



Animal &
Plant Health
Agency

United Kingdom Variety List Trials: Trial Procedures for Official Examination of Value for Cultivation and Use (VCU) Harvest 2024

Linseed – Spring and winter sown, & Flax

Appendices

July 2023

Changes

- Updated Appendix 2 with new seed treatment product
- Updated Appendix 5 with new Trial Operator

Contents

Scope.....	1
Appendix 1 – Approved trial organisers/ operators for linseed.....	2
Appendix 2 - Seed treatment products for use on NL trials.....	3
Appendix 3 – Seed despatch deadline dates.....	4
Appendix 4 – Growing Trial Operators and Trial locations.....	5
1. Growing Trial Operators/Seed Handling Operators.....	5
2. Pathology Trials Operator	5
Appendix 5 – Control varieties for VCU assessments	6
Winter linseed	6
Spring linseed	6
Appendix 6 – Dates by which records should be submitted.....	7
A. To Trials Organiser	7
B. To Data Handling Operator	7
C. To Quality Testing Operator	7
Appendix 7 – Growth stages of linseed	8
Appendix 8 – Assessment of linseed diseases	10

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 – Linseed – Spring and winter sown

Appendix 1 – Approved trial organisers/ operators for linseed

Activity	Organisers / Operators responsible
Trials Organiser	BSPB
Seed Handling Operator	NIAB
Trial Design and Data Handling Operator	AHDB Cereals and Oilseeds
Pathology Trials Operator	None
Trial Inspection and 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 NL trials

Integral Pro

Appendix 3 – Seed despatch deadline dates

VCU seed must be delivered to NIAB by:

VL Winter linseed 15th August

VL Spring linseed 15th December

DL Spring Linseed last Wednesday in February

Appendix 4 – Growing Trial Operators and Trial locations

1. Growing Trial Operators/Seed Handling Operators

Winter Linseed

Growing Trial Operator	Seed Handling Operator (if not trial operator)	Location of trial
NIAB	Trial Operator	Sutton Scotney, Hampshire
Elsoms Seeds	NIAB, SHU	Spalding, Lincolnshire

Spring Linseed

Growing Trial Operator	Seed Handling Operator (If not trial operator)	Location of trial
Envirofield	NIAB, SHU	Suffolk
Envirofield	NIAB, SHU	Dorset
EuroFins	NIAB, SHU	Wilson, Derbyshire
Elsoms Seeds	NIAB, SHU	Pode Hole, Lincolnshire
Elsoms Seeds	NIAB, SHU	Spalding, Lincolnshire.

2. Pathology Trials Operator

Pathology Trial Operator	Location of trial
Not applicable	-

Appendix 5 – Control varieties for VCU assessments

Winter linseed

Alpaga

Attila

Spring linseed

Batsman

Abacus

Bingo

Flax

Lirina

Appendix 6 – Dates by which records should be submitted

A. To Trials Organiser

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

B. To Data Handling Operator

Record	Date
Plot records should be sent to Data Handling Operator	Within 10 days of record being taken

C. To Quality Testing Operator

Samples	Date
Plot samples for quality testing should be sent to the Quality Testing Operator	Within 2 days of harvest

Appendix 7 – Growth stages of linseed

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
Leaf production	1.1	First true leaf emerged
Leaf production	1.2	Second true leaf emerged
Leaf production	1.3 etc	Third true leaf emerged
Stem extension	2.0	No internodes (rosette)
Stem extension	2.5	About five internodes
Flower bud development	3.0	Only leaf buds present
Flower bud development	3.1	Flower buds present but enclosed by leaves
Flower bud development	3.3	Flower buds visible from above ('green bud')
Flower bud development	3.5	Flower buds raised above leaves
Flower bud development	3.6	First flower stalks extending
Flower bud development	3.7	First flower buds yellow ('yellow bud')
Flowering	4.0	First flower opened
Flowering	4.1	10% all buds opened
Flowering	4.3	30% all buds opened
Flowering	4.5	50% all buds opened

Main Growth Stage	Growth stage	Description of Growth Stage
Pod development	5.3	30% potential pods
Pod development	5.5	50% potential pods
Pod development	5.7	70% potential pods
Pod development	5.9	All potential pods
Seed development	6.1	Seeds expanding
Seed development	6.2	Most seeds translucent but full size
Seed development	6.3	Most seed green
Seed development	6.4	Most seed green-brown mottled
Seed development	6.5	Most seeds brown
Seed development	6.6	Most seed dark brown
Seed development	6.7	Most seed black but soft
Seed development	6.8	Most seed black and hard
Seed development	6.9	All seeds black and hard
Leaf senescence	7.0	No description
Stem senescence	8.1	Most stem green
Stem senescence	8.5	Half stem green
Stem senescence	8.9	Little stem green
Pod senescence	9.1	Most Pods green
Pod senescence	9.5	Half pods green
Pod senescence	9.9	Few pods green

Appendix 8 – Assessment of linseed diseases

The following key (next page) is suitable for foliar and capsule diseases. For stem diseases such as Sclerotinia, and Verticillium an assessment of the % of stems infected per plot should be made.

Instructions:

- 1) Examine all leaves and capsules 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	Observation on Leaves	Observation on Capsules
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 capsules 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 capsules 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/capsules dead - no green tissue left	Leaves/capsules dead - no green tissue left



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