

# StorOx Works: The Research Speaks for Itself



**StorOx**<sup>®</sup>  
Broad Spectrum Bactericide/Fungicide



## PROTECTION STARTING IN THE FIELD AND CONTINUING INTO YOUR STORAGE FACILITY

Beyond storage solutions, BioSafe Systems provides environmentally responsible field and water treatment products. By stopping disease before it reaches your storage facility, you reduce the potential for infection and increase shelf life.

### OXIDATE BROAD SPECTRUM BACTERICIDE/FUNGICIDE

Good disease control practices begin in the field. Using OxiDate as a foliar bactericide/fungicide will eliminate plant pathogens such as early blight and late blight on contact with no mutational resistance.

### GREENCLEANPRO GRANULAR ALGAECIDE/FUNGICIDE

A chlorine and copper alternative, GreenCleanPRO can be applied to potato-processing wastewater and lagoons to treat for odor causing bacteria and to inhibit algae and biofilm buildup. GreenCleanPRO can also be used in potato storage environments such as on floors, walls, and walkways to prevent algae growth.

### SANIDATE 5.0 SANITIZER/DISINFECTANT

SaniDate 5.0 treats fresh-cut and post harvest fruits and vegetables, through application of spray bars, process waters, flume tanks, hydrocoolers, and hard surfaces and equipment. SaniDate 5.0 is an ideal alternative to chlorine, treating not only plant pathogens for spoilage control, but also eliminating human health pathogens such as E. coli and Salmonella. SaniDate 5.0 will help improve the quality and shelf-life of your produce.

### SMARTFOG HUMIDIFICATION AND CHEMICAL DELIVERY SYSTEM

BioSafe Systems has partnered with SmartFog, a manufacturer of advanced humidification and chemical delivery systems. SmartFog utilizes a DryFog technology that provides proper temperature and humidity levels while utilizing a droplet size of less than 5 microns, meaning less physical moisture in the storage environment. SmartFog can efficiently inject and infuse the DryFog with BioSafe Systems' Activated Peroxygen Chemistry to allow for economical treatment of potatoes in storage.







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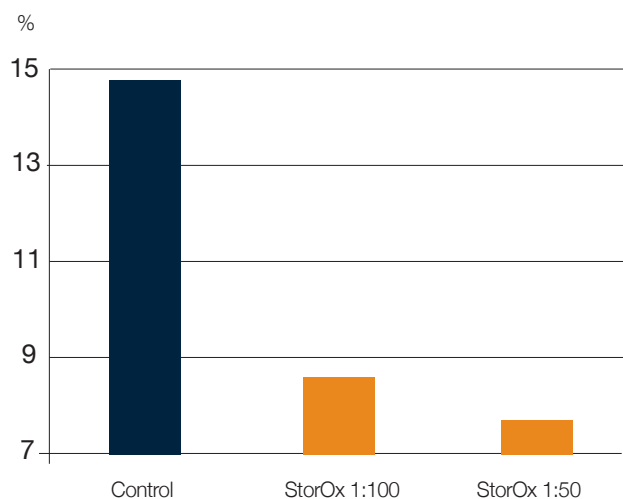
Storage pathogens are the scourge of potato growers everywhere, costing 5 to 10 percent loss of crop each year. Applying StorOx Broad Spectrum Bactericide/Fungicide to your facility and tubers can help decrease crop loss due to storage pathogens such as soft rot, late blight, pink rot, and silver scurf.

## SEE FOR YOURSELF.

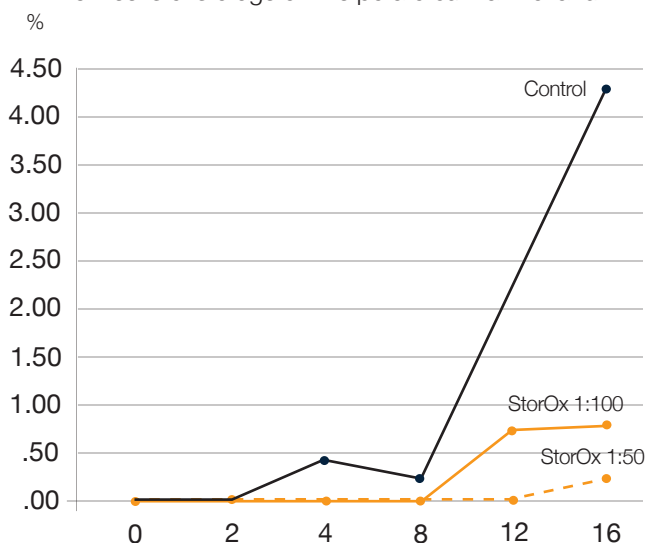
### FUSARIUM DRY ROT

**Bruised or wounded tubers are susceptible to Fusarium Dry Rot, a seed-and soil-borne pathogen that causes decay and dry rot during storage. Applying StorOx during storage cuts the development of Fusarium dry rot in half.**

Effect of StorOx on the development of Fusarium dry rot after 16 weeks of storage on the potato cultivar Shepody.



Effect of StorOx on the development of soft rot after 16 weeks of storage on the potato cultivar Norland.



### SOFT ROT

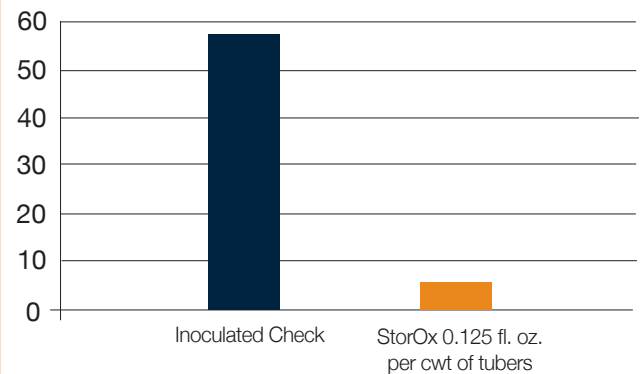
**Soft rot infects bruised or wounded areas on potato tubers, particularly in warm conditions coupled with a lack of ventilation. When used at a rate of 1:50, StorOx decreased soft rot by 93%, with less than 1% of plants affected at the end of sixteen weeks of storage.**

## LATE BLIGHT

Late Blight favors wet conditions, spreads quickly through the air to infect other plants, and can survive from season to season. When applied at a rate of 0.125 fl. oz. per cwt of tubers, StorOx reduced the incidence of Late Blight by 90%.

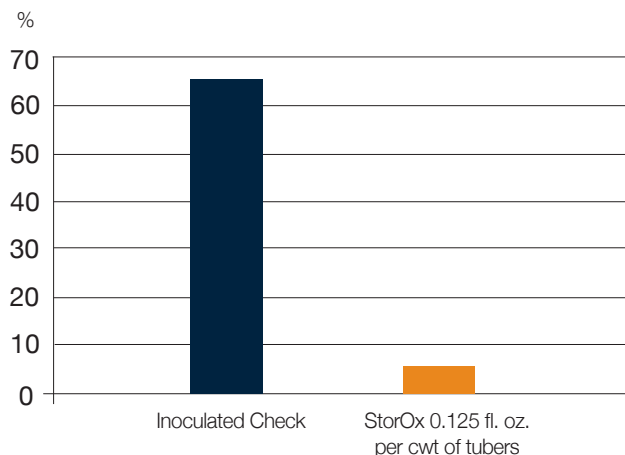
Incidence of tubers with Potato Late Blight stored at 10°C for 90 days after treatment with StorOx.

(Source: Study by Gachango et al, 2009)



Incidence of tubers with Pink Rot stored at 10°C for 90 days after treatment with StorOx.

(Source: Study by Gachango et al, 2009)

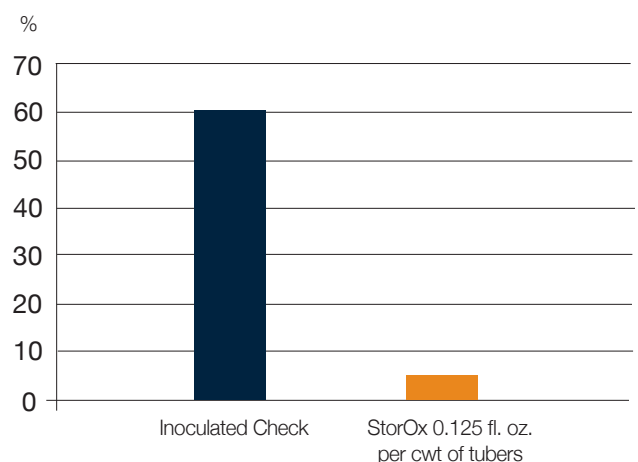


## PYTHIUM LEAK

Like Soft rot, Pythium leak enters tubers at wound sites, and spreads in warm weather conditions. StorOx can help decrease the incidence of Pythium leak by 92%.

Incidence of tubers with Pythium Leak stored at 10°C for 90 days after treatment with StorOx.

(Source: Study by Gachango et al, 2009)



## PINK ROT

Pink rot is caused by Phytophthora, a fungus spread through soil or water that generally affects tubers before harvest and continues to spread from tuber to tuber in storage. Using StorOx at the low rate of 0.125 fl. oz. per cwt of tubers can help decrease pink rot incidence by almost 95%.



## **STOROX POTATO STORAGE APPLICATIONS**

StorOx is a broadly-labeled bactericide/fungicide which can be used through all stages of potato storage.

### **PRE-STORAGE SANITATION**

Good management practices call for an aggressive sanitation program prior to putting potatoes in storage. Use StorOx to sanitize all interior surfaces, including plenum pipes, humidification systems, and harvesting and piling equipment. StorOx kills most plant pathogens within 60 seconds of contact.

### **EVAPORATIVE COOLER TREATMENTS**

Apply StorOx directly on the media surfaces of evaporative cooler pads to help reduce biofilm contamination. StorOx may also be added to the water to help keep media surfaces clean, improving cooling efficiencies by up to 30%.

### **BIN PILER TREATMENTS**

Applying StorOx to bin pilers helps to reduce pathogen inoculum as the potatoes come out of the field and into the storage.

StorOx can be mixed with any type of water, requires no pre-activation, and may be applied through any type of spray nozzle system. StorOx may also be tank mixed with other residual fungicides or phosphorus acid products to provide additional levels of control.

### **HUMIDITY TREATMENTS**

Studies have shown that many disease problems are the result of bruising due to low humidity levels in storage. Growers can increase humidity without any fear of excess water by injecting StorOx into the humidification treatment, providing a continuous level of disease suppression.

### **RESCUE TREATMENTS**

StorOx may also be applied during storage as rescue treatment by applying StorOx through individual plenum pipes to contain hot spots within the pile that may develop through the storage season.

Our qualified StorOx specialists can provide technical assistance or service. Call BioSafe Systems (toll-free) at 1-888-273-3088 to speak with one of our post harvest technical representatives.



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