

Havi Consortium

In the fast-paced and highly competitive field of cannabis cultivation, ensuring superior product quality and safety is of the utmost importance. A crucial challenge facing the industry is microbial contamination, including concerns related to yeast and mold. This case study explores how Havi Consortium, a forward-thinking cannabis cultivator located in Michigan, leveraged the AirROS Air Purification System to significantly elevate their microbial management, achieving unparalleled results.



Client Profile:

Havi Consortium, Michigan

Havi Consortium, an industry leader in cannabis cultivation based in Michigan, had a solid track record of meeting existing regulatory standards. However, their initial microbial CFU (Colony Forming Units) counts were hovering close to the upper permissible limit, with an initial reading of **100,500 CFU**. Through rigorous retesting, they reduced this to **70,000+** CFU. Despite these efforts, their ambition was to go far beyond simply meeting standards.

Challenge at Hand

Aiming to set new benchmarks for the industry, Havi Consortium sought an innovative solution to achieve unparalleled product purity and safety, striving to exceed current standards dramatically.

Goal

Is to pass microbial testing less than 70,000 CFU to have cleaner product for the safety of customers.

Acquisition and Installation Process

Havi Consortium purchased three AirROS systems for implementation across their facility. These systems were installed in the:

- Veg Room
- Flower Room
- Dry Room

To ensure a comprehensive microbial control strategy. SAGE Industrial partnered with Havi Consortium to gather the requisite data, which guided the selection of the appropriate equipment tailored to their specific growing environment. Once the system was engineered and produced to the specifications, it was shipped to Havi Consortium for installation. The setup was carried out by Havi Consortium's team under the live guidance of SAGE Industrial's Tech Support, ensuring a seamless installation process.



Deploying the AirROS Solution

Phase 1: Primary Air Cleaning

Havi Consortium implemented the AirROS system with that comes with a reaction chamber to fulfill its commitment to excellence. This chamber produces Reactive Oxygen Species (ROS) that act as potent cleaning agents. Air from the cultivation environment was purified as it passed through this chamber, with the ROS agents neutralizing microbial cell walls and effectively eliminating molds, viruses, and other pathogens.

Phase 2: Secondary Air and Surface Purification

After the initial phase, the purified air re-entered the growing facility. This air contained longer-lived ROS, specifically gas-phase hydrogen peroxide, and minimal ozone (30 ppb). These compounds not only maintained the purity of the air but also sanitized surfaces. A reaction between ozone and hydrogen peroxide produced Hydrogen Trioxide, an influential natural antimicrobial, adding another layer of sanitation and odor control.

The Results

After adopting the AirROS system, Havi Consortium conducted rigorous testing across seven distinct cannabis strains, achieving remarkable results:

First Test Key Lime Cherries

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED

Second Test Wedding Cake

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED

Third Test Kushmints

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	200 CFU	100 CFU/g	100 CFU/g	PASSED

Fourth Test Key Lime Mintz

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	4,816 CFU	100 CFU/g	100 CFU/g	PASSED

Fifth Test Lime Cherries

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	210 CFU	100 CFU/g	100 CFU/g	PASSED

Sixth Test Ice Cream Cake

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	<100	100 CFU/g	100 CFU/g	PASSED

Seventh Test Wedding Pie

	Limit	Detected	LOD	LOQ	Pass/Fail
Aspergillus	1000 CFU/g	N/D	100 CFU/g	100 CFU/g	PASSED
Yeast & Mold	10000 CFU/g	100	100 CFU/g	100 CFU/g	PASSED



Conclusion and Strategic Insight

Havi Consortium's experience with the AirROS system underscores their future-focused and quality-centric approach to cannabis cultivation. By adopting this cutting-edge technology, they have not only sustained but significantly elevated their exceptional safety and quality track record.

This case study serves as compelling evidence that even for organizations already leading in terms of quality and safety, the AirROS system can deliver transformative benefits.

