



Agriculture & Horticulture
DEVELOPMENT BOARD



New Project

TF 195

Sensitivity of apple powdery mildew
(*Podosphaera leucotricha*)
populations to triazole, strobilurin
and other fungicides

Project Number:	TF 195
Title:	Sensitivity of apple powdery mildew (<i>Podosphaera leucotricha</i>) populations to triazole, strobilurin and other fungicides
Start and end dates:	1st April 2011 to 31st March 2014
Project Leader:	Dr Angela Berrie & Professor Xiangming Xu, East Malling Research
Industry Representative:	Nigel Kitney
Location:	The project will be based at East Malling Research, making use of specialist isolation glasshouse facilities to develop the techniques and to grow the plants Additional sites: Monitoring will be done in commercial orchards in years 2 and 3
HDC Cost:	£42,266

Project Summary:

After scab and canker, powdery mildew is the most important disease on apple in the UK. Most cultivars are susceptible to the disease and some such as Cox are very sensitive. Recently experience suggests that mildew control in many apple orchards of Cox and other cultivars including Gala, Braeburn and Bramley is poor. There are many possible reasons for the poor mildew control. This project aims to investigate one specific reason for the poor control: whether there is a significant reduction in the sensitivity of mildew populations to common fungicides (triazoles and strobilurins). It will develop a practical method for assessing the sensitivity of mildew to fungicides and use it to assess the extent of the problem in commercial apple orchards. Sensitivity of potential new mildew fungicides in the SDHI group of fungicides will also be monitored. The information generated will provide the industry with a clearer understanding of apple powdery mildew and the current factors affecting it. The results from this project combined with those on alternative fungicides from the Sceptre project will provide the industry with clear guidelines on how to manage apple powdery mildew in the future.

Aims & Objectives:

- (i) Project aim: To develop a sustainable, cost effective system for control of apple powdery mildew (*Podosphaera leucotricha*)
- (ii) Project objective(s):
- To develop a practical method for monitoring the sensitivity of populations of *P. leucotricha* to triazole, strobilurin and other fungicides
 - To use the method to monitor the sensitivity of mildew populations to triazoles, strobilurin and other fungicides in apple orchards

Further information

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

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