



Frost sensors

Keeping the chill at bay

Complexity



Price



Scale



Evaporating water from plant tissues or soil absorbs heat from the environment. When the air is dry the evaporation is very intense, and this can lead to plant damage.

However, if we react in time and increase the air humidity, the evaporation is less intense and the damage is lessened - this can be achieved by the use of at least one agriculture frost protection sensor.

How

Frost sensors are often made up of two temperature sensors (precision thermistors) within a single housing unit.

These units should then be dispersed across growing areas, aligned to the canopy.

To get the best data, the position of the monitors should be adjusted through the season to keep them at canopy height and ensure they provide the most relevant information about what temperatures the crop has been exposed to, particularly during vulnerable flowering stages.

Sensors should be placed at several locations known to be particularly impacted by frost and preferably on a range of soil types.

These sensors should also be distributed throughout the farm to ensure that changes in elevation and windbreak are accounted for when taking readings.

Some models take advantage of the latest web-enabled technology to remotely monitor sites and to notify growers of important events such as frost conditions.

Why

Frost can severely damage the quantity and quality of crop yield.

On clear, calm nights, leaf and bud temperature can drop below freezing even if air temperature remains slightly above 0°C.

As we start to find ways of counteracting frost, every bit of data helps.

Data from temperature monitors can be used to develop a historical database to monitor frost incidence on growers' properties and to assist with whole-year frost risk management planning.

Frost sensors can help us plan long term sustainable solutions to cropping and agriculture problems, and can help us avoid planting in fields that are particularly vulnerable to frost events.

[Water](#)[Grower](#)[Cropping](#)

Benefits

Quality assurance

Help protect your crops by getting alerted to potential frost conditions.

Rapid response

Integrated SMS alert systems keep you informed about what's happening on farm.

Cost effective

Frost sensors are inexpensive and easy to set up.

Getting started

1. Obtain frost sensors from reputable suppliers.
2. Install the sensors as directed.
3. Monitor for frost events.

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More Info

For more information on how you can deploy this technology on farm, give us a call or visit our website via the link below or QR code.



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