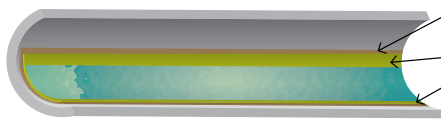


Irrigation Line

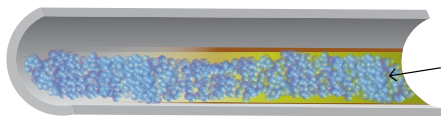
Phyto-Catalyst™ keeps irrigation lines and emitters free flowing and clear of mineralization and biological film formation.



Bacteria forms inside irrigation lines due to organics (fertilizers, recycled water) in the water.

A layer of biological film builds up over the bacteria.

This biological film build up causes blockages in emitters.



Phyto-Catalyst™ initiates an immediate catalytic breakdown of the polysaccharide linkages, which bacteria have secreted for adhesion to surfaces, through the formation of the ultra fine microbubbles.



Phyto-Catalyst™ maintains free flowing lines, clear emitters, and higher oxygen transfer within the water line.

The Future of Ecological Agriculture

Phyto-Catalyst™ provides a comprehensive and ecological solution for:

- Maintenance of irrigation systems,
- Microbial health of soils,
- Bioavailability of nutrients.
- Mitigation to the damages from plant diseases and pest infestations.
- Improving crop yields and plant vitality
- Reducing usage and costs of water, fertilizers and pesticides.



Seal of Safety

The Bio-Organic Seal of Safety is our commitment to offering the highest bio-aquatic safety on the market today. Our products are not only completely safe and non-toxic, but offer a new model for green chemistry that improves the ecological health of ecosystems.



All Bio-Organic Catalyst products are produced in the United State and must meet the highest standards of quality.

Bio-Organic Catalyst, Inc.
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bio-organic.com



BIO-ORGANIC CATALYST
THE POWER IN NATURE®



AGRICULTURE
SOIL CONDITIONING &
NUTRIENT OPTIMIZATION

Phyto-Catalyst™

Phyto-Catalyst™ is a revolutionary breakthrough in water and soil treatment that keeps water lines clean and free flowing, enhances the microbial health of soils, and supports optimum plant growth, through improving the nutrient and water uptake of plants.

Contains a highly nutrient rich composition that:

- ✓ Enhances gas transfer of oxygen
- ✓ Promotes aerobic soil conditions
- ✓ Facilitates greater water percolation throughout the soil layers
- ✓ Improves moisture penetration and retention
- ✓ Increases the soil's ability to release nutrients
- ✓ Optimizes the health of soil microbiology
- ✓ Improves plant growth and yields
- ✓ Helps remediate anaerobic slime growth in water lines and soils

Phyto-Catalyst™ can potentially lower the amount of fertilizer usage through improving the plant's and the soil's ability to most fully utilize nutrients.

Phyto-Catalyst™ is delivered at very high dilutions through any type of watering system, including hydroponics and irrigation lines, where there are additional benefits in the eradication of organic slime and mineralization build-up.

Phyto-Catalyst™ has shown significant plant growth enhancement in a variety of studies. Phyto-Catalyst™ is a nutrient optimizer, a molecular oxygen enhancer, and a biological soil conditioner, providing a superior microbial soil environment and maximization of nutrient availability.

Guaranteed Analysis		
Minerals:	mg/L	%/WT
Total Kjeldahl Nitrogen	3,470	0.00347
Zinc	4,781	0.004781
Potassium	281.3	0.0002813
Sodium	185.7	0.0001857
Phosphorus	123.5	0.0001235
Magnesium	21.4	0.0000214
Iron	0.4	0.0000004
Copper	0.153	0.000000153
Manganese	0.1	0.0000001
mg/L or % Active	8,864	0.0089

Trace Amount	
Vitamins:	mg/L
Riboflavin	Trace
Niacin	Trace
Pantothenic Acid	Trace
Biotin	Trace
Pyridoxine Hydrochloride	Trace
Folic Acid	Trace
Vitamin B12	Trace
Inositol	Trace
Trace Amount = <0.0002 mg/L	

Ecological Remediation Strategies for Optimum Plant Health

Our technical breakthrough lies in the ability of Phyto-Catalyst™ to facilitate a more aerobic, and therefore healthy ecological environment in soils and plants, through the reactions of our specially prepared bio-catalytic formulation.



Phyto-Catalyst™ is able to optimize the solubility of nutrients within the soil so that they are released and absorbed by the roots in a more efficient manner. This ability produces greater root growth, and an ability to reduce fertilizer requirements, as nutrients are more efficiently transported by the plants.

Phyto-Catalyst™ has shown an ability to substantially reduce the use of toxic chemical agents in controlling insect infestations, and plant diseases, contributing to the better overall health of the soils and plants.

Phyto-Catalyst™ offers a new ecological model that improves plant growth and productivity, reduces chemical and fertilizer costs, and protects the health of both plants and people.



Recent studies in greenhouses with tomato plants and other vegetables have demonstrated increased survivability, and increased volumes in harvest yields.