Research aims to reduce water footprint and increase shelf life of potted and cut herb production

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New research from the University of Southampton is aiming to reduce the water footprint and increase shelf life of potted and cut herb production in the UK.

Focusing on a range of potted and cut herbs, including flat-leaved parsley, basil and coriander, the aim is to reduce the use of irrigation water during crop production, while improving the flavour and quality of

the herbs. It has already been shown in other growing systems that substantial water savings can be made without detrimental impacts on crop quality.

The project is led by Professor Gail Taylor from the University of Southampton and builds on research findings from a BBSRC IPA (Industrial Partnering Award) with Vitacress Ltd.

The project was awarded from the Annual Sainsbury's Supermarket Agricultural R&D Grant - where growers, suppliers and researchers are asked to compete for a pot of £1 million provided by Sainsbury's.

More than 18 million pots of herbs are produced in the UK each year and much of this production is undertaken by Vitacress under glass in Sussex. Cut herbs are grown widely in the UK summer and overseas in winter.

Professor Taylor says: "It's hard to imagine a world without fresh herbs and yet this product has only been on our supermarket shelves for the past ten years or so and much remains to be learned to optimise the use of water in cultivation. We will use the latest technologies in thermal and remote imaging to assess precisely when irrigation should be applied, targeting water to best effect and helping Sainsbury's to achieve their targets for the 20 x 20 Sustainability Plan, which includes a robust water stewardship commitment from suppliers and also a target to double the amount of British food sold.

"This research, we hope, will contribute to both of these aspirations, while at the same time increasing our fundamental knowledge on the way in which plants use water."

The research team includes Professor Gail Taylor, Mark Chapman, Hazel Smith and Libby Rowland from the University of Southampton, in

partnership with Steve Rothwell from Vitacress Salads Ltd and Calum Kelly and Rob Honeysett from Sainsbury's Supermarkets Ltd.

Provided by University of Southampton