



Where next with biological pest control Selchuk Kurtev, Zest Sustainable ICM

WHAT I WILL COVER



- > UK Pesticides National Action Plan 2025 (NAP2025)
- > Short-term (3-5 years) trends
- > Medium-term (5-10 years) trends
- > Long-term (10 years+) trends
- Summary





- 1. 'Encourage **<u>uptake</u>** of IPM
- 2. Set <u>clear targets to monitor</u> use of pesticides
- **3.** <u>Strengthen compliance</u> to ensure safety and better <u>environmental outcome</u>'
- To address the 18 actions stated, many of them lack detail:
- 10 actions to encourage uptake
- 4 actions to set targets to monitor
- 4 actions to build and strengthen compliance

Policy paper

UK Pesticides National Action Plan 2025: Working for a more sustainable future

Contents

Introduction Objective 1: Encourage uptake of Integrated Pest Management (IPM)

Objective 2: Set clear targets and measures to monitor use of pesticides

Objective 3: Strengthen compliance to ensure safety and better environmental outcomes References

Annex 1: Statutory obligations for a Pesticides National Action Plan

Annex 2: Integrated pest management principles Annex 3: Pesticide facts and figures







Encourage uptake:

- Increase knowledge and implementation of decision support tools
- Training provision and funding for research
- Precision application and use of drones
- Evidence based horizon scanning of gaps
- Support biopesticide applications and their approval
- Specify major crop as lagging on uptake







Setting targets to monitor:

- Work with organisations collecting data behind the indicators from previous NAP to update, improve and replace existing indicators
- All 4 governments to work with regulatory bodies to agree indicator framework for producing monitoring reports
- Assess progress against targets
- Publish biennial reports on results



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Pesticide Usage Surveys

This application presents pesticide usage data relating to Great Britain 1 Committee on Pesticides and funded by the charge on the agrochemic Biosciences Institute of Northern Ireland.





Strengthen compliance:

- Commission a project to review where data can further inform a <u>risk-based</u> approach to compliance
- Industry/assurance schemes might be considered as part of assessing users' risk profiles, targeted inspections
- Update of the 'Code of practice for using plant protection products' (and the 'Code of practice for suppliers of pesticides to agriculture, horticulture, and forestry')
- Engage with online marketplaces for online sales of professional PPP to increase visibility of the legal requirements







What does it really all mean:

- ✓ Recognition of the need for pesticides
- ✓ Clear target on reduction of pesticides use
- ✓ Large broadacre crops identified as key area to increase the uptake of IPM
- ✓ Bio-control agents and biopesticides clearly promoted
- ✓ Updates to monitoring and reporting of the use and uptake of IPM
- ✓ More training and update on statutory instruments
- ✓ More rigorous compliance coming our way
- ✓ Importance of assurance schemes and industry bodies
- ✓ Better control of online sales of PPP
- ✓ Targeted risk-based inspections



SHORT-TERM

- Decision support tools
- Digitised agronomy
- Introduction formats labour cost savings
- New species and improved production systems, strains and formulations
- Precision application and delivery methods
- Conservation of habitats and reduction of impact on beneficials on whole farm approach
- Bee Vectoring Technology (BVT)
- Sterile Insect Techniques (SIT)



MEDIUM-TERM

- Genetically engineered biocontrol agents
- New species and improved production systems, strains and formulations – Super bugs!
- Entrance of field introductions of biologicals through drones etc
- Crop genetic improvements and selections removing predatory mite barriers, VOC attractants etc







LONG-TERM

- Cyborg insects, nanobots??
- Remote controlled predatory insects??
- > Unlikely to happen within the next 10 years BUT...
- Improvements will reach new height of effectiveness
- Crop production system changes in parallel











SUMMARY



- Digitised crop monitoring and decision support uptake
- Precision delivery methods improvement
- Bio-control agent strains and improvement to formulations
- > Utilising the whole farm IPM
- > Increased costs to farming businesses over short period of time
- Stringent compliance in future and evidence-based approach
- Speed of uptake is likely to increase in short- and medium-term



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