

**Request for Information - Response Document**

**Data Pilot Study: collection, collation analytics and outputs from AHDB pest monitoring activities in cereals in the UK**

**Note: Please ensure that you answer this questionnaire after having read and digested the Request for Information (RFI) document. All responses will remain confidential; however an anonymous summary of responses may be published on the E-Tendering Portal.**

**Please provide your name and contact details in the table below.**

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| --- | --- |
| **Organisation name** |  |
| **Name of respondent and contact details** |  |
| **Date** |  |

**RFI Response Document**

As explained in the RFI information, AHDB wishes to understand the variety of solutions available in the market place that would fulfil the scope and an estimated cost of the product.

This information is requested to allow AHDB to decide how best to proceed and also obtain internal stakeholder budget approval.

This information will form feedback only. Information regarding individual organisations will not be published.

**Please respond to each of the questions below.**

| **Subject/Question**  | **Response** |
| --- | --- |
| **1** | **About the Supplier** |
| **Pest component:** Please give a brief example of the role you have taken for similar activity monitoring aphids or other agricultural pests/weeds diseases? *Please complete only if you are interested in the pest component of the work. Please answer further questions relating to pest component (2a and 3)* |  |
| **Data component:** Please give a brief example of the role you have taken for similar activity in data collection, collation, analytics and outputs. If your example is outside of agriculture, please describe the relevance to agriculture. *Please complete only if you are interested in the data component of the work. Please answer further questions relating to data component (2b and 3)* |  |

| **Subject/Question** **Pest component** | **Response** |
| --- | --- |
| **2a** | **What the Supplier possesses to provide the outcomes** |
| Which aphid /beneficial species would you be able to monitor, what approaches could be used, how frequently and by whom?\* |  |
| What practically important information could be provided about the aphid vectors (e.g. insecticide resistance status, whether the aphids are carrying BYDV, aphid genotype)? How could these characteristics be quantified? Specify the number of samples that could be processed each year.\**\*If the provision of practically important information is not feasible, respondents should include N/A on this section of the response form. Conversely, respondents whose expertise is in the provision of this type of information (but not pest monitoring) should complete this section of the response form* |  |
| What additional information could be provided about the insects that are monitored/collected that would add value/support decision making by growers? |  |
| Do you already have an existing network of traps, personnel or sampling in place that would be able to provide the monitoring that you are proposing? If yes, please provide details of how that network/service currently operates. Comment on the coverage of delivery across the UK that would be achieved by the network. Are there regions where less comprehensive monitoring would be carried out? If yes, specify what would be monitored and how frequently.  |  |
| Are there new/prototype monitoring /trapping and/or forecasting tools that should be considered for investigation/validation as part of the Data Pilot Study? |  |
| What agronomic and environmental variables could also be measured and how would these be reported/made available to the Data Pilot Study. |  |
| Are there aphid and/or BYDV forecasting tools/models already available or in development that should be considered for inclusion in the Data Pilot Study. |  |
| Are there other monitoring approaches and options for provision of the Data Pilot Study that you would like us to consider? *(This may include the provision of information on other pest species).* |  |
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| **Subject/Question** **Data component** | **Response** |
| --- | --- |
| **2b** | **What the Supplier possesses to provide the outcomes** |
| Collection* What data would be need to be collected on a one-time basis? (Registration of the sampling site)
* What data would be need to be collected multiple times? (Identified in collaboration with the aphid specialists). Uploads likely to be via phone or tablet
* What data can be collected automatically? (e.g. location, date, time)
* What potential future data collection methods might be available (e.g. Remote-Sensing)
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| Collation* How might data be integrated with other platforms (e.g. MS Azure, ESRI ARC GIS)
* How would data be validated to minimise outliers?
* How will data be aggregated to present on a map for a rapid high level visualization of the data?
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| Analytics* How might Machine learning and Artificial Intelligence be used to analyse photographic evidence (e.g. sticky traps or water traps with diverse range of insects)
* How might you achieve a minimum 24 hour reporting, and potential real time reporting?
* How might the data be shared with third parties for interpretation and integration with other data (e.g. laboratory results from traps)?
* What analytic tools are needed to analyse data from different geographical locations?
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| Outputs* How will real-time analysis get back to farmers (e.g. visual online map, or text/email)
* How will messages from this interpretation be presented on the AHDB web site and visualization tools?
* *Future AHDB aspirations will be to integrate monitoring data from a diverse range of pests, weeds and diseases and use artificial intelligence specialists to interpret the drivers and potentially conflicting information.*
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| **Subject/Question**  | **Response** |
| --- | --- |
| **3** | Supplier Support and Delivery options |
| Would you be prepared to work in collaboration with others to achieve a successful pilot? (e.g. if pest and data components are managed by different contractors) |  |
| AHDB has specialists both in the pest and data. How might you communicate with these specialists to achieve a successful outcome? |  |

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| **Additional Information – please add anything further you feel would help AHDB assess the market appetite for the described scope** |
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