

GREEN VALLEY FARMS CASE STUDY

Not all pathogen testing services
are created equal



AT A GLANCE

Challenges

- Transitioned from 7-acre outdoor facility to 4,000 sq. ft. indoor facility
- Unfamiliar with Hop latent viroid or pathogen testing in the cannabis industry
- Couldn't trust results from various pathogen testing services due to discrepancies in positivity rates

Results

- Custom pathogen mitigation plan paired with existing systems proactively prevents infection and spread
- Estimated 'thousands' saved by proactively testing new plants and testing before cutting clones

"Our testing budget is nothing compared to what we lose when plants have HLVD. The 10%-20% yield loss over 1000 plants per run can literally be a million dollar issue."

Tim Smith

Cultivation Director at
Green Valley Farms

Introduction

The Green Valley Farm team was previously operating an outdoor, 7-acre facility but then transitioned to indoor cultivation. Not long after the transition, the cultivation team at Green Valley Farm experienced 30% yield reduction and reduced flower quality.

They initially suspected that the nutrition, irrigation or air filtration system was creating suboptimal growing conditions. But any changes to these variables did not significantly increase yield. After conferring with an acquainted nursery, the team learned about Hop latent viroid and were referred to TUMI Genomics for pathogen testing.

Challenge

Even using their information systems to monitor plant health and growth, the team wasn't familiar with HLVD or pathogen testing services in the cannabis industry.

Before testing with TUMI Genomics, Tim Smith, the Cultivation Director at Green Valley Farm, began by vetting 12 HLVD testing laboratories, narrowing the list down to four that had the right reputation and price.

For two months, the Green Valley Farm team worked in tandem with the four different labs to test sick plants. Through testing and retesting, it became clear that other labs were not detecting HLVD. However, TUMI Genomics was accurate every time and measured a 20% - 25% positivity rate across the facility..

Results

Once the infected plants were identified and removed, yields began improving quickly. The validated science, clear SOPs, and other educational publication from TUMI Genomics gave the cultivation team confidence to regularly pathogen test.

The TUMI Genomics team helped the cultivation team develop a pathogen mitigation plan using integrated pest management, irrigation, and regular pathogen testing. This pathogen mitigation plan, paired with regular testing and the team's existing information systems has enabled the team to more closely monitor and recognize HLVD.