New Project

HNS 185

Understanding and managing crop protection through Integrated Crop Management.

Project Number:	HNS 185
Title:	Understanding and managing crop protection through Integrated Crop Management.
Start and end dates:	1st February 2011 to 31st March 2012
Project Leader:	Dr Erika F. Wedgwood
Industry Representative:	Nick Dunn, Frank P Matthews Ltd
Location:	ADAS Boxworth
HDC Cost:	£71,780

Background and project objectives:

Integrated Crop Management (ICM) integrates the use of both non-chemical and reduced or alternative chemical pesticide practices for the effective management of pests, diseases and weeds. ICM includes the:

- Use of good growing conditions and husbandry
- Monitoring of pest problems and awareness of any thresholds
- Preference for non-chemical control measures, where possible
- Use of biological control agents, where available (and effective)
- Use of specific and targeted pesticides, where possible
- Use of optimum application methods.
- Avoiding chemical programmes that could promote resistance in addition to promoting the use of lower risk plant protection products (where risk relates to the safety of the active ingredients for humans and the environment), where possible.
- Checking control success then modifying programmes and implementing corrective actions as necessary

The nursery stock industry in the UK has adopted ICM to varying degrees. There have been many *ad-hoc* projects, including those funded by the HDC, and the development of techniques by growers and consultants, which have covered specific pests and diseases or weed problems, but until now there has been no attempt to bring together these many strands of ICM knowledge and to combine these with current best or 'better' practice amongst HNS growers.

The proposed project aims to combine relevant information across all horticultural sectors from applied research, from both grower and consultant/researcher experience, and the study of ICM practices used presently in the UK and abroad. This will be used to guide UK growers towards best or 'better' practice ICM which is economically viable, takes account of ongoing changes in crop protection legislation - such as the changes that could arise through the implementation of the EC Sustainable Use Directive (SUD) - and is practical for growers to implement.

Knowledge gaps requiring further work will also be identified and ongoing use made of the principal project findings in order to prioritise and focus future research and technology transfer initiatives. Importantly, the guidelines produced will take into account the full range of HNS business sizes and current systems (indoor / outdoor container-grown HNS and field-grown HNS).

Economic appraisal of the costs and benefits involved in adopting ICM techniques will comprise an important part of the project, along with an assessment of their strengths and weaknesses. Environmental and social responsibility considerations will also be taken account of when assessing current practices and the feasibility of new practices, as will existing science-based evidence when considering treatment efficacies. Due regard will also be given to any incompatibilities between ICM techniques.

The main purpose of the work is to help the industry understand and manage crop protection and plan for the future.

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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