

## Optimise your tree crop performance

New Zealand is a diverse market in terms of grower requirements in the permanent and speciality crop sector. A service which offers valuable, accurate and actionable insights into the most important tree-related analytics is fundamental to ensuring quality yields for all tree crop farmers and stake-holders.

Aerobotics, an aerial imagery and data analytics ag-tech company is here to assist farmers with tree health and early-stage stress and canopy size metrics on a per tree level using state of the art machine learning algorithms enabled by multispectral drone imagery. Farmers are able to track changes in these metrics over time and between scans to monitor the efficiency of mechanical or chemical interventions or seasonal influences. Some of the many features on offer include our highly accurate Tree Count tool, Missing Tree reports, Tree Size & Health grouping software and an award winning scouting service that guides you to an area of interest to verify if and what corrective action is needed.

For New Zealand citrus farmers, we've developed a Yield Estimation product, for real-time fruit size and colour distribution, This allows farmers to provide exporters with harvest estimations, to better understand and plan their marketing strategies, and to mechanically or chemically manipulate sizes at harvest if required.

### SnapShot

200 K Active Hectares

18 Active Countries

1 M Fruit Processed

81 M Trees Processed

## How our technology works

Your whole farm is digitally captured, providing you with insights into every orchard boundary, variety, hectares, number of trees and missing trees.

Farmers have access to in-depth analytics including the health, size and GPS location of each tree. This enables them to conduct scouting routes based on anomalies found on the software, export variable rate maps and generate CSV reports for stakeholders.

## Key Grower Challenges:



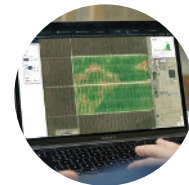
### Labour Planning

Traditional scouting can be both challenging and costly. Undetected anomalies can cause severe damage when scouting is not targeted, underperforming trees are not detected at the right time and place, and scout reports are inaccurate or lost.



### Input Planning

Not being able to accurately plan and calculate fertiliser or chemical inputs can become extremely costly to any farming business. Without the right information, it is difficult to allocate resources to specific blocks or areas on the farm that require attention.



### Production Planning

An orchard with variance in tree health or canopy size can be challenging to manage, where incorrect production planning figures can have costly implications. Profits can be lost without tools for simpler planning and accurate production figures.

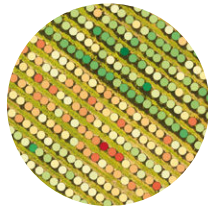
## Grower Benefits

Farmers have access to their own Aeroview web-based account and Aeroview InField mobile application to actively manage their farm.



### Strategic Planning

- Automated Tree Counts and Missing Tree reporting tool
- Digitised cloud-based orchard management software
- Tree size and grouping tool to manage replants and planting periods over time
- Orchard health comparison for prioritization and redevelopment planning
- Exportable reports



### Tree Health Monitoring

- Identify early-stage stress on an individual tree or zonal level
- Plan efficient scout routes to reach places of interest for grove scouts or PCA's.
- Make data-driven decisions regarding grove prioritization
- Save on your nutritional or chemical applications by only applying when and where necessary



### Customisable Orchard Overview

- Allows the users to compare and benchmark blocks' performance to track changes over time and effectively manage the orchard
- Plan efficient and targeted scouting, monitoring and intervention for blocks require the most attention
- Customisable and actionable reporting



### Yield Estimation (for citrus only)

- Accurate yield estimation using automated canopy-level drone flights and artificial intelligence
- Reports on flight date size distributions and fruit colours
- Provides estimates of fruit size distribution at early or late harvest dates to plan for fruit size interventions and labour during harvest time

## Integrated Data Sources

- 01 Seasonal drone imagery
- 02 Weekly satellite imagery
- 03 Daily in-field scouting



## Single Flight Orchard Monitoring Package

Tree Crop monitoring and alerts, throughout the season

- ✓ High resolution professional drone flight (1 x Farm scan)
  - ✓ Farm set up & digitisation
  - ✓ Weekly NDVI & Crop moisture maps
  - ✓ Per tree monitoring & anomaly detection
    - ✓ Tree counts & missing trees report
    - ✓ Full pest & disease scouting platform
- ✓ Exportable shapefiles based on variation found in the orchard
  - ✓ Farm reporting & data exports
  - ✓ Customer service on demand

Contact Us Today!

**Yoav Yichie**  
Business Development Manager

+61 423950045  
yoav@aerobotics.com

