

New Project

FV 391

Carrots: Improving the management
& control of cavity spot

Project Number:	FV 391
Title:	Carrots: Improving the management & control of cavity spot
Start and end dates:	1st May 2011 to 30th April 2014
Project Leader:	Dr Peter Gladders, ADAS UK Ltd
Industry Representative:	Keith Mawer, Strawson Ltd
Location:	Main site: ADAS Boxworth, Boxworth, Cambridge CB23 4NN (laboratory testing of fungicides)
HDC Cost:	£119,444.00

Project Summary:

Carrot growers are reliant on a single active ingredient (metalaxyl-M) for cavity spot control. Its performance can be variable as it is known to be affected by enhanced soil degradation. The extent of enhanced soil degradation will be determined by testing 25 fields used for carrot production during both 2011 and 2012. There are new opportunities to improve control of carrot cavity spot as new fungicides have become available with strong activity against *Pythium* species. After initial screening experiments in the laboratory on agar media, the project will investigate dose and timing of new fungicides to determine optimum practice.

In addition, biological (spray) treatments are also now available and will be evaluated along with soil calcium treatments. The benefits of integration of these chemical and amendment measures will be evaluated on resistant (tolerant) and susceptible cultivars so the component benefits can be quantified.

Aims & Objectives:

(i) Project aim:

To develop sustainable control measures for carrot cavity spot

(ii) Project objective(s):

1. To evaluate new fungicides and biological treatments with potential to control *Pythium* species in soil.
2. To establish optimum application rates, methods and timings for the most promising new products.
3. To determine the contribution of pre-planting calcium applications for cavity spot control.
4. To test combinations of the novel treatments for cavity spot control on resistant (tolerant) and susceptible cultivars.
5. To determine the prevalence of enhanced degradation of metalaxyl-M in carrot growing areas.

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