

RD 2.1.6: Integrated Pest Management

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Aim:
To understand the importance of factors that modify reliance on pesticides and integrate these into IPM toolboxes tailored to key Scottish horticultural and arable crops.

We work closely with stakeholders to prioritise IPM research and promote uptake of best practice.

Disease control options which reduce Scotland's reliance on pesticides are required for the National IPM Action Plan and as a result of reduced availability of plant protection products.

IPM tools include improved monitoring and forecasting tools which are being evaluated for key pest and disease threats in each cropping system.

Research Objectives

- Analysis of disease risk modifiers
- Development of decision support systems
- Evaluation of new IPM tools
- Integrated crop-specific IPM Toolboxes



Evaluating and integrating tools for the soft fruit IPM toolbox

We are evaluating:

- New aphid and *Phytophthora* resistant raspberry germplasm
- Impact of parasitoid wasps as bio-control agents in commercial polytunnels
- Selected biopesticides applied to aphid hotspots
- Monitoring and diagnostics for Spotted Winged Drosophila
- Plant growth/vigour promoters using coir based substrates
- Floral resources to attract hoverflies providing natural aphid predation
- Use of aphid molecular markers to evaluate movement and population genetics of aphids on crop host plants (raspberry, strawberry, potato)



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Impact

- Delivery of new tools for control of pests and pathogens
- Integration of new and existing control options to reduce reliance on pesticides.
- IPM to underpin sustainable and robust pest and pathogen control and meet policy objectives.

