

Indoor Grow Facility Implements Synexis DHP® and Reports Multiple Positive Outcomes

A cannabis and lettuce grower was searching for an effective and low-maintenance solution to help mitigate mold and mildew inside grow rooms.

The Chief Horticulture Officer had discovered Synexis during her research for pathogen control solutions when there was a disease outbreak in a grow room many years ago. She contacted Synexis to discuss Synexis DHP technology and deployment options.

Challenges: Mold, Mildew and Time-Consuming Mitigation Methods

- **Powdery mildew and mold** were prone in a particular grow room.
- **Growers spending significant time with disease centers** to find disease mitigation solutions.
- **Need a proactive method for pathogen control** for maintaining product quality.

Solution: Synexis Dry Hydrogen Peroxide (DHP®) Technology

- **Grow facility installed 13 Synexis devices** throughout the grow rooms without disrupting operations.

Results: 3 Months of No Observed Disease Outbreaks

- **No known plant disease outbreaks** in grow rooms where devices were deployed.
- **Noticeable reduction in odor** in grow room and helps comply with odor management regulation.
- **100x reduction of total Volatile Organic Compounds*** (VOCs) over study period.
- **Improved product quality**, supporting the brand's mission and commitment to overall quality.
- **Saved resource time** that would have been required for alternative pathogen control efforts.

*Customer testimonial

Customer:
Cannabis & Lettuce Grower

Location: USA
Industry: Indoor Agriculture
Indoor Coverage Area:
6,950 ft² / 111,200 ft³

KEY CHALLENGES

- **Powdery mildew and mold** prone in grow room
- **Need a proactive pathogen control solution**
- **Growers spend substantial time with disease centers**
- **Need odor management plan** to meet regulation

SOLUTION SYNEXIS DHP® TECHNOLOGY

13 Synexis devices
deployed in grow rooms

RESULTS

- **No observed disease outbreaks**
- **Reduction in odor**
- **Significant and persistent reduction in TVOCs**
- **Improved product quality**
- **Gained back valuable time** from growers

How Synexis Technology Works



Sentry XL Device
wall mount/freestanding

Synexis patented technology produces the pure gas form of hydrogen peroxide (**Dry Hydrogen Peroxide**), creating continuous, touchless, and proactive microbial-reduction pressure throughout indoor environments.

DHP® is a proactive and synergistic method, enhancing cleaning protocols, for **reducing surface-level and airborne pathogens** in occupied spaces.

Synexis offers in-duct or stand-alone devices for **scalable deployment options** from small rooms to larger indoor facilities.

Backed by Independent Third Party Data

>99.9%

Salmonella: Reduction on surfaces at 10 hours vs. control¹

A. niger (black mold): In-air reduction at 2 hours vs. control²

>99.8%

Influenza A: Reduction on surfaces at 24 hours vs. control³

E. coli: In-air reduction at 1 hour vs. control⁴

1. Data on File. SYN-0009. 2. Data on File. SYN-0010. 3. Data on File. SYN-0002 4. Data on File. SYN-0005

The Synexis System showed effective reduction for every species of pathogen it has been tested against whether viral, bacterial, or fungal. For specific pathogen information contact Synexis.

Let's Connect

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"Synexis has helped our closed air loop facility achieve an acceptable level of powdery mildew expression on our commercial lettuce production (little to no visible evidence of powdery mildew in the harvested crop). We have also used Synexis technology in our cannabis R&D facility. Besides keeping our product free of mold and mildew, the Synexis devices showed a 100x reduction in VOC's within the room. These measurements were taken for 90 days with multiple plants in flower to demonstrate the effectiveness of Synexis devices to reduce odor -- what a great side-effect to an already incredible mildew reduction technology." - M.K. Chief Horticulture Officer

