



Voluntary Initiative Update – Herbicides in Water / IPM Survey

Neal Evans

Industry
sponsors:



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:



Integrated Pest Management

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



Connecting beekeepers and farmers



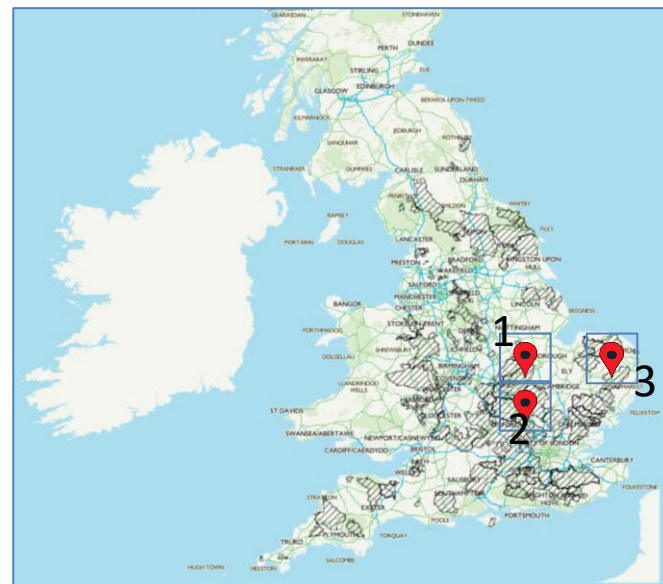
OSR Herbicides?
Think Water

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)

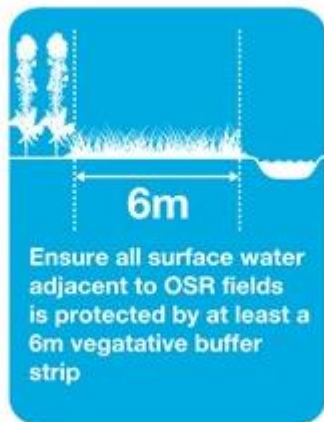
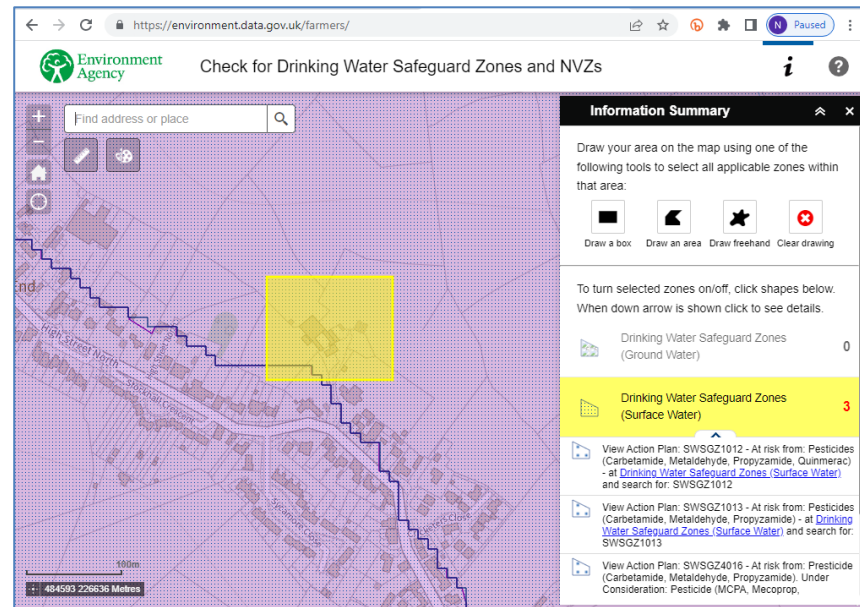



OSR Herbicides?
Think Water



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:



**Propyzamide**



Introduction
Propyzamide is key to controlling grassweeds, especially blackgrass, in oilseed rape. With no known resistance, propyzamide can help manage and reduce the blackgrass burden across the rotation.

After heavy rain events however, there is a risk that propyzamide could get into surface water from field run-off or through field drains. Appropriate planning, management, and adoption of stewardship practices must be followed to reduce this risk.

How to stop propyzamide reaching water
All pathways matter. Follow basic water protection advice:-

- Take care when filling and cleaning the sprayer.
- Use 6m grass buffer strip, or 5m no-spray zone, beside water courses.
- Discuss cultivation and spray timing with your BASIS registered adviser.
- Manage soils and tramlines to avoid surface run-off or erosion.
- Do not apply when soils are cracked, dry or saturated.
- Do not apply propyzamide if heavy rainfall is expected within 48 hours of application.

How best to use the products

- Propyzamide works best when applied to cold moist soils, but this must be balanced with the need to protect water. Soils do not need to be completely saturated. Where practical, avoid use if drains are flowing or are likely to flow in the near future.

Dose

- Only use the maximum rate of 840g/ha for severe blackgrass situations. Lower dose rates of 700 - 750 g/ha or 500g/ha are recommended for less severe blackgrass, other grasses and broadleaf weeds. (see product labels for details)

High Risk Areas
Safeguard Zones* for propyzamide.
Discuss how to avoid risks to water from propyzamide with your adviser.

Reducing the risk

- Always follow the advice on the left hand side of this sheet.
- If at least 5 of the following criteria are met, then the risks to water will be significantly reduced.

1. There is no risk of heavy rainfall within 48 hours of application	<input type="checkbox"/>	✓ or X
2. Field drains are not flowing and unlikely to flow within 7 days of application	<input type="checkbox"/>	
3. Field slope is less than 5% (1 metre fall in 20 metres)	<input type="checkbox"/>	
4. The field is NOT bordered by a watercourse	<input type="checkbox"/>	
5. The field has a 6m grass buffer strip adjacent to water	<input type="checkbox"/>	
6. There are NO field drains	<input type="checkbox"/>	
7. The field has NOT been deep sub-soiled (below plough layer) or mole-drained within the preceding 6 months	<input type="checkbox"/>	
8. The crop has been established with true minimum tillage working the top 4-6cm only or by direct drilling	<input type="checkbox"/>	

* See the Environment Agencies "Farmers" page to check map: http://bit.ly/EA_Farmers

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For further information visit www.voluntaryinitiative.org.uk

Better Bentazone Together

https://maps-esu.ramboll.com/portal/apps/MapJournal/index.html?appid=1603025727094e15921404ad1b231e

Last updated: 19 May 2021

Know the Bentazone Risk

>> Click [here](#) to access the web app. <<

Bentazone has been frequently detected in UK water bodies. The environmental risk from Bentazone has therefore led to the formation of the Better Bentazone Together Group (comprising of BASF, Sharda and Nufarm), development of the Know the Bentazone Risk Initiative and the implementation of the Bentazone Water Stewardship Programme. Together, these aim to encourage responsible product use. Bentazone Stewardship Guidance recommends measures which growers and their advisors are asked to comply with and can be found at the following websites:


<https://www.agricentre.basf.co.uk/en/Sustainability/Water-Stewardship/Bentazone-Stewardship/>

<https://nufarm.com/uk/bentazone-water-stewardship/>

<https://voluntaryinitiative.org.uk/schemes/stewardship/better-bentazone-together/>

Growers and their advisors are required to search available published records, from which, together with local knowledge of their field locations, they can ascertain whether product application would meet the Bentazone Stewardship Guidance.

This Know the Bentazone Risk - Planning and Mapping Tool provides a simple

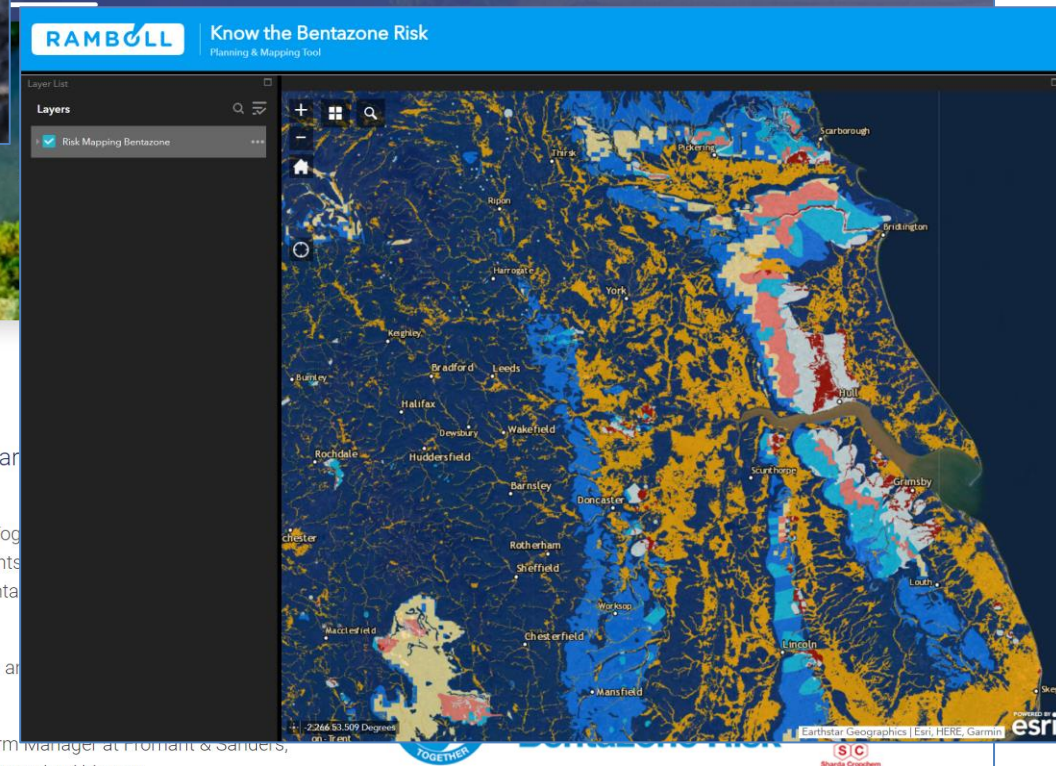


v 2022 - BCPC x Check for Drinking Water Safe...

ther/

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Themes Legislation Water Environment Resources Contact



Better Bentazone Together

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

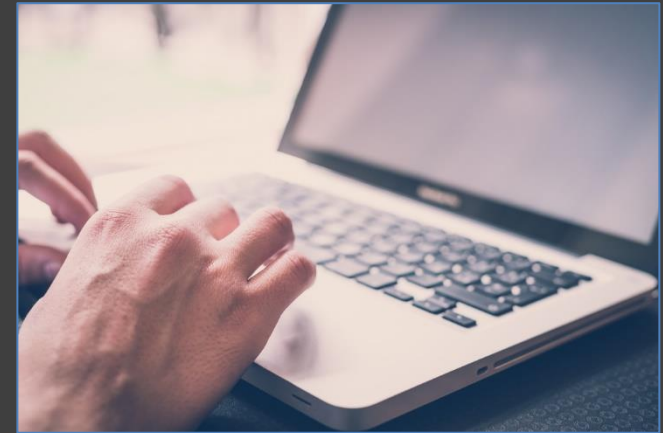
BASF, Nufarm and Sharda Cropchem have formed the "Better Bentazone Together" group, promoting sustainable on-farm water stewardship through marketing, events and the development of management tools. The first initiative is the "Know the Bentazone Risk" tool.

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 Florman & Sanders, Kissingbury, Northamptonshire and current [FSOOTY 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 re-vamped late 2022



Pest Management Science



Research Article

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

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

First published: 29 March 2019 | <https://doi.org/10.1002/ps.5428> | Citations: 2

[Read the full text >](#)

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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: (i) 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



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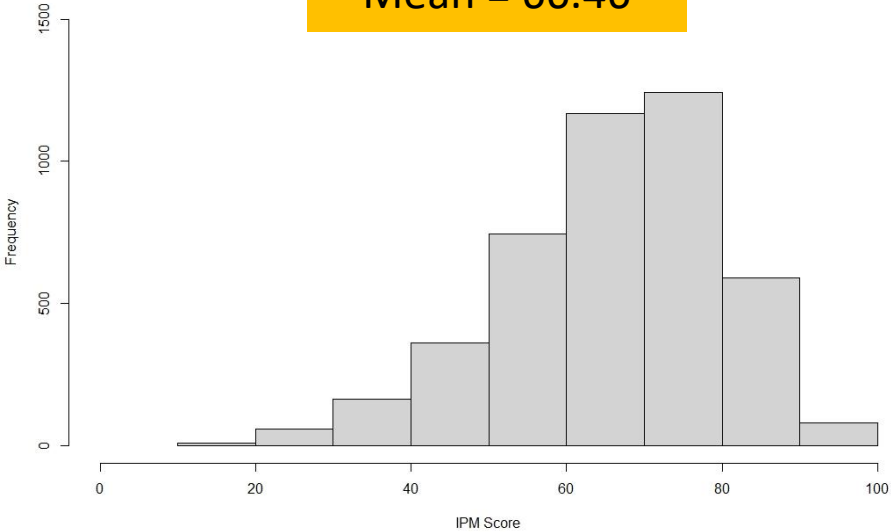
IPM Plans - Figures

Year	Plan type	Respondents
2022	Arable	4560
2022	Grassland	307
2022	Hort/potato	136
2021	Arable	4372
2021	Grassland	269

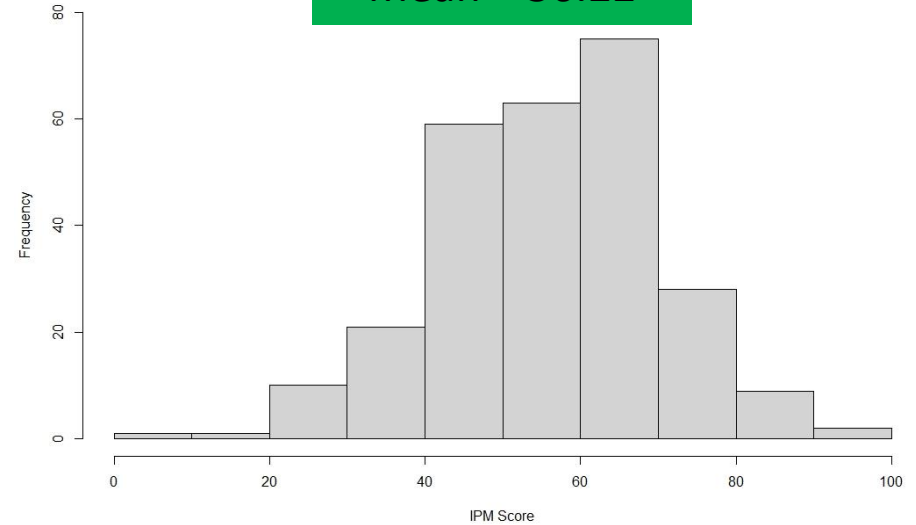


IPM scores

Arable
Mean = 66.46

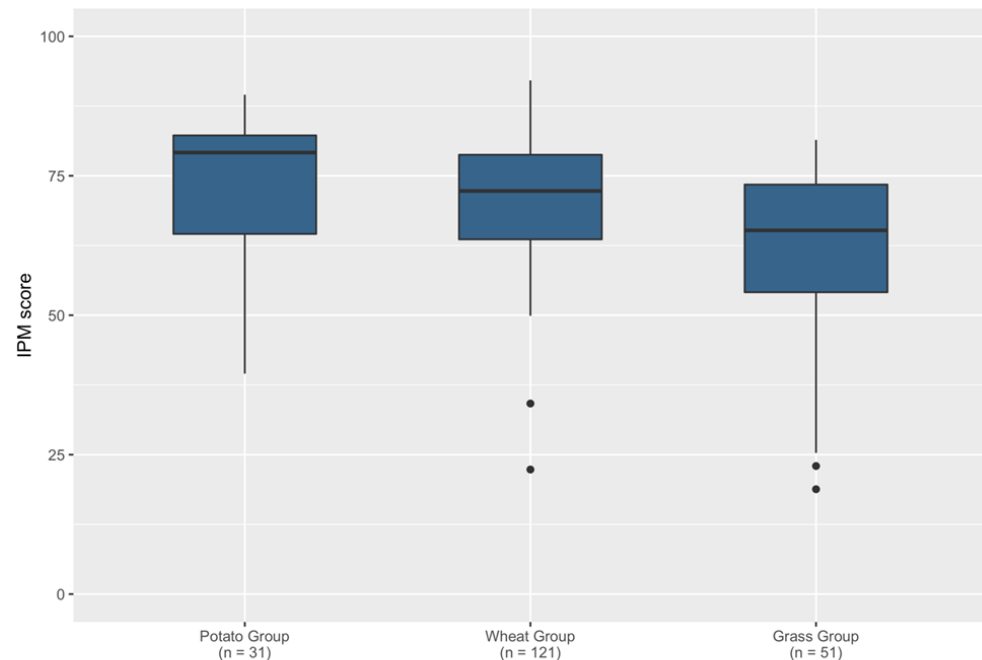


Grassland
Mean = 56.22



Significantly different?

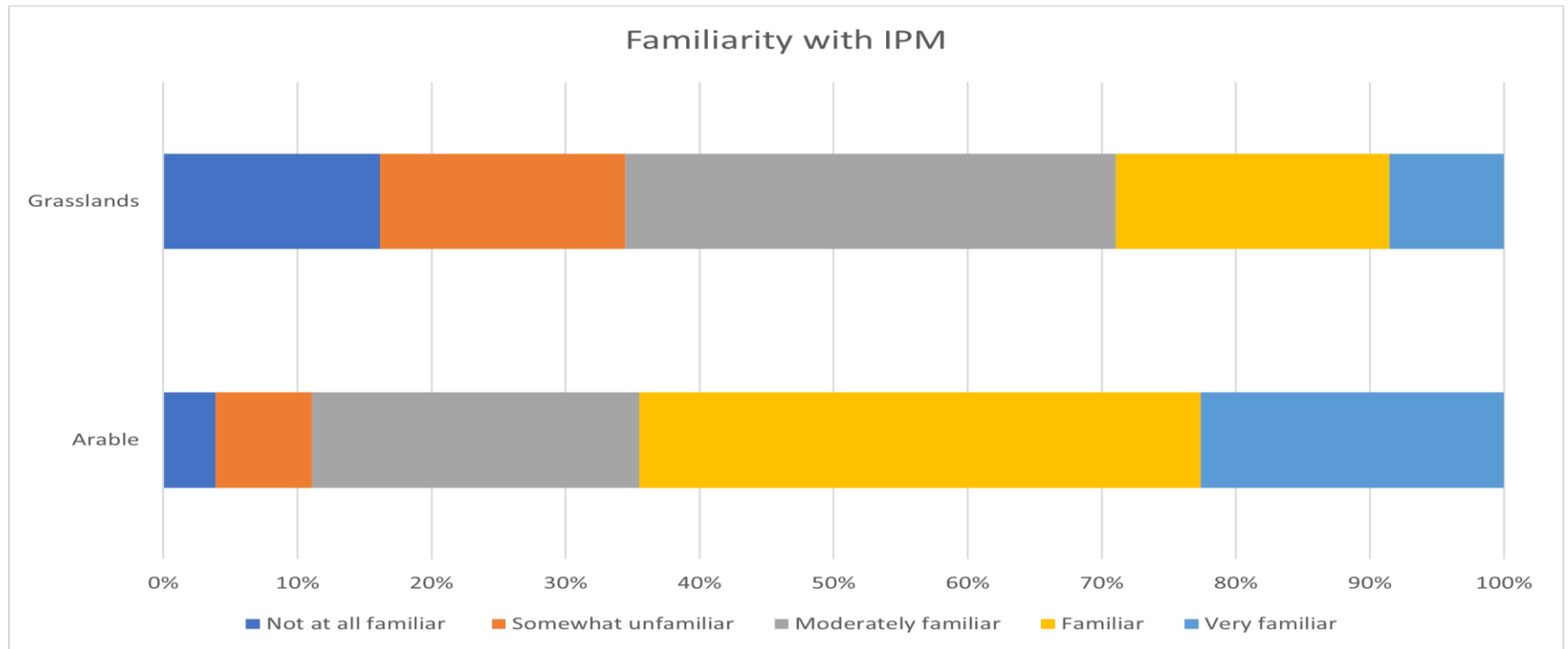
- NFU Test and Trial Study
- Those completing IPM Plans offered the ability to “opt in”
- More detailed study using crop specific Crop Management Plans (developed by ADAS)
- Grassland not quite scoring as highly as Horti/potato or arable
- Also looking at barriers to uptake



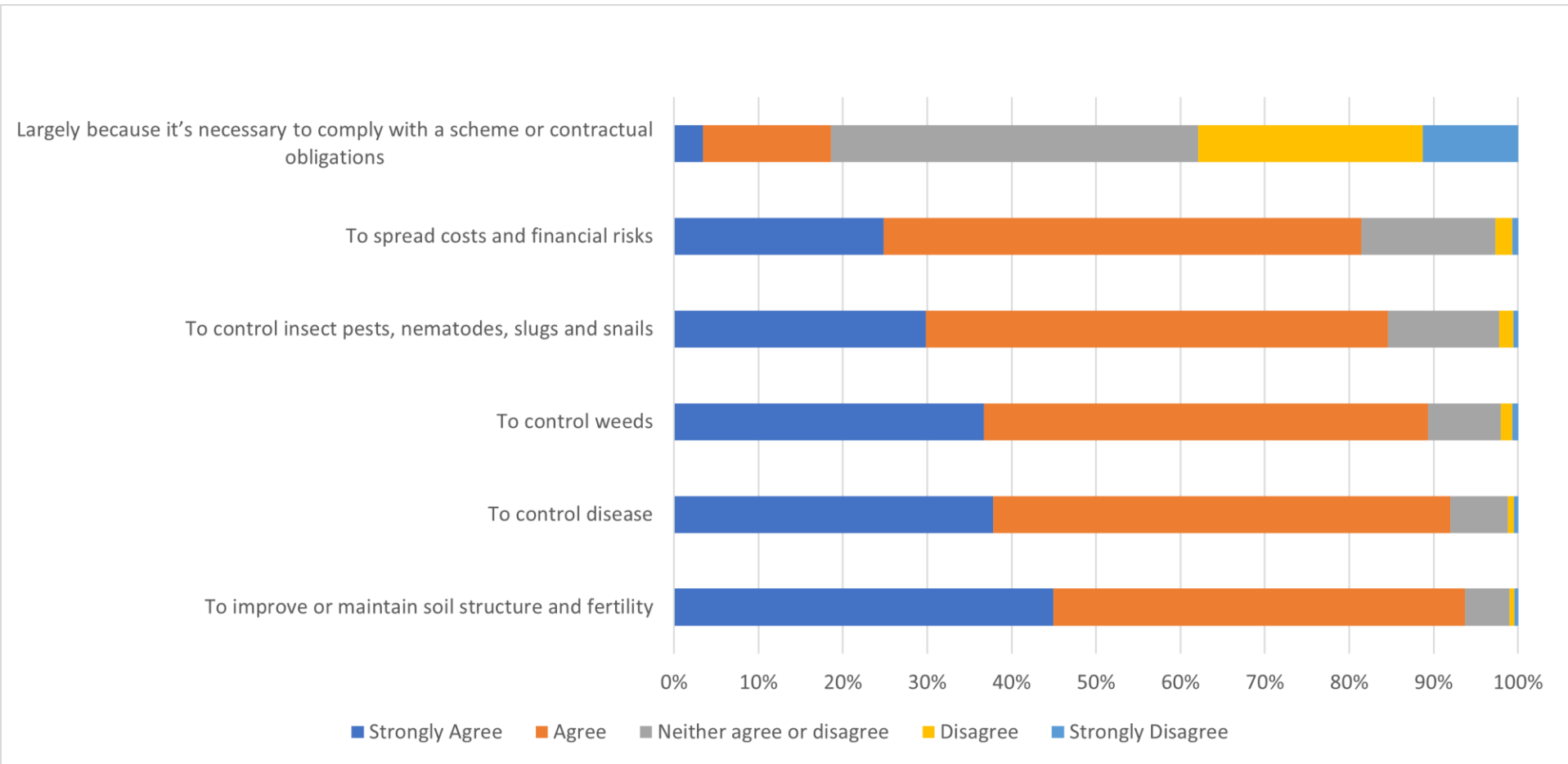
AOV and Tukey Honest Significant Differences results indicate that both Potato & Wheat have significantly higher IPM scores than Grass at alpha < 0.01.

Familiarity with IPM

- Almost 90% of Arable completers were at least “moderately familiar” with IPM. Grassland 65%



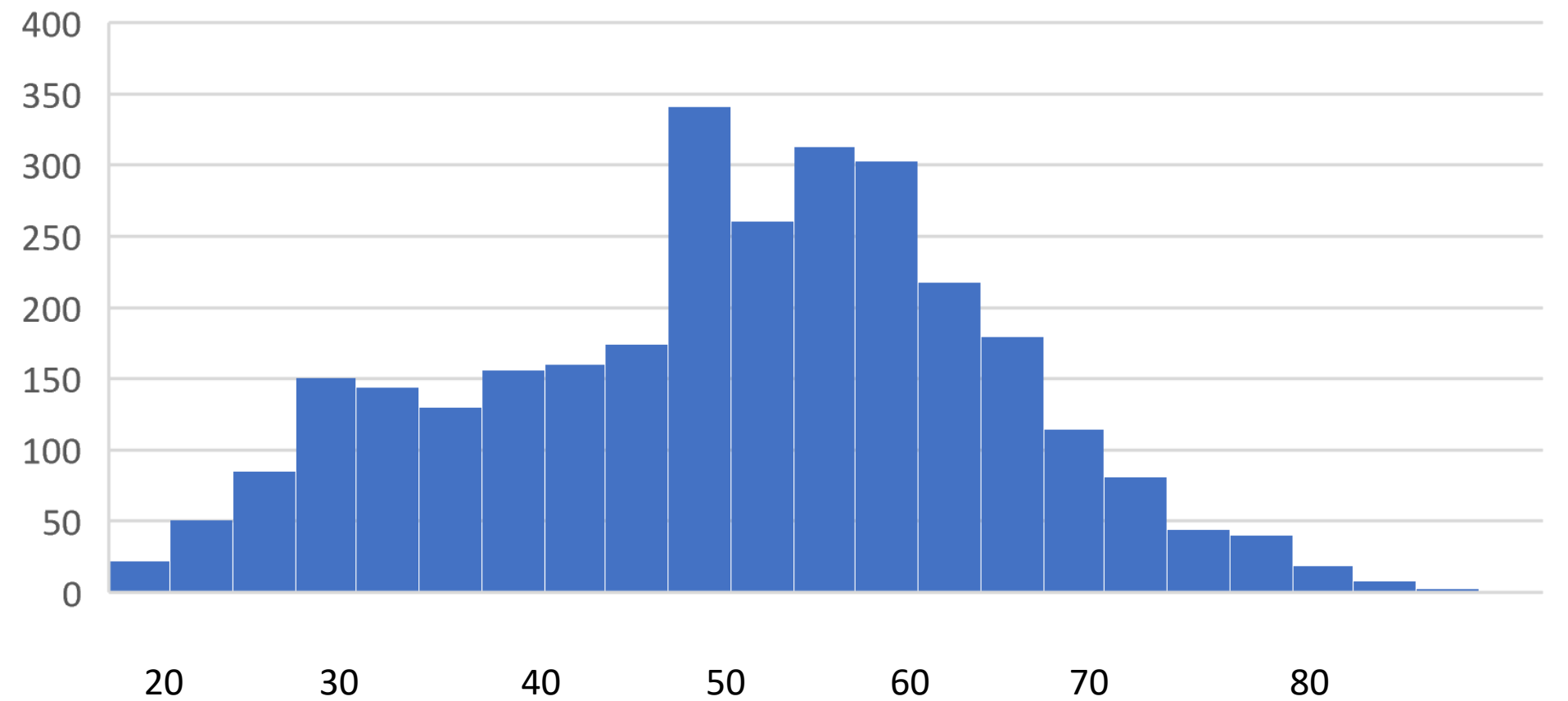
If you typically use an arable rotation, why do you do this?



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

Age?



Any Questions?



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

- First day of CropTec, Weds 23rd 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

