

# Defra Survey of Crop Pests and Diseases



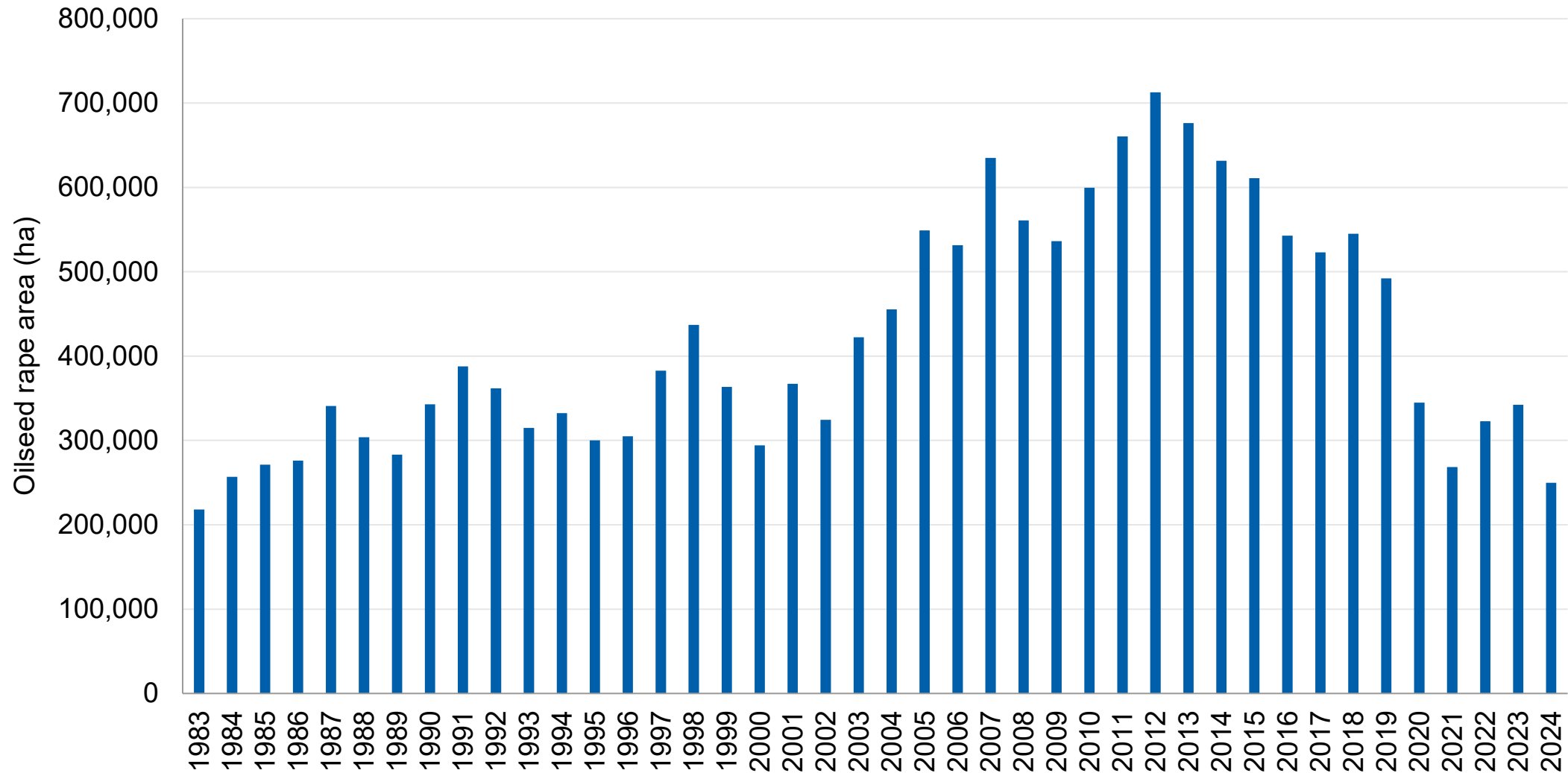
PEST & DISEASE  
SURVEY



Department  
for Environment  
Food & Rural Affairs



# OSR crop area (hectares) in England



<https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june>

# Project aim



Deliver pest and disease information essential to establishing consensus across key stakeholder groups

Farmers and advisers



Industry



Researchers



Policy makers



# Guided by stakeholders



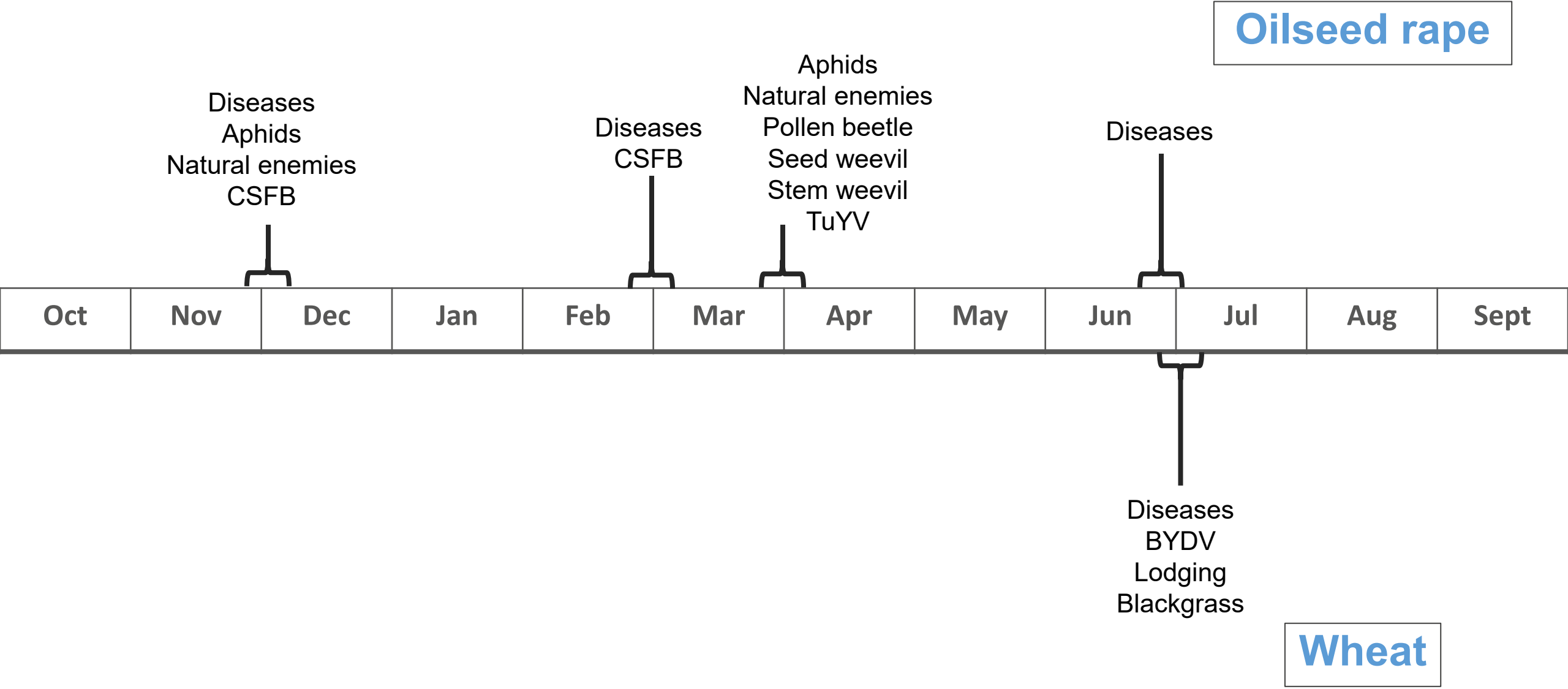
## Project Steering Committee



## Stakeholder Engagement Group



# Assessment schedule



# Agronomic information

- Field location
- Area of field
- Cultivar & sowing date
- Previous cropping (4 years)
- Field cultivations
- Seed dressing used & whether seed was farm saved or certified
- All pre and post emergence pesticide inputs:
  - Product
  - Dose
  - Application date and crop growth stage

# Mining the historical data



- What determines disease severity in commercial fields?
  - Cultivar resistance, fungicide programme, sowing date, weather, previous crop, sampling data/sampling growth stage, seed origin
- Cultivar resistance rating
  - Is resistance rating correlated with disease severity in the field?
  - Do growers select cultivars on basis of resistance rating?
  - Do growers adjust their fungicide programme according to the resistance rating?
- Fungicide use
  - Do growers adjust treatment programmes when resistance develops?



# Bringing innovation to the survey

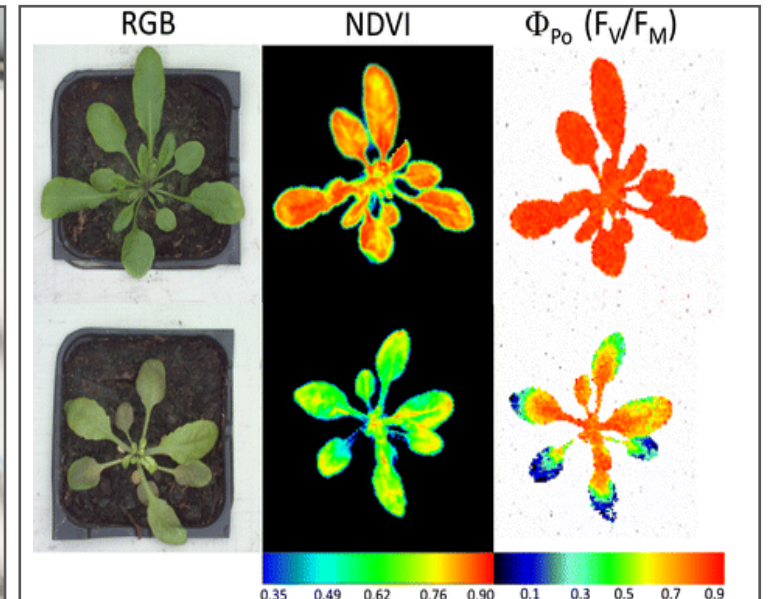
- **Objective:** Test the feasibility, usefulness and efficiency gains from key innovations, develop/implement most valuable ones



CSFB new assessment methodology



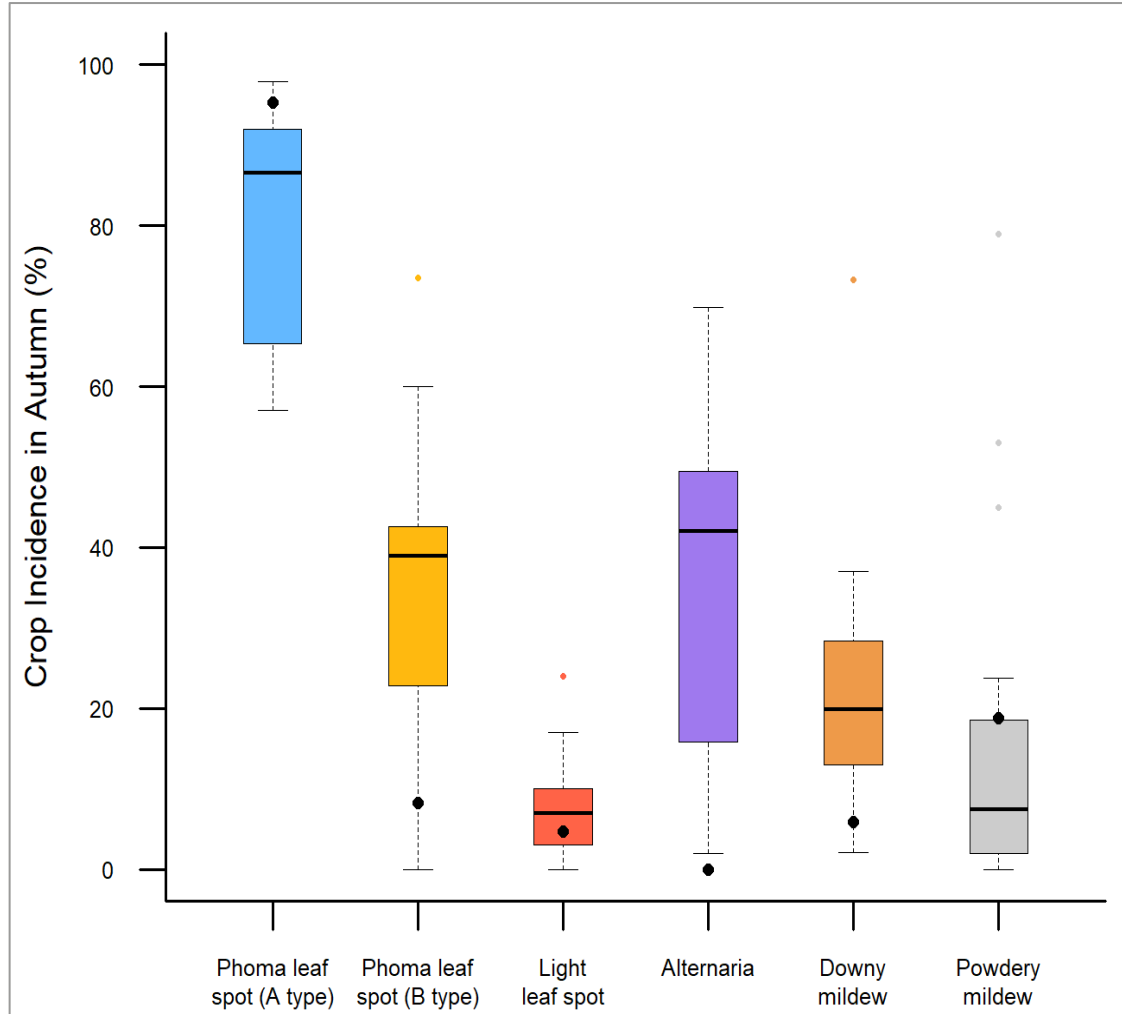
Fusarium head blight molecular diagnostics



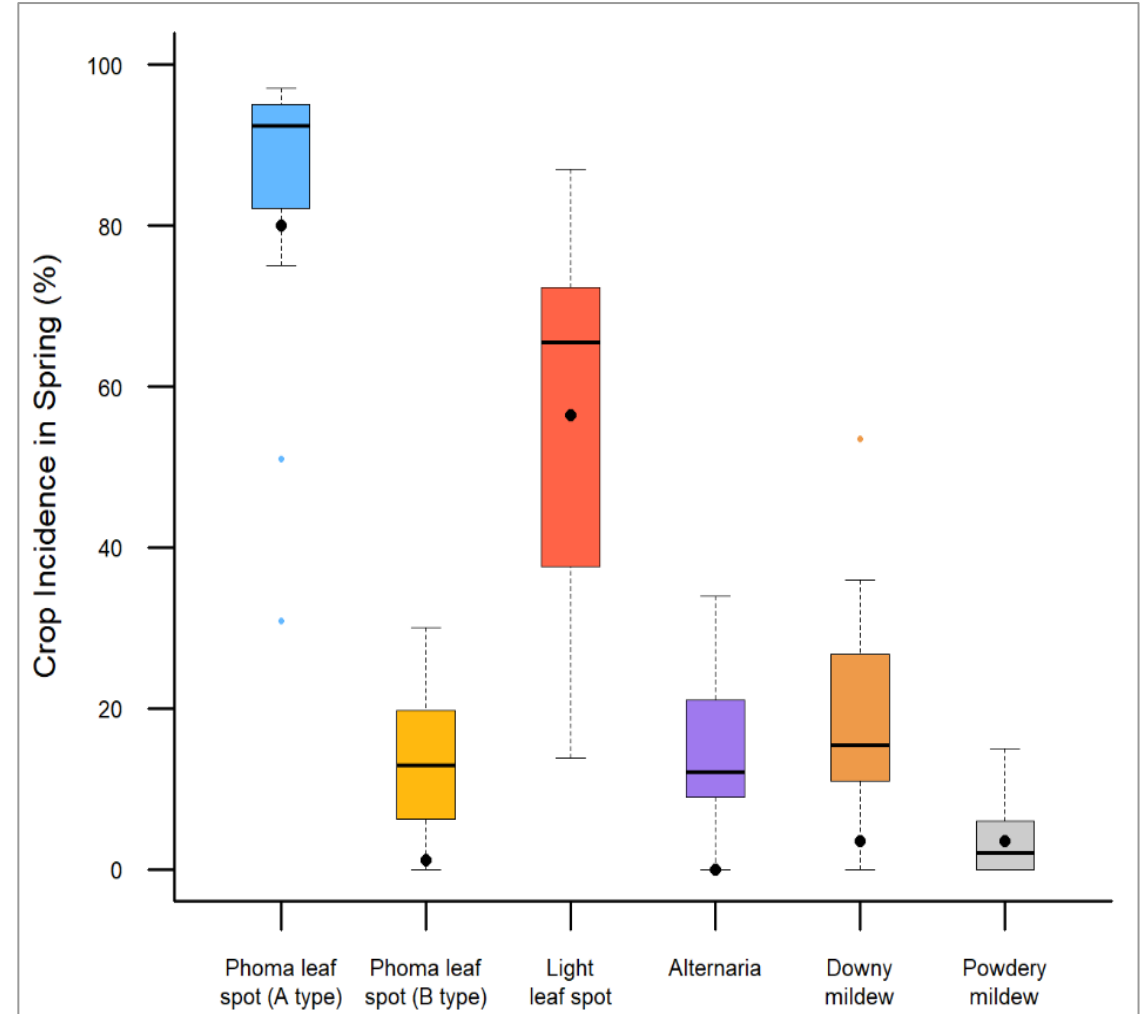
Disease image analysis via PhD with Reading University



# Foliar diseases compared with 20-year mean

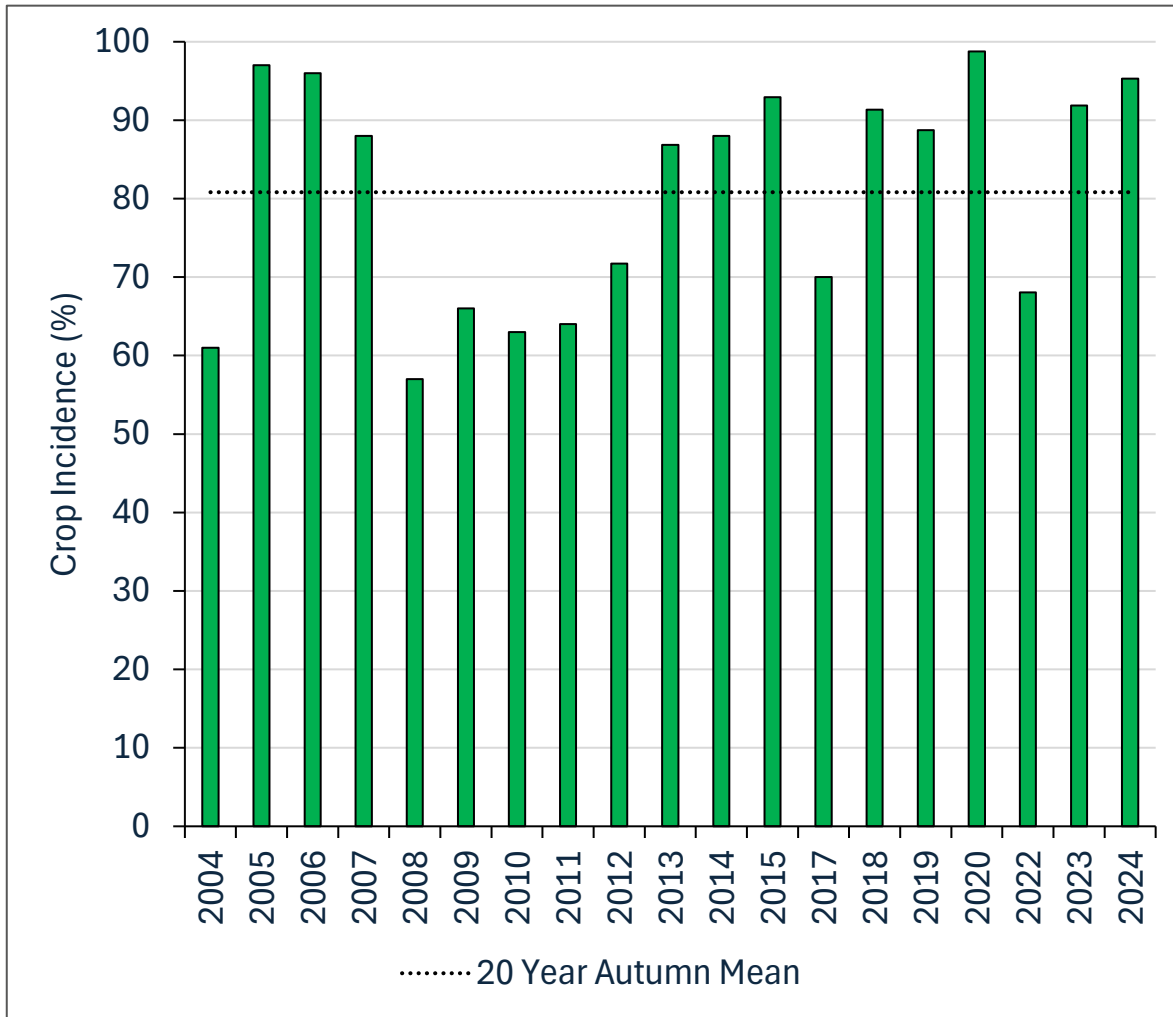


Autumn

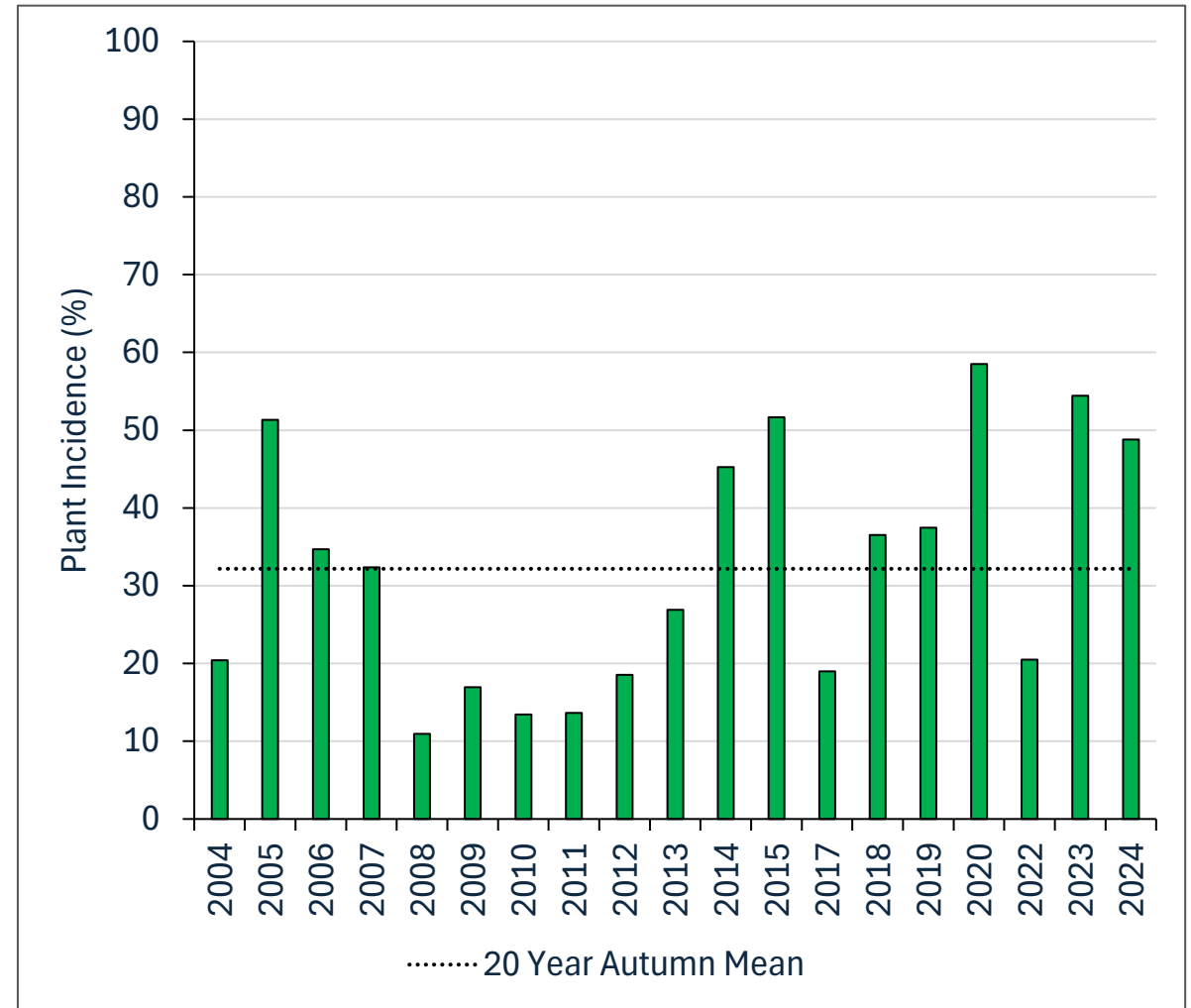


Spring

# OSR foliar diseases: phoma leaf spot in autumn

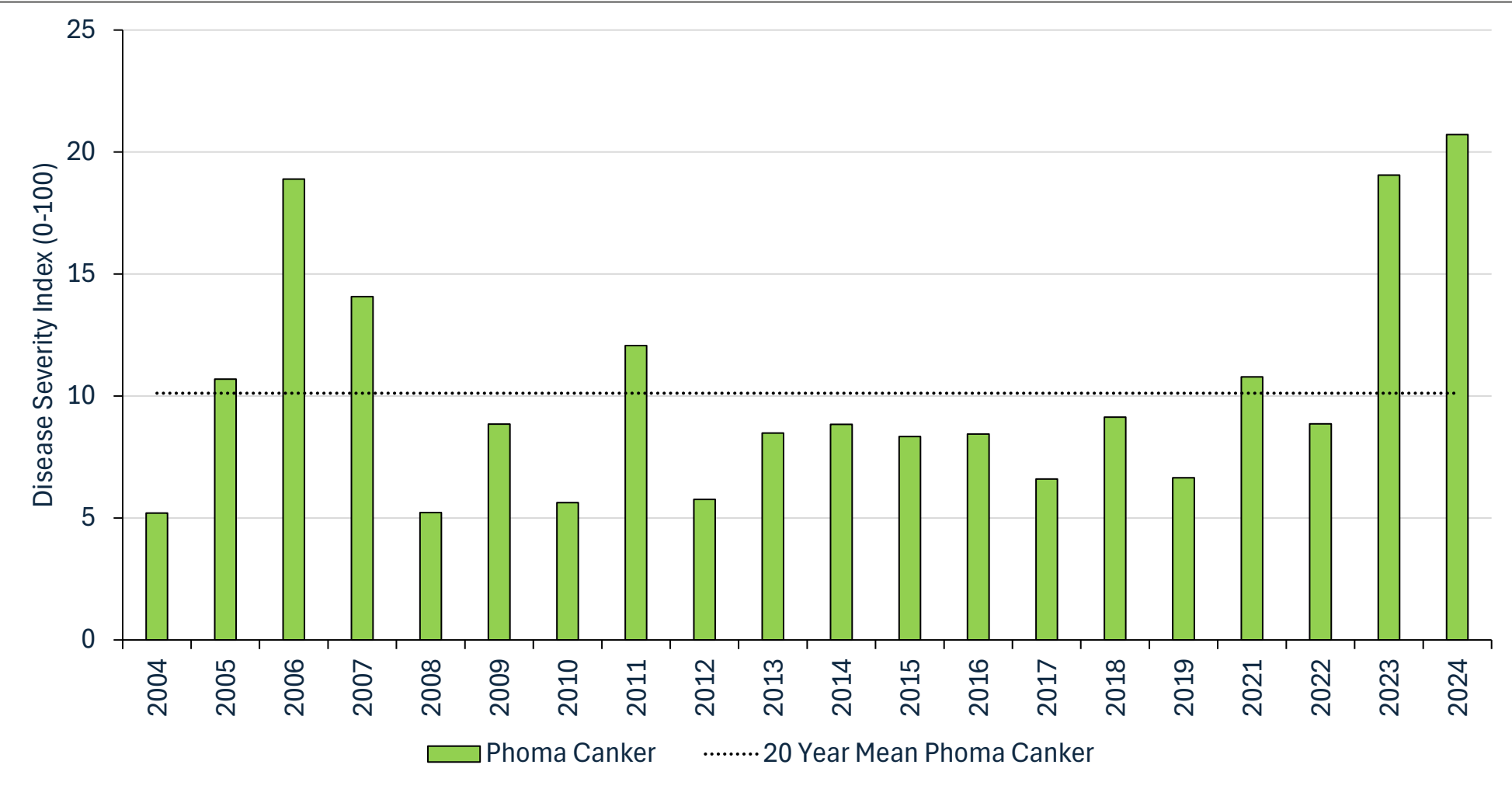


Crop incidence (%)

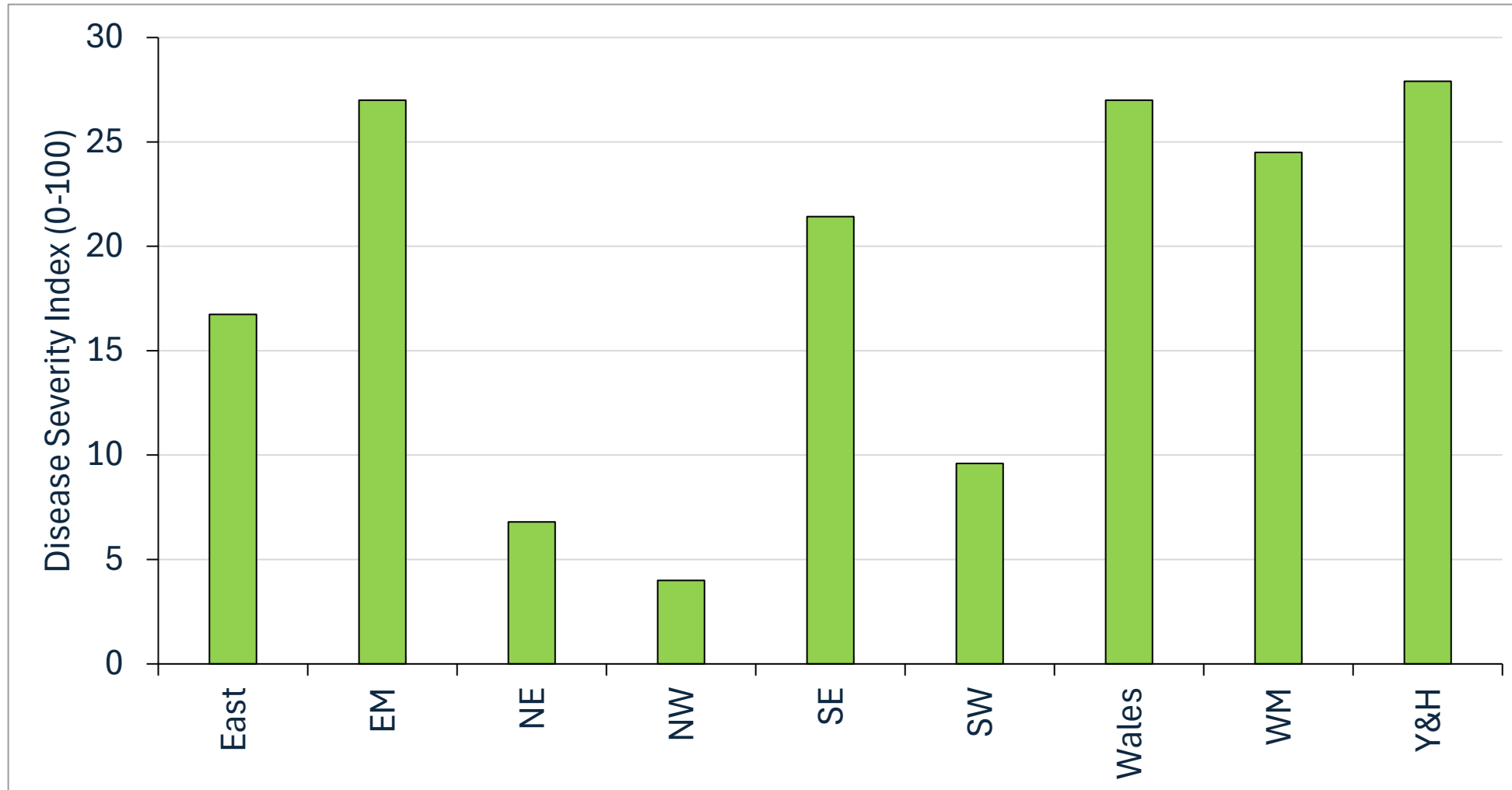


Plant incidence (%)

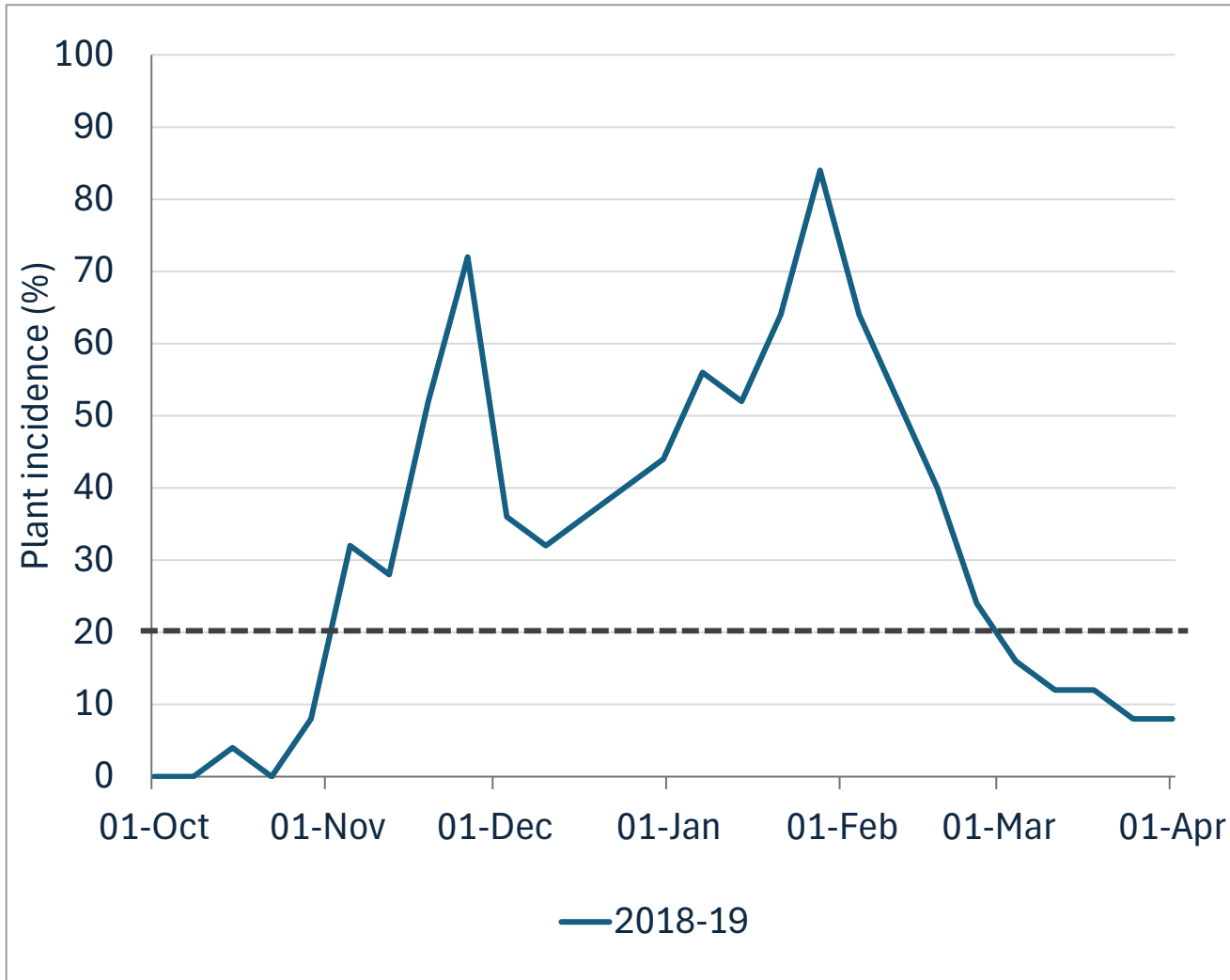
# Phoma canker in summer



# OSR stem canker severity in summer 2024



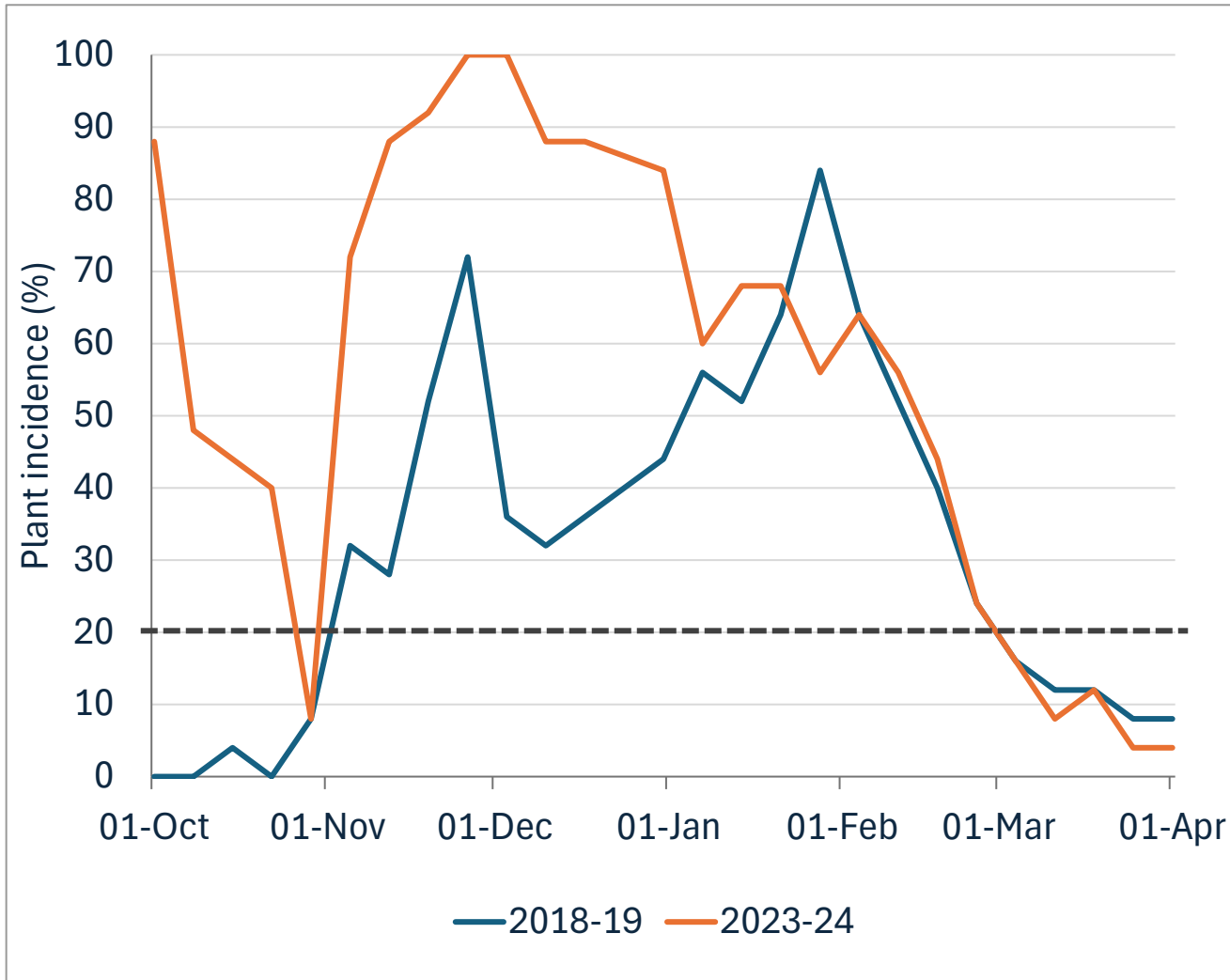
# Impact of early or late epidemic



- Approx. 21 days of rain
- Wet August & September
- Early epidemic for last two seasons
- Leaf spots by mid-October
- Conventionals more susceptible than hybrids
- Delayed sprays
- Less investment
  - Fewer applications
  - Cheaper products



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# Making the data accessible



## PEST & DISEASE SURVEY

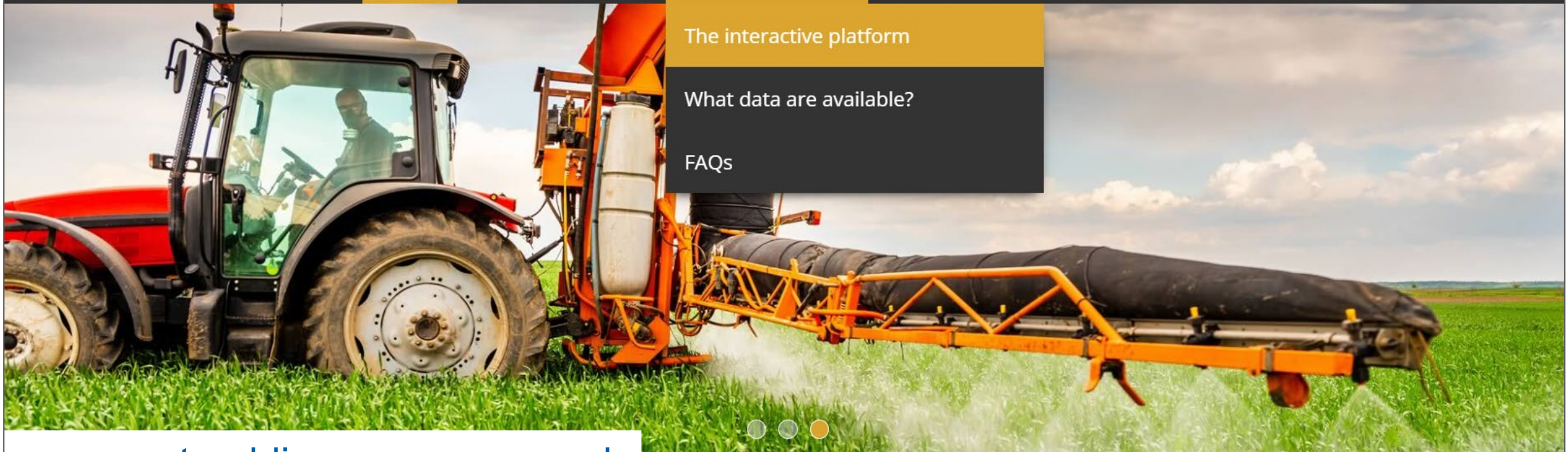


- Home
- About the survey ▾
- Explore the data ▾
- News
- Reports
- Contact us

The interactive platform

What data are available?

FAQs



[www.pestanddiseasesurvey.co.uk](http://www.pestanddiseasesurvey.co.uk)



# The interactive platform is live



The screenshot shows the website's navigation menu at the top with links for Home, About the survey, Explore the data, News, Reports, and Contact us. Below the menu is a header section featuring the ADAS logo on the left, a central title 'PEST & DISEASE SURVEY' with wheat and flower icons, and the Department for Environment, Food & Rural Affairs logo on the right.

**Defra Survey of Crop Pests & Diseases - Data Explorer**

Welcome to the Defra Survey of Crop Pest and Diseases data explorer.

We have created a set of pages to allow you to explore the crop incidence (percentage of fields affected), plant incidence (percentage of plants in a field affected) and severity (percentage of the plant part affected) for surveyed diseases of oilseed rape and winter wheat.

The data have been broken down by the time of sampling, with three sampling periods for oilseed rape (autumn, spring & summer) and one for winter wheat (summer). Within each data visual you will be able to see the time series for the whole UK or individual regions and also a breakdown of the disease incidence or severity by the plant part(s) sampled.

Navigation buttons include: Wheat (Summer data), Wheat Green Leaf Area, Variety Information, OSR (Autumn data), OSR (Spring data), and OSR (Summer data).

A wide-angle photograph of a vibrant green agricultural field, likely oilseed rape, stretching to the horizon under a clear blue sky with light, wispy clouds.

# OSR disease data; 1982 – present



Home About the survey Explore the data News Reports Contact us

[Return to Start Page](#)

[Disease Glossary](#)

[Farm Count Data](#)

**Select Disease**

Phoma stem canker

**Select Attribute**

Crop Incidence

Plant Incidence

Severity

[Clear filter selections](#)

**Sowing**

All


**Variety**

All

**Cultivation**

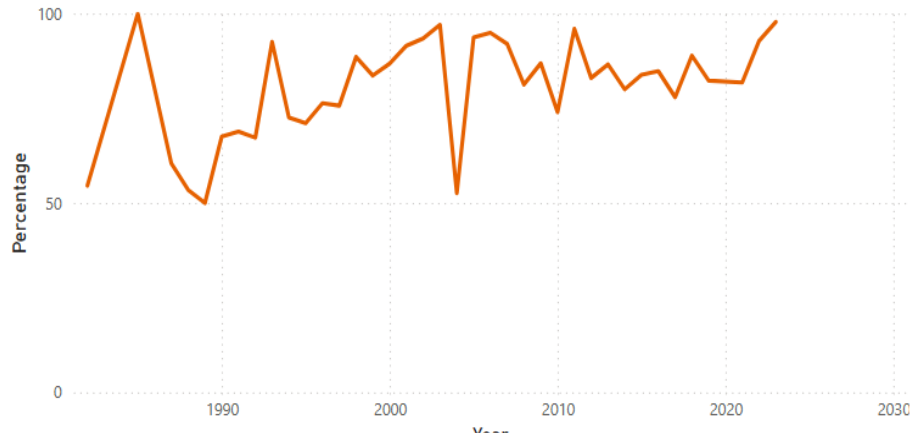
All

**Select the region**



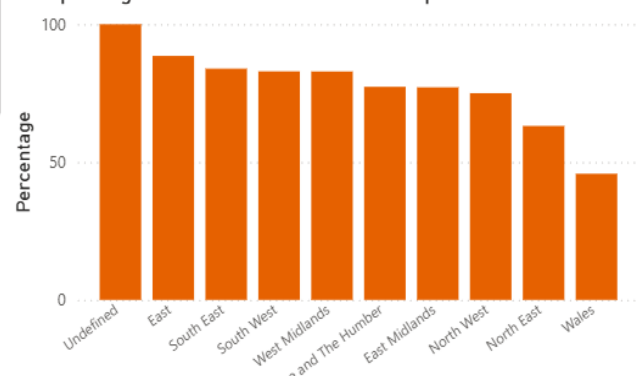
**Multiple Regions - Phoma stem canker Crop Incidence**

Plant Part Affected — Stem



Year	East	East Midlands	North East	North West	South East	South West
2023	94.44	100.00	100.00	100.00	100.00	100.00
2022	86.36	95.65	100.00	100.00	100.00	100.00
2021	100.00	80.00	66.67	100.00	0.00	100.00
2019	90.48	87.50	25.00	100.00	90.00	100.00
2018	94.74	84.21	80.00	100.00	90.00	100.00
2017	72.22	93.75	33.33	100.00	81.82	100.00
2016	90.48	94.44	66.67	100.00	66.67	100.00
2015	96.00	85.71	50.00	100.00	64.29	100.00
2014	92.00	100.00	40.00	100.00	76.92	100.00
2013	88.89	77.78	80.00	100.00	100.00	100.00
2012	80.77	76.19	60.00	100.00	91.67	100.00
2011	100.00	100.00	25.00	100.00	100.00	100.00

**Multiple Regions - Phoma stem canker Crop Incidence**







# Download the data

A screenshot of the ADAS website. The top navigation bar is dark grey with white text for 'Home', 'About the survey', 'Explore the data', 'News', 'Reports', and 'Contact us'. The 'Explore the data' menu is open, showing three options: 'The interactive platform', 'What data are available?' (highlighted in yellow), and 'FAQs'. Below the navigation, the page content includes a 'Data Overview' section with a link to 'Data availability', an 'Underpinning Data' section with a paragraph about Excel spreadsheet files, and two sub-sections: 'National' with two links for 'National Mean TimeSeries Wheat September 2024' and 'National Mean TimeSeries OSR September 2024', and 'Regional' with two links for 'Regional Mean TimeSeries Wheat September 2024' and 'Regional Mean TimeSeries OSR September 2024'.

Home About the survey Explore the data News Reports Contact us

The interactive platform

What data are available?

FAQs

**Data Overview:**

An overview of available data is summarised in the [Data availability](#).

**Underpinning Data**

The data underpinning the platform visualisations are available to download as Excel spreadsheet files:

**National:**

- [National Mean TimeSeries Wheat September 2024](#)
- [National Mean TimeSeries OSR September 2024](#)

**Regional:**

- [Regional Mean TimeSeries Wheat September 2024](#)
- [Regional Mean TimeSeries OSR September 2024](#)



# Thank you

[pestanddiseasesurvey@adas.co.uk](mailto:pestanddiseasesurvey@adas.co.uk)

[www.pestanddiseasesurvey.co.uk](http://www.pestanddiseasesurvey.co.uk)

[@DefraSurvey](#)

