Moisture and nutrient status in the root zone

The WET Sensor from Delta-T Devices is essential equipment when accurate measurement in soil and substrates is vital to your business.

The Delta-T WET Sensor has crucial applications in precision horticulture and soil science research, and is usable in both soils and growing substrates. It is exceptional in its ability to measure pore water conductivity (EC$_p$), the EC of the water that is available to the plant.

Readout and data storage are carried out with the HH2 Moisture Meter.
The Delta-T WET Sensor

The Applications

The Delta-T WET Sensor is essential for testing the following...

Fertigation and hydroponics
Where plants are grown in artificial substrates, nutrients are routinely supplied in irrigation water - "fertigation". Nutrient levels are controlled by monitoring the water content and conductivity (EC) and adjusting the injection of liquid fertiliser into the irrigation water. The Delta-T WET Sensor excels in monitoring this crucial information.

Soil salinity
If the irrigation water is recycled or abstracted from rivers with high levels of dissolved salts, over time there can be a build-up of soil salinity. Soil salinisation will eventually reduce crop yields. The WET Sensor is fast and efficient for sampling soil salinity, ensuring that farmers have the essential information they need to take remedial action as quickly as possible.

Container-grown shrubs and trees
Nutrients are sometimes provided by fertigation but are often provided by Controlled Release Fertilisers. The rate at which these are taken up depends on the weather conditions. The Delta-T WET Sensor can be used to measure EC within the growing media, removing much of the guesswork from this procedure.

The Advantages

The WET Sensor combines a number of features to make it indispensable in horticulture...

Saves time and money
The WET Sensor takes a complete reading in ~5 seconds – so you can monitor the growing conditions of hundreds of plants in a day. It replaces expensive lab analysis and ensures your crops are grown under optimal conditions.

Absolute accuracy
Water content ± 3%
Pore water EC ± 0.1 mS.cm⁻¹ (varies with water content)
Temperature ± 1.0°C

Research grade sensor
The WET Sensor has been used in research for over 15 years. Innovative ASIC-based design and 3-parameter measurement make it an effective solution to the problem of monitoring growing conditions in competitive areas of horticulture and agriculture.

Simple operation
Insert the WET Sensor, press [Read] and scroll down [3]:
Water Content 65%
Pore water EC 4.1 mS.cm⁻¹
Temperature 27.2°C
Detailed reading set-up is available but rarely needed.

Specialist calibrations
The WET Sensor is supplied with default calibrations for generic mineral, organic, sand and clay soils. Specialist substrate calibrations are available as a set for a variety of horticultural media - see ordering information.