

Alastair Heath James Heath and Sons Ltd

Rea Valley Tractors (John Deere) customer



For **Alastair Heath, of James Heath and Sons Ltd**, near Telford, optimising their irrigation schedule is vital. He and his brother James grow 150ha of potatoes spread over a number of fields eight miles from the home farm. Around 85% of the crop is irrigated, using 20ha of trickle and three rain guns. Since installing four 60cm soil probes and two **iMETOS ECO D3** Clima 80 stations, supplied by Rea Valley Tractors, they are better able to match water supply to crop need. Schedules are checked and updated weekly, based on water deficit reports from their Agrii agronomist and the data from the METOS stations and probes.

"Before we installed the stations we treated every field the same. Now, we know that we can have a 20mm difference in rainfall in fields only 2.5 miles apart, and that our fields vary in how each crop responds to water uptake."

Alastair says:

"With the live data from the probes we can see how much water is available in that field's soil, and how fast the crop is using it. This helps us plan when to irrigate, how much water to put on, and how long it will last. We're finding that we vary the amount we apply a lot more than before. Depending on how soon we can get to the various fields, we know that some need irrigating every seven days to get them back to field capacity, while others can be left for longer, or need water more frequently. Previously, we used to try to get into a rota of going round a certain number of times, but if you had a problem it just delayed the whole schedule. Now, it's all about making informed decisions rather than educated guesses."

Alastair and James are also using the data from the METOS stations and probes to help them improve disease control, particularly the timing of blight sprays.

"When you look at the air temperature recordings from the stations, and at how the moisture levels are going up and down with rainfall, you can gauge the conditions in that field and work out the trends. We're now looking at the data from individual fields, and using this alongside Hutton Period alerts from Blightwatch. This helps us make a better-informed decision of the blight pressure on a field-by-field basis. Last year, in what was an unexpectedly busy blight season, the additional data from the stations enabled us to tailor our blight sprays much more. Every season is so different. But having this information on weather, rainfall, and soil moisture from the stations helps us plan our activities better, and make decisions according to actual conditions in the field."



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