EXPONENT

BIODIVERSITY IS THE KEY

Pharmgrade Exponent is a broad spectrum, highly concentrated biological inoculant used to promote soil health and maximize plant growth. Exponent introduces beneficial bacteria and fungi species known to exhibit biocontrol of pathogens, reduce plant stress, and provide plant growth promoting metabolites. Exponent is formulated to be particularly helpful in tree and vine cropping systems, with an aim to insure the health of these long-term crops.

3 KEY FACTORS FOR CONSISTENT RESULTS

01 Broad-spectrum biologicals are the key to consistently great results year after year. We use multiple different strains to help create a healthy soil profile that is disease-resistant and nutrient-rich. Each of these strains is chosen because University Data shows their benefits in the soil, creating great plant health.

02 Biologicals have four purposes in the soil; without them, you are missing out on the potential of your crops.

03 Pharmgrade has the highest quantity of Colony-Forming Units on the market, while being broad-spectrum and having the best logistics in the industry.

THE PHARMGRADE ADVANTAGE

BIODIVERSITY

- Restores natural checks and balances
- Multiple effective cultures for each problem
- Strains selected for specific mechanisms vs. bio-stimulant

CONCENTRATION

- Concentration difference 100yds vs. diameter of Saturn
- Gallons vs. Ounces for price
- CFU's /ml or gram is measure of AI

LOGISTICS

- Stabilized for tank mixes
- No refrigeration or special handling
- Can be applied through spray rigs pivot injection, drip

For more information, contact us: 1 (800) 725-9578

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PHARMGRADE

SPECIES | PGPR/PGPM MECHANISM

Version: EXPONENT_001
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	B. Amyloliquefaciens	B. Firmus	B. Licheniformis	B. Megaterium	B. Methylotrophicus	B. Mucilaginosus	B. Polymyxa	B .Pumilus	B. Subtilis	L. Herbarum	L. Pentosus	L. Lactis	Penicillium bilaiae	Trichoderma harizanum	Trichoderma Spirale	Trichoderma viride	Azotobacter chroococcum
	Aerobes									Anaerobes			Fungi				Nitro Fix
1) IMPROVES NUTRIENT AVAILABILITY																	
Increase Fertilizer Use Efficiency	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Manufactures Humic/Fulvic Acid		■	■	■		■	■		■	■	■	■		■		■	■
Improves Boron Efficiency & Uptake						■											
Improves Nitrogen Efficiency & Uptake				■		■			■								■
Supplies Atmospheric N To Plant		■		■		■			■								■
Improves Calcium Efficiency & Uptake						■											
Improves Copper Efficiency & Uptake						■											
Improves Iron Efficiency & Uptake						■											
Improves Magnesium Efficiency & Uptake						■											
Improves Manganese Efficiency & Uptake						■											
Improves Molybdenum Efficiency & Uptake						■											
Improves Phosphorous Efficiency & Uptake	■	■		■		■			■	■	■	■	■	■		■	
Soluablizes Phosphorous		■		■		■				■	■	■	■			■	
Improves Silicon Efficiency & Uptake						■											
Improves Sulfur Efficiency & Uptake						■											
Improves Zinc Efficiency & Uptake						■											
Improves Potassium Efficiency & Uptake	■					■	■						■	■		■	
Greater Than Normal Nutrient Availability	■	■	■	■	■	■	■	■	■	■			■	■		■	■
2) BIOCONTROL AGENT																	
High Concentrations Of Cfu/Gram/Acre	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Competitive Exclusion	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Bio Control Agent	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Nematode Bio Control	■	■			■		■		■	■	■	■		■		■	
Endoparasitic Fugus On Nematode		■							■	■	■	■	■	■		■	
Antibiotics Produced	■		■	■	■		■		■	■							■
Endophyte				■	■	■	■	■	■					■		■	
Prevent Gray Mold, Late Blight, V. Wilt			■		■		■		■								■
Works On Viruses	■								■								
Kills Pathogens By Hydrolytic Enzymes	■													■		■	
Low Molecular Weight Antibiotics	■					■			■								
Produces Neosporin/Bacterin							■		■								
Rizoctonia Solani					■				■	■							
Fusarium Wilt					■				■								
Early Blight					■				■								
Late Blight	■								■								
Pear Black Spot					■												
Powdery Mildew											■						
Botrytis										■	■	■					
Grey Mold					■				■	■	■	■	■			■	
3) PRODUCES PLANT GROWTH STIMULATORS (PLANT HEALTH)																	
Promote Root Growth	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Amino Acid Producer	■								■								■
Produces Metabolites Similar To Cytokinin, Auxin Etc	■				■				■								■
Increase Resistance To Freezing And Cold			■														
Hydrolyze Starch & Bio Degrades Mannan, Xylan,Cellulose				■		■		■									
Improves Quality And Taste Of Fruit			■														
4) PLANT STRESS REDUCTION																	
Abiotic Stress Reducer			■						■	■				■		■	
Reduce Compaction			■			■				■	■	■					
Salt Stress Reducer				■			■			■							
Sar Plant Responses	■		■	■	■				■	■				■		■	■
Stimulate Growth	■	■	■	■	■	■	■	■	■	■			■	■		■	■
GENERAL SOIL HEALTH																	
Builds Healthy Soil	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Efficient Bio Degrader	■	■	■	■		■	■	■	■	■	■	■				■	
Accelerate Germination	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Adjusts The Bacterial Balance		■	■	■		■	■		■	■	■	■		■		■	
Enhance Soil Microbiome Diversity	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Biofilm Producer (Soil Aggregation)			■	■					■	■	■	■					
Degrades Residual Pesticides	■		■	■					■	■	■	■					
Builds Organic Acids	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Improves Root Microbiome	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Improves Soil Aeration	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Improves Soil Condition	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Easy To Apply	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Irrigation, Dripline, Root Dip, Planter Band,Spray Rig, Etc	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■