

## Great Britain and Northern Ireland Variety List Trials: Trial Procedures for Official Examination of Value for Cultivation and Use (VCU) Harvest 2025

Winter oilseed rape

**Appendices** 

**March 2025** 

#### **Changes**

- Updated title from United Kingdom to Great Britain and Northern Ireland
- Updated year to 2025
- Appendix 4
  - o For Table 1 Added Trial Description column
  - Removed John Innes Centre
  - o Added SHO of NIAB, SHU to NIAB Bridgend.
  - o Removed NIAB Hinxton, Cambridgeshire.
  - Updated NIAB Easton Royal to NIAB Gussage St Mary, Dorset.
  - o Removed VL2 only from NIAB Birchington, Kent.
  - o Added VL2 only to NIAB Broughton, Hampshire.
  - o For KWS UK Ltd Duxford, removed VL2 only and added SHU of NIAB, SHU.
  - Added note on which centres funded by AHDB.
- Appendix 5
  - o Replaced Aspire with Pi Pinnacle
  - Replaced PT303 with LG Armada
  - Replaced V316OL with V367OL
- Appendix 10
  - Updated year mentions to 2024/2025 as appropriate.
  - Updated "Last updated" to December 2023
  - Table for Products, active substances and manufacturers: removed Filan and Hallmark Zeon. Added Aviator Shepherd and Aviator 235 XPro.
  - Updated tables to Spring 2024 and Autumn 2024
  - Updated Appendix 10 with latest protocol provided February 2025

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## Scope

This document contains the appendices for the main guidance document:

Trial Procedures for Official Examination of Value for Cultivation and Use (VCU) Harvest 2024 – Winter oilseed rape

## **Appendix 1 – Approved Trial Organisers/ Operators for winter oilseed rape**

Activity	Organisers / Operators Responsible
Trials Organiser	BSPB
Seed Handling Operator	NIAB
Data Handling Operator	NIAB
Pathology Trials Operator	NIAB
Trial Inspection	AHDB Cereals and Oilseeds
Technical Validation Operator	AHDB Cereals and Oilseeds
Quality Testing Operator	NIAB
Data Review and Standard Setting Operator	NIAB

## **Appendix 2 – Seed treatment products for use** on VL trials

To be advised

## **Appendix 3 – Seed despatch deadline dates**

VCU seed must be delivered to NIAB Seed Handling Unit by 10 August

## **Appendix 4 – Growing Trial Operators and trial locations**

### 1. Growing Trial Operators/Seed Handling Operators

Growing Trial Operator	Seed Handling Operator (If not Trial Operator)	Location of trial	Trial Description
Scottish Agronomy	NIAB, SHU	Kirton, Fife	T only
NIAB		Thorne, Yorkshire	T only
Elsoms Seeds Ltd	NIAB. SHU	Harlaxton, Nottinghamshire	T only
Limagrain UK Ltd	NIAB, SHU	Croxby, Lincolnshire	T only
Elsoms Seeds Ltd	NIAB, SHU	Swineshead, Lincolnshire	T only
NIAB	NIAB, SHU	Bridgend, Mid- Glamorgan	T only
NIAB		Callow, Herefordshire	T only
NIAB (VL2 only)		Gussage St Mary, Dorset	T only
NIAB		Birchington, Kent	T only
NIAB (VL2 only)		Broughton, Hampshire	T only
KWS UK Ltd	NIAB, SHU	Orford, Suffolk	T only
KWS UK Ltd	NIAB, SHU	Duxford, Cambridgeshire	T only
LS Plant Breeding	NIAB, SHU	Wisbech, Cambridgeshire	T only
*SRUC (VL2 only)	NIAB, SHU	Mid-Lothian	T only
*SRUC (VL2 only)	NIAB, SHU	Angus, Aberdeenshire	T only

Growing Trial Operator	Seed Handling Operator (If not Trial Operator)	Location of trial	Trial Description
*NIAB (VL2 only)		Croft, North Yorkshire	T only
*NIAB (VL2 only)		Berwick, Northumberland	T only
*Scottish Agronomy (VL2 Only)	NIAB, SHU	Scottish Borders	T only

<sup>\*</sup>Funded by AHDB

### 2. Pathology Trials Operator

Pathology Trials Operator	Location of trial
NIAB	Cambridgeshire

## **Appendix 5 – Control varieties for VCU assessments**

Variety	Yield controls	
Aurelia	Yield control (Hybrid)	
Ambassador	Yield Control (Restored Hybrid)	
Aspire (VL2)	Yield control (Conventional)	
Pi Pinnacle (VL1)	Yield control (Conventional)	
Turing	Yield control (Restored Hybrid)	
LG Armada	Yield control (Restored Hybrid) and RH buffer	
PX131	Semi-dwarf comparitor and SD buffer	
Resort	High erucic control required only if candidates entered	
Matrix CL	Clearfield comparator	
V316OL (VL2)	HOLL Comparator	
V367OL (VL1)	HOLL Comparator	
Variety	Disease controls	
DK Exsteel	light leaf spot resistance	
PT279CL	light leaf spot susceptible	
Aurelia	RL Agronomy index link	
Aspire	RL Agronomy index link	
Resort	light leaf spot susceptible	
DK Expansion	Canker resistor	
DK Explicit	Canker resistor	
Crome	Canker susceptible	
Crocodile	Canker susceptible	

### Appendix 6 – Dates for submission of data

### **To Trials Organiser**

Record	Latest date of receipt by Trials Organiser
Site data part 1 (including site sketch)	Within 2 months of drilling trial
Site data part 2	By the time trials harvested
Plot records (in approved electronic format)	Growing Trial Operator should notify Trials Organiser that trial has been harvested within 2 days of harvest

### **Plot Records to Data Handling Operator**

Record	Date
Plot records	Non-yield field data: Within 10 days of record being taken or by date of harvest.
	Yield and moisture data: Within 3 days of harvest date.
	Quality data: Within 3 days of receipt of samples.

### **Plot samples to Quality Testing Operator**

Samples	Date
Plot samples for quality testing	Within 2 days of harvest.

## **Appendix 7 – Growth stages of oilseed rape**

Main Growth Stage	Growth stage	Description of Growth Stage
Germination and emergence	0.0	Dry seed
Leaf production	1.0	Both cotyledons unfolded and green
	1.1	First true leaf emerged
	1.2	Second true leaf emerged
	1.3 etc	Third true leaf emerged
Stem extension	2.0	No internodes (rosette)
	2.5	About five internodes
Flower bud development	3.0	Only leaf buds present
	3.1	Flower buds present but enclosed by leaves
	3.3	Flower buds visible from above ('green bud')
	3.5	Flower buds raised above leaves
	3.6	First flower stalks extending
	3.7	First flower buds yellow ('yellow bud')
Flowering	4.0	First flower opened
	4.1	10% all buds opened
	4.3	30% all buds opened
	4.5	50% all buds opened

Main Growth Stage	Growth stage	Description of Growth Stage
Seed development	6.1	Seeds expanding
	6.2	Most seeds translucent but full size
	6.3	Most seed green
	6.4	Most seed green-brown mottled
	6.5	Most seeds brown
	6.6	Most seed dark brown
	6.7	Most seed black but soft
	6.8	Most seed black and hard
	6.9	All seeds black and hard
Leaf senescence	7.0	
Stem senescence	8.1	Most stem green
	8.5	Half stem green
	8.9	Little stem green
Pod senescence	9.1	Most pods green
	9.5	Half pods green
	9.9	Few pods green

## Appendix 8 – Assessment of oilseed rape diseases

Use for assessing light leaf spot, Alternaria, downy mildew,

#### Phoma and white leaf spot on leaves and pods

- 1) Examine all leaves and pods in 3 areas of each plot.
- 2) Ignore all naturally senescent tissue.
- 3) Include all necrosis and chlorosis attributable to disease.
- 4) Estimate % infection using the descriptions below. Record the average % infection from the 3 areas. Interpolate values if necessary.

% Infection	Leaves	Pods
0	No infection observable	No infection observable
0.1	Trace of infection	Trace of infection
1	Diseased leaves with 1 small lesion; plants with a few scattered lesions	Terminal raceme with a few scattered lesions
5	Leaves appear 1/10 infected; diseased leaves with 2 lesions	Terminal raceme appears 1/10 infected; diseased pods with 1 or 2 lesions
10	Leaves appear ¼ infected; diseased leaves with few large or many small lesions	Terminal raceme appears ¼ infected; diseased pods with 2 or more lesions
25	Area appears ½ infected ½ green	Area appears ½ infected ½ green
50	Area appears more infected than green	Area appears more infected than green
75	Very little green tissue left	Very little green tissue left
100	Leaves/pods dead - no green tissue left	Leaves/pods dead - no green tissue left

#### Other disease assessments:

#### Club root

Any suspected club root in trials should be confirmed by sampling 30 plants within the suspected area, and its presence notified to the co-ordinators.

#### Sclerotinia %

Should be assessed as the % of stems with complete girdling leading to 'whiteheads' within a plot.

#### Botrytis%

Should be assessed as the % of stems infected within a plot.

#### Stem canker

Stem canker may be assessed by pulling up 30 stems per plot before harvest. Stems should be pulled at random throughout the plot, but since access is likely to be very difficult, aim to take 15 stems from the second drill row on each side of the plot, using the first 3-5m of the plot length. Appropriate sampling times are usually from the middle of June onwards. If sampling is not carried out prior to swathing, it must be done as soon as possible afterwards, within a maximum of 2 days.

#### Verticillium %

Should be assessed as the % of stems infected within a plot when the symptoms are clearly visible. Its presence should be notified to the co-ordinators.

## **Appendix 9 – Winter hardiness assessment key**

This is scored on a 1-9 scale. A high figure shows good winter hardiness

- 1. Total loss of plant
- 2. Very severe leaf damage, up to 75% loss of plants
- 3. Very severe leaf damage, up to 50% loss of plants
- 4. Severe leaf damage, severe leaf loss, up to 25% loss of plants estimated
- 5. Severe leaf damage, loss of lower leaves and slight loss of plants
- 6. Severe leaf scorch, loss of lower leaves
- 7. Moderate leaf scorch
- 8. Slight to very slight leaf scorch
- 9. No damage

# Appendix 10 – Fungicide and early insecticide protocol for winter oilseed rape variety trials 2024/2025

Last updated: February 2025

Recommendations by Paul Gosling, BASIS Registration number R/E/8107/IFM.

RL Trials Co-ordinator: Sean Burns 0773 639936 VL Co-ordinator: Jeremy Widowson 01353 653846

This programme is for use on AHDB Recommended List and Variety List winter oilseed rape trials in 2024:

- For spring and summer applications to trials for harvest 2025
- For autumn applications to trials to be harvested in 2026

It is an experimental protocol and is designed to meet the protocol aim of keeping disease levels in treated plots as low as is possible in all varieties and in all trials. It is not intended to follow commercial practice.

<u>Please note</u> that most treatments are compulsory, and the rates and timings specified should be adhered to as closely as possible. The protocol is robust and, if applied correctly, should be effective.

Compulsory treatments are in **bold** text and *Optional* are in *italics*.

If, however, disease levels rise above 5% (e.g., if weather conditions do not allow optimal application), please contact Sean Burns (RL) or Louise Everest (VL) to discuss an appropriate course of action.

Fungicides should be applied at the stated dose rates unless agreed otherwise with the regional advisors via the RL Trials Co-ordinator. Changes to dose rates will only be sanctioned in exceptional circumstances.

Please contact the RL Trials Co-ordinator or VL Co-ordinator if you have any difficulty in sourcing a particular product.

In some cases, two or more products may be available from a company with the same active substances and formulation; if you wish to use such a product and it is not listed in this protocol, contact the RL Trials Co-ordinator or VL Co-ordinator.

If a generic product is the only option available, check that the amount of active ingredient (ai) in the generic product is the same as the rate give in the protocol.

**Important**: Every care has been taken to ensure that all mixtures, rates and timings are approved, meeting COSSH regulations and manufacturer's guidelines. However, it is the responsibility of the Trial Manager to ensure that they meet all current regulations at the time of application. The Trials Coordinators should be notified of any conflict between the protocol and current regulations.

#### **Changes from previous version**

Below is a summary of product changes from the previous protocol, please ensure that whoever is making the application has the up-to-date version of the protocol and understands the product and rates to be applied at each timing for respective crops

Page	Crop/Timing	Details of change
6	Autumn	Proline 275 - removed for all regions

#### Products, active substances, and manufacturers

Product	Туре	Active Substance	Max dose/No of applications	Amount of active substance	Manufacturer
Shepherd	Fungicide	Boscalid + pyraclostrobin	0.8l/ha max individual dose & max total dose per crop.	150:250g/l	BASF
Pictor	Fungicide	Boscalid + dimoxystrobin	0.5I/ha max individual dose.  1.0 I/ha max total dose per crop.	200:200 g/l	BASF
Proline 275	Fungicide	Prothioconazole		275 g/l	Bayer CropScience
Aviator 235 Xpro	Fungicide	Bixafen + prothioconazole	1.0I/ha max individual dose.  Max 2 treatments per crop.	60:200 g/l	Bayer CropScience

#### Winter Oilseed Rape - Spring 2025

Fungicide Protocol for the North and East/West regions					
Timing	Growth Stage (GS) - target timing or disease  Product / active ingredient		Rate		
Onset of spring growth prior to stem extension					
Target foliar diseases		Proline 275	0.63 l/ha		
GS 4.0 – 4.3	First flowers opened				
Target Alternaria, Botrytis and Sclerotinia.		Pictor	0.375 – 0.5 l/ha		
Note: If there is a strong likelihood that soil or weather conditions will prohibit the application of the second Pictor spray, then apply full rate Pictor at this timing (maximum of 0.5 I/ha permitted).					
GS 4.5 – 5.0	(up to 3 weeks later or just prior to 50% of pods at final size (GS 75 BBCH)				
To target sclerotinia		Pictor	0.375 – 0.5 l/ha		
Please note that a fungicide application for Sclerotinia control should be applied to untreated trials especially where these trials are taken to yield.					

#### Autumn 2025 (for crop 25/26)

Treatment Timing	Growth Stage (GS) - target timing or disease	Product / active ingredient	Rate
Northern Region			
Optional on appearance of first symptoms or, by end of November	Light leaf spot and Phoma	Aviator Xpro	1.0 l/ha
East/ West Region			
On appearance of first symptoms or, if no symptoms present by end of October (the 4-leaf stage). If a second autumn fungicide application after Shepherd is unlikely, then use Proline 275 in place of Shepherd	Phoma	Shepherd*	0.4 l/ha
Apply if phoma lesions spotted 4 – 6 weeks after previous application, or by end of December. Fungicide applied at this timing will also provide protection for light leaf spot, even if symptoms are not visible in the crop. Depending on seasonal condition or disease pressure.	Phoma or light leaf spot	Aviator Xpro	1.0 l/ha

<sup>\*</sup>Consult the relevant trials co-ordinator if this product is unavailable



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