SBR Agricultural Products, Turkey

Using the WET-2 Sensor to optimise growing conditions, fruit yield, and fruit quality

Delta-T Devices products used:
WET Kit - Includes multiparameter WET-2 Sensor (moisture, temperature, EC) and HH2 Readout Meter.

SBR - a major Turkish fruit producer

SBR Agricultural Products (SBR) was founded in 1990 and operates in the Mersin Silifke region of Turkey.

It specialises in the cultivation of fruit, especially berries - using cutting edge techniques.

Its growing facilities are substantial - with 400,000 square metres of hydroponic strawberry greenhouses, and separate 50,000 square meter production areas for raspberry, blackberry and blueberry.

SBR’s use of the WET Sensor

SBR staff have been using the Delta-T Devices WET Kit since 2018 to help manage their hydroponic strawberry production – taking critical measurements of moisture and pore EC (Electrical Conductivity) of the water around the plant roots, several times each day.

These measurements are used by their crop managers to fine tune fertigation, in order to maintain optimal water and nutrient levels for each crop.

The highly portable and rugged WET Kit comprises the WET-2 Sensor, alongside HH2 Moisture Meter readout unit and carry case.
The WET Kit enables the SBR greenhouse managers to take accurate fast readings of substrate moisture, pore water EC, and temperature at multiple locations across the farm.

These instantly displayed measurements are stored with date & time stamp in the HH2 Meter and can be uploaded later to Excel for archiving and analysis.

The speed and accuracy of this process is important, especially so for substrate‐grown berries in protected environments. If problems with substrate conditions arise, the “timely” period for responsive action by the greenhouse managers can be very short. Berry size and quality can deteriorate within a matter of hours under sub‐optimum growing conditions.

As well as a crucial remedial tool, using the WET Kit in this way enables SBR staff to determine daily and even seasonal growing trends for each greenhouse — leading to improved crop management and decision making.

The overall effect of using the WET Kit data is to reduce unnecessary water (pumping) costs, expensive fertiliser use, waste and run‐off; whilst increasing crop yield and fruit quality

The staff at SBR also use the WET-2 Sensor in soil to optimise the growing conditions of other produce they cultivate.

SBR’s Mehmet Özmen says,

“We’ve been very impressed with the WET-2 Sensor since we started using it. The data it produces allows us to have real confidence in our irrigation decision making.

The portability of the sensor and readout unit, means we can carry it with us when we inspect crops – and the multiple calibrations mean that we can always get a reliable reading, regardless of the growing media.

We take multiple readings on a daily basis – and the EC and moisture values the WET-2 Sensor provides enables us to adjust the levels of irrigation and fertigation to achieve ideal soil and substrate conditions.

This application of water and fertilizer at the right time (and in the right quantity) helps us ensure high fruit quality and yields.”