



Horticultural
Development
Company

New Project

FV 350

Nitrogen requirement of leeks

Project Number: FV 350

Title: Nitrogen requirement of leeks

Start and end dates: 1 April 2009 to 31 March 2011

Project Leader: Clive Rahn, University of Warwick

Project Co-ordinator: Gareth Skinner, Vale Vegetable Crop Consultancy

Location: Warwick HRI, University of Warwick, Wellesbourne, Warwick, CV35 9EF

Background and project objectives

The overall aim of the project will be to improve the matching of nitrogen fertiliser application to the nutrient requirements of leeks to maximise production of quality produce with minimal impact on the environment. Such information is vital to justify any changes in the national fertiliser recommendations. Currently there are no clear recommendations of the amounts of nitrogen required to support over-winter growth. Previous N response experiments in the UK have suggested responses to in excess of 500kg/ha N of spring and summer applied N. This is in sharp contrast with work carried out in Europe where substantially less nitrogen is thought to be satisfactory.

An experiment will be set up in the first year to determine the amounts of N taken up in relation to crop size over a range of nitrogen levels in order to determine generalisable targets for nitrogen requirement in the summer autumn and winter periods. This will be augmented by measurements of yield and nitrogen offtake in commercial crops. In the second year experiments will be carried out to examine different methods of targeting N supply to N demand. The methods to be tested will be based on information gathered during the first years work and discussions with the Leek Growers Association.

The key deliverable from this project will be an improved and scientific basis upon which to base nitrogen recommendations for the leek crop. These can be delivered directly into the industry and inform future revisions of RB209.

Further information

Email the HDC office (hdc@hdc.org.uk), quoting your HDC number, alternatively contact the HDC at the address below.

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