



AT A GLANCE

Challenges

- Massive Hop latent viroid outbreak in 2020
- Revenue loss of \$30,000 each month in testing services and replacement clones for customers

Results

- With regular pathogen testing and newly implemented mitigation measures the facility was free of Hop latent viroid in 10 months
- The HLVd-positivity rates decreased from 30% to 5%
- The decrease in replacement clones saved the nursery about \$8,000 every month

“The consistency of the results demonstrates that we are truly working with educated scientists.”

Eva Erickson

Co-founder and Cultivation Team Member at Haze Valley Nursery

Introduction

After receiving customer concerns that some plants were underperforming, the cultivation team at Haze Valley Nursery started to suspect an infection. After noticing Hop latent viroid (HLVd) symptoms in their facility, the team decided to start investing in pathogen testing services.

However, the test results from local labs were inconsistent and the sample collection procedures were inconvenient and often resulted in sample degradation. The team realized they weren't confident in the results and felt they needed more accurate testing and additional support to eliminate the infection.

Challenge

After testing for seven months the nursery couldn't reduce the frequency of infected plants. The nursery was losing \$30,000 monthly, about \$11,000 every month on HLVd testing services, and the remainder being a combination of new plant purchases and replacement plants for their clients. In a final desperate move, the cultivation team decided to conduct a blind study and send identical samples to multiple labs. The results were all inconsistent and the turnaround times varied greatly.

Results

With poor results from the blind study, the cultivation team decided to expand beyond local testing services and connect with the TUMI Genomics team. TUMI Genomics agreed to participate in the same blind study. The TUMI Genomics HLVd assay proved accurate, with a rapid turnaround, and a simple sample collection process.

With guidance from the TUMI Genomics team, the cultivation team was confident in their results and developed a clean mother stock program complete with custom operating procedures. In 10 months, the nursery reduced the level of HLVd-infected plants from 30% to under 5% and saved over \$80,000 that would have been spent on inaccurate testing and lost revenue.