



BioPlex ULTIMATE ROOT ZONE Rx™

SOIL Amendment • ROOT Innoculate
BIOStimulant • BIOCarbon • BIO Fertilizer

All Natural Pro-Biotic Plant Food With Beneficial Rhizobacterial & Fungi Cultures

BioPlex ULTIMATE ROOT ZONE Rx™ is both a fertilizer and a soil amendment, rich with high levels of carbon to feed a diverse population of soil microbial cultures and is non-burning, safe for use on all turf species. Quality turf requires successfully managing the soil, root and rhizosphere. Recent research on the use of organic fertilizers, processed meal amendments, and composts on turf grass have focused on (1) the suppression of turf grass diseases, (2) the potential for reducing fungicide and fertilizer inputs, and (3) the effects on the physical, chemical, and microbiological properties of soils.

An abbreviated summary of results has documented that a minimum of twice annual bio-based organic top-dressing of golf course greens and tees have shown to be effective in reducing the potential severity of future turf grass diseases, while improving numerous soil, plant and root/rhizo related enhancements necessary for sustaining highly managed, high quality turf grass. Sustaining a healthy and diverse population of soil organisms requires on-going additions of organic matter, a near neutral pH, and a balanced supply of bio-based nutrients.

DIRECTIONS FOR USE:

Application Guidelines for Golf Course Topdressing

Step #1: Evenly spread **BioPlex ULTIMATE ROOT ZONE Rx** at a rate of 15-25 lb per 1,000 sq. ft. turf area. The 15 lb would be considered a maintenance rate; the upper level of 25 lb, a curative rate. For best results, confirm that proper pH and nutrient levels are at acceptable, optimal ranges.

Step #2: The best way to incorporate non chemical, natural organic amendments into the soil is through aeration. A good method of incorporation is to apply the amendment first, followed by several passes with an aerator equipped with hollow tines and a heavy drag mat attached. The drag mat will break-up the cores and mix the organic amendment with the soil, dragging some of the mix back into the holes. This operation is best performed during cool/moist seasons when grass is actively growing and soil temperature generally exceeds 52° F.

Step #3: Important, aeration and dragging can be stressful to the turf during hot, dry weather. Apply 1 to 2 applications annually, Early Spring and Mid-Fall are best suited to achieve optimal results. **BioPlex ULTIMATE ROOT ZONE Rx** can be applied/integrated in conjunction with other topdressing protocols.

Application Guidelines for Plant Installation

Ornamental Trees	1 1/4 lb per 5 gallon container 1/2-1 lb per 1" caliper for B&B
Spade Dug Trees	2-4 lb per 1" caliper Trunk Diameter
Ornamental Shrubs	1/2 lb per EACH 1 gallon size container

Vertical Mulch Application-Construction Compaction

Ornamental Trees & Shrubs:

Augar holes on 3' centers, in 360° concentric circle formations 3 feet apart, starting 3-6 feet inside to 5-10 feet outside the outer branch canopy edge (drip-line). Augar holes 3 inches wide x 10 inches deep and fill the bored holes to soil surface level. It will require approximately 1.5 lbs of Ultimate Root Zone Rx to fill (1) 3x10" hole. (1) 50 lb bag will treat 300 sq. ft. area - 1 application.

Storage and Handling

Store product in a cool, dry environment, avoid excessive heat, moisture and prolonged exposure to direct sunlight. If you are only utilizing a portion of the bag be sure to secure it tightly before storing. Recycle bag or dispose of properly if recycling facility is unavailable. Wash hands thoroughly after handling product. Refer to MSDS for more details on product.

Warranty

BioPlex, Inc. warrants that this product conforms to the analysis on its label. When used in accordance with label directions, under normal conditions, this product is reasonably fit for its intended purposes. Since timing, method of application, weather, plant, and soil conditions, mixture with other chemicals, and other factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reasonably foreseeable. The user assumes all risks of any such use.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>

Guaranteed Analysis:

Composted Poultry Litter	63.56%
Total Nitrogen (N):	1.0%
0.40% Ammoniacal Nitrogen	
0.03% Nitrate Nitrogen	
1.50% Water Soluble Nitrogen	
2.07% Water Insoluble Nitrogen*	
Available Phosphate (P2O5):	1.0%
Soluble Potash (K2O):	1.0%
Calcium (C):	6.0%
Sulfur (S):	2.0%
Boron (B):	0.017%
Copper (Cu):	0.05%
.05% Water Soluble Copper (Cu)	
Iron (Fe):	0.06%
.06% Water Soluble Iron (Fe)	
Cobalt (Co):	0.0003%
Magnesium (Mg):	0.06%
.06% Water Soluble Magnesium (Mg)	
Manganese (Mn):	0.06%
.06% Water Soluble Manganese (Mn)	
Molybdenum (Mo):	0.0004%
Sodium (Na)	0.07%
Zinc (Zn):	0.02%
.02% Water Soluble Zinc (Zn)	

Derived From: Aerobically Composted Poultry Litter, Elemental Sulfur, Manganese Sulfate, Ferrous Sulfate, Copper Sulfate, Cobalt Sulfate, Molybdenum Oxide, Zinc Sulfate, Boric Acid & Sulfate of Potash.

* Slow Release Nitrogen from Poultry Manure

BIOLOGICAL ACTIVE INGREDIENT(S):

Live Beneficial Microbes	0.04%		
Arthrobacter globiformis	1X10 ⁸ CFU/gram	Cellulomonas fimi	1X10 ⁸ CFU/gram
Arthrobacter simplex	1X10 ⁸ CFU/gram	Micrococcus luteus	1X10 ⁸ CFU/gram
Aspergillus oryzae	1X10 ⁸ Prop./gram	Myrothecium verrucaria	1X10 ⁸ Prop./gram
Azospirillum lipoferum	1X10 ⁸ CFU/gram	Pseudomonas fluorescens	1X10 ⁸ CFU/gram
Azotobacter chroococcum	1X10 ⁸ CFU/gram	Pseudomonas putida	1X10 ⁸ CFU/gram
Azotobacter paspali	1X10 ⁸ CFU/gram	Phanerochaete chrysosporium	1X10 ⁸ CFU/gram
Azotobacter vinelandii	1X10 ⁸ CFU/gram	Rhizopus oryzae	1X10 ⁸ Prop./gram
Bacillus amyloliquefaciens	1X10 ⁸ CFU/gram	Rhodobacter sphaeroides	1X10 ⁸ CFU/gram
Bacillus cereus	1X10 ⁸ CFU/gram	Rhodospseudomonas palustris	1X10 ⁸ CFU/gram
Bacillus megaterium	1X10 ⁸ CFU/gram	Rhodospirillum rubum	1X10 ⁸ CFU/gram
Bacillus macerans	1X10 ⁸ CFU/gram	Streptomyces griseus	1X10 ⁸ CFU/gram
Bacillus pumilus	1X10 ⁸ CFU/gram	Streptomyces griseoflavus	1X10 ⁸ CFU/gram
Bacillus polymyxa	1X10 ⁸ CFU/gram	Trichoderma viride	1X10 ⁸ Prop./gram
Bacillus subtilis	1X10 ⁸ CFU/gram	Trichoderma reesei	1X10 ⁸ CFU/gram

NON-PLANT FOOD INGREDIENT(S):

EctoMycorrhiza (11 Species)	0.25%
Rhizopogon villosullus	L. laccata
R. luteolus	(38 million prop./lb each)
R. amylopogon	Sclerotinia cepa
R. fulvileba	S. citrinum
(95 million prop./lb each)	(189 million prop./lb each)
Pisolithustinctorius	Suillus granulatus
(568 million prop./lb)	S. punctatipes
Laccaria bicolor	(118 million prop./lb each)

EndoMycorrhiza (9 Species)

0.15%	
Glomus intraradices	G. deserticola
G. mosseae	Gigaspora margarita
G. aggregatum	Paraglomus Brasilianum
G. etunicatum	G. Monosporum
(5,900 prop./lb each)	(454 prop./lb each)
G. clarum	

Humic Substance:	7.5%
Fulvic acid:	4.0%
Ascophyllum nodosum seaweed:	2.0%
L. Amino acid:	2.5%
BioChar (Carbon 88%):	20.0%

Derived From: Ascophyllum Nodosum, Humic Substance, Protien Hydrolysate, BioChar

Net Weight
50 lb. (22.8 Kg)



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