

# PRECISION IRRIGATION OF STRAWBERRY PLANTS



Niab research on water use efficiency highlighted that commercial UK strawberry growers could reduce water use each season by up to 33% without compromising yield or fruit quality (Figure 1).

The Water Efficient Technology (WET) Centre at Niab's East Malling site in Kent has demonstrated to growers how this can be achieved. It employs advanced precision irrigation technology (Figure 2) which measures the moisture content of strawberry grow bags and triggers irrigation when the moisture content falls below a preset value, returning it to the optimum level.

Adoption of this technology has reduced the industry average water use for an everbearer strawberry variety from 82 m<sup>3</sup> per tonne of fruit produced in 2013 to 60 m<sup>3</sup> in 2023. Technology employed at The WET Centre achieves an average of 43 m<sup>3</sup> and at best has reduced it to 28 m<sup>3</sup>.

This technology has been combined with rainwater harvesting and re-use to enable the Centre to achieve 90% self-sufficiency in water, even in very dry seasons (Figure 3).

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Figure 1. Measuring the rate of water run-off from strawberry bags



Figure 2. Precision irrigation technology



Figure 3. Modern tunnels can harvest rainwater

