibrous root mass
- Speeds seed germination and seedling establishment and sod establishment
- Increases microbial activity to sustain healthy rhizosphere and degrade thatch
- Helps offset the effects of sub-optimal temperatures of other stress
- Excellent to rehab root dieback or decline

Safe & Effective to Use Any Season, Any Time!

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	3.0%
2.50% Water-Soluble Nitrogen	
0.50% Water-Insoluble Nitrogen	
Available Phosphate (P₂O₅)	3.0%
Soluble Potash (K₂O)	2.0%

Derived From: Liquid Fish and Sea Plant Extract

ACTIVE INGREDIENTS:

Fish Hydrolysates	75%
Ascophyllum nodosum Seaweed	22.5%
<i>(Norwegian Cold Processed Source)</i>	
L-Amino Acid	2.5%

Derived from: Protein Hydrolysates

Product Description:

BioPlex ALL OCEAN™ 3-3-2 is entirely sourced from natural, organic components and it prides itself on being a truly environmentally friendly fertilizer. It is a 100% soluble, homogeneous, fully stabilized, almost odorless liquid concentrate. In **ALL OCEAN™ 3-3-2**, the seaweed is processed via a cold extraction process. Cold processed seaweed extract is a natural product derived from hand-harvested ascophyllum nodosum seaweed from Norway and Ireland. Processed “cold” ensures the preservation of high levels of cytokinins, auxins and other naturally occurring growth stimulants, hormones, vitamins, amino acids, cytoplasm, macro and micronutrients. The cytokinins are then paired with 18 important amino acids, trace minerals, plant hormones, and even a bit of hydrolyzed fish, which contains additional amino acids, to create an all-natural blend that promotes dense root growth and overall plant, root and soil health.

Plant health and root health are the primary focus of **ALL OCEAN™ 3-3-2** nutrient agronomics. It promises to not burn vegetative plant and root structures regardless of the season it is applied in. It is a slow-release fertilizer, focused on the continuous health of your plants through chelation. **ALL OCEAN™ 3-3-2** contains an L-Amino 18 complex, which increases chelation in your plants. Chelation expedites the absorption of more trace nutrients, such as iron, zinc, and copper, from your growing medium. The L-Amino 18 ensures more optimal stress tolerance, providing important proteins for photosynthesis, and it's an important precursor in the production of phytohormones which play an important role in the metabolism of many minerals and trace elements.

For optimal results, apply **ALL OCEAN™ 3-3-2** during early vegetative growth to maximize benefits, then continue to apply small doses throughout active growth cycles leading to plant maturity. It is easily translocated and nutritionally effective applied as both a foliar or soil drench. Finally, **ALL OCEAN™ 3-3-2** is a versatile, general purpose fertilizer that can be used to promote healthy, fibrous root growth in vegetable crops, field crops, trees, vines, and indoor house plants. It can be used on fairways, greens, lawns, gardens, and landscaping. It can even be used within commercial nurseries and greenhouses. If you are looking for a GREAT performing 100% organic, nutritionally complete liquid fertilizer concentrate, **BioPlex ALL OCEAN™ 3-3-2** would be a SUPER choice. YOU will NOT be disappointed!

PACKAGE SIZE:

1 Gallon, 4x1 Gallon/Case • 6 Gallon Mini-Drum
 32 fl oz Bottle, 12 x 32 Bottles/Case (**Special Order**)

BioPlex[®] Fertile FUSION[™] 12-4-6



Much More than a Quality T/O NPK Fertilizer Aminos, Seaweed, Fulvic Acid, Wetting Agent, Micros

Benefits:

- Slow Release
- Safe, Non-Burning
- Bio-Blend Nutrients
- Probiotic, Eco-Friendly

Fertile Facts:

- N per Gallon = 1.2 lbs, Wt. per Gallon = 10.5 lbs, pH = 6.8
- Biostimulant response offsets environmentally induced stress symptoms
- Elevated photosynthesis threshold increases health and vigor
- Natural plant extracts combine with fulvic acid & L-Amino acids combine for optimal nutrition
- Contains L-Aminos for stress resistance and fibrous root mass
- Six (6) key micronutrients to ensure long lasting color and improve nutrient mobility & utilization
- Low salt and chloride, pro-biotic, bioblend - no burn formula

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	12.0%
3.0% Water-Soluble	
9.0% Water-Insoluble Nitrogen	
Available Phosphate (P₂O₅)	4.0%
Soluble Potash (K₂O)	6.0%
Boron (B)	0.02%
Copper (Cu)	0.05%
Iron (Fe)	0.10%
Manganese (Mn)	0.05%
Molybdenum (Mo)	0.005%
Zinc (Zn)	0.05%

NON-PLANT FOOD INGREDIENT(S):

Fulvic Acid	2.0%
Ascophyllum nodosum Seaweed Extract	4.0%
L-Amino Acid	1.25%
Polymethylsiloxane Wetting Agent	2.0%

Derived from: Ascophyllum nodosum seaweed, Humic Substances, Protein Hydrolysates

Product Description:

BioPlex Fertile FUSION™ 12-4-6 is a BioBlend liquid complex derived in part from rich, virgin soluble fish hydrolysate, natural fulvic acid, colloidal phosphates, cold processed ascophyllum nodosum seaweed, L-Amino acid complex, wetting agent and ammonium phosphate. This fertilizer includes balanced elemental nutrition and carbon supplementation to encourage prompt color response and establish more fibrous roots to ensure complete recovery of damaged roots and declining plants. **BioPlex Fertile FUSION 12-4-6** is fortified with our proprietary BioPlex Concentrate, a powerful, safe, and effective natural biostimulant. Biostimulation elevates numerous physiological plant functions important to comprehensive cellular integrity. In addition, its use helps enhance root structure fibrosity and optimize and elevate plant health and vigor.

BioPlex's proprietary BioBlend formulating protocol guarantees a complete, diverse source of chelated, highly digestible, eco-friendly, probiotic nutrients. The bottom-line primary agronomic plant responses you might expect when using **BioPlex Fertile FUSION 12-4-6** include: added stress resistance, drought tolerance, increased photosynthetic capacity, increased chlorophyll production, improved cellular turgidity and permeability, evenly wet soils, less isolated dry spots and even nutrient distribution. **BioPlex Fertile FUSION 12-4-6** is uniquely formulated to satisfy the complete nutritional requirements of both turf and ornamentals throughout active vegetative growth stages, **BioPlex Fertile FUSION 12-4-6** is an excellent choice for use on both cool and warm season grasses, as well as on flowers, bedding plants, trees and shrubs.

**More than a Quality,
Complete NPK Fertilizer!**

PACKAGE SIZE:

1 Gallon, 4x1 Gallon/Case • 32 fl oz Bottle, 12 x 32 fl oz Bottles/Case

Kick BioPlex STARTER 5-10-5



Great T/O FORTIFIED, ROOT STIMULATOR & STARTER FERTILIZER
 Aminos, Seaweed, Fulvic Acid, Wetting Agent, Micros



Benefits:

- Slow Release
- Safe, Non-Burning
- Bio-Blend Complex
- Root Stimulator

Kick Starter Facts:

- N per Gallon = 0.515 lbs, Wt. per Gallon = 10.3 lbs, pH = 6.5
- Economical 10-12 week nutrient release
- Formulated with CP seaweed and rich carbon-based humates
- Contains L-Aminos for stress resistance and fibrous root mass
- Contains six (6) key micronutrients

Product Description:

BioPlex Kick STARTER™ 5-10-5 is a BioBlended liquid fertilizer concentrate that embodies ALL of the relative agronomic performance characteristics professionals seek in a fertilizer. It is high in phosphorous, a primary, digestible, mineral required for root mass growth and development. With a prescription combination of two of the oldest, most effective forms of fertilizers known to mankind—soluble hydrolyzed fish and cold processed ascophyllum nodosum seaweed—is safe and delivers safe and predictable results. **BioPlex Kick STARTER 5-10-5** secondary organic nutrient inputs are derived from soluble fish meal, feather meal, colloidal phosphates, borax and glucoheptomates of Cu, Zn, Mn, and Mo. To ensure a targeted multidimensional plant response, 5-10-5 is fortified with our proprietary powerful, safe and effective biostimulant complex. The 1.25% L-Amino complex ingredient, when utilized in combination with fulvic-humates and key micronutrients, optimizes nutrient portability, efficiency, stability and translocation—a prerequisite for new fibrous root, shoot, leaf, stem and other vegetative formations.

The bottom line: BioPlex Kick STARTER 5-10-5 delivers more agronomic plant response dynamics than the typical starter fertilizer. Biostimulation resulting from the cold processed seaweed synthesizes elevated thresholds of auxins, gibberellins and various key indoles, which are all important to comprehensive cellular integrity. The nonionic state-of-the-industry wetting agent ingredient ensures evenly wet soils with more equal nutrient distribution, which increases nutrient uptake in all use applications and growing conditions. “Kick Start” your next new planting or post fairway overseeding with **BioPlex Kick STARTER 5-10-5!**

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:	NON-PLANT FOOD INGREDIENT(S):
Total Nitrogen (N).....5.0%	Fulvic Acid.....1.0%
5.0% Water-Soluble	Ascophyllum nodosum
Available Phosphate (P ₂ O ₅)..10.0%	Seaweed Extract.....4.0%
Soluble Potash (K ₂ O).....5.0%	L-Amino Acid1.25%
	Polymethylsiloxane Wetting Agent ..2.0%

Derived from: Urea, Phosphoric acid, Potassium hydroxide, Fish hydrolysate, Sodium borate, Copper EDTA, Iron EDTA, Manganese EDTA, Sodium molybdate

MICRONUTRIENTS EXPRESSED AS AN ELEMENT:

Boron (B).....	0.2%
Copper (Cu)	0.05%
Iron (Fe)	0.05%
Manganese (Mn)	0.05%
Molybdenum (Mo).....	0.0005%
Zinc (Zn).....	0.06%

Multi Dimensional Plant & Root Response!

PACKAGE SIZE:

1 Gallon, 4x1 Gallon/Case • 32 fl oz Bottle, 12 x 32 fl oz Bottles/Case

BioPlex[®] Foliar FUSION BIOS[™]

Beneficial Microbes & Plant Nutrients
from Sea-Plants



Realtime Nutrient Mobility to Optimize Plant Health
Correct Nutritional Deficiencies & Elevate Plant Vigor During Stress

Benefits:

- Healthier, Stronger, Greener Turf and Ornamentals
- More Stress Resistant Ornamental Nursery Inventories
- Elevate Nursery Inventory Curb Appeal
- Healthier First Year Field or Container Transplants
- Quick and Direct Delivery of Nutrients to the Plant
- Larger Fruit
- Higher Brix, More Nutrient Dense Fruit
- Produce Has Longer Shelf Life

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N):5%

3.50% Ammoniacal Nitrogen	Derived from Kelp Meal,
0.45% Nitrate Nitrogen	Urea, Potassium Nitrate,
0.61% Urea Nitrogen	Monopotassium Phosphate,
0.44% Water-Insoluble Nitrogen	Ammonium Phosphate

Available Phosphate (P₂O₅):15%

Soluble Potash (K₂O):10%

CONTAINS NON-PLANT FOOD INGREDIENT(S)

Live beneficial soil microbes of the following types and minimum colony forming units (CFUs) per gram:

Arthobacter globiformis 1X10⁴; Azospirillum brasilense 1X10⁵; A. lipoferum 1X10⁴; Azotobacter chroococcum 1X10⁴; A. paspali 1X10³; A. vinelandii 1X10⁴; Bacillus amyloliquefaciens 1X10⁵; B. atrophaeus 1X10⁴; B. licheniformis 1X10⁴; B. megaterium 1X10⁴; B. pumilus 1X10³; B. subtilis 1X10⁴; B. thuringiensis 1X10⁴; Brevibacillus brevis 1X10⁵; Micrococcus luteus 1X10⁴; Pseudomonas fluorescens 1X10⁴; P. putida 1X10³; Rhodospseudomonas palustris 1X10³; Rhodospirillum rubrum 1X10³; Streptomyces griseus 1X10³ (Propogules per gram)

Product Description:

BioPlex Foliar FUSION BIOS[™] foliar bio-fertilizer spray (5-15-10) is a scientifically formulated combination of beneficial plant-growth-inducing-rhizobacteria (PGIR) and specific plant nutrients for turf, ornamentals, orchards, vegetable crops, vineyards, transplants and more.

Seasonal plant stress is unpredictable, so the ability to increase plant vigor in real time is huge relative to plant health. Tank-mixing with **BioPlex Wilt STOPPER Foliage Film[™]** is a GREAT hedge in proactively offsetting unpredictable seasonal environmental stress. Unfortunately, soil fertility often cannot be amended in time to make effective corrections during one short season. However, plants are still able to absorb nutrients through the surface cells and stomata of their foliage. Foliar feeding is therefore a fast and effective way to correct nutrient deficiencies, or supplement any nutrient program in season. **BioPlex Foliar FUSION BIOS[™]** can be used several times throughout the growing season for additional nutritional support of your turf and ornamental plant materials.

Used as a foliar, the microbial additions to the foliage increase atmospheric nitrogen and phosphorus absorption rates of the plant leaves, thus reducing the amount of supplemental nutrients needed to maintain optimal plant health.

For optimal plant response, **BioPlex Foliar FUSION BIOS[™]** can be effectively tank-mixed with other spray applications every 14-28 days for turf, ornamentals, cannabis, hops, hemp, orchards, vineyards and more.

Biological Foliar Nutrient Complex 5-15-10

Use when PLANT HEALTH is not an OPTION but a
NECESSARY EXPECTATION!

PACKAGE SIZE:

1 lb Bag, 4 Acres per Pound



Safe – Slow Release – Lower Soil pH - TURF & ORNAMENTALS



Benefits:

- Increases Plant Nutrition
- Increases Plant Health
- Increases Soil Fertility

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Sulfur (S)	90%
Inert Ingredients	10%
Free Sulfur	90%
Combined Sulfur	0%

Derived from Elemental Sulfur

Product Description:

BioPlex Organics pH Power-Down Soil Modifier is a high quality granular, water soluble aggregate sized at SGN 250. Will spread evenly from any type hand held cyclone spreader (preferably) or can be carefully distributed around plants by a scoop and spread method.

General Localized Soil pH Reduction:

#1 Rate per 100 sq. ft. Area Surrounding Established Ornamental Tree

Drive Soil pH Down 1 UNIT

Evenly Spread 2 lbs per 100 Sq-Ft (or) 20 lb per 1,000 SF

Drive Soil pH Down 2 UNITS

Evenly Spread 2.75 lbs per 100 Sq-Ft (or) 27.50 lb per 1,000 SF

#2 Rate per EACH 1 Inch Caliper Trunk Diameter (or) EACH 12 inches Plant Height

Drive Soil pH Down 1 UNIT

NEW PLANT INSTALLATIONS: Evenly spread ½ lb throughout the backfill for newly installed plants. Concurrently, soil surface apply with a spinner hand held spreader 1/2 lb per EACH 1” caliper trunk diameter or EACH 12-18” of plant height.

Drive Soil pH Down 1 UNIT

ESTABLISHED ORNAMENTALS: Surface apply evenly with a hand held spinner spreader ¼ lb of product per each 1 foot of plant height **or** spread. (Use the larger dimension to determine rates) To drive down 2 units, double rates. Check pH with another soil test within 9-12 months to see if additional applications are required.

Drive Soil pH Down 2 UNITS

NEW PLANT INSTALLATIONS: Evenly spread 1 lb throughout the backfill for newly installed plants. Concurrently, evenly apply with a spinner hand held spreader another 1 lb to the 100 SF (10x10) soil surface immediately surrounding the plant.

NOTE: 9 months after the application take a follow-up soil test to confirm if any additional pH POWER-Down applications are required to achieve your targeted pH.

PACKAGE SIZE:

50 lb Poly Bag

BioPlex[®] 8 Application ORGANIC Lawn & Land Care

Homogeneous Fertilizer + Microbes + Mycorrhiza + Molasses

8-2-4



8 Versatile Turf & Ornamental Applications

Homogeneous Particle – 41 Species Soil & Root Inoculants – Compost – Molasses

Benefits:

- Contains 25 PGIR
- Homogeneous Bonded Uni-Particle
- Contains Endo-EctoMycorrhiza
- Feeds Both the Plant & Soil
- Turf - Ornamental & Soil Benefits

**100% Natural Organic
COMPLETE NUTRITION FEEDS...**
Plant – Soil – Roots – Biology

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:	NON-PLANT FOOD INGREDIENT(S):
Total Nitrogen (N): 8%	Live Beneficial Microbes (BIO-Fertility) 0.5% <small>Determined by Assay Methods FDA III and MEF 4 1X10⁶ CFU/gram</small>
2.0% Ammoniacal Nitrogen	Arthrobacter globiformis
2.5% Other Water-Soluble Nitrogen	Azospirillum brasilense
3.5% Water-Insoluble Nitrogen	Azospirillum lipoferum
Available Phosphate (P₂O₅):..... 2%	Azotobacter chroococcum
Soluble Potash (K₂O): 4%	Azotobacter paspali
Iron (Fe): 3%	Azotobacter vinelandii
Calcium (Ca): 4%	Bacillus amyloliquefaciens
<small>Derived from: Aerobically composted poultry litter and feather meal.</small>	Bacillus atrophaeus
	Bacillus licheniformis
	Bacillus megaterium
	Bacillus pumilus
	Bacillus subtilis
	Bacillus thuringiensis
	Brevibacillus brevis
	Cellulomonas fimi
	Mycorrhiza Fungi (Plant Nutrition) 0.5%
	EctoMycorrhiza 4,600 CFU/gram
	EndoMycorrhiza 1,100 CFU/gram
	Molasses (BIO Feeder Substrate) 5.0%
	Compost (BIO Feeder Substrate) 86.95%
	Inert Ingredients (Filler) 7.05%

RATE & USE GUIDELINES

8 Application Homogeneous TURF & ORNAMENTAL BIO-Fertilizer

LAWN CARE TURF MAINTENANCE: An annual natural organic premium turf maintenance fertility program includes a **TOTAL** of 12-15 lbs per 1,000 sf of product applied to turf grasses PER YEAR. Applications can be divided up into 2 to 4 applications per year. Important, apply 40% to 50% of total product in FALL. A typical **2 application** annual fertility program: 6-7 lb per 1,000 sf applied in the FALL followed by 5 lbs per 1,000 sf applied mid to late SPRING. Use spreader setting for particle size of 1.5 - 2.0 mm or call 1-800-441-3573 and request spreader setting guidelines for your brand and model spreader.

FAIRWAY TURF MAINTENANCE: Apply at 3-5 lb per 1,000 sf every 45-60 days throughout active growing season for cool season, Turf Type Tall Fescue, Bermudagrass, St. Augustine and Zoysia grasses. Use spreader setting for particle size of 1.5 - 2.0 mm.

ATHLETIC FIELD TURF MAINTENANCE: Apply at 3-5 lb per 1,000 sf every 45-60 days throughout active growing season. Late Fall, apply at 5 lb per 1,000 sf. Use spreader setting for particle size of 1.5 - 2.0 mm.

ESTABLISHED TREE MAINTENANCE: Evenly spread with a hand held spreader 1-2 lb per EACH 1" caliper trunk diameter or EACH 12-18" of plant height or spread. Apply between tree trunk and 3-4 feet outside branch canopy drip-line. Apply Spring & Fall.

LANDSCAPE BED MAINTENANCE: Evenly apply at 5-7 lb per 1,000 sf of bed area. Use a hand held spreader for best particle distribution. For optimal plant nutrition and health, apply early Spring and early Fall.

TREE & SHRUB TRANSPLANTING: Incorporate into planting hole at 0.5-1.0 lb per EACH 1" caliper trunk diameter or EACH 12-18" of total plant height or spread - use the larger dimension to calculate rates of application.

NEW SEEDING: Apply at 3-5 lb per 1,000 sf and lightly incorporate into seed bed surface area prior to seed application. Use spreader setting for particle size of 1.5 - 2.0 mm.

HYDROSEEDING - 5,000 SF BATCH: Incorporate at 5-10 lb per each tank slurry batch of 4,000 - 5,000 sf targeted area.

PACKAGE SIZE:

50 lb Bag, 40 x 50 lb Bags/Pallet
40 lb Box

BioPlex[®]
Ultimate PLANT MAINTENANCE
Granules™

SUSTAINABLE Fertility
SUSTAINABLE Plant Health



Use Where ULTIMATE Plant Health is a CUSTOMER EXPECTATION
 Contains Endo-EctoMycorrhiza, Biology, Amino Acids, BioCHAR, DE, Humates, Fish Emulsion & MORE



Benefits:

- Contains 45 Diverse PGIR
- Homogeneous Bonded Uni-Particle
- Contains BioCHAR 88% Carbon
- Contains Endo-EctoMycorrhiza
- Feeds the Plant & Soil Up to 3 Years

Formulation and Active Ingredient Profile

ACTIVE INGREDIENTS:

Total Nitrogen (N) 10.0%
 0.40% Ammoniacal Nitrogen
 1.03% Nitrate Nitrogen
 2.50% Water-Soluble Nitrogen
 6.07% Water-Insoluble Nitrogen

Available Phosphate (P₂O₅).....3.0%

Soluble Potash (K₂O)5.0%

Calcium (C)3.0%

Derived from Aerobically Composted Poultry Litter, Ammonium Sulfate, Methylene Urea, Sulfate of Potash, Fish Emulsion, Ascophyllum nodosum Kelp

BIOLOGICAL ACTIVE INGREDIENTS:

Live Beneficial Microbes (25 Species) 1.275%

NON-PLANT FOOD INGREDIENTS:

EctoMycorrhiza (11 Species):.....1.275%

EndoMycorrhiza (9 Species):.....1.897%

Calcined Diatomaceous Earth (Axis):..... 5.0%

Fish Emulsion: 1.0%

L-Amino Acid: 1.0%

Humic Substance:.....27.40%

Ascophyllum nodosum Seaweed Extract: 3.0%

BioCHAR (Carbon 88%): 10.0%

Derived From: Ascophyllum nodosum Seaweed Extract, Humic Substance, AXIS[®] Diatomaceous Earth, BioChar Carbon, Fish Hydrolyze, BioPlex Amino Acid Complex

Product Description:

BioPlex Ultimate PLANT MAINTENANCE Granules™ have been engineered to effectively support the sustainability of the “Plant / Soil / Biological Pyramidal Matrix” - the foundation of all dynamic and sustainable ecosystems. Plants require healthy soil in order to grow and successfully survive in landscape outplantings. A variety of soil factors are known to increase nutrient availability and greatly influence long-term plant health and vigor. The most influential might be the organisms comprising the soil microbial community of the rhizosphere, which is the soil surrounding the roots of plants where complex interactions occur between the roots, soil, and microorganisms. Root exudates act as substrates and signaling molecules for microbes creating a complex and interwoven relationship between plants and the microbiome. Each microorganism functions in coordination with the overall soil microbiome to influence plant health.

To a large part, current turf and ornamental management strategies are mainly dependent on inorganic chemical-based fertilizers, which over time have caused a serious threat to human health and environment. The exploitation of beneficial microbes as a bio-fertilizer has become of paramount importance for their potential role in low-input sustainable bio-fertility. The eco-friendly approaches inspire a wide range of application of plant growth inducing rhizobacteria (PGIR), endo and ectomycorrhizal fungi, cyanobacteria and many other useful microscopic organisms that have been shown to improve nutrient uptake, plant growth and plant tolerance to abiotic and biotic stress.

BioPlex Ultimate PLANT MAINTENANCE Granules™ does not claim to have all the answers relative to effective, sustainable bio-fertility. **BioPlex Ultimate PLANT MAINTENANCE Granules™** were designed and formulated specifically for the maintenance of outplanted turf and ornamentals. After carefully examining the label ingredient list, we hope you will agree that **BioPlex Ultimate PLANT MAINTENANCE Granules™** supplies a comprehensive 360° degree approach to effectively support the sustainability of the “Plant / Soil / Biological Pyramidal Matrix”.

PACKAGE SIZE:

20 lb Bag, 2 x 20 lb Bags/Case **Sold by the case ONLY**

BioPlex
BioBASIC Fertilizers™

DRY - PELLETIZED FORMULATIONS

5-3-1

Soluble Seaweed & Humates



Easy-Spread Particle – Slow Release – Built from Pathogen Free Bio-Solids
Excellent for NEW SEEDING and TURF MAINTENANCE



Product Description:

BioPlex BioBASIC™ formulations are created around an all-natural, highly predictable bio-based, homogeneous nutrient complex originally branded “OceanGro.” Extremely Eco-friendly, OceanGro is so safe it is approved to fertilize citrus and other food crops in Florida. It carries the highest EPA “Exceptional Quality” classification. **BioBASIC** are homogenized and pelletized to ensure an even, uniform, dust-free nutrient distribution. Select ingredients deliver a basic broad-spectrum range of probiotics sourced from natural compost substrates to feed existing microbial soil bacterium and other beneficial rhizosphere populations. **BioBASIC Fertilizers** are packaged in heavy duty 3-ply poly-lined 50 lb. bags, palletized and shrink wrapped 40 bags per pallet.

BioPlex 5-3-1 (98% natural organic) – This is a very safe, cost-effective, general purpose, slow-release turf and ornamental fertilizer that is suited for maintenance or installation. It is well adapted to year-round use in almost any landscape, turf, or nursery setting. Also effective as a supplemental ingredient in grower potting soil mixes, you can use it to replace popular, premium synthetic nutrients.

Quality Slow 4-6 Month Release
Quality Organic Nutrients -
GREAT VALUE!

Benefits:

- Safe, Multi-Purpose Turf, Ornamental & Grower Fertilizer
- Extremely Eco-Friendly
- Suited for Maintenance or Installation
- Year-Round Use
- Broad-Spectrum Range of Probiotics
- Dust-Free Nutrient Distribution

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	5.0%
0.15% Ammoniacal Nitrogen	
3.75% Water-Insoluble Organic Nitrogen	
1.10% Urea Nitrogen	
Available Phosphate (P₂O₅)	3.0%
Soluble Potash (K₂O)	1.0%
Iron (Fe)	3.0%

Active Ingredients:

Ascophyllum nodosum Seaweed	0.21%
Leonardite Humic Acid	0.084%
Mannitol.	0.002%
Alginic Acid.....	0.007%

PACKAGE SIZE:

50 lb Bag, 40 x 50 lb Bags/Pallet

BioPlex
BioBASIC Fertilizers™
 DRY - PELLETIZED FORMULATIONS

12-3-5
Soluble Seaweed & Humates

“BioPlex 12-3-5 BioBASIC fertilizer, formulated with soluble seaweed and humates, has worked really well for our field grown ornamentals. Bottom-line, after a few years use now, we really like it a lot.” - **Tankard Nursery**

Easy-Spread Particle – Slow Release – Adapts Well to Turf & Ornamental Use
 Contains Seaweed, Humic Acid, Mannitol & Alginic Acid



Benefits:

- General Purpose Turf, Ornamental Fertilizer
- Extremely Eco-Friendly
- Suited for Maintenance or Installation
- Broad-Spectrum Range of Probiotics
- Dust-Free Nutrient Distribution

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	12.0%
0.30% Ammoniacal Nitrogen	
3.62% Water-Insoluble Organic Nitrogen	
8.08% Urea Nitrogen	
Available Phosphate (P₂O₅)	3.0%
Soluble Potash (K₂O)	5.0%
Iron (Fe)	2.0%

Active Ingredients:

Ascophyllum nodosum Seaweed	0.21%
Leonardite Humic Acid	0.084%
Mannitol.....	0.002%
Alginic Acid.....	0.007%

Product Description:

BioPlex BioBASIC™ formulations are created around an all-natural, highly predictable bio-based, homogeneous nutrient complex originally branded “OceanGro.” Extremely Eco-friendly, OceanGro is so safe it is approved to fertilize citrus and other food crops in Florida. It carries the highest EPA “Exceptional Quality” classification. **BioBASIC** are homogenized and pelletized to ensure an even, uniform, dust-free nutrient distribution. Select ingredients deliver a basic broad-spectrum range of probiotics sourced from natural compost substrates to feed existing microbial soil bacterium and other beneficial rhizosphere populations. **BioBASIC Fertilizers** are packaged in heavy duty 3-ply poly-lined 50 lb bags, palletized and shrink wrapped 40 bags per pallet.

BioPlex 12-3-5 (85% natural organic) – The 12-3-5 formulation was created for in season when active vegetative growth characteristics are present. Twelve units of nitrogen are formulated to release slowly over 120-180 days per application, irrespective of weather-related factors. Customers commonly use this formulation for turf maintenance, new seeding and field fertilization of ornamentals in nurseries and tree farms.

Quality Slow 4-6 Month Release
Quality Organic Nutrients -
GREAT VALUE!

PACKAGE SIZE:

50 lb Bag, 40 x 50 lb Bags/Pallet

BioPlex
BioBASIC Fertilizers™
 DRY - PELLETIZED FORMULATIONS

4-6-4
Soluble Seaweed & Humates



Excellent for ALL Acid Loving Plants – Maintenance & Installation
 Contains Seaweed, Humic Acid, Mannitol & Alginic Acid to Feed Both PLANT & SOIL



Benefits:

- Specialty Fertilizer for Acid Loving Plants
- Extremely Eco-Friendly
- Suited for Maintenance or Installation
- Broad-Spectrum Range of Probiotics
- Dust-Free Nutrient Distribution

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	4.0%
0.15% Ammoniacal Nitrogen	
2.0% Water-Insoluble Organic Nitrogen	
1.85% Urea Nitrogen	
Available Phosphate (P₂O₅)	6.0%
Soluble Potash (K₂O)	4.0%
Iron (Fe)	4.6%

Active Ingredients:

Ascophyllum nodosum Seaweed	0.21%
Leonardite Humic Acid	0.084%
Mannitol	0.002%
Alginic Acid	0.007%

Product Description:

BioPlex BioBASIC™ formulations are created around an all-natural, highly predictable bio-based, homogeneous nutrient complex originally branded “OceanGro.” Extremely Eco-friendly, OceanGro is so safe it is approved to fertilize citrus and other food crops in Florida. It carries the highest EPA “Exceptional Quality” classification. **BioBASIC** are homogenized and pelletized to ensure an even, uniform, dust-free nutrient distribution. Select ingredients deliver a basic broad-spectrum range of probiotics sourced from natural compost substrates to feed existing microbial soil bacterium and other beneficial rhizosphere populations. **BioBASIC Fertilizers** are packaged in heavy duty 3-ply poly-lined 50 lb. bags, palletized and shrink wrapped 40 bags per pallet.

BioPlex 4-6-4 (96% natural organic) – This product has been formulated to effectively meet the specific nutritional needs of a wide range of acid-loving plants. It’s ideal for ornamentals ranging from azaleas, rhododendrons, hollies, ground covers, conifers and many others. Use it for both maintenance and new plant installation.

Quality Slow 6-9 Month Release
Quality Organic Nutrients -
GREAT VALUE!

PACKAGE SIZE:

50 lb Bag, 40 x 50 lb Bags/Pallet

BioPlex
BioBASIC Fertilizers™
 DRY - PELLETIZED FORMULATIONS

20-4-5
Soluble Seaweed & Humates



Go To ROOT STIMULATOR for Commercial Applicators
 Excellent for Spring & Fall Lawn Care and Sports Turf



Benefits:

- Turfgrass Maintenance-Fertilization
- Extremely Eco-Friendly
- Suited for Maintenance or Installation
- Broad-Spectrum Range of Probiotics
- Dust-Free Nutrient Distribution
- Slow Release of Nutrients

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	20.0%
1.0% Ammoniacal Nitrogen	
1.80% Water-Insoluble Organic Nitrogen	
17.2% Urea Nitrogen	
Available Phosphate (P₂O₅)	4.0%
Soluble Potash (K₂O)	5.0%
Iron (Fe)	2.0%

Active Ingredients:

Ascophyllum nodosum Seaweed	0.21%
Leonardite Humic Acid	0.084%
Mannitol.....	0.002%
Alginate Acid	0.007%

Product Description:

BioPlex BioBASIC™ formulations are created around an all-natural, highly predictable bio-based, homogeneous nutrient complex originally branded “OceanGro.” Extremely Eco-friendly, OceanGro is so safe it is approved to fertilize citrus and other food crops in Florida. It carries the highest EPA “Exceptional Quality” classification. **BioBASIC** are homogenized and pelletized to ensure an even, uniform, dust-free nutrient distribution. Select ingredients deliver a basic broad-spectrum range of probiotics sourced from natural compost substrates to feed existing microbial soil bacterium and other beneficial rhizosphere populations. **BioBASIC Fertilizers** are packaged in heavy duty 3-ply poly-lined 50 lb bags, palletized and shrink wrapped 40 bags per pallet.

BioPlex 20-4-5 (50% natural organic) – This product is almost exclusively dedicated to the nutritional requirements related to both cool and most warm season commercial turf grass cultivars. It has a 50% natural, slow-release timeline to ensure a predictable 90-120 day feeding of plant roots. Typical coverage per 50 lb bag ranges anywhere from 10,000-15,000 sq ft per bag.

Quality Slow 3-4 Month Release
Quality Organic Nutrients -
GREAT VALUE!

PACKAGE SIZE:

50 lb Bag, 40 x 50 lb Bags/Pallet



FEED, PROTECT & PREVENT



**Eco-Friendly with 29 PGIR - COMPLETE Annual Plant & Soil Nutrition
Homogeneous – Soil & Root Inoculants – DE – Seaweed – BioCHAR**



Benefits:

- Contains 29 PGIR
- Homogeneous Bonded Uni-Particle
- Contains BioCHAR 88% Carbon
- Contains Endo-EctoMycorrhiza
- Contains AXIS Calcined Diatomaceous Earth
- Feeds Plant & Soil Up to 5 Years

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Compost Poultry Litter.....	38.0%
Total Nitrogen (N)	2.0%
Available Phosphate (P ₂ O ₅)	1.0%
Soluble Potash (K ₂ O)	1.0%
Calcium (C)	3.0%

Derived from Ascophyllum nodosum Seaweed Extract, Aerobically Composted Poultry Litter, Humic Substance, AXIS® Diatomaceous Earth, BioCHAR Carbon

** Slow Release Nitrogen from Poultry Manure and Methylene Urea*

NON PLANT FOOD INGREDIENT(S):

Live Beneficial Microbes (Plant Metabolism)	0.178%
EctoMycorrhiza #viable spores/gm (Drought Tolerance)	0.977%
EndoMycorrhiza (VAM) #viable spores/gm (Mineralization) ...	0.845%
Calcined Diatomaceous Earth (Axis®) (Aeration)	4.0%
Humic Substance (Microbe Food Source)	6.0%
Ascophyllum nodosum Seaweed (Root Growth)	3.0%
BioCHAR (Carbon 88%).....	40.0%

Product Description:

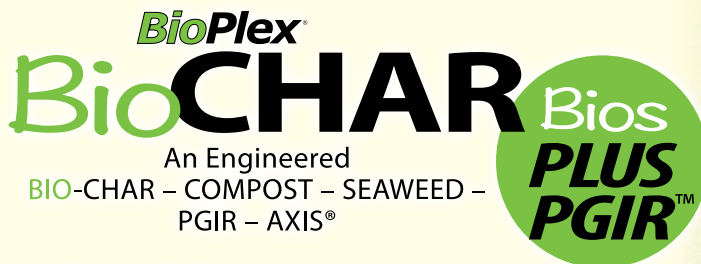
BioPlex Healthy 4-SEASON Landscape Granules™ have been engineered to effectively support the sustainability of the “Plant / Soil / Biological Pyramidal Matrix” - the foundation of all dynamic and sustainable ecosystems. Plants require healthy soil in order to grow and successfully survive in landscape outplantings. A variety of soil factors are known to increase nutrient availability and greatly influence long-term plant health and vigor. The most influential might be the organisms comprising the soil microbial community of the rhizosphere, which is the soil surrounding the roots of plants where complex interactions occur between the roots, soil and microorganisms. In affect, root exudates act as substrates and signaling molecules for microbes creating a complex and interwoven relationship between plants and the microbiome. Each microorganism functions in coordination with the overall soil microbiome to influence sustainable plant health.

BioPlex Healthy 4-SEASON Landscape Granules™ provide an agronomically sound, eco-friendly approach to introduce a wide range of plant-growth-inducing-rhizobacteria (PGIR), endo and ectomycorrhizal fungi, cyanobacteria, bio-carbon, seaweed, calcined diatomaceous earth, humates and many other useful microscopic organisms that have been shown to improve nutrient uptake, plant growth and plant tolerance to abiotic and biotic stress. Sustainable fertility depends fundamentally on digestible food for the plant, food for the soil and food for the diversified beneficial and fungi colonies within the rootzone. **BioPlex Healthy 4-SEASON Landscape Granules™** exploits the importance of beneficial microbes as a bio-fertilizer that have increasingly become of paramount importance for their potential role in low-input sustainable bio-fertility.

After carefully examining the label ingredient list, we hope you will agree that **BioPlex Healthy 4-SEASON Landscape Granules™** supplies a comprehensive 360° degree approach to effectively support the sustainability of the “Plant / Soil / Biological Pyramidal Matrix”.

PACKAGE SIZE:

20 lb Bag, 2 x 20 lb Bags/Case **Sold by the case ONLY**



SOIL & ROOT Zone Amendment



CARBON – 45 SOIL & ROOT INOCULANTS – DE – SEAWEED – HUMIC SUBSTANCE
(Formulated with New Homogeneous Uni-Particle Technology)



Benefits:

- Contains 29 PGIR
- Homogeneous Bonded Uni-Particle
- Contains BioCHAR 88% Carbon
- Contains Endo-EctoMycorrhiza
- Contains AXIS Calcined Diatomaceous Earth
- Feeds Plant & Soil Up to 5 Years

Product Description:

BioPlex BioCHAR Bios PLUS PGIR™ contains high levels of CARBON (88%) and Oxygen – arguably two of the most valuable organic soil conditioners. A unique, homogeneous ingredient complex of Biochar Carbon, DE, Nitrogen Fixing Bacteria, Mycorrhiza, Humic Substrate and Cold Processed Seaweed are all formulated into an “Easy Spread”, 2 mm homogeneous uni-prill. The physical properties of CARBON alone helps improve air and water infiltration and also plays a critical role in increased hydration and adsorption capacity in soils. The “Carbon Power Pack” joins with the element hydrogen and remains a critical and essential component of the basic compounds that make up plant cells. (H) Hydrogen, (C) Carbon and (O) Oxygen constitute the basic building blocks of the organic compounds that make up 95% of a plants diet. The process, “Carbon Fixation” is therefore critical in maintaining healthy and green turf grass through periods of extreme heat and drought.

All healthy soils contain a vast world of rhizo and nitrogen fixing microbes and beneficial fungi. These bacteria and fungi colonize and life-cycle in or in close proximity to the root zone. Microbes and fungi support plant health by increasing the availability of nutrients and water, to do so on a sustainable basis requires an aerobic, microporous, bio-habitat environment.

As a topdressing, **BioPlex BioCHAR Bios PLUS PGIR™** fills a unique role in supporting microbial colonization in the bio-ecosystem within the root rhizosphere. This ecosystem remains a fundamental prerequisite required to maintain **optimal turf and soil health** throughout the uncertain environmental conditions that routinely challenge the intensive turf maintenance practices most often associated with golf course and sports turf management. The uniform 2 mm homogeneous uni-prill particle makes it ideal and easy to evenly spread just like a quality G&T fertilizer. The particle size and homogeneous uniformity allows it to seamlessly blend and integrate effectively with other topdressing material aggregates.

BioPlex BioCHAR Bios PLUS PGIR™ is (1) a source of Carbon, (2) a soil amendment to reduce compaction, (3) a great bio-habitat, (4) a great source for Rhizobacteria to build roots and Nitrogen Fixing bacteria to supply nutrition, (5) a great source of humic substance to sustain soil biotics, (6) seaweed to stimulate cellular health and integrity that will add fibrousity and mass to the root zone. Safe and effective on all types of cool and warm season grasses.

PACKAGE SIZE:

20 lb Bag, 2 x 20 lb Bags/Case **Sold by the case ONLY**

Formulation and Active Ingredient Profile

CONTAINS NON PLANT FOOD INGREDIENT(S):

Active Ingredients:

Live Beneficial Microbes (Plant Metabolism).....	0.128% <small>(Contains 25 Different Species)</small>
EctoMycorrhiza #viable spores/gm (Drought Tolerance)	1.175% <small>(Contains 11 Different Species)</small>
EndoMycorrhiza (VAM) #viable spores/gm (Mineralization) ...	1.697% <small>(Contains 9 Different Species)</small>
Calcined Diatomaceous Earth (Axis®) (Aeration):	5.0%
Humic Substance (Microbe Food Source):.....	49.0%
Ascophyllum nodosum Seaweed (Root Growth):	3.0% <small>(Norwegian Cold Processed Source)</small>
BioCHAR (Carbon 88%) (Carbon, Bio-Habitat):	40.0%



CRITICAL BENEFITS... Carbon, Habitat, Inoculants, Pathogen FREE Compost, Increased Air & Water Infiltration, Improves Soil Hydration Capacity



Product Description:

BioPlex GC Carbon-Compost PLUS (47% BioCHAR + 1.5% Humic Acid + 47% Compost + Mycorrhiza Fungi) contains high levels of CARBON and Oxygen, arguably the most valuable of all soil conditioners. BioCHAR is a most valuable and versatile organic soil conditioner and plays a fundamental supporting role in the neutralization of soluble salts from fertilizers and pesticide residues. BioCHAR is remarkably stable and very porous. It provides a sustainable foundation for bio-habitats and persists a long time in the soil resulting in increased hydration and adsorption capacity in amended soils. **BioPlex GC Carbon-Compost PLUS** fills a unique role in porous soil matrix (bio-habitat) by facilitating the long-term retention of moisture, nutrients and Plant-Growth-Inducing-Rhizobacteria (PGIR). All are required and necessary to sustain optimal plant and soil health as well as neutralizing existing or future soluble salt residues as a result of repetitive application of pesticides, fertilizers and/or ice-melters utilized annually in both commercial turf and/or residential landscape settings.

Being inherently stable and very porous, it persists a longtime in the soil and therefore increases plant hydration and adsorption capacity to keep plant vegetation and root structures hydrated through periods of extreme heat and drought. In addition, with an 80% plus CARBON footprint, high maintenance turfgrass in particular has a significant payoff when used as part of an annual topdressing program. Whether your primary objectives are related to nursery or greenhouse growing, turf maintenance, ornamental maintenance installations, or sports turf; soils amended with **BioPlex GC Carbon-Compost PLUS** outperform standard unamended soils in every area of critical review for many years to come. Sustain your 'peace of mind' that your turf and ornamentals have a balanced physical bio-habitat necessary for optimized plant and soil health while at the same time ensuring a healthier eco-system.

Benefits:

- Carbon Supplement
- Soil Porosity
- Improved Soil Hydration
- Excellent Bio-Habitat
- Neutralize Soluble Salts
- Improve Nutrient Mobility
- Mycorrhizal Soil Inoculant

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS

SOIL AMENDING INGREDIENT(S)

Pathogen Free Compost	47.00%
BioCHAR	47.00%
Humic Acid	1.50%
Total Other Ingredients	3.55%
Non-Plant Food Ingredients	0.95%

BIOLOGICAL ACTIVE INGREDIENT(S):

EndoMycorrhizal Fungi	0.96 ppg/g
-----------------------------	------------

Purpose:

Promotes plant growth and provides a sustainable foundation for bio-habitats and persists a long time in the soil resulting in decreased soluble salts, increased hydration and adsorption capacity in amended soils as well as improved air and water infiltration properties.

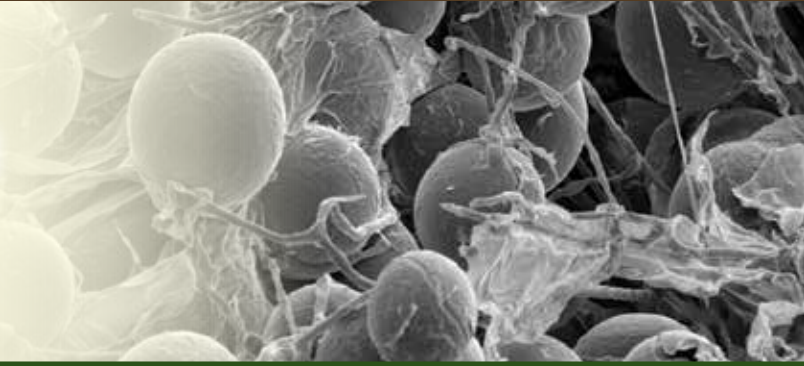
BioPlex GC Carbon-Compost PLUS is a professional quality soil amendment that can be used for residential turf, commercial turf, athletic fields, equine fields, sod, golf courses, erosion control, nurseries, and other turf establishments. Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn or garden, and sweep any product that lands on the driveway, sidewalk, or street back onto your lawn or garden.

PACKAGE SIZE:

1 cu ft per bag (0.028 cubic meter) • 50 x 1 cu ft Bags/Pallet

BioPlex 
Easy Spread BASIC BioCHAR
Landscape, Nursery, Grower &
Golf Course

Premium Greens Grade Homogeneous GRANULES



Homogeneous Bonded Uni-Particle Technology
Easy Spread Particle, 73% CARBON + SEAWEED + COMPOST Soil Amendment



Benefits:

- Contains BioHabitat
- Increases Moisture Retention
- Contains Food for Soil
- Increases Soil Porosity
- Increases Air-Water Infiltration
- Builds Soil Structure

Product Description:

BioPlex Easy Spread BASIC BioCHAR (73% BioCHAR + 2% Seaweed + 25% Compost) contains high levels of CARBON and Oxygen, arguably the most valuable of all soil conditioners. BioCHAR is a most valuable and versatile organic soil conditioner and plays a fundamental supporting role in the neutralization of soluble salts and pesticide residues. It is remarkably stable and very porous, it provides a sustainable foundation for bio-habitats and persists a long time in the soil resulting in increased hydration and adsorption capacity in amended soils. **BioPlex Easy Spread BASIC BioCHAR** fills a unique role in porous soil matrix (bio-habitat) by facilitating the long-term retention of moisture, nutrients and Plant-Growth-Inducing-Rhizobacteria (PGIR). All are required and necessary to sustain optimal plant and soil health as well as neutralizing existing or future soluble salt residues as a result of over application of fertilizers and/or ice-melters utilized annually in both commercial and residential landscape settings.

The general advice in the BioCHAR community is that sustainable healthy, pro-biotic soil habitat will contain 10% BioCHAR by volume. Use **BioPlex Easy Spread BASIC BioCHAR** in the general soil area surrounding the root zone, and when possible, below the roots of your vegetables, flowers, grass, trees or shrubs. Your ultimate 10% target doesn't all have to incorporate into the soil all at once. When you add **BioPlex Easy Spread BASIC BioCHAR** to an area and mix it into the soil, it isn't going away any time soon. Those subsequent modifications to the root zone will continue to persist for many years to come. You can quantify your ultimate 10% by volume target by aggregating cumulative application volumes over two or more seasons.

Whether your primary objectives are related to nursery or greenhouse growing, turf maintenance, ornamental plant installations or sports turf, soils amended with **BioPlex Easy Spread BASIC BioCHAR** will outperform standard unamended soils in every area of critical review for many years to come.

Sustainable "peace of mind" means that your turf and ornamentals have a balanced physical bio-habitat necessary for optimized plant and soil health for many, many years to come.

PACKAGE SIZE:
40 lb Box

Plant Health thru Sustainable **BIOLOGY**™ 

Formulation and Active Ingredient Profile

NON PLANT FOOD INGREDIENT(S):

- Aerobically Cured Organic Compost:**..... 25%
- Ascophyllum nodosum Seaweed:**2%
- BioCHAR (Carbon 88%):** 73%

Derived from Aerobically Composted Poultry Litter, BioChar Carbon Aggregate, Ascophyllum nodosum Seaweed

Particle Type: Homogeneous Formulation
Particle Size: 1.0 - 1.5 mm | 100 SGN

BioPlex[®] BULK Bio CHAR



GREAT for Carbon, Compaction, Clay Soils, Moisture Retention, Bio-Habitat, Air & Water Infiltration & MORE



Benefits:

- Adds Porosity to Soils
- Adds Bio-Habitat
- Carbon Source
- Increases Air & Water Filtration
- Reduces Nutrient Input
- Increases Water Retention
- Increases Plant Health

Formulation and Active Ingredient Profile

Product Type: Bulk BioCHAR Aggregate
Special Feature(s): Economical Bulk Package
Homogeneous Particle Size:
 MEDIUM FINE – Approx. 1.0 – 3.0 mm particle.
Contains: BioCHAR (88% Carbon)
Ice-Melter Neutralization Capability: YES
NPK Organic Nutrient's: Bulk formulation – N (0) P (0) K (0)
BioHabitat Structure Content: BioCHAR 100% by Wt.

Product Description:

BioPlex BioCHAR contains high levels of CARBON and Oxygen – arguably one of the most valuable organic soil conditioners. Ornamentals, in order to survive and thrive in diverse landscape outplantings, require living healthy soil that is built upon a sustainable, regenerative bio-habitat found within the root rhizosphere. All healthy soils are supported by a vast world of microbes and beneficial fungi and bacteria that co-habit in or around the plant rhizosphere. Microbes and fungi support plant health through “regenerative life-cycling”, in turn, this process increases the availability of nutrients, and to continue a sustainable basis, requires an aerobic, microporous, carbonaceous bio-habitat based soil environment.

Being inherently stable and very porous, BioCHAR persists a longtime in the soil and therefore increases plant hydration and adsorption capacity to help keep plant vegetation and root structures hydrated through periods of extreme heat and drought. In addition, with an 88% CARBON footprint, it neutralizes excessive soluble salt and chemical residues from fertilizers, ice-melters and pesticides.

BioPlex BioCHAR fills a unique role in facilitating the long-term retention of moisture, nutrients and organic food substrates necessary to help the critical bio-ecosystem thrive within the root rhizosphere of both TURFGRASSES and ORNAMENTAL plants. In the quest for optimal plant health, a regenerative bio-ecosystem is a fundamental, agronomic prerequisite required to maintain plant and soil health throughout uncertain and challenging environmental conditions that “green industry” professionals deal with “24-7-365”.

In the simplest terms, reducing nutrient input requirements and conserving water while sustaining optimal Plant Health is a primary result of amending poor or depleted soils with **BioPlex BioCHAR**.

PACKAGE SIZE:
 2 Cubic Yard (Approx. Wt. 1,600 lb) *Super Sack Container*



**Quick Acting, Mobile, Non-Phytotoxic, Chelated Biochemistry
Contains 2.5% L-Amino Acid Complex**

Benefits:

- Efficient Nutrient Translocation
- Extended Nutrient Stability
- Improved, Extended Plant Color Response
- Effective as Foliar Spray and in Drip Tape Applications
- Effective for Deep Root Feeding, Remediate Chlorosis
- Non-Phytotoxic, Safe and Effective in All Seasons
- Improved Moisture Retention and Cell Hydration Capacity
- Stimulated Seed Germination and Root Establishment
- Greater Root Fibrosity and Cuticle Resistance to Pests and Diseases
- Compatible with Other Fertilizers and Pesticides

Product Description:

BioPlex Emerald Green 5-Iron™ is like no other competitive iron supplement on the market. Without question, it will provide diverse and enhanced agronomic benefits. Through new proprietary biochemistry technology, key proprietary ingredients are effectively homogenized (antioxidants, amino acids, natural surfactants, and complexing polysaccharides) via a new plant extraction process. The net results are new molecular compound chemistries that more efficiently complex metal ions, resulting in superior iron uptake. No matter if you utilize “5-Iron” in turf for color and root mass or in ornamental applications for chlorosis, when used at its unprecedented LOW use rate, this product is fast-acting, nonphytotoxic, and non-staining. It takes performance results and expectations of iron technology to a brand new never before seen level.

BioPlex Emerald Green 5-Iron’s proprietary formulation technology ensures more efficient nutrient translocation and longer nutrient stability. It has a unique chelate complexing chemistry that effectively releases random naturally occurring nutrients that traditionally stay tied up in the soil. In addition, **BioPlex Emerald Green 5-Iron** infuses soils with soluble microbial feeder substrates, increasing desirable, indigenous, microbial and rhizobial populations. The addition of an L-Amino ingredient component further stimulates nutrient portability, efficiency, stability and uptake. This then results in enhanced stomate functionality, chlorophyll production and last but not least, highly elevated drought and stress tolerance.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:
Iron (Fe) 5.0%
5.0% Water-Soluble Iron (Fe)
Derived from: Iron polysaccharide

NON-PLANT FOOD INGREDIENT(S):
L-Amino Acid 2.5%
Derived from: Protein hydrolysate

***New Technology - Superior Color,
Nutrient Uptake & Portability!***

PACKAGE SIZE:
1 Gallon, 4 x 1 Gallon/Case



“...For Summer-Digging, we use BioPlex to curb plant stress. It works really well on Crepe Myrtles which don't dig well until after they flush. Crews form a moat around the plant and the BioPlex is applied as a ground drench. It really helps with the vigor of the plant. It works best if it sets for a minimum of 24-48 hours.” - **Tankard Nursery**

“SUMMER-DIG” In 90° PLUS Temps with OVER 95% SUCCESS RATE
 Use with WILT-STOPPER Foliage Film for Ultimate Plant Hydration



Benefits:

- Reduces Transplant Decline & Stress Symptoms
- Speeds Plant Establishment & Caliper Growth
- Speeds Transplant Stabilization
- Increases Fibrous Root Mass
- Increases Moisture Retention
- Rehabilitates Damaged Plants
- Improves Inventory Curb Appeal
- Decreases Plant Stress & Mortality
- Improves Cell Wall Integrity & Permeability
- Increases Cellular Capacity & Drought Tolerance

Product Description:

BioPlex “ORIGINAL DIGGING” Transplant Concentrate & Plant Enhancer™ is a powerful concentrated liquid biostimulant complex formulated from cold processed ascophyllum nodosum seaweed extract, humic extract, enzymes and a new generation nonionic wetting agent. This unique formula boosts photosynthetic and cellular capacity and increases antioxidants, even when applied under stressful, adverse environmental conditions.

BioPlex “ORIGINAL DIGGING” Transplant Concentrate & Plant Enhancer is most frequently used by tree movers, landscape contractors, and nurseries in support of the harvest and transplantation of trees, shrubs, and other ornamentals. ALL plants respond well to this product, including deciduous, conifer and palm type trees and shrubs. Containerized and bedding plants also become established more quickly with less stress symptoms when the product is used at planting.

Excellent for **SUMMER-DIGGING**. **BioPlex “ORIGINAL DIGGING” Transplant Concentrate & Plant Enhancer** is well recognized for its success in summer-digging ornamentals. Depending on the time of year and degree of pressure from existing environmental stress, it is most often applied as either a root drench or foliar spray. In some circumstances, both application protocols would be necessary to achieve superior results (follow label guidelines). Conifers, well into candling can be successfully harvested in June. For 30 years, **BioPlex** has come to the rescue when plant harvest cannot be delayed. **BioPlex** products have long enjoyed a great reputation to provide the additional plant support necessary to successfully summer-dig, even in the most severe environmental conditions.

Formulation and Active Ingredient Profile

CONTAINS NON PLANT FOOD INGREDIENT(S):	
Active Ingredients:	
Ascophyllum nodosum Seaweed	14%
(Norwegian Cold Processed Source)	
Leonardite Humic Acid	10%
Mannitol	0.10%
Alginate Acid	0.35%
Non-ionic Polyether-Polymethylsiloxane Wetting Agent.....	10%
Inert and Other Ingredients	65.55%

PACKAGE SIZE:
 1 Gallon, 4 x 1 Gallon/Case
 6 Gallon Mini-Drum
 32 fl oz Bottle, 12 x 32 fl oz Bottles/Case



TOTAL INSTALLATION

“I’ve used BioPlex Concentrate for a little over a year with wonderful results. I never thought I’d be able to transplant in 85° weather with little or no wilting - but it really worked well for me. It has extended my transplanting season from 4 1/2 months per year to 7 or 8 months, making it easier for scheduling and a better bottom line.”
 - *Knecht’s GreenGrow Nurseries & Landscaping*

TOTAL INSTALLATION Guarantees TOTAL TRANSPLANT SUCCESS
 TRANSPLANT STABILIZATION thru Plant, Soil & Root - Nutrition, Inoculation & Hydration



Benefits:

- Enhanced Plant, Root and Soil Functions
- Increased Tissue Hydration and Drought Tolerance
- Improved Plant Recovery, Establishment and Stabilization
- Soil Amendment & Root Inoculant
- Easily Digested Organic Nutrition

Product Description:

BioPlex “TOTAL INSTALLATION” Transplant Concentrate & Plant Enhancer™ contains the identical powerful concentrated liquid biostimulant complex and ingredient group as our **BioPlex “ORIGINAL DIGGING” Transplant Concentrate & Plant Enhancer**. It has cold processed seaweed extract, humic extract and numerous enzymes, plus a new generation nonionic wetting agent.

But there’s more!

In addition, we’ve added other important installation and closely related agronomic plant, soil, and rhizosphere active ingredients to achieve more comprehensive plant responses. It begins with a complete Endo-EctoMycorrhizal complex, adds beneficial soil enhancing microbial and biological cultures, contains a natural organic (NPK, 1-2-1) nutrient package (derived largely from fish and seaweed) and last but not least, includes a complete vitamin B-complex. When applied in new ornamental installations, you can effectively expect to reduce transplant stress.

Other beneficial results include: (1) increase fibrous root mass formations, (2) increase photosynthetic capacity, (3) increase antioxidants, (4) improve cellular turgidity and hydration capacity, (5) amend new soil biotics, (6) deliver a full complement of beneficial Endo-EctoMycorrhizal fungi, (7) deliver essential biological soil bacterium, (8) supply a highly digestible and balanced slow release prescription nutrient complex to speed stabilization and help provide the functional nutrition and soil biology required to optimize soil and enhance plant health, hydration and vigor.

Formulation and Active Ingredient Profile

CONTAINS NON PLANT FOOD INGREDIENT(S):

Active Ingredients:

Kelp Extract (derived from Cold Processed <i>Ascophyllum nodosum</i>).....	14%
Fulvic Acid (derived from Humic Substance)	10%
Non-ionic Polyether-Polymethylsiloxane Wetting Agent	10%
Alginic Acid	0.35%
Vitamin B Complex	0.05%
Inert Ingredients	65.60%

Biological Active Ingredients:

Bacillus Licheniformis	205,000 cfu/g
Bacillus Subtilis.....	205,000 cfu/g
Bacillus Megaterium.....	205,000 cfu/g
EctoMycorrhizae.....	7800 cfu/g
EndoMycorrhizae (VAM)	2850 cfu/g
Total active bacteria	4%
Active fungi	8%
Protozoa.....	7%

GUARANTEED ANALYSIS:

Total Nitrogen (N)	1.0%
Phosphate (P₂O₅)	2.0%
Potash (K₂O)	1.0%
Iron (Fe)	0.10%
Magnesium (Mg)	0.50%
Manganese (Mn)	0.05%
Zinc (Zn)	0.05%

Derived From Fish Hydrolyze

PACKAGE SIZE:

2 Gallons, 2 x 2 Gallons/Case
 64 fl oz Bottle, 6 x 64 fl oz Bottles/Case

BioPlex **ULTIMATE**
ORNAMENTAL
INSTALLATION G™

An Engineered **SOIL** Amendment, **BIO-FERTILIZER** & **ROOT** Inoculant.



Guaranteed TRANSPLANT SUCCESS Even in **POOR Site & Soil Environments**
Built on AGRI-Science, BIO-Science, SOIL-Science & Common Sense



Benefits:

- Contains 45 Diverse PGIR
- Homogeneous Bonded Uni-Particle
- Contains BioCHAR 88% Carbon
- Contains Endo-EctoMycorrhiza
- Feeds the Plant & Soil Up to 3 Years

Product Description:

Some call this product a technological breakthrough, we call it GOOD Science, long overdue - built on **Agri** science, **BIO** science and **SOIL** science. As a result of more than thirty (30) years of in-house research, **BioPlex Organics** has identified both individual and groups of highly integrated plant functions that are most prone to fail or decline when subjected to common outplanted stress factors. These environmental or physically induced plant limitations frequently result in weeping, wilting, vegetative desiccation and more. Stress induced plant decline symptoms by themselves are not necessarily problematic if temporary and short-lived; however, if persistent, can become chronic and lead to unsightly vegetative dieback or complete plant mortality.

The effectiveness of **BioPlex ULTIMATE ORNAMENTAL Installation G™** hinges on its ability to target plant functions (directly or indirectly) through the selection of individual ingredient's (*agronomic building-blocks*) it utilizes to formulate products with. Some of the more important targeted plant functions and soil cycles that we have been able to identify and affect are: *bio-fertility, bio-nutrition, hydration capacity, wilting point, hormone synthesis, total cellular integrity, soil porosity, air and water infiltration and soil BIOlogy*. "Ultimately", these plant processes and associations form the foundations for sustainable bio-nutrition and cellular integrity, both are vital and necessary prerequisite's for plant health and **SUCCESSFUL ORNAMENTAL TRANSPLANTATION!**

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Composted Poultry Litter:..... 43.692%
Total Nitrogen (N):.....3.0%
0.40% Ammoniacal Nitrogen
0.03% Nitrate Nitrogen
0.50% Water-Soluble Nitrogen
2.07% Water-Insoluble Nitrogen*
Available Phosphate (P₂O₅):4.0%
Soluble Potash (K₂O):.....3.0%
Calcium (C):3.0%

Derived from Aerobically Composted Poultry Litter, Feather Meal, Seaweed Extract, Sulfate of Potash, Bone Char, Fish Emulsion

* Slow Release Nitrogen from Poultry Manure

BIOLOGICAL SOIL & ROOT INOCULANTS:

• 27 Targeted Beneficial Microorganisms
• 20 Endo-EctoMycorrhizal Fungi (0.080%)
• EctoMycorrhiza (11 Species)
• EndoMycorrhiza (9 Species)

NON-PLANT FOOD INGREDIENT(S):

Fulvic Acid (Humate).....3.0%
Humic-Compost Substance.....26.25%
18 L-Amino Acids.....2.75%

BIOstimulant: Ascophyllum nodosum Seaweed.....2%
BIOCarbon: Engineered from BioCHAR.....15%
AXIS®: Fine Calcined Diatomaceous Earth.....7%

Derived from Ascophyllum nodosum, Humic Substance, Protein Hydrolysate, BioChar Carbon

BioPlex ULTIMATE ORNAMENTAL Installation G is carefully engineered to deliver high quality **complex nutrient substrates, calcined diatomaceous earth, carbon, micronutrients, microorganisms, mycorrhizal fungi, L-amino acids, organic matter and fulvic acid** directly to topsoil, plant roots and rhizosphere. Plant roots make the primary connection with the soil where fine root hairs intersect with earth's minerals. Although they are functionally independent organisms, the root system and shoot structures live together symbiotically - intrinsically dependent on one another. **This is the point of intersection where select, product ingredient groups integrate with plant parts and initiate desirable plant responses necessary for sustainable bio-fertility and cellular integrity.** As long as the soil biology stays charged with organic matter and/or plant metabolites, the bio-fertility cycle can be effectively sustained indefinitely.

PACKAGE SIZE:

40 lb Box

BioPlex... 5-in-1 Complete Planting Granules



Contains **BioPlex** Endo-EctoMycorrhiza SOIL & ROOT INOCULANTS
Fortified with 10% Polymer GEL Crystals, Seaweed and Soil Conditioners



5 Critical Ingredients = UNLIMITED Transplant Benefits!

Ingredient #1: BioPlex Transplant Concentrate & Plant Enhancer stimulates numerous primary plant, root and soil responses necessary for successful transplantation.

Ingredient #2: BioPlex (All Purpose) Granular Endo-EctoMycorrhizal Soil & Root Inoculants ensures long-term stress resistance, moisture management and drought tolerance. Permanent plant enhancements include increased fibrous root mass and drought tolerance, which allow for more efficient moisture and nutrient assimilation.

Ingredient #3: BioPlex Advanced Polymer GEL Crystals ensures additional hydration capacity is available to the root system for approximately 3-5 years or more. It helps reduce watering frequency requirements while reducing the possible precursors for plant mortality frequently associated with root damage resulting from excess water.

Ingredient #4: BioPlex Natural Organic 2-3-2 Fertilizer provides the low-salt, low-chloride, highly digestible nutrients necessary for elevated health and vigor and speedier plant establishment.

Ingredient #5: BioPlex Porous Volcanic Rock Crystals improves soil porosity ensuring greater air and water infiltration. It helps create a drier, more aerobic root zone profile that is structurally less prone to host serious root pathogens that precede plant decline and mortality.

PACKAGE SIZE:

- 4 lb Pouch, 6 x 4 lb Pouches/Case
- 7 lb Jug, 4 x 7 lb Jugs/Case
- 40 lb (2 x 20 lb) Bags/Box

Product Description:

BioPlex 5-in-1 Complete™ Planting Granules is one composite product, formulated to affect five strategic, agronomic plant responses. It delivers one predictable result: SUCCESSFUL TRANSPLANT OUTCOMES with significantly decreased incidence of symptomatic plant decline or mortality!

Simplicity doesn't always require settling for less. Simplify your transplanting protocols while improving transplant results and profits with **BioPlex 5-in-1 Complete Planting Granules**. Everything a plant requires to successfully transplant is formulated within one easy application! This proven 5-way product combination gives professionals a comprehensive, cost-effective one-step plant installation protocol that fulfills COMPLETE agronomic plant establishment requirements. You get ALL this for about \$1.50 to \$2.25 product cost PER EACH 1" CALIPER TRUNK DIAMETER!

**Speed Plant Establishment
Decrease Plant Mortality
GEL Increases Soil Hydration Capacity**

Formulation and Active Ingredient Profile

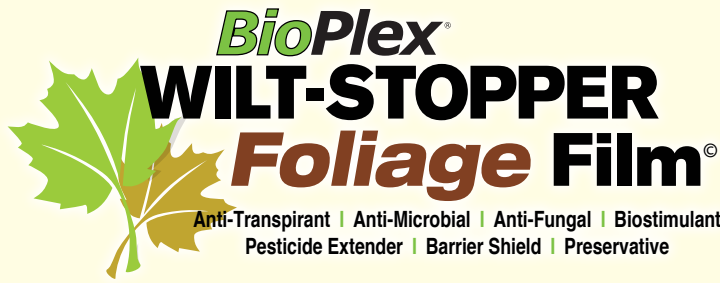
GUARANTEED ANALYSIS: 2-3-2

Total Nitrogen (N)2%	Available Phosphate (P₂O₅).....3%
0.27% Water-Soluble Organic Nitrogen	Soluble Potash (K₂O)2%
1.73% Ammoniacal Nitrogen	

Derived from composted poultry litter

NON-PLANT FOOD INGREDIENTS:

- | | |
|---|--|
| <ul style="list-style-type: none"> • 5% EctoMycorrhizal Fungi: Pisolithus tinctorius (1,000,000 spores per lb) Rhizopogon villosulus(500,000 spores per lb) Rhizopogon luteolus (500,000 spores per lb) Rhizopogon amylopogon (500,000 spores per lb) Rhizopogon fulvigleba (500,000 spores per lb) • 8% Bio-Plex Transplant Concentrate • 10% Water Holding Polymer Gel • 20% Volcanic Rock Dust Crystals | <ul style="list-style-type: none"> • 5% EndoMycorrhiza Fungi: (VAM - All @ 100 propagules per lb) Glomus mosseae Glomus intraradices Glomus clarum Glomus monosporus Glomus deserticola Glomus brasilianum Gigaspora margarita |
|---|--|



Anti-Transpirant | Anti-Microbial | Anti-Fungal | Biostimulant
Pesticide Extender | Barrier Shield | Preservative

“I had an opportunity to experience the effects of BioPlex Transplant Concentrate in the summer. An associate and I used this product on White Pine with 8” candles. We dug 3-4 trailer loads that sat out for 3-4 days. The trees never wilted. We were quite impressed with this.” - **Trees Unlimited**

Excellent to PREVENT or MANAGE Plant Stress Symptoms
BONUS Anti-Microbial, Anti-Fungal and Biostimulant for Turf & Ornamentals



Benefits:

- Reduces Vapor Loss During Plant Stress
- EPA Exempt FIFRA, 40 CFR 180.1072 Poly-D-glucosamine (chitosan)
- Non-Phytotoxic, Environmentally Safe
- Anti-Fungal, Anti-Bacterial used in Turf Maintenance
- Excellent Hydration Tool for Successful Summer-Dig
- Creates a Shield or Barrier to Reduce Disease in Plants
- Enhances Plant Survival in Environmental Extremes of Heat and Cold
- Effective in All Growing Media and All Growth Stages
- Improves Flower and Fruit Production

Product Description:

BioPlex WILT-STOPPER Foliage Film® is formulated from chitosan and is a natural plant elicitor because the exoskeletons of all insects are made of the same thing (chitin). When chitosan comes in contact with the plants vegetation, it “signals” the plants into thinking they are being infested and the plant’s natural immune response is stimulated and set in motion in order to survive. For many types of plants, this stimulating or eliciting of your plant’s immune response can increase the concentration and production of sap, resin, essential oils, fruit, and even the plant’s overall size. Its’ physical film forming anti-desiccant shield properties when solubilized in water, increases your plant’s hydration capacity by a physical barrier covering the ‘stomata’ found within the plant vegetative surfaces. It can even help in the recovery of stress-shocked transplanted ornamentals and food crops. In solution, chitosan can be applied as a soil amendment, foliar anti-desiccant spray, foliar film protection barrier, hydroponic amendment, or pesticide sticker extender. Chitosan not only provides an antimicrobial film that curtails mold and fungal growth, it causes a reaction that also improves the immune system sensitivity of plants to many common pathogens. The similarity of chitosan to natural plant sugars encourages a natural bioactive effect that takes place on the molecular level. When applied in soil or any growing media, it has been shown that chitosan is able to stimulate beneficial microorganisms while inhibiting pathogens [5]. When applied as a foliar spray, plant involuntary transpiration is reduced by stomata closure while also providing a vector barrier against mold, bacteria, and viruses. In growing trials, it has been shown that “spraying tomato plants with chitosan increased all vegetative growth parameters expressed in plant height, number of branches, and number of leaves per plant.” [6]

BioPlex WILT-STOPPER Foliage Film is a natural biomolecule which improves plant health, reduces need for synthetic pesticides and reduces transpiration (increases cellular hydration capacity) without reducing plant function or physical appearance.

PACKAGE SIZE:
2 Gallons, 2 x 2 Gallons/Case
64 fl oz Bottle, 6 x 64 fl oz Bottles/Case

[5] Barka, E. Ait, et al. “Chitosan improves development, and protects *Vitis vinifera* L. against *Botrytis cinerea*.” *Plant Cell Reports* 22.8 (2004): 608-614.[6] E.M. El-Tantawy, et al. “Behavior of Tomato Plants as Affected by Spraying with Chitosan and Aminofort as Natural Stimulator Substances under Application of Soil Organic Amendments.” *SciAlert*

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:
SOIL AMENDING INGREDIENT(S)

Chitosan (Anti-Transpirant)	3.0%
Total Other Inert Ingredients (Emulsifiers).....	97.0%



BioPlex Carries the BEST Tree Guying Kits & Supplies



This Tree Guying System has quickly become one of the most respected and admired systems in the tree staking market today. This easy to install system offers a superior replacement for lodge poles, wire and wood stakes, T-Posts, and wire & garden hose. It installs faster and is a fraction of the cost of other guy-line based systems.

The fastest, most cost effective, professional tree guying system to date... Period!

- Nearly 3x faster to install than lodge poles
- Requires no special tools
- Tension buckles eliminates the need for turnbuckles
- System comes ready to install
- Blends into the landscape
- Proven system preferred by Landscape Contractors

Tree-Tie Webbing

(800 lb Test)

Our durable UV-coated tree-tie webbing is the choice of landscapers. It is available in 150' and 300' spools and has approximately 900# break strength. The olive drab color to blend into the landscape. We can provide it to you at a price that leaves the competition scratching their heads. Tree tie webbing is 3/4" wide polypropylene (like nylon) approximately 900# break strength. Will not rot. Olive drab color.

BioPlex professional grade tree tie webbing has unlimited uses such as:

- Use with Lodge Poles
- Use with T-Posts
- Creating Your Own Staking System
- Truck Tie Downs

BioPlex professional grade Tree-tie Webbing Available by the Single Spool or Case:

- 300' spools – 8 spools per case.
- 500' spools – 5 spools per case.

Tree Guying Kits

PACKAGE SIZE: Kit, 25/cs



ALUMINUM ANCHOR



NYLON ANCHOR



Installation Tool
DRIVE ROD
(Pounder sleeve for guying kits)



Installation Tool
DRIVE ROD
(for guying kits)

PACKAGE SIZE: Each



BioPlex Palm Braces

(5'x1", 1000lb + Cam Loc Tensioner per Kit)

Are you properly protecting your Palm investment? There's a new innovative industry standard for securing braces to a tree or palm's collar. Introducing the new industry standard for securing battens to the palm collar (or other tree) and is the professional alternative to traditional metal banding methods. Five improvements in one easy-to-use design is why this was the first palm bracing system to be awarded a U.S. patent.

Clean-Cutting and wrapping burlap is a thing of the past. Palm bracing has burlap pre-mounted on each wood block. No excess material means no excess moisture around the bark of the tree; greatly reducing the risk of fungus, disease, trunk discoloring and ant nests.

Safe-No metal bands to girdle the tree and deform trunk shape.

Versatile-Palm bracing straps are mounted through a wood channel so that the wood blocks won't slip — potentially a risk with metal banding.

Strong-The green tree webbing has a approximately 900# tensile rating and the non-rusting locking tension buckles are rated at 1200# break strength.

Complete-Palm bracing wood battens have a special notch that easily accepts your 2x4's as they lock the ground supports in place. No more wasting your time beveling wood. Just snap them in place, nail, and go!

BioPlex
TREERING™ 
 Portable • Slow Drip • Watering Device



Portable, Slow-Drip Water Release Technology
 Makes EVERY Drop Count + DEEP Root & Soil Soaking

**Compact...Nest
 for Easy Storage
 & Transportation**

Tree Ring & Tree Ring Jr.

Primary Use: Get thorough water infiltration to the roots, with no runoff, when you use our **Tree Rings**.

- More **targeted and effective** than sprinkler systems
- More **water-efficient** than rain or irrigation
- **Reduces** watering **frequency**
- Facilitates 90% **moisture absorption**
- 100% deep **soil infiltration**

	Tree Ring	Tree Ring Jr.	Water-It-Well
Capacity	25 Gallons	10 Gallons	18 Gallons 1 Bag 2 Bags
Drip Time	3-5 Hours	2-4 Hours	5-9 Hours
Tree Diameter	1"-9"	1"-4"	1"-4" 5"-9"
Height	10"	8"	30"
Life Expectancy	10 Years	10 Years	5 Years
Construction	HDPE	HDPE	Vinyl Plastic
UV Resistant	Yes	Yes	Yes
Weight	7 lb.	4 lb.	2 lb.
Package Size	Each, Dozen, Pallet	Each, Dozen, Pallet	Each, 30/cs

Tree Rings are Exclusively Manufactured, Sold and Distributed by BioPlex Organics. Sold by the EACH, DOZEN AND PALLET.

**Designed with BioPlex NEW, Clog Resistant
 "Micro-Weep" Soaking Technology**

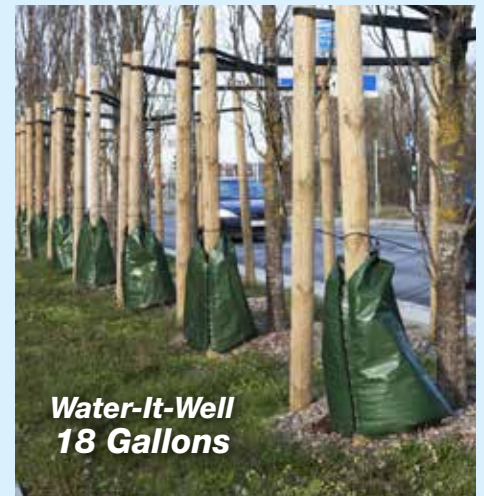
BioPlex
WATER-IT-WELL 
 Slow-Drip, Deep Root Soaking Tree Bags

If you plant shade trees, you need a Water-It-Well Slow Release Watering Bag! Golf courses, parks, cities, nurseries, landscapers, DOT's, resorts and homeowners all love its simple, affordable patented tree watering technology. Makes anyone a watering professional. Perfect for newly planted or established trees up to 8" in caliper, with branches beginning at least 25 inches from the ground or higher. Save time, water, effort and trees!

SPECS:

Single bag fits minimum 1 inch to maximum 4 inch caliper tree with branches at least 25" from the ground or higher. Use a Double Bag setup (2 single bags zipped together back-to-back) to water 4 inch to 8 inch caliper trees. Made with green reinforced polyethylene seams, black webb straps and nylon zippers. Uses NEW, clog resistant, "Micro-Weep" soil soaking technology. Bag is empty in approximately 4 to 8 hours. UV stabilized to withstand exposure to sunlight. Fill opening fits up to 3" diameter hose.

MEASUREMENTS: Full – 30" tall x 18" wide (at base)



**Water-It-Well
 18 Gallons**

Portable, Slow-Drip Watering Bag for Trees

- Water Once Every 4-7 days
- Easy & Quick to Install - 5 minutes
- Zip 2 Together for Large Trees
- Slow-Drip for Deep Water Infiltration
- Use on Top of B&B Root Balls
- 1 Bag Fits 1"-4" Caliper Trunk Diameter
- 2 Bag Set-up Fits 5"-9" Caliper Trunk Diameter
- Drip Time 5-9 Hours (18 Gallons)

BioPlex[®] 12-8-8 BIO-MYCORRHIZAL[™] Fertilizer Tablets



Harness the Energy to Outgrow POOR Soil & Site Limitations
 A Complete Nutrient Complex to Inoculate and Feed Both the Plant & Soil

Benefits:

- Super Eco-Friendly
- Contains Beneficial Mycorrhiza
- Contains Beneficial Soil Microbes
- Speeds Plant Establishment
- Agronomically Balanced

The #1 Choice of Landscapers, Architects, Arborists, Nursery Professionals and Serious Gardener Enthusiasts.

Product Description:

BioPlex 12-8-8 BIO-Mycorrhizal[™] Fertilizer Tablets offer an advanced biological approach to the successful transplanting and general maintenance of nearly all types of trees, shrubs, ornamentals and flowers. Mycorrhizal fungi combined with beneficial ingredients like seaweed extract and humic acid will encourage strong, healthy root growth resulting in the rapid establishment of a plant.

BioPlex 12-8-8 BIO-Mycorrhizal Fertilizer Tablets contain both Endo and Ecto Mycorrhiza making them an effective choice for almost all plant types and species. In addition to the biological components are an array of readily available plant nutrients that will give any plant that extra measure of plant support needed to achieve robust growth. **BioPlex 12-8-8 BIO-Mycorrhizal Fertilizer Tablets** are the smart, natural choice for overcoming the numerous agronomic challenges plants are required to outgrow to ensure complete transplant success.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:		SECONDARY PLANT FOOD INGREDIENT(S):	
Total Nitrogen (N)	12.0%	Free Sulfur (S)	4.90%
2.38% Water-Soluble Nitrogen		Total Iron (Fe)	3.80%
5.68% Water-Insoluble Nitrogen		1.36% Water Soluble Iron	
1.65% Ammoniacal Nitrogen		Total Manganese (Mn)	2.75%
1.54% Methylene Urea Nitrogen		1.17% Water Soluble Manganese	
0.75% Urea Nitrogen		Total Magnesium (Mg)	1.12%
Available Phosphoric Acid (P₂O₅)	8.0%	<small>Secondary plant food derived from Elemental Sulfur, Iron Sulfate, Ferrous Sulfate, Manganese Sulfate, Magnesium Sulfate</small>	
Soluble Potash (K₂O)	8.0%	NON PLANT FOOD INGREDIENT(S):	
<small>Derived from Composted Poultry Litter, Fish Hydrolysate, Ammonium Sulfate, MAP, Potassium Sulfate, Sulfate of Potash</small>		Asphyllum nodosum Seaweed	8.0%
		(Norwegian Cold Processed Source)	
		Leonardite Humic Acid	6.0%
		Endo-EctoMycorrhiza	14.0%
		(Contains 12 Different Species)	

**Feeds the...
 Plant - Soil - Roots - Biology**

PACKAGE SIZE:
 80 - 15 gram Tablets/Pouch, 6 Pouches/Case
 750 - 15 gram Tablets/Box

BioPlex
ULTIMATE
PLANT HEALTH
 4-3-4 plus **BIO-MAXX**



Tablets

Plant Based BIO-FERTILIZER - Feeds Both Plant & Soil
 Contains 24 Diverse Soil & Root Inoculants – Humic Acid – Dextrose – Micros



Product Description:

BioPlex ULTIMATE PLANT HEALTH™ 4-3-4 plus BIO-MAXX planting tablets are an all natural and probiotic bio-based fertilizer planting tablet. Well adapted for a wide range of ornamental landscape installations, maintenance and nursery-grower container applications. It is available in popular 5 and 15 gram sizes. The 5 gram tablets are ideal for smaller bedding plant outplantings and small container production. The 15 gram tablets are excellent for larger outplanted container or smaller trunk caliper B&B plants. You will find them well suited for use in annual and perennial flowers, ground covers, ornamental grass plants, flowering trees and shrubs, fruit trees, hanging baskets, bedding plants, tropical plants and palms.

BioPlex ULTIMATE PLANT HEALTH 4-3-4 plus BIO-MAXX planting tablets are agronomically and biologically complete. They deliver a slow, non-burning nutrient release that aids fibrous root development to speed plant establishment at the time of installation. By supplying an added measure of plant support (e.g., speedier plant establishment, reduced transplant shock) via the combination of diverse populations of biocultures, this product increases availability, transport and uptake of existing soil nutrients. With the addition of beneficial soil bacteria and endo and ectomycorrhizal fungi, these planting tablets help enhance the density, diversity and relative competitive activity of the biological culture population within the soil and root rhizosphere. By improving the building blocks and health of the soil structure, while simultaneously ensuring the optimal health and vigor of the plant, it's easy to understand why **BioPlex ULTIMATE PLANT HEALTH 4-3-4 plus BIO-MAXX** is the #1 choice of landscape architects and contractors, discerning gardeners, arborists, and nursery professionals seeking an eco-friendly, safe and effective bio-fertilizer alternative.

PACKAGE SIZE:
 2,250 (5g) Tablets/Box • 750 (15g) Tablets/Box

Benefits:

- All Natural BioBlend
- Contains Endo-EctoMycorrhizae
- 4-6 Months Slow Release
- Excellent for 4-Season Fertilization Contains: NUTRIENTS for the Plant-FOOD, INOCULANTS and HABITAT for the Soil, Microbes & Rhizosphere
- Feeds the Soil Up to 3 Years

“All Natural” Bio-Based Fertilizer Planting Tablet!

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:		(BIO-MAXX) NON PLANT FOOD INGREDIENT(S):	
Total Nitrogen (N)4.0%	1.5% Water-Soluble Nitrogen 2.5% Water-Insoluble Nitrogen	Humic Acid3.0%	Dextrose5.0%
Available Phosphate (P₂O₅)3.0%		• EndoMycorrhizal Fungi	
Soluble Potash (K₂O)4.0%		<i>Each, 0.075 propagules/gram</i>	
Calcium (Ca)1.5%		Glomus intraradices, Glomus mossae, Glomus aggregatum, Glomus etunicatum, Glomus deserticola	
Sulfur (S)2.0%		• EctoMycorrhizal Fungi	
Magnesium (Mg)0.5%		<i>Pisolithus tinctorius, 125 spores/gram</i>	
Iron (Fe)0.3%		<i>Each, 62 Spores/gram</i>	
Manganese (Mn) 0.05%		Rhizopogon villosulus Rhizopogon luteolus, Rhizopogon amylopogon Rhizopogon fulvigleba, Rhizobial Microorganisms	
Zinc (Zn) 0.005%		<i>Each, 375,000 CFU/gram</i>	
		Bacillus amyloliquefaciens Bacillus subtilis, Bacillus licheniformis, Bacillus megaterium Bacillus pumilus, Bacillus pasteurii, Bacillus coagulans	
		<i>Each, 500,000 CFU/gram</i>	
		Paenibacillus polymyxa, Paenibacillus durum	
		<i>Each, 375,000 CFU/gram</i>	
		Trichoderma reesei, Streptomyces lydicus, Streptomyces griseus	

Derived from: Feather Meal, Meat & Bone Meal, Potassium Sulfate, Calcium Carbonate, Iron Sulfate, Magnesium Sulfate, Manganese Sulfate, Zinc Sulfate



SAFE & EFFECTIVE 2-Year, Slow-Release Transplant Nutrition
Delivers 8 Essential Nutrients to Ensure OPTIMAL PLANT HEALTH



Benefits:

- Increase Plant Health
- Speed Plant Establishment
- Super Slow-Release
- Feeds up to 2 Years

Product Description:

BioPlex 20-10-5 Root MAXX™ Planting Tablets are the reliable choice for providing consistent, long-lasting fertility to newly planted trees, shrubs, ornamentals and flowers. For most types of plants, **BioPlex 20-10-5 Root MAXX Planting Tablets** will provide adequate amounts of essential nitrogen for up to 2 years. The key to the nutrients longevity ultimately lies in its composition and form. The unique nitrogen source within the tablets exists in a form that undergoes a preferred natural conversion by specialized soil bacteria resulting in its “slow release” and overall extended availability. In turn, the increased biological activity creates a healthier, more viable rooting zone resulting in a healthier more robust, natural and visually appealing plant growth. **BioPlex 20-10-5 Root MAXX Planting Tablets** come complete with 8 essential plant nutrients in proper ratios and remain a safe, proven and reliable choice for all new plantings.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	20.0%
7.0% Water-Soluble Nitrogen	
13.0% Water-Insoluble Nitrogen	
Available Phosphoric Acid (P₂O₅)	10.0%
Soluble Potash (K₂O)	5.0%
Combined Sulfur (S)	2.0%
Iron (Fe)	2.5%
Manganese (Mn)	2.0%
Magnesium (Mg)	2.25%
Zinc (Zn)	0.18%

Derived from Urea-formaldehyde, Ammoniated Phosphates, Potassium Sulphate, Iron Sulfate, Manganese Sulfate, Magnesium Sulfate, Zinc Sulfate

The Ultimate Plant Health & Root Stimulating Planting Tablet!

PACKAGE SIZE:

- 65 - 21 gram Tablets/Pouch, 6 Pouches/Case
- 500 - 21 gram Tablets/Box
- 1,000 - 10 gram Tablets/Box

BioPlex Water-Soluble
ENDO-ECTO
MYCORRHIZAL
 Soil & Root Inoculants™

“We were recently consulted regarding some Oak street trees that were showing signs of decline. I applied two applications of your Transplant Concentrate along with your Water Soluble Mycorrhizal Soil & Root Inoculant. The following spring the results were striking. Quicker leaf out, with larger and darker leaves than the untreated trees.” - **Davis Landscape & Arborist**

Contains 33 BioPlex Proprietary BIO-Mycorrhizal SOIL & ROOT INOCULANTS Fortified with 20 Beneficial Microbes, Humic Acid and Vitamin B1



Benefits:

- Stress Reduction & Drought Tolerance
- More Aggressive Rooting & Rapid Establishment
- Superior Plant Hydration & Caliper Development
- Healthier, Hardier Plants with Maximum PSP (Plant Survival Potential)
- Superior Bareroot Transplant Survival, which Starts Before the Plants are Placed Into the Soil
- A One-Step Dip Works Great with All Your Liners, Transplants, Plugs & Container Outplantings

Product Description:

As we develop natural, holistic, eco-sensitive approaches to managing man-made planting environments, we must consider the inseparable relationships between beneficial soil organisms located within the rhizosphere. Mycorrhizal fungi are one of the more important groups of soil organisms and play a critical role in optimizing plant health and vigor. When these soil and root relationships are altered by such occurrences as high phosphate fertilization or a cultivated, amended planting site, these relationships are degraded and require periodic augmentation to maintain these important natural, beneficial relationships.

BioPlex Water Soluble Endo-EctoMycorrhizal Soil & Root Inoculants™ is a micronized powder inoculum consisting of a proprietary blend of spores, including 13 Endo-EctoMycorrhizal fungi species. To increase biodiversity and deliver additional soil benefits, a total of 20 additional beneficial biological cultures are included to optimize plant, root, and soil health.

The ultra-micronized powder comes in a small particle size less than 300 microns (#50 screen). Incredibly, about 90% of the world’s known plant species form symbiotic unions with beneficial EndoMycorrhizal and EctoMycorrhizal fungi. This is very effective for numerous turf and ornamental applications.

PACKAGE SIZE:
 1 lb Bag, 5 x 1 lb Bags/Case

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)1.0% **Available Phosphate (P₂O₅)0.5%**
 0.6% Water-Soluble Organic Nitrogen **Soluble Potash (K₂O)7.0%**
 0.4% Water-Insoluble Organic Nitrogen *Derived From: Kelp (F1722)*

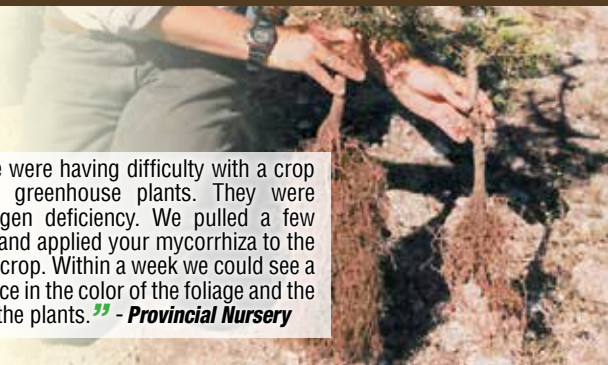
CONTAINS NON-PLANT FOOD SOIL AMENDING INGREDIENT(S):

Total Active Ingredient(s) 43%

<p>(13 prop/g. each) Glomus intraradices Glomus mosseae Glomus aggregatum Glomus etunicatum</p> <p>(2.5 prop/g. each) Glomus deserticola Glomus monosporum Glomus clarum Paraglomus brasilianum Gigaspora margarita</p> <p>(208,750 prop/g. each) Rhizopogon villosullus Rhizopogon luteolus Rhizopogon amylopogon Rhizopogon fulvigleba</p>	<p>(820,000 CFU/g. each) Bacillus licheniformis Bacillus azotoformans Bacillus megaterium Bacillus coagulans Bacillus pumilus Bacillus thuringiensis Paenibacillus polymyxa Paenibacillus durum Azotobacter chroococcum Pseudomonas aureofaciens Pseudomonas fluorescens Saccharomyces cerevisiae</p> <p>Inert Ingredient(s) 57% 31% *Natural Fertilizer *(inert as soil amending ingredient) 16% Clay (carrier) 10% Other Inert</p>	<p>Pisolithus tinctorius (1,250,000 prop/g) Suillus granulatus (260,000 prop/g) Laccaria bicolor (83,500 prop/g) Laccaria laccata (83,500 prop/g) Scleroderma cepa (417,500 prop/g) Scleroderma citrinum (417,500 prop/g) Trichoderma koningii (198,000 CFU/g) Trichoderma harzianum (132,000 CFU/g)</p> <p>33% Humic Acids <i>derived from leonardite</i> 3% Vitamin B1 <i>(thiamine mononitrate)</i></p>
--	--	--

BioPlex
Multi Purpose Granular
ENDO-ECTO
MYCORRHIZAL™
SOIL & ROOT INOCULUM

“Last spring we were having difficulty with a crop of containerized greenhouse plants. They were showing a nitrogen deficiency. We pulled a few trays to the side and applied your mycorrhiza to the remainder of the crop. Within a week we could see a dramatic difference in the color of the foliage and the overall health of the plants.” - **Provincial Nursery**



Contains 23 BioPlex Proprietary BIO-Mycorrhizal SOIL & ROOT INOCULANTS
Fortified with Compost, 11 Beneficial Microbes, Seaweed & Humic Acid



Benefits:

- Improves Water Uptake
- Improves Stress Tolerance
- Speeds Plant Establishment
- Increase Plant Health
- T/O Soil & Root Inoculants
- Cool and Warm Season Turf Grass, Seedbeds and Propagation Trays

Product Description:

Under natural conditions, plants live in close association with beneficial soil organisms (many called mycorrhizae fungi and others microbial or biological cultures). Several miles of mycorrhiza (root inoculant) in the form of mycelia filaments can be present in less than a thimbleful of soil around healthy, vigorously growing plants. Fungal-root relationships are mutually beneficial because the plant enjoys improved nutrient and water uptake, disease resistance, superior stress tolerance and enhanced growth characteristics. In return, the fungi receive food substrates from natural plant root metabolites to survive. While not so glamorous, this association between plants and mycorrhizal fungi is fundamental to successful plant establishment and long-term survival.

BioPlex (Multi Purpose) Granular Endo-EctoMycorrhizal™ Soil & Root Inoculum contains 12 carefully selected species of beneficial Endo-EctoMycorrhizae fungi plus 11 different bacterial species. In total, 23 diverse species. The entire biology group will prove effective in the colonization of most plant roots and soils. Mycorrhizae mycelia filaments (which form a root-like system) increase the adsorbing capacity of roots 10 to 10,000 times. Nearly all commercially produced plants have the potential to form mycorrhizal unions and require this symbiotic association for maximum growth and performance in all out planted environments.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)2.0%	Available Phosphate (P₂O₅) ... 1.25%
1.15% Water-Insoluble Nitrogen	Soluble Potash (K₂O)..... 1.0%
0.45% Ammoniacal Nitrogen	<i>Primary and secondary nutrients derived from composted Poultry Litter - 38%</i>
0.40% Water-Soluble Nitrogen	

MYCORRHIZAL & BIOLOGICAL NON-PLANT FOOD INGREDIENT(S):

- (1) EctoMycorrhiza Spores per pound minimum:**
 Pisolithus tinctoris (5,000,000) Rhizopogon amylopogon (2,000,000)
 Rhizopogon villosulus (500,000) Rhizopogon fulvigleba (2,000,000)
 Rhizopogon luteolus (2,000,000)
- (2) EndoMycorrhiza (VAM - All @ 5,000 Spores per pound minimum):**
 Glomus mosseae Glomus deserticola
 Glomus intratradices Glomus brasilianum
 Glomus clarum Glomus margarita
 Glomus monosporus
- (3) Mycorrhizal Feeder Bio-Substrate: 20%**
 Naturally occurring paramagnetic & diamagnetic ground rock mineral powders, high nutrient content of protein, carbohydrates derived from plants and herbs plus geologically concentrated humus humates.
- (4) 17% Humic Acid, 3% Biologicals: 20%**
 To include: Acinetobacter, Aspergillus, Bacillus Subtilis, Bacillus Thuringiensis, Bacillus Cereus, Bacillus Megaterium, Lactobacillus, Azobacter, Pseudomonas, Rhizobium Melliloti, Rhizobium Phaseoli.
- (5) Kelp Extract: 5%**
 Soluble Ascophyllum nodosum Seaweed.

Great Tool to Improve Soils and Increase DROUGHT TOLERANCE!

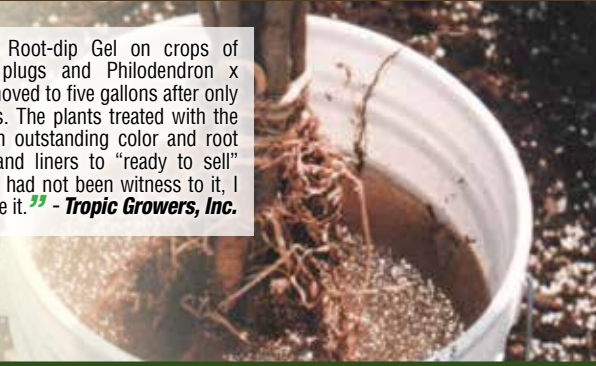
PACKAGE SIZE:

25 lb Box

BioPlex... 1-2-3 Bareroot Gel plus Soil & Root Inoculants



“We used your 1-2-3 Root-dip Gel on crops of Philodendron sellkoui plugs and Philodendron x evansii. The plugs were moved to five gallons after only four and one-half months. The plants treated with the Gel-Dip grew rapidly with outstanding color and root structures. From plugs and liners to “ready to sell” plants in five months, if I had not been witness to it, I probably would not believe it.” - *Tropic Growers, Inc.*



Contains **BioPlex** Endo-EctoMycorrhiza SOIL & ROOT INOCULANTS

Fortified with 10% Seaweed Extract, Humic Acid, L-Amino Acid and Complex Sugars



Benefits:

- Hydrates Fibrous Root Mass
- Lasts 3-5 Years in Soil
- Increases Bareroot Survival 300-500%
- Improves Drought Tolerance
- Reduces Transplant Mortality
- Speeds Plant Establishment
- Greater First Year Growth

Product Description:

BioPlex 1-2-3 Bareroot GEL's™ powerful “1-2-3” strategic ingredient combination gives you extraordinarily successful bareroot planting outcomes. Three key ingredients deliver more than nine critical successful transplant results.

1 Product with 3 Ingredients = 9 Beneficial Agronomic Transplant Benefits!

Ingredient #1: BioPlex Transplant Concentrate & Plant Enhancer stimulates two primary plant responses that are critical to successful transplants. It promotes superior moisture retention in plant tissues. It also facilitates a more fibrous root system and greater caliper development in the first year.

Ingredient #2: BioPlex (All Purpose) Granular Endo-Ecto Mycorrhizal Soil & Root Inoculants ensures long-term stress and moisture management, bringing many life-long plant enhancements. It results in more fibrous root hydration. It also increases moisture and nutrient translocation and reduces stress symptoms.

Ingredient #3: BioPlex Advanced Polymer GEL Crystals ensures additional hydration capacity is available to the root system for approximately 3-5 years. Its primary benefits include:

- Reduced plant decline and dehydration symptoms.
- Decreased watering frequency.
- Reduced hydration-dehydration stress cycles.
- Speedier plant establishment and more first year growth.

Formulation and Active Ingredient Profile

CONTAINS NON PLANT FOOD INGREDIENT(S):

Active Ingredients:

Advanced Polymer GEL Crystal.....	60%
Soluble Endo-EctoMycorrhizal Fungi	10%
Soluble Humic Acid	4%
Soluble Cold Processed Norwegian Seaweed.....	6%
L-Amino Acids	10%
Complex Sugars	10%

PACKAGE SIZE:

7 lb Jug, 4 x 7 lb Jugs/Case



**Absorbs & Desorbs More than 500 TIMES its WEIGHT in WATER
MAXIMIZES Hydration Capacity - DECREASES Plant Mortality**



Benefits:

- Increases the water-holding capacity in natural or synthetic soil media
- Increases bareroot plant survival by 300-500%
- Increases plant survival by stabilizing plant hydration
- Improves rate and speed of seed germination
- Aids in the absorption of excess moisture, which helps maintain good drainage, sustains adequate soil oxygen levels, and prevents anaerobic (root-rot) planting conditions
- Has a patented hydrophobic coating that prevents lumping and makes its application and storage possible even under moist, humid conditions
- Is dry and free flowing and compatible with granular fertilizers, grass seed, and other granular products
- Is easy to use in tank mixes, injection units, hydroseeding sprayers, and polymer planters
- Is non-corrosive and friendly to plants, soils, and our environment
- Reduces water requirements and frequency for new plant installations, seeding, sod and hanging baskets

Product Description:

BioPlex Advanced Polymer GEL™ Crystals is an easy to use dry, unhydrated, stable, granular gel polymer used for managing and conserving moisture in turf, landscape, nursery, and horticulture applications.

Through technically advanced chemistry, its hydration properties perform reliably three to five years in soils. **BioPlex Advanced Polymer GEL** maintains the unique ability to absorb and desorb more than 500 times its weight in water and more than 150 times its weight in a standard fertilizer solution. When utilized as a soil amendment, **BioPlex GEL** dramatically increases soils' water-holding capacity while it improves aeration and drainage in soils. When properly hydrated, **BioPlex GEL** protects turf, sod, trees, bareroot whips, and shrubs against water stress damage caused by under-watering, drought, or other harsh unpredictable and extreme environmental conditions.

***Fine Particle Size Increases Hydration Capacity.
Smaller Particle Size Attaches to Finer Root
Hairs and Remains Functional in the
Soil (Adsorbing and Desorbing Water)
for Up to 3-5 Years!***

Formulation and Active Ingredient Profile

MAIN PHYSICAL CHARACTERISTICS:

Non-toxic (FHSA Std); 7 - 7.5 pH.; non-phytotoxic.
Small Coated crystals; free flowing.
Dustless; disperses evenly in liquids; no lumping.
More than 95% of absorbed liquid is released to the soil or plants, as needed.

PACKAGE SIZE: 15 lb Box, 3 Boxes/Case



**A COMPLETE, NUTRIENT RICH, Natural Organic Fertilizer + BIO-Brew
Compost + Microbes + Mycorrhiza + Molasses**



Benefits:

- Contains 25 Microbials, 13 Endo-EctoMycorrhiza, Fully Digested Compost and Molasses
- Natural Organic, Sustainable Plant Nutrition + Soil and Root Inoculants
- Eco-Friendly, Plant, People & Pet SAFE!
- Safe for Flowers, Turf, Vegetables, Shrubs, Tropical & Indoor Plants

**Compost Tea + BIO-Brew...
Feeds the PLANT & SOIL!**

Product Description:

BioPlex developed **Compost Tea + BIO-Brew Bags** for use by all plant enthusiasts ranging from the hobby, weekend gardener to the master gardener. Simply put, compost tea is the byproduct of diluting compost with water, which results in a brown, tea-colored liquid. The thought of compost tea adding nutrients to the soil is nothing new, but increasing importance is being given to microorganism diversity that populate and thrive in the nutrient-rich liquid. Compost Tea Bags can be effectively used both to steep a fresh, nutrient-rich liquid bio-brew, or as dry packs placed into a transplanting hole or soils - or ultimately - both in combination.

Each **Compost Tea Bag** contains highly concentrated, safe, digestible plant nutrients derived from aerobically cured, pathogen free compost, Endo-Ecto Mycorrhiza plus 25 beneficial rhizobacteria to help improve plant health, soils, root zone and fibrous root mass. The value added benefits don't end there, with the addition of molasses, currently existing microbial colonies as well as new beneficial rhizobacteria and fungi inoculants will rapidly produce valuable plant health, soil and root benefits almost immediately.

A single application of the **Compost Tea & BIO-Brew** enriches the soil, feeds the roots, and promotes healthy and natural plant growth. It's safe to use across a variety of plant types: indoor house plants, flowers, vegetables, shrubs, cannabis and more exotic, tropical plants. It even helps promote healthy turf growth! If you're the type of gardener or grower seeking to introduce sustainable plant and soil nutrition and who worries about soil health along-side plant health, **BioPlex's Compost Tea Bags & BIO-Brew** is a product well worth purchasing.

Treat your plants to a batch of nutrient rich Compost Tea TODAY!

1 Pouch (12 bags) brews 15-30 gallons of Tea Brew

BioPlex *BIO-Brew Bag - Sold Separately

**Holds up to 22, 21g Tea Bags - Contains tea bag contents incase a tea bag breaks while in the brew process. The tea bag contents may clog or restrict spray-tip screen. Sold Each or in 5 packs.*

PACKAGE SIZE:

12 X 21 gram T-bags/Pouch, 20 Pouches/Case

Formulation and Active Ingredient Profile

4-4-4 GUARANTEED ANALYSIS:

Total Nitrogen (N) 4%	Soluble Potash (K₂O): 4%
0.1% Ammoniacal Nitrogen	Iron (Fe): 2%
0.2% Other Water-Soluble Nitrogen	Calcium (Ca): 3%
3.7% Water-Insoluble Nitrogen	
Available Phosphate (P₂O₅): .. 4%	<i>Derived from: Aerobically composted poultry litter.</i>

CONTAINS NON-PLANT FOOD INGREDIENT(S):

0.5% Live Beneficial Microbes 1x10 ³ CFU/gram	Micrococcus luteus
Arthrobacter globiformis	Phanerochaete chrysosporium
Azospirillum brasilense	Pseudomonas fluorescens
Azospirillum lipoferum	Pseudomonas putida
Azotobacter chroococcum	Rhodobacter sphaeroides
Azotobacter paspali	Rhodopseudomonas palustris
Azotobacter vinelandii	Rhodospirillum rubrum
Bacillus amyloliquefaciens	Streptomyces griseus
Bacillus atrophaeus	Trichoderma reesei
Bacillus licheniformis	
Bacillus megaterium	Mycorrhiza Fungi 0.5%
Bacillus pumilus	EctoMycorrhiza 4,600 CFU/gram
Bacillus subtilis	EndoMycorrhiza 1,100 CFU/gram
Bacillus thuringiensis	Molasses 5.0%
Brevibacillus brevis	Compost 86.95%
Cellulomonas fimi	Inert Ingredients 7.05%
Lysinibacillus sphaericus	



60 Unit, Chelated, Complete Nutrient & Micro Package
Unbelievable Buds – Blooms – Vegetation – Root Mass in ALL Growing Protocols



Benefits:

- Perfect for a Variety of Indoor and Outdoor Plant Feeding Applications
- Ideal for Containers, Window Boxes, Annuals, Perennials, Outdoor Beds and Gardens
- Starts to work instantly for quick and spectacular results
- Start feeding plants weekly and then every 7-10 days before and during bud set and bloom
- High phosphorus and potassium for abundant color and bloom yield
- Promotes more blooms for greater color

Product Description:

BioPlex ROOT to SHOOT Bud to Bloom is formulated for all water soluble fertilizer applications. Especially, those seeking significant elemental nutrient inputs that affect the optimal growth and development of critical plant functions and structures. These include flower, bud, stem, root and shoot formations. It is 100% water soluble and is excellent to use both as a surface soil drench or injected into a drip irrigation system. With the addition of critical EDTA chelated micro nutrients (B-Cu-Fe-Mn-Mo-Zn) ensure efficient nutrient mobility and translocation. Zinc plays a valuable role in Auxin synthesis and carbohydrate metabolism. Molybdenum aids cell wall structure and permeability. Manganese and magnesium aid in chlorophyll and protein synthesis. Iron aids in chlorophyll and cytoplasm synthesis. Boron and copper play a valuable role in nitrogen fixation and various metabolic functions. Bottom-line, **BioPlex ROOT to SHOOT Bud to Bloom** supplies the elemental essentials necessary for both optimal plant health and root growth.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	10.0%
2.0% Ammoniacal Nitrogen	
8.0% Nitrate Nitrogen	
Available Phosphate (P₂O₅)	20.0%
Soluble Potash (K₂O)	30.0%
Boron (B)	0.02%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

Derived From: Ammonium Phosphate, Potassium Phosphate, Potassium Nitrate, Sodium Borate, Copper EDTA, Iron EDTA, Manganese EDTA, Sodium Molybdate, Zinc EDTA

Flowers • Vegetables
Ornamentals • Cannabis • Hemp

PACKAGE SIZE:

25 lb Bag
 3 lb Pouch, 10 x 3 lb Pouches/Case



5-0-0 GROW BASE
3% Ca - 2% Mg



Formulated with **BioPlex** "BAST" Buffer & Stabilization Technology
 Balanced & Stabilized Nitrogen – Calcium – Magnesium

Benefits:

- Buffered Nutrient Stabilization Chemistry
- Low Salt
- Maximum Crop Yields

**Formulated with BAST
 Proprietary BUFFER and
 STABILIZATION Technology!**

Product Description:

BioPlex has formulated three state of the art **HydroMAXX** fertilizer formulas that can be effectively adapted to commercial Vertical Grow Systems (VGS) or used for specialty crop production, such as medical cannabis, when special, unique growth and harvest characteristics are necessary. All **BioPlex HydroMAXX™** Fertilizers are formulated with **BioPlex** proprietary BAST (Buffer And Stabilization Technology), which minimizes, often nearly eliminating, repetitive and time-consuming interim water pH & PPM variation adjustments.

BioPlex HydroMAXX 5-0-0 Grow Base, 3.5% Ca / 1% Mg is a liquid hydroponic Calcium (3.5% Ca) and Magnesium (1% Mg) supplement. When added to nutrient reservoirs along with **BioPlex HydroMAXX Veggie Harvest 2.5-4-36** it completes the **HydroMAXX** hydroponic plant nutrient program. **BioPlex HydroMAXX 5-0-0 Grow Base** is low in salt content and provides sufficient amounts of both Calcium and Magnesium to ensure exquisite hydroponic crop production and yields. **BioPlex HydroMAXX 5-0-0 Grow Base** should be added to the nutrient reservoir first and is completely compatible with **BioPlex HydroMAXX Veggie Harvest 2.5-4-36**.

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:

Total Nitrogen (N)	5.0%
5.0% Nitrate Nitrogen	
Calcium (Ca)	3.0%
3.0% Chelated Calcium (Ca)	
Magnesium (Mg)	2.0%
2.0% Water-Soluble Magnesium (Mg)	

Derived From: Calcium nitrate, Magnesium nitrate, Citric acid

*Not for use in organic crop and food production in California. This fertilizer is intended as a supplement to a regular fertilization program and may not by itself provide all the nutrients normally required by crops or other intended plants.

PACKAGE SIZE:

1 Gallon, 4 x 1 Gallon/Case



Veggie Harvest 2.5-4-36



Formulated with **BioPlex** "BAST" Buffer & Stabilization Technology
 Contains: NPK plus Micros - Humic Acid - Amino Acid - Yucca Extract

Benefits:

- Enhances Essential Oils in Cannabis, Hemp & Herbs
- Low Salt & Biostimulant Properties
- Uniform Nutrient Dispersal & Suspension

Formulated with BAST Proprietary BUFFER and STABILIZATION Technology!

Formulation and Active Ingredient Profile

GUARANTEED ANALYSIS:		NON PLANT FOOD INGREDIENT(S):	
Nitrogen (N)	2.5%	Humic Acid	1.5%
2.5% Nitrate Nitrogen		Natural Yucca Extract	3.5%
Available Phosphate (P₂O₅) ...	4.0%	Anionic Amino Acid Polymer Salt	9.0%
Soluble Potash (K₂O)	36.0%	<i>Derived from: Humic Substances, Yucca Schidigera</i>	
Sulfur (S)	8.5%		
8.5% Water-Soluble Sulfur (S)			
Boron (B)	0.09%		
0.09% Water-Soluble Boron (B)			
Copper (Cu)	0.02%		
0.02% Water-Soluble Copper (Cu)			
Iron (Fe)	0.4%		
0.4% Chelated Iron (Fe)			
Manganese (Mn)	0.2%		
0.2% Chelated Manganese (Mn)			
Molybdenum (Mo)	0.01%		
0.01% Water-Soluble Molybdenum (Mo)			
Zinc (Zn)	0.2%		
0.2% Chelated Zinc (Zn)			

Derived from: Monopotassium Phosphate, Potassium Nitrate, Potassium Sulfate, Sodium Borate, Copper EDTA, Iron DTPA, Manganese EDTA, Sodium Molybdate, Zinc EDTA

Product Description:

BioPlex has formulated three state of the art **HydroMAXX** fertilizer formulas that can be effectively adapted to commercial Vertical Grow Systems (VGS) or used for specialty crop production, such as medical cannabis, when special, unique growth and harvest characteristics are necessary. All **BioPlex HydroMAXX™** Fertilizers are formulated with **BioPlex** proprietary BAST (Buffer And Stabilization Technology), which minimizes, often nearly eliminating, repetitive and time-consuming interim water pH & PPM variation adjustments.

BioPlex HydroMAXX Veggie Harvest 2.5-4-36 (Dry Soluble) is a premium water-soluble hydroponic base nutrient package designed for increased nutrient stability and uptake by the plant roots. The use of this product will enhance the production of essential oils and fragrances as well as stimulating root, fruit, flower and bud formations. The size of buds, fruit and flowering will also be reflected in a boost in production and harvest. Rich in a diverse group of micronutrients should help ensure that your crop can reach its full genetic potential crop after crop.

The essential fertilizer elements are blended with key beneficial ingredients to ensure limited interaction between the nutrients, preventing their precipitation from nutrient reservoirs or tanks. The addition of a patented Anionic Amino Acid Polymer, along with Humic Acid, helps to complex the mineral nutrients so they remain in a form that is readily available to the plant. Natural Yucca Extract serves as a "wetting agent" to allow for more uniform nutrient dispersal when dissolved in water. **BioPlex HydroMAXX Veggie Harvest 2.5-4-36** is to be used in conjunction with **HydroMAXX 5-0-0 Grow Base** (3.5% Ca / 1% Mg) in order to provide a well-rounded plant nutrition program.

BioPlex HydroMAXX Veggie Harvest 2.5-4-36 (Dry Soluble) is manufactured under the highest quality controls to ensure the same predictable growth and plant response each and every crop. You will find it competitively priced and highly adaptable to the most discerning hydroponic grower protocols. Experienced, technical product specialists are available to help with the initial implementation of this product into your production.

PACKAGE SIZE:
25 lb Pail



AUGUST "23" CUSTOMER APPRECIATION SALE

Cash-N-Carry - **SAVE UP TO 33%**

Purchase 12 same or mixed cases @ MSRP case price and receive **6 additional cases free*** = **33% Discount**

Purchase 8 same or mixed cases @ MSRP case price and receive **3 additional cases free*** = **27% Discount**

Purchase 6 same or mixed cases @ MSRP case price and receive **2 additional cases free*** = **25% Discount**

** The UNIT COST of EACH Additional Free Product MUST be of "Equal or Lesser" Value than the Lowest UNIT COST of any Purchased Products.*

2023-24 Early Order Discount Program **3-WAYS to SAVE UP TO 36%**

Order in September

Purchase 5 mixed cases @ MSRP case price and receive

2 additional cases free* = **28% Discount**

Payment in full at time of purchase... Receive an additional 5% discount

Order in October

Purchase 6 mixed cases @ MSRP case price and receive

2 additional cases free* = **25% Discount**

Payment in full at time of purchase... Receive an additional 4% discount

Order in November

Purchase 8 mixed cases @ MSRP case price and receive

2 additional cases free* = **20% Discount**

Payment in full at time of purchase... Receive an additional 3% discount

** The UNIT COST of EACH Additional Free Product MUST be of "Equal or Lesser" Value than the Lowest UNIT COST of any Purchased Products.*

Additional Pre-Pay in Full Discount

SAVE UP TO 3%

Prepay in Full Oct. 1- Nov. 31 (but not time of order) = **3% Discount**

Prepay in Full before Dec. 31 (but not time of order) = **2% Discount**

Additional Shipping Discount

SAVE UP TO 3%

Shipped on or before Dec. 31 = Save an additional **3% Discount**



Lock-In Product Prices & Save Up To 36%!



To place an order please contact your sales rep or customer service



All invoices must be paid in full prior to shipping

Shipping before or no later than the 15th of March, 2024

PRODUCT DISCOUNTS ARE CALCULATED ON EACH PRODUCTS BASE UNIT PRICE. SOME PRODUCTS LIKE BIO BASIC FERTILIZERS, TREE RINGS AND OTHERS MAY BE EXCLUDED FROM THESE DISCOUNT PROGRAMS.

Call Today: 800-441-3573 | Tech Support Call/Text: 717-917-5126 | Email: bioplex@earthlink.net

www.BIO-PLEX.com