



Animal &
Plant Health
Agency

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

Lupin

Appendices

July 2023

Changes

- Changed document name from Spring Lupin to Lupin.
- Added Winter Lupin tables as appropriate with TBC in all relevant areas until decided in February meeting.

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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 – Spring Lupin

Appendix 1 – Approved Trial Organisers/ Operators for spring lupin

Activity	Organisers/Operators Responsible
Trial Design and Data Handling Operator	NIAB
Trials Organiser	BSPB
Pathology Trials Operator	None
Trial Inspection	PGRO
Technical Validation Operator	NIAB
Quality Testing Operator	NIAB
Data Review and Standard Setting Operator	NIAB

Appendix 2 – Seed treatment products for use on NL trials

(To be arranged with Trials Organiser)

Appendix 3 – Seed dispatch deadline dates

The latest date for receipt of seed of Winter Lupin is 15th September.

The latest date for receipt of seed of Spring Lupin is 10th January.

Appendix 4 – Growing Trial Operators and trial locations

Winter Lupin

Growing Trial Operator	Seed Handling Operator (If not trial operator)	Location of Trial
TBC		TBC

Spring Lupin

Growing Trial Operator	Seed Handling Operator (If not trial operator)	Location of Trial
Agrii	NIAB, SHU	Sudbury, Essex

Appendix 5 – Control varieties for VCU assessments

Ildigo – blue

Carabor - blue

TBC – white

TBC - yellow

Appendix 6 – Dates by which records should be submitted

To Trials Organiser

Record	Latest date of receipt by Trials Organiser
Site data part 1 (including site sketch)	Within 1 month of drilling trial
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

Plot records to Data Handling Operator

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

Plot samples to Quality Testing Operator

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

Appendix 7 - Growth Stages of Lupin

Adapted from Lupin Development Guide (Dracup/Kirby 1996) University of Western Australia Press

Main Growth Stage	Code	Definition
Germination and Emergence	0.0	Dry Seed
Germination and Emergence	0.1	Imbibed seed
Germination and Emergence	0.3	Radicle apparent
Germination and Emergence	0.5	Germination (Radicle length 5 mm)
Germination and Emergence	0.7	Hypocotyl protruding through seed coat
Germination and Emergence	0.9	Emergence

Main Growth Stage	Code	Definition
Leaf Emergence	1.1	1 st pair of leaves protruding beyond upright cotyledons
Leaf Emergence	1.2	2 nd pair of leaves emerged
Leaf Emergence	1.3	3 rd pair of leaves emerged
Leaf Emergence	1.n	N pair of leaves emerged

Main Growth Stage	Code	Definition
Stem Elongation	2.1	Little separation between bases of leaves
Stem Elongation	2.3	Bases of some basal leaves clearly separated
Stem Elongation	2.5	Bases of several leaves clearly separated from each other inflorescence
Stem Elongation	2.7	Influence bud clearly visible
Stem Elongation	2.9	Inflorescence bud clearly separated from base of highest leaf

Main Growth Stage	Code	Definition
Flowering	3.0	Bracts completely hiding corolla
Flowering	3.1	Pointed bud stage
Flowering	3.4	Open flower stage
Flowering	3.5	Coloured corolla stage
Flowering	3.7	Senescent corolla stage
Flowering	3.9	Pod set

Main Growth Stage	Code	Definition
Pod Ripening	4.0	Yong, green pod. No septa between seeds abutting.
Pod Ripening	4.1	Young, green pod. No septa between seeds; seeds separating
Pod Ripening	4.2	Green pod, slight bulging of walls, seeds filling 50 % of space between septa.
Pod Ripening	4.3	Seeds filling 75 % of space
Pod Ripening	4.5	Green pod, septa split
Pod Ripening	4.7	Pod turning khaki coloured
Pod ripening	4.9	Pod pale reddish-brown and wrinkled

Main Growth Stage	Code	Definition
Seed Ripening	5.0	Seed small, dark green, with watery contents
Seed Ripening	5.3	Seed large, green, little watery contents
Seed Ripening	5.5	Seed large, light green to pale greyish-blue coat, green cotyledons
Seed Ripening	5.7	Seed large and soft, pale fawn coat, yellow to golden orange cotyledons
Seed Ripening	5.8	Seed hard but dentable
Seed Ripening	5.9	Seed hard and ripe for harvest



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