

press release

Date: Thursday 16 May 2013

HDC precision herbicide research moves toward commercialisation

Precision technology that will allow reduced herbicide use by accurately identifying and spotspraying weeds, developed from research funded by the Horticultural Development Company (HDC), is to go into commercial production.

The prototype device combines an innovative image analysis-based system for identifying a variety of weeds in row crops, coupled with a choice of two precision spraying modules to directly apply herbicide either to single spots or to small patches of weeds. The technology is based on evidence from HDC project FV 307a, *Reducing herbicide use in row crops with targeted application methods treating detected weeds in small patches or spots*.

"We looked at how combining new spray technologies with vision guidance techniques can deliver targeted application of selective or total herbicides," explains lead researcher, Dr Paul Miller of Silsoe Spray Applications Unit. "The results showed high precision for spot application to weeds in onions, leeks and sugar beet—an advance on an earlier technique pioneered to develop spot application of glyphosate to volunteer potatoes in onions and carrots."

Speaking on behalf of Garford Farm Machinery, which is to commercialise the technology, Philip Garford said, "Results from field experiments have showed that this technology has great potential to benefit field vegetable growers all over the UK. We are pleased to be working with the research team to develop the device into a commercially viable product." Leek grower Patrick Allpress of Allpress Farms added, "Growers are always under pressure to reduce chemical use, so we welcome the development of this device that could eliminate the need for broadcast herbicide application."

The HDC funds projects to support the commercial development and sustainability of the UK's horticultural crop sectors. HDC Knowledge Transfer Manager, Rosie Atwood, said, "Providing value for money for levy payers is at the heart of everything we do. We're excited

that this research has led to the commercial development of a practical, useful tool that will not only cut costs for field vegetable growers while maintaining effective weed control, but will also reduce the impact of chemicals on the environment."

Another success of the project is that the glyphosate-based herbicide 'Roundup Energy' (Monsanto UK) has recently secured approval for an Extension of Authorisation for Minor Use (EAMU). This EAMU (0354/2013) now allows UK growers of various tuber, root and bulb crops to use 'Roundup Energy' as a spot-sprayed, inter-row herbicide.

For full advisory information for use and restrictions, please view or download the EAMU from the CRD website. A Growers Summary and full reports for project FV 307a can be found by searching by project number at <u>www.hdc.org.uk</u>.

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Notes to Editors:

If you would like more information on this release or would like to speak to Paul Miller, Philip Garford or Rosie Atwood please contact Charlotte Corner, HDC Communications Manager: charlotte.corner@hdc.ahdb.org.uk on 024 76478880

- The HDC is a division of the Agriculture and Horticulture Development Board (AHDB) which administers the collection of an 'industry levy' to fund essential near-market research and development. The research programme and knowledge transfer activities are strategically aligned to the needs of the industry by working closely with growers, consultants, scientists and funding bodies.
- The HDC has responsibility for over 300 crops in the horticultural industry and commissioned over 75 research and development projects in 2012.
- The Agriculture and Horticulture Development Board (AHDB) is an independent, evidencebased 'Levy Board' which plays a pivotal role in improving farm business efficiency and competitiveness. The AHDB is wholly funded by farmers and growers through statutory levies. Because the levy is statutory AHDB is classified as a non-departmental public body.