

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1995

[Full Table of Content](#)



95/W/LP/2 Establishment Study on Heavy Soil - Lupins

Rothamsted Research

Rothamsted Research (1996) *95/W/LP/2 Establishment Study on Heavy Soil - Lupins* ; Yields Of The Field Experiments 1995, pp 136 - 137 - DOI: <https://doi.org/10.23637/ERADOC-1-50>

95/W/LP/2

LUPINS

ESTABLISHMENT STUDY ON HEAVY SOIL

Object: To identify seedbed conditions for the establishment and survival of autumn-sown lupins - Woburn, Long Mead.

Sponsor: I. Shield.

Design: 3 blocks of 8 plots.

Whole plot dimensions: 6.0 x 9.0.

Treatments:

ESTABL	Seedbed type, cultivations and method of sowing:
1	Medium-coarse seedbed, unconsolidated, precision drilled 5 cm deep
2	Medium-coarse seedbed, unconsolidated, tine-drilled 5 cm deep
3	As 2, then rolled
4	Fine seedbed, consolidated, tine-drilled 5 cm deep, rolled
5	Medium-coarse seedbed, unconsolidated, tine-drilled 7.5 cm deep
6	Direct drilled 5 cm deep, seed mixed with slug pellets
7	Minimal cultivations, seed broadcast with slug pellets, cultivated to 5 cm
8	Seed broadcast, ploughed to 10 cm, levelled

Experimental diary:

08-Sep-94 : T : ESTABL 1, 2, 3, 4, 5, 7 and 8: Sub-soiled.
12-Sep-94 : T : ESTABL 1, 2, 3, 4, 5: Ploughed.
: T : ESTABL 1: Precision drilled 5 cm deep.
: T : ESTABL 2, 3: Tine drilled 5 cm deep.
: T : ESTABL 4: Flat rolled, rotary harrowed, tine-drilled 5 cm deep.
: T : ESTABL 3, 4: Cambridge rolled.
: T : ESTABL 5: Precision drilled 7.5 cm deep.
: T : ESTABL 6: Direct drilled 5 cm deep with Draza at 5.5 kg.
: T : ESTABL 7: Seed broadcast with Draza at 5.5 kg. Rotary harrowed to 5 cm.
: T : ESTABL 8: Seed broadcast, ploughed 10 cm deep, rotary harrowed to level.
18-Sep-94 : B : Opogard 500 SC at 2.3 l with Gramoxone 100 at 3.0 l in 200 l.
02-Nov-94 : B : Laser at 1.0 l with adjuvant oil at 2.4 l in 300 l.
19-Apr-95 : B : Cultar at 0.75 l in 300 l.
28-Apr-95 : B : Atlas Simazine at 2.0 l in 300 l.
03-May-95 : B : Danadim Dimethoate 40 at 0.85 l with Vassgro Spreader at 0.3 l in 300 l.
30-Jun-95 : B : Danadim Dimethoate 40 at 850 ml in 300 l.
24-Aug-95 : B : Combine harvested.

95/W/LP/2

- NOTES:** (1) Seed was CH304/70, dressed Germipro UFB, sown at 40 seeds per m².
(2) The crop on treatment 8 failed and has been omitted from the analysis.

Previous crops: Set-aside 1993, w. wheat 1994.

NOTE: Plants were counted monthly from sowing to April. Dry matter was measured in December. Leaf and branch numbers were counted post-flowering. Components of yield were measured, oil and protein content of grain was assessed on **ESTABL** 1 only.

GRAIN TONNES/HECTARE

***** Tables of means *****

ESTABL	
1	1.02
2	1.20
3	1.41
4	1.35
5	0.98
6	0.64
7	1.07
Mean	1.10

*** Standard errors of differences of means ***

ESTABL
0.214

***** Stratum standard errors and coefficients of variation *****

Stratum	d.f.	s.e.	cv%
BLOCK.WP	12	0.263	24.0
GRAIN MEAN DM%	88.9		
PLOT AREA HARVESTED	0.00135		