



ORION
DETECT.PREDICT.PLAN



The Orion Orchard Imaging System

Mount the imaging rig to a farm vehicle and drive through the orchard. The Orion Orchard Imager then processes the images. Results are uploaded to a web app for clear display of your data.

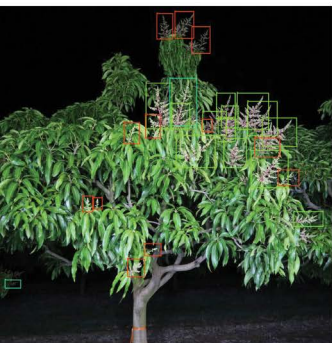


The Orion Orchard Imager is used to map both mango flowering, i.e. identifying areas of early flowering for potential early harvest, as well as mapping mango fruit load across the orchard. The system is able to count fruit visible from a vehicle driving past the trees. Fruit hidden inside the canopy? That's ok - you can adjust the count system.

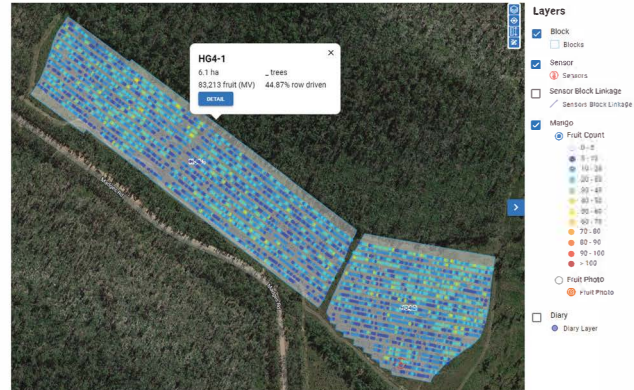


Key Specifications

- Nvidia Orin AGX Processor: 1.2 hours processing per hour of recording
- Imaging speed considerably faster than predecessors
- 5MP camera for high resolution imaging
- Multi-band GPS antenna for quick GPS connection
- 7 km per hour recording speed
- Less than 200W (12V @ 16.5A)
- 12V @10A with lights strobing
- 12V @5A when processing, lights off
- IP68 Weatherproofing
- LED panel output: 80,000 lumen
- Passive heat-sink design for cooling in hot temperatures
- Large handles for transporting system enclosure
- Adjustable camera brackets for an adjustable field of view
- Quiet operation



Mango flower and fruit mapping capability - on the same tree. Data collected over years can inform orchard management. The technologies used support robotic harvesting.



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MANGO AUTOHARVESTER
NOW IN DEVELOPMENT

