

Using water to maximum efficiency



Jeremy Best has been growing soft fruit on his 31 acre farm Mitchell Fruit Garden near Newquay since 1976, sourcing the produce to retail outlet and wholesalers. Raspberries, tayberries, gooseberries, black currants, rhubarb, and strawberries are all grown as part of the family business. A keen advocate of the financial rewards from growing strawberries, saying “the worst strawberry crop beats the best lettuce crop you could ever grow” Jeremy explains the irrigation system he has set up which is aimed at achieving maximum efficiency.



cost £100, and the electricity for the pumping system cost £200. Now we mainly use a form of drip irrigation with small drips every half metre, and we have found that this system reduces water usage by 90% per acre / hectare.”

“An integrated underground irrigation system that uses a reservoir as the source was originally installed with hydrants placed all over the farm (60% funded by the Capital Grant Scheme).”



He also has to comply with water quality legislation. “The farm is in an NVZ area which means that with the reservoir being set at the top of the watershed of Ladock river I must make doubly sure there are no spillage /pesticide incidences.”

Jeremy uses water-powered dosing technology to deliver a system of fertigation. Two dosing liquids are pumped from beside the reservoir; one containing calcium nitrate, the other a compound strawberry feed containing essential micronutrients and macronutrients such as potassium (which is increased as the season progresses).

“The 5 million litre reservoir is fed by springs. We had to get an abstraction license, which

The system allows for water quantities to be controlled with the dosing of any nutrients added being proportional to the water flow passing through the pumps. “The controlled watering system means that you can meter out the fertiliser and can work out the vegetative and fruiting time and requirements.”

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The entire irrigation / fertigation system for one table top area (including pipe work, fittings, pumps etc.) cost £4000 to install.



The strawberries are mainly grown in raised beds (in soil of a silt-loam consistency). The polytunnels provide protection against the rain and extend the growing period from the end of April to the end of November. Covering the beds with plastic allows for greater control of the growing environment.

“Having moisture at root level is extremely efficient and means that no evapo-transpiration occurs. We use a system of 3 rows of strawberries per bed, with 2 lines of irrigation piping running down either side of the crops, and 2 drippers.”

The drippers deliver 2 to 3 drips every metre, with each drip going at 2 litres an hour. This provides the right volume and spread of water.

“The possibility of being able to work out how many drops per run means that the system is very controlled. It gets the most out of the plants and means you have happy and healthy plants with no disease or root problems.”

Using this system of fertigation, the ever-bearers produce a kilo and a quarter of strawberries per plant between June and November.