

PHYTON®

News

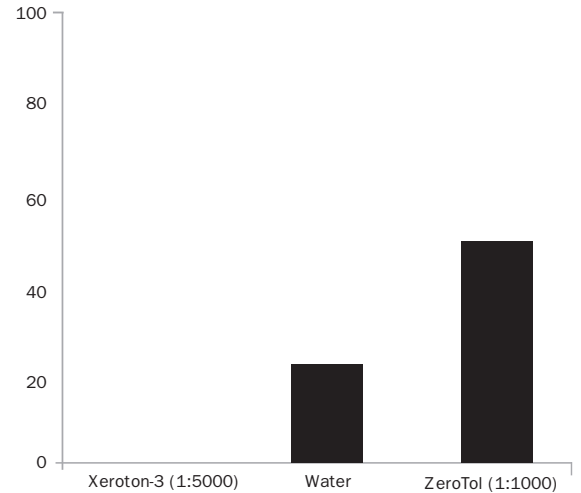
Serving the Greenhouse and Nursery Industry for over 25 years.



Xeroton-3 is a highly concentrated unique broad spectrum formula that offers superior results at a lower cost per application.

New Patented Advanced Chemistry

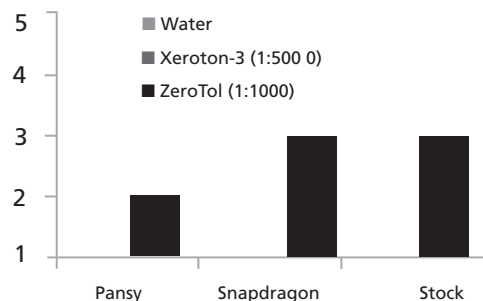
New Active: Octanoic Acid - X3 has three active Ingredients that attack and destroy pathogens and algae in your water, in your soil, on surfaces and on your plants.



Xanthomonas severity (%) on Lavender cuttings treated with Xeroton-3 and Zeritol in mist-propagation.

Superior Disease Control - X-3 has proven to be more effective in disease control in plant trials than other similar products and goes 5 times farther.

Non-Phytotoxic - X3 has been tested and trialed on many plant species, and has proven very safe



*Figure 1. Phytotoxicity in Pansy (*Viola x wittrockiana*), Snapdragon (*Antirrhinum majus*) and Stock (*Matthiola incana*).*

Phytotoxicity was recorded with the following scale: 1 (no phytotoxicity), 2 (slight), 3 (moderate), 4 (severe) and 5 (dead plant). Ann Chase, Chase Horticultural Research, Inc 2008.

Active Ingredients:

- Hydrogen peroxide
- Peroxyacetic acid
- Octanoic acid

Use Sites:

- Greenhouses
- Nurseries
- Garden Centers
- Landscapes
- Interiorscapes

Applications:

- Water treatment
- Mist-propagation
- Foliar spray

Controls:

- Drench
- Sanitation
- Algae
- Bacteria
- Fungi

Restricted Entry Interval (REI):

- 0 hours

Packaging:

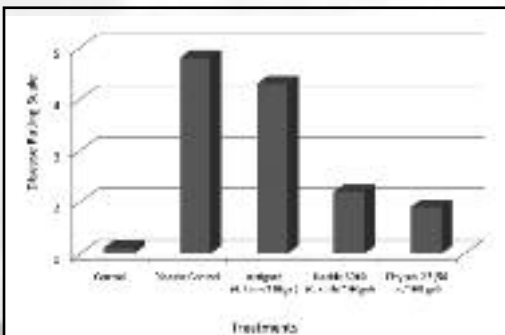
- 96 oz
- 4 gal
- 12 gal

Chrysanthemum Bacterial Leaf Spot

Bacterial leaf spot is most important in southern states where high moisture contributes to infection and disease development. For that reason, it is a troublesome disease on outdoor grown chrysanthemums. This disease is caused by *Pseudomonas cichorii*.

Infection typically starts on the leaves; lower and older leaves are usually affected first. Look for circular or elliptical spots that may increase in size to form irregular areas. The spots are brown dark to black.

Professor D. J. Norman at University of Florida conducted a trial in 2008 comparing Actigard, Kocide 3000 and Phyton-27 efficacy in controlling bacterial leaf spot. With only one pretreatment Actigard was ineffective in controlling this disease and was no different than the control (Disease control). Although, Kocide 3000 was effective in controlling the disease, it left evident chemical residue on the surface of the plants. **Phyton-27 was the only effective treatment with no residue left on the chrysanthemum plants.**



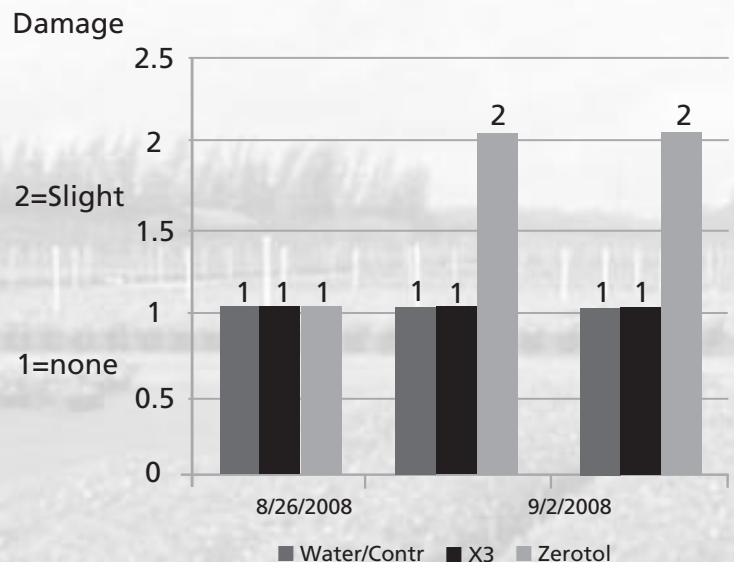
Chrysanthemum leaf spot (*Pseudomonas cichorii*). The number of leaves with lesions was recorded using the following scale: 1 (no disease), 2 (1-5 leaves), 3 (6-10 leaves), 4 (11-24 leaves), 5 (25-100 leaves).



Mist Propagation and X3

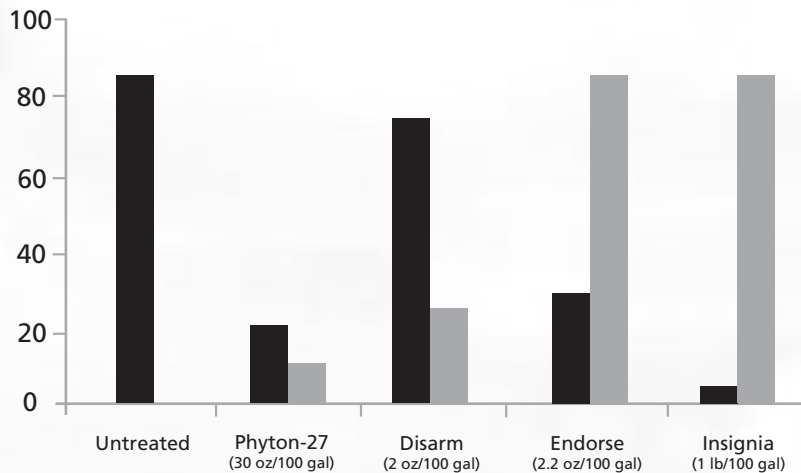
The use of mist in propagation of vegetative cuttings and seedlings is imperative to producing quality rooted cuttings and seedlings. The mist area is an ideal environment (moist and warm) for diseases to attack and spread throughout the entire propagation area. Here are some guidelines and X3 tips to help reduce disease and increase production in your propagation area.

1. Always start with a clean propagation area and clean cutting tools. Use X3 as a sanitizing agent to clean the structure, floors, benches, pots and trays, and all cutting tools. X3 will eliminate bacterial diseases, fungal diseases and algae. Use between 1 and 8.5 ounces of X3 per 10 gallons of solution. Refer to the label for exact rate.
 2. Plant cuttings can be dipped in a solution of X3 before being planted to be sure the cutting is disease free before sticking. Use 2.5 ounces of X3 per 10 gallons of solution.
 3. X3 should be used as a soil drench on trays or pots before sticking to be sure the planting environment is disease free. Use 25 ounces of X3 per 100 gallons of solution.
- X3 should be injected into the mist system to maintain a disease free environment during the germination or rooting period. Injecting X3 into the mist will reduce disease, eliminate algae, and produce stronger healthier cuttings and seedlings. Use 2.6 ounces of X3 per 100 gallons of solution for four to ten consecutive days. Reduce rate to .5 ounces of X3 per 100 gallons for the duration of
4. X3 should be injected into the mist system to maintain a disease free environment during the rooting period.
 5. Continue to use X3 in the disease spray and drench rotation throughout the crop cycle. X3 is an excellent curative fungicide that has 0-REI.
 6. Use Phyton 27 during propagation and the rest of the crop production cycle. Phyton 27 has broad spectrum control, systemic activity and a long residual activity. Phyton 27 is safe on blooms and does not leave a residual.
 7. X3 has proven safe on plants and has shown no phytotoxicity in plant trials. The phytotoxicity trial below was conducted by Chase Research. See figure 1 for test results.



Control of Powdery mildew in poinsettia production.

Powdery mildew could affect your poinsettia crop during several stages of production such as propagation, flower initiation and bract development. However, powdery mildew tends to be more problematic during the finishing stages. This disease is most likely to develop faster in cooler weather (spring or late fall) when there is a greater fluctuation between day and night temperatures. Avoid high relative humidity in your greenhouse and provide proper air circulation to minimize powdery mildew incidence.



Number of powdery mildew colonies and Percentage of Residue on Poinsettia "Prestige Red".
Margery Daughtrey, Cornell University, 2008

Scout your plants frequently: early detection is the key of success in managing powdery mildew; it is harder to control when the disease is well established. Weekly scouting is recommended since plants could be infected but not show any symptoms. New plant material entering the greenhouse should be inspected right away.

What and where to look for: powdery mildew is easily recognized by fluffy white colonies growing on leaf surfaces. It can grow on both sides of the leaf and it often starts on the undersides along with corresponding yellowish (chlorotic) or white powdery spots on the upper sides of leaves.

Dispose infected leaves properly: if infected leaves are detected during your scouting routines, remove all infected leaves and place them rapidly into a bag that can be sealed. Removing infected material properly helps reduce the source of inoculum and therefore minimize future infections.

Rotation, rotation, rotation: an effective fungicide program is necessary for successful powdery mildew control. Fungicides should be rotated frequently to avoid development of resistant powdery mildew. Also, fungicide applications are more effective against powdery mildew when applied as wet sprays (high volume sprays) rather than low volume applications.

Incorporate Phyton-27 in your poinsettia fungicide program

- Phyton-27 provides effective control of powdery mildew and botrytis in poinsettia.
 - Leaves NO RESIDUE
 - Low resistance development MOA
 - Safe to use on color bracts
 - Excellent rotation partner



Phyton Corp is happy to welcome **Alan Miller** to our Team. Alan will be our new Technical Sales Manager for the United States and cover a sales territory from Missouri to the East Coast, the central east coast area and New England.

Alan graduated from OSU in 1977 with a degree in Horticulture and has worked in the industry for the past 32 years. His past experience includes: 17 years as a grower/manager, 5 years as a national fertilizer representative, 6 years with a horticulture distribution company as their technical manager for chemicals, fertilizers, soils, and diagnosis and recommendations in the above areas, and 3 years as a regional sales manager for a national chemical company.

We welcome Alan to our staff, and look forward to offering his expertise to you. Alan will be offering advice and recommendations on the use of Phyton 27 and our new product X3.

Phyton Corporation
5608 International Parkway
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Phyton Trade Shows

OFA

Columbus, OH
July 11-14, 2009
Booth #2754

Carlin Buyer Fest
St. Paul, MN
August 17-18, 2009

Farwest Show
Portland, OR
August 20-22, 2009
Booth #8022

BFG Hort Expo
Brooklyn Park, MN
August 25-26, 2009

Griffin Grower Expo
West Springfield, MA
August 26, 2009

BFG Hort Expo
West Springfield, MA
August 26, 2009

BFG Hort Expo
Hoffman Estates, IL
September 1, 2009

Carlin Buyer Fest
Milwaukee, WI
September 9-10, 2009

BWI Buyer Show
Chattanooga, TN
September 14-16, 2009

Griffin Grower Expo
Lancaster, PA
September 23, 2009

BFG Hort Expo
Columbus, OH
September 24, 2009



Phyton-27® delivers exceptional bacterial and fungal disease control on a wide range of ornamental crops. Preventively and therapeutically, from propagation to post-harvest, without residue.

Xeroton-3 is a highly concentrated broad spectrum formula that offers superior results at a lower cost per application. X3s new active, Octanoic Acid, provides better disease control, plant safety and uses 5X less to boost your profits.



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