

Reaseheath builds cutting-edge glasshouse

One of the most advanced glasshouses for teaching protected crop production is being erected at Reaseheath College, near Nantwich in Cheshire.

The 768sq m CambridgeHOK glasshouse, which replaces a range of old structures, should be complete by October. It will feature three compartments: one will be used for tomato production; one for growing strawberries; the third is split into two to accommodate propagation and to produce ornamentals with ebb and flood irrigation. A mezzanine floor will hold the computer control terminals and allow students a better overview of how the glasshouse operates.

Lecturer Sarah Hopkinson, who is leading the project for Reaseheath, said the facility is a step ahead because its height will be the same as a modern commercial glasshouse and it will use cutting-edge technology, such as diffuse glass in the roof and Philips LED top and intercrop lighting. That will give the college the ability to conduct near-market research, too, she said. "Once commissioned, we plan to run a benchmark trial growing Piccolo tomatoes

under the LED lights," she added.

The glasshouse is part of a multimillion pound national centre for 'food futures and the environment' and is being funded by the Skills Funding Agency and by the college itself. The centre will also include an agritech building for precision farming technology and robotics. "We have big agriculture and engineering departments and this facility will pull the two together and focus on the more innovative aspects," said Ms Hopkinson. "But we have had initial discussions about trials to look at robotics in a greenhouse environment."

The college already offers Level 2 and Level 3 diplomas in horticulture but is introducing this year a degree course on production technology. "Not many colleges focus on production horticulture but we're really keen to do it because that's where the career opportunities are and because the technology is a key way to draw young people in," she said.

Ms Hopkinson said the project had received 'massive support' from Cheshire tomato grower Phil Pearson and consultant Paul Challinor.

CambridgeHOK was involved in the construction of Philips' GrowWise research centre at Eindhoven (See page 20) in the Netherlands which was formally opened last month. The centre has eight climate rooms, each housing four tiers of production tables lit from above by GreenPower LED units which can emit blue, red and far-red light. The centre's remit is to develop the 'light recipes' that best suit individual crops for so-called vertical farming where crops such as leafy vegetables, strawberries and herbs could be grown in completely enclosed growth rooms.