



BIO-ORGANIC CATALYST  
THE POWER IN NATURE™

**PHYTO-CAT™**  
PHYTO-CATALYST™  
IRRIGATION CLEANING PROGRAM



Phyto-Cat is a bio-catalytic water conditioner that provides superior cleaning of the slimes, biofilms and mineral deposits that foul irrigation lines and emitters. Phyto-Cat is engineered to immediately oxidize and dissolve mineral scaling and biofilms. Phyto-Cat is not acid or alkaline and will not affect the PH of the soil. Phyto-Cat is completely safe to handle and saturates water with dissolved oxygen which supports healthy aerobic microbial activity in the soil.

To get the most benefit from the Phyto-Cat treatment always inject Phyto-Cat upstream of any filtration system. Phyto-Cat will clean filtration systems as well as the irrigation lines. You can plan to use about one gallon per acre per year to clean and maintain a drip irrigation or micro-irrigation system.

## Continuous Dosing Treatment Program

### Continuous Dosing Shock Treatment

Applying Phyto-Cat using a continuous dosing pump such as an [LMI Chemical Metering Pump](#) At the beginning of the season or when irrigation lines are experiencing reduced water flow or there is visible algae or biofilm build-up. Irrigate normally until water has reached the furthest point of your irrigation set. Begin dosing at approximately 63 ML/min until 1 quart of Phyto-Cat per acre has been injected. End the water irrigation as soon as the Phyto-Cat has been injected so that Phyto-Cat is still in the system and it will continue to degrade biofilms and breakdown mineral scales and deposits after the irrigation is over.

### Maintenance Treatment

After the initial shock treatment, three quarts (or three litres) of Phyto-Cat per acre should be micro-dosed into the system throughout the irrigation season. Connect a container of Phyto-Cat via continuous dosing pump to your irrigation system upstream of any filtration. Supply 3 quarts of Phyto-Cat per acre and according to your estimated irrigation water use for the year, set the pump rate so that the 3 quarts will be consumed by the end of the season. Many continuous dosing pumps can also be wired to turn on automatically when irrigation is started. Phyto-Cat can be injected at 1:250,000 (ie. 1 gallon of Phyto-Cat per 250,000 gallons) depending on water and soil conditions and irrigation usage.

## Manual Injection Treatment Program

### Manual Injection Shock Treatment

If a continuous dosing pump is not available mix Phyto-Cat with water prior to injection so that the quart can be injected gradually over the entire irrigation and the water is aerated while containing Phyto-Cat. Phyto-Cat can be injected either centrally or in the field at an individual irrigation set using equipment such as a [Maezzi Injector](#) or a [Solution Master](#). If you are mixing mechanically outside of the irrigation system we recommend using a foam suppressing agent such as [Miller Foam Fighter](#) at 4 oz./100 gallons of water.

### Manual Injection Maintenance Treatment

Inject 3 quarts of Phyto-Cat per acre in equal increments every two to four weeks during the irrigation season with an amount of Phyto-Cat. Three quarts equals 6 treatments of 16 ounces per acre, or 12 treatments of 8 ounces per acre.

PHYTO-CAT™  
MANUFACTURED IN THE USA UNDER  
DOMESTIC AND INTERNATIONAL PATENTS

[bio-organic.com](http://bio-organic.com)



### 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.