

PHC2020/05 Identifying links between farmer and agronomist perceptions on pest and disease risk, the information sources they use to determine pesticide usage and the uptake of IPM methods.

Background: Scotland produces some of the highest yielding and highest quality crops in the world but also carries significant pest, weed and disease burdens in its arable production systems. Pesticide use therefore remains an important tool in managing these risks to crops and maintaining profitable production. There are several drivers, including pesticide withdrawals and the biodiversity and climate crises, for reducing reliance on pesticides and promoting the uptake of more sustainable practices through Integrated Pest Management (IPM). We wish to commission a project to understand where growers and agronomists currently gather information to form their impression of pest and disease risk and inform their decision making on the need for interventions, pesticide or otherwise. This project will identify accurate, efficient and trusted sources and test whether these sources are influential in appropriate usage of control options across key arable regions and crop types. The Plant Health Centre will align this with our KE strategy and look for important barriers to the adoption of IPM practices.

Impact: We will use the outcomes of this project to provide guidance on the role of key stakeholders within plant protection and crop production in driving behaviours to carrying out their communication roles so that useful information sources and effective networks can be better utilised. This project should link with key IPM stakeholder groups and to current research networks working on IPM.

Objectives and research required for this call:

1. Collect information on currently perceived pest and disease threats to Scottish crops and businesses on a regional basis. This should cover both growers and agronomists and should be carried out in a manner which allows for existing stakeholder networks and information sources to be captured.
2. Use the above to identify the key information and data sources that influence perceptions on pest and disease risk, and capture the control decisions implemented; in essence does pesticide usage in Scotland align with actual or perceived risk and how can we optimise information flows to maximise impact on IPM practices. We expect an analysis of the information sources and the network links that allow information to flow most accurately and efficiently. Similarly, we wish to identify any inaccurate or unhelpful sources where information could be reduced.
3. Identify any intervention tools or methods that might be needed to manipulate or change how information flows, and this must be bespoke to the needs of the Scottish stakeholder network.

Plant Health Centre

C/o James Hutton Institute, Invergowrie, Dundee DD2 5DA

Phone: +44 (0)1382 568 905

Email: info@planthealthcentre.scot; Web: www.planthealthcentre.scot

It is essential that this aligns with other initiatives with stakeholders around the uptake of IPM practices.

Outputs required:

- A report summarising findings against the objectives outlined above, suitable for distribution to stakeholders in the plant health sector including those who participated in the study.
- A stand-alone 1-2 page policy summary that outlines the current relevant policy and the impact that policy has on the knowledge creating by this research.

Indicative key dates:

- Deadline for submission of application form: 12pm on 21st December 2020
- Project start: 1st March 2021
- Overview of plans and project start-up meeting with PHC Directorate: by end March 2021
- Submission of Final Report and Policy Summary: 30th July 2021
- Meeting with Scottish stakeholders: to be confirmed

Detailed milestones to be confirmed by bidder.

Date all work needs to be completed by: 30th July 2021

Project type: Collaborative

Maximum funding available (including VAT where applicable): £40,000

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