

Prophylactic Fungicide Applications

Management of Powdery Mildew (PM) relies on fixed or calendar-based fungicide sprays at high cost. However, this approach results in inefficient use of fungicides with applications well before the pathogen is present. In addition to the unnecessary expense, overspraying can lead to fungicide resistance and crop loss, it is time-consuming, unhealthy and bad for the environment.

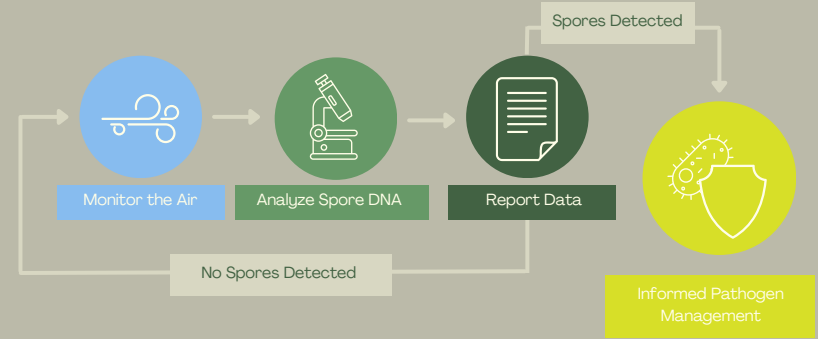


Data-driven Pathogen Control

Using our patented technology our sensors allow the monitoring of PM spores in the air, **delivering georeferenced alerts of disease risk based on spore loads** before symptoms are visible on the plants. This information enables growers to manage PM more precisely, stretching spray intervals when there is no threat and focusing scouting and cultural practices (e.g., pruning) in the right areas.

How Root's Pathogen Control System (PCS) works

Our monitoring service operates by deploying a **network of sensors** to precisely monitor the concentration of PM spores in commercial vineyards. Our sensors actively draw air into a tube where spores are captured. The sample tubes are collected 2 times a week by growers and sent to our laboratory, where our **DNA-based platform** allows the quantification of spores in the sample.

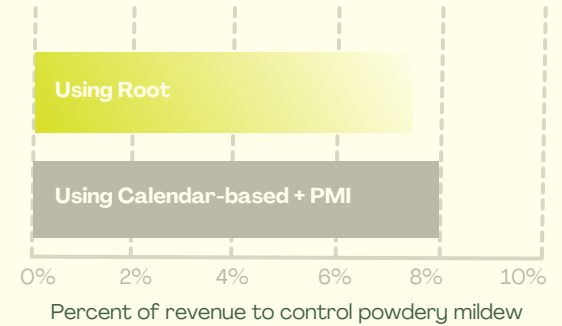


How can I start monitoring PM in my farm using Root's technology?

- 1 **Contact** our specialists to determine the appropriate number of sensors for your farm.
- 2 **Sign up** for the right amount of sensor subscriptions to meet your needs. Root requires a minimum of 2 sensors within 40 acres to ensure accurate monitoring.
- 3 **Set up** your sensors with our field team. Our team will deliver a collection of pre-labeled tubes to cover the entire season.
- 4 **Send** your pre-labeled tubes using your prefer courier. When we receive your samples, we will perform a DNA-based assay to quantify the sample's spores.
- 5 **Access your results.** Your results are typically available online (or via text or email) within 24 hours. Find your results at cloud.rootappliedsciences.com



Root's Alerts Will Help You reduce Management and Production Costs



Early Adopters Have Already Seen the Benefits

"I recommend other farmers utilize Root's Pathogen Control System to reduce applications and save money."

David Gates, Senior VP Vineyard Operations, Ridge Vineyards, Inc.

"The data provided by Root gives you peace of mind and allows you to trust elongating your application intervals."

Brad Kurtz, Gloria Ferrer Vineyard Director