



Animal &
Plant Health
Agency

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

May 2024

Changes

- Updated title from United Kingdom to Great Britain and Northern Ireland
- Updated year to 2025
- Appendix 4
 - For Table 1 Added Trial Description column
 - Removed John Innes Centre
 - Added SHO of NIAB, SHU to NIAB Bridgend.
 - Removed NIAB Hinxton, Cambridgeshire.
 - Updated NIAB Easton Royal to NIAB Gussage St Mary, Dorset.
 - Removed VL2 only from NIAB Birchington, Kent.
 - Added VL2 only to NIAB Broughton, Hampshire.
 - For KWS UK Ltd Duxford, removed VL2 only and added SHU of NIAB, SHU.
 - Added note on which centres funded by AHDB.
- Appendix 5
 - 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

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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

Growing Trial Operator	Seed Handling Operator (If not Trial Operator)	Location of trial	Trial Description
*SRUC (VL2 only)	NIAB, SHU	Angus, Aberdeenshire	T only
*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

*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 comparator 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: December 2023

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

RL Trials Co-ordinator: Mark Bollebakker 01480 482989
NL Co-ordinator: OBJ Jeremy Widdowson 01353 653846

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

- For spring and summer applications to trials for harvest 2024.
- For autumn applications to trials to be harvested in 2025.

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.

Please note 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. **If, however, disease levels rise above 5% (for example, if weather conditions do not allow optimal application), please contact Mark Bollebakker (RL) or Jeremy Widdowson (NL) 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 NL 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 NL Co-ordinator. Generic products should be avoided as they may contain the same active substances but in a different formulation.

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 Co-ordinators should be notified of any conflict between the protocol and current regulations.

Products, active substances and manufacturers

Product	Type	Active substance	Amount of active substance	Manufacturer
Shepherd	Fungicide	Boscalid + pyraclostrobin	Boscalid + pyraclostrobin	BASF
Pictor	Fungicide	Boscalid + dimoxystrobin	200:200 g/l	BASF
Aviator 235 Xpro	Fungicide	Bixafen + prothioconazole	60:200 g/l	Bayer CropScience
Proline 275	Fungicide	Prothioconazole	275 g/l	Bayer CropScience

Winter Oilseed Rape - spring 2024

Fungicide Protocol for the North and East/West regions			
Treatment 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 l/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)			
	<i>To target sclerotinia.</i>	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 2024 (for crop 2024/25)

Treatment Timing	Growth Stage (GS) - target timing or disease	Product / active ingredient	Rate
Northern Region			
<i>Optional on appearance of first symptoms or, by end of November</i>	<i>Light leaf spot and Phoma</i>	<i>Proline 275 or Aviator Xpro</i>	<i>0.63 l/ha 1.0 l/ha</i>

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
<i>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.</i>	<i>Phoma or light leaf spot</i>	<i>Proline 275** or Aviator Xpro</i>	<i>0.63 l/ha 1.0 l/ha</i>

* Consult the relevant trials co-ordinator if this product is unavailable.

Proline 275 can be used twice in the programme across autumn and spring, but the **max total dose must not exceed 1.26 l/ha.



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