

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 1990

[Full Table of Content](#)



---

### 90/R/LP/1 Varieties and Growth Regulators - W. Lupins

#### Rothamsted Research

Rothamsted Research (1991) *90/R/LP/1 Varieties and Growth Regulators - W. Lupins* ; Yields Of The Field Experiments 1990, pp 138 - 139 - DOI: <https://doi.org/10.23637/ERADOC-1-42>

90/R/LP/1

WINTER LUPINS

VARIETIES AND GROWTH REGULATORS

**Object:** To study the effects of two growth regulators on the growth, maturity and yield of two winter lupin varieties - Long Hoos VI/VII 5.

**Sponsors:** J. McEwen, J.M. Day, D.P. Yeoman.

**Design:** 2 randomised blocks of 16 plots.

**Whole plot dimensions:** 1.8 x 9.0.

**Treatments:** All combinations of:-

Whole plots

1. <b>VARIETY</b>	Varieties:	
C 8	C 8	
LUCKY	Lucky	
2. <b>GROW REG</b>	Growth regulators:	
2 CHLORO	2-chloroethylphosphonic acid	
TRIAPENT	Triapenthanol	
3. <b>G R RATE</b>	Rates of growth regulator (g):	
	2 CHLORO	TRIAPENT
1	100	150
3	300	450
6	600	900

plus two extra treatments:

**EXTRA**

C 8 0	C8 without growth regulator
LUCKY 0	Lucky without growth regulator

- NOTES:** (1) Each block contained two additional EXTRA plots for ancillary studies.  
(2) Plots were netted from October to April.  
(3) Growth regulators were applied in 300 l on 17 May, 1990.

**Basal applications:** Manures: (0:18:36) at 1.1 t. Weedkillers: Terbutylazine at 0.42 kg and terbutryn at 0.98 kg in 200 l. Fluazifop-P-butyl at 0.19 kg applied with a wetting agent, 'Vassgrow', in 220 l. Insecticides: Deltamethrin at 7.5 g in 200 l. Dimethoate at 0.34 kg in 400 l. Irrigation: 25 mm. Previous crops: Lupins 1988, s. barley 1989.

**Seed:** Sown at 60 seeds per square metre.

90/R/LP/1

**Cultivations, etc.:** - PK applied: 22 Aug, 1989. Ploughed: 29 Aug.

Rotary cultivated: 13 Sept. Spiked rotary cultivated and harrowed:

14 Sept. Seed sown, chain harrowed and rolled: 15 Sept.

Terbuthylazine and terbutryn applied: 19 Sept. Irrigation applied:

25 Sept. Fluazifop-P-butyl with wetting agent applied: 8 Dec. Hand

weeded: 27 Mar, 1990 - 6 Apr. Deltamethrin applied: 25 Apr.

Dimethoate applied: 17 May. Combine harvested: 11 Sept.

**NOTE:** Plants were counted at establishment and in spring. Plant heights were measured and flowering dates were recorded. Components of yield were measured at maturity.

**GRAIN (AT 90% DRY MATTER) TONNES/HECTARE**

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

GROW REG	2 CHLORO	TRIAPENT	Mean	
<b>VARIETY</b>				
C 8	4.03	4.59	4.31	
LUCKY	0.45	1.38	0.91	
Mean	2.24	2.98	2.61	
<b>G R RATE</b>				
	1	3	6	Mean
<b>VARIETY</b>				
C 8	4.30	4.33	4.29	4.31
LUCKY	0.26	0.98	1.50	0.91
Mean	2.28	2.66	2.90	2.61
<b>G R RATE</b>				
	1	3	6	Mean
<b>GROW REG</b>				
2 CHLORO	2.15	2.20	2.37	2.24
TRIAPENT	2.41	3.11	3.43	2.98
Mean	2.28	2.66	2.90	2.61
<b>VARIETY</b>				
	<b>G R RATE</b>	1	3	6
<b>GROW REG</b>				
C 8	2 CHLORO	4.29	3.96	3.83
	TRIAPENT	4.30	4.71	4.76
LUCKY	2 CHLORO	0.00	0.44	0.91
	TRIAPENT	0.51	1.52	2.09
<b>EXTRA</b>				
C 8 0	LUCKY 0	Mean		
4.20	0.87	2.54		
<b>GRAND MEAN</b>				
	2.59			
<b>GRAIN MEAN DM%</b>				
	66.9			
<b>PLOT AREA HARVESTED</b>				
	0.00130			