

# Grower Summary

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## **FV 387a**

Improving Quality and  
Extending the Season for Late  
UK Leeks

Final 2013

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## Use of pesticides

Only officially approved pesticides may be used in the UK. Approvals are normally granted only in relation to individual products and for specified uses. It is an offence to use non-approved products or to use approved products in a manner that does not comply with the statutory conditions of use, except where the crop or situation is the subject of an off-label extension of use.

Before using all pesticides check the approval status and conditions of use.

Read the label before use: use pesticides safely.

## Further information

If you would like a copy of the full report, please email the HDC office ([hdc@hdc.ahdb.org.uk](mailto:hdc@hdc.ahdb.org.uk)), quoting your HDC number, alternatively contact the HDC at the address below.

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| <b>Project Number:</b>          | FV 387a  |
| <b>Project Title:</b>           | Improving Quality and Extending the Season for Late UK Leeks |
| <b>Project Leader:</b>          | David Norman   |
| <b>Contractor:</b>              | Precision Agronomy Ltd                                       |
| <b>Industry Representative:</b> | Patrick Allpress, Allpress Farms                             |
| <b>Report:</b>                  | Finall Report, 2013  |
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| <b>Previous report/(s):</b>     | N/A  |
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| <b>Project Cost:</b>            | £49,250  |

## **Headline**

Maleic hydrazide applied as the product Fazor, gave a highly significant reduction of bolting in late leeks produced under UK conditions, giving the potential for the leek season to be extended by 3-4 weeks.

## **Background**

The season for UK leeks starts with harvest at the end of June using transplant plants produced under glass and then transplanted outside under crop covers, the season then runs through until late April/early May in the following year. The crops for the latest part of the season are direct field drilled in the previous May for harvest up until late April/early May the following year. The season finishes usually because the old season crop runs to seed (bolts) making it unacceptable for the market. In many similar biennial crops such as onions, carrots and parsnips the use of a sprout suppressant reduces bolting and re-growth to allow a longer marketing season. The use of these sprout suppressants also offers improvements in quality and shelf life for late season produce. The use of such materials has not been investigated in leeks previously and hence this study was proposed by the British Leek Growers Association. Maleic hydrazide is currently not approved for use in leeks in the UK.

## **Summary**

Fazor (maleic hydrazide) show excellent promise for extending the season of UK leeks. This can be achieved from a by reduction in bolting, the main cause of the loss of quality at the end of the UK leek season. In addition to reducing bolting Fazor has other beneficial effects on leek quality by reducing softness and telescoping, both of which are important quality defects at the end of the UK season. There does, however, need to be caution in the use of this product, should it become approved, as application too early can cause leeks to become too short and fat, application too late, after bolting has occurred does not have any beneficial effects. The effects of gibberellins on the increase of shank length were inconclusive, with some variable results with interesting trends but no significant increase proven from the one year of trial.

## **Financial benefits**

Using this technique could extend the leek season by up to four weeks, potentially allowing year long supply of British leeks to consumers when used with the correct storage. Given that the total value of leek production in the UK is currently worth £35,000,000 this could add a further £3,000,000 worth of production value to this figure.

## Action Points

- This study has confirmed that the application window for maleic hydrazide on leeks is during March, as spring re-growth resumes after the winter dormant period. The effects have been proven on two different varieties and over three seasons of work.
- The use of maleic hydrazide is likely to result in an exceedance of the current maximum residue level (MRL) for leeks as the use is not an approved use and the MRL is set at a low rate to reflect this. Once the timing and rates have been confirmed therefore, residue studies data will be required to submit data to allow an increase of the MRL, to comparable levels with other crops where the active is in approved use. Following this increase in MRL an application for an off-label approval could be submitted.