

# Measurement Solutions for Agriculture

A business of

CallaghanInnovation



## VALUE TO INDUSTRY

- Make more confident decisions
- Get more consistent outcomes
- Use measurement strategies to solve problems
- Calibrate to international standards of measurement
- Optimise processes and product development
- Cut performance and regulatory risks

**Measurement is critical** to agriculture decision-making, problem solving and the design and use of agricultural technologies.

The Measurement Standards Laboratory (MSL) finds solutions – with smart strategies for measuring and controlling temperature, humidity, mass, pressure, light, electricity, length, time and frequency.

We are New Zealand's official measurement standards body – the source of traceable links to international standards of measurement and your best link to accredited local testing and calibration laboratories.

Whether it's the accuracy of temperature and humidity sensors, development of horticulture shade cloths or improving dimensional accuracy of agriculture machinery and equipment, we can help.

If there's an inconsistency you can't explain, a big decision that turns on a tiny variable or any other measurement challenge, get in touch.



## CASE STUDY

**The Challenge** – The colour of the gold kiwifruit is a critical indicator used in maturity monitoring to ensure that fruit arrives in the market in optimum condition.

**The Solution** – During harvest season, the colour of huge volumes of kiwifruit are measured against reference colour tiles to enable decision making around timing of harvest and environmental conditions for storage of product. MSL not only provides reliable calibration of colour standards as a secure basis for those decisions, but worked with testing facilities to identify and correct a source of error in the colour measurements.

**The Result** – By correcting the source of measurement error, MSL helped the testing facilities from potentially putting up to 13% of the fruit into the market that was over developed and potentially spoiled.

## CONFIDENT DECISIONS

To make the best decisions you need accurate and reliable measurements and a sound grasp of the uncertainties that can influence outcomes. The Measurement Standards Laboratory can help you get it right.

We can help check the freezing points of your biological samples and vaccines to avoid spoilage during shipment.

We've worked on post-harvest handling systems to improve efficiency and quality control of fresh produce. We've advised on how to use and maintain the equipment to make sure it keeps on meeting safety specifications.



## WE'VE GOT YOUR MEASURE

The Measurement Standards Laboratory offers expert measurement advice, training, and calibration of your reference equipment.

We can calibrate or provide advice on the calibration of balances and pressure gauges used in the agrichemical and animal health industries.

MSL can help with development of horticultural fabrics and shade cloths used to improve yield and quality of crops by selectively either reducing or enhancing the effects of solar radiation. For example, the development of new products by measuring transmittance and reflectance, and the labelling and certification to support product claims, giving assurance to vendors and purchasers.



### CONTACT US

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