Voluntary Initiative Update – Herbicides in Water / IPM Survey
Neal Evans
The Voluntary Initiative @ 21

• Initiated 2001
• Raft of measures to self regulate and ensure “Best Practice” use of plant protection products (PPP’s)
• Three main instruments:
  1. NRoSO (National Register of Sprayer Operators), 21K members
  2. NSTS (National Sprayer Testing Scheme), 16K sprayers tested 2022
  3. IPM Plan

Industry sponsors:
IPM key to strategy for VI and Govt.

- IPM central to the VI’s Best Practice message
- Positive dialogue with government to shape re-draft of National Action Plan (NAP) and more recently the IPM Sustainable Farming Incentive (SFI) Standard
- Similar discussions with relevant organisations for other devolved nations
VI: Facilitation Across the Sector
Stewardship Programmes

OSR Herbicides?
Think Water

Water Protection Advice Sheets

CFE
Championing the Farmed Environment

METAZACHLOR MATTERS

BeeConnected
Connecting beekeepers and farmers
The Oilseed Rape Herbicides Stewardship Group

- Propyzamide
- Carbetamide
- Quinmerac
- Clopyralid
- Metazachlor

Pilot catchments

1. River Kym (AngW)
2. Mimmshall Brook (AffW)
3. Instead Brook (E&S)
Oilseed Rape Herbicides Stewardship Messages

Three steps:

1. Use The Environment Agency’s Drinking Water Safeguard Zone (DWSgZ) map website
2. Speak to agronomist or Catchment Officer about potential run-off on field by field basis
3. Use best practice agronomy to help protect water by implementing the following:
Better Bentazon Together

Three industry leading manufacturers have formed a new partnership to address threat of de-regulation when it is up for re-approval in 2025.

BASF, Nufarm and Sharda Cropchem have formed the “Better Bentazon Together” initiative promoting sustainable on-farm water stewardship through marketing, events and development of management tools. The first initiative is the “Know the Bentazon Risk” tool.

NEW: A high risk planning and mapping tool to support cropping decisions and has been developed available here.

Drip trays have been produced to support farmers this year. Steve May, Farm Manager at P Hammond & Sanders, Kibblesworth, Northamptonshire and current FSDDTY Champion has already received his tray.
New IPM Plans

- Based on research of Henry Creissen et al., 2019
- Based on Agronomic and Social Science
- IPM Score 0-100
- Arable (Broad acre) IPM Plan launched Dec 2020
- Grassland IPM Plan launched Jan 2021
- Horticulture plan launched later in April 2022
- Scottish version developed
- Broad Acre and Grassland to be revamped late 2022

Measuring the unmeasurable? A method to quantify adoption of integrated pest management practices in temperate arable farming systems

Henry E Creissen, Philip Jones, Richard B Tranter, Robbie D Girling, Stephen Jess, Fiona J Burnett, Michael Gaffney, Fiona S Thorne, Steven Kildea

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Abstract

BACKGROUND

The impetus to adopt integrated pest management (IPM) practices has re-emerged in the last decade, mainly as a result of legislative and environmental drivers. However, a significant deficit exists in the ability to practically monitor and measure IPM adoption across arable farms; therefore, the aim of the project reported here was to establish a universal metric for quantifying adoption of IPM in temperate arable farming. This was achieved by: (1) identifying a set of key activities that contribute to IPM; (ii) weighting these in terms of their importance to the achievement of IPM using panels of expert stakeholders to create the metric (scoring system from 0 to 100 indicating level of IPM...
## IPM Plans - Figures

<table>
<thead>
<tr>
<th>Year</th>
<th>Plan type</th>
<th>Respondents</th>
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<tbody>
<tr>
<td>2022</td>
<td>Arable</td>
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<tr>
<td>2022</td>
<td>Grassland</td>
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<tr>
<td>2022</td>
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<tr>
<td>2021</td>
<td>Grassland</td>
<td>269</td>
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</tbody>
</table>
IPM scores

Arable
Mean = 66.46

Grassland
Mean = 56.22
Significantly different?

- NFU Test and Trial Study
- Those completing IPM Plans offered the ability to “opt in”
- More detailed study using crop specific Crop Management Plans (developed by ADAS)
- Grassland not quite scoring as highly as Horti/potato or arable
- Also looking at barriers to uptake

AOV and Tukey Honest Significant Differences results indicate that both Potato & Wheat have significantly higher IPM scores than Grass at alpha < 0.01.
Familiarity with IPM

- Almost 90% of Arable completers were at least “moderately familiar” with IPM. Grassland 65%
If you typically use an arable rotation, why do you do this?

- Largely because it’s necessary to comply with a scheme or contractual obligations
- To spread costs and financial risks
- To control insect pests, nematodes, slugs and snails
- To control weeds
- To control disease
- To improve or maintain soil structure and fertility
Other types of questions/data

- Do you consider cultivations as part of your IPM strategy?
- Please indicate what cultivations you do?
- Estimate the % of cultivated land that is currently ploughed?
- What influences your choice of crops grown?
- What factors do you consider when developing/evaluating your integrated pest management plan, either alone or with an adviser at the start and during the season?
- Do you currently use any Decision Support Systems?

- Others on level of education? / participation in farmer discussion groups? / location? / etc.

- Statistical analysis being done in collaboration with colleagues at Anglia Ruskin University
Any Questions?

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CropTec Event:
The VI @ 21; Past Present and Future

- First day of CropTec, Weds 23\textsuperscript{rd} Nov, 15.00

- Panel discussion, IPM-based approach to sustainable farming
  - Matt Culley, NFU Crops Board Chair
  - Hazel Doonan, Head of Agronomy and Crop Prot, AIC
  - Matt Redman, Contractor, AHDB Monitor Farm and VI Champion
  - Steve May, Sprayer operator, Current FSOOTY Champion and Chair Northants Bee Keepers Assoc