

Using the WET Sensor to optimise growing conditions and irrigation efficiency in high volume strawberry and raspberry production

Clock House farm nestles in the rolling hills of Kent, a few miles south of Maidstone in the UK. The expansive 250 acre farm grows a variety of fruit, including strawberries, raspberries and blackberries.

Notable innovators in horticulture, Clock House Farm were one of the first commercial growers to adopt table-top production of strawberries in the late 1990s. Since 2008 they have been using Delta-T WET Sensors to monitor growing conditions, making thousands of readings a week.

Farm Manager Nick Deppe oversees WET Sensor usage across the farm - and here he explains how and why the device is used:

"The WET Sensor measures substrate moisture and EC quickly and easily. These variables are critical for ensuring our fruit are as healthy as possible at all times."

"Once a week I meet with an agronomist and we set 7 day targets for both % moisture levels and EC levels for each fruit substrate. I then produce a sheet on which the current levels can be filled in (on a daily basis) and compared against the agreed target levels."



Farm Manager Nick Deppe explains how his team uses the WET Sensor



"This approach allows us to continually monitor the moisture and EC situation, hit our targets, and address any shortcomings at very short notice - something that is absolutely critical with fruit such as raspberries, which can deteriorate within a matter of hours under sub-optimum growing conditions."

Nick oversees a team of 7 staff that take measurements with the WET Sensor. He estimates that each team member takes at least 60 separate readings a day – resulting in a total of around 500 daily measurements across the farm.



Nick explains further:

"Optimising the quality and yield of our fruit is obviously a key priority for Clock House Farms. By knowing the exact EC and moisture levels hour by hour we have the data that enables us to react quickly to changing substrate conditions."

"It is the immediacy of the data which the WET Sensor provides that is valuable to us, not just the excellent accuracy. In terms of benefits that the WET Sensor provides, it not only gives us the confidence that we have optimal growing conditions at all times, it has also enabled us to reduce irrigation levels (whilst enhancing produce quality) - eliminating unnecessary water wastage and reducing expensive fertiliser costs."



WET Sensor

The WET Sensor measures three vital properties of substrates: water content, EC and temperature

- Accurate measurement of pore water conductivity in-situ
- Ideal for precision horticulture and soil science applications
- Rugged and reliable multi-parameter sensor



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