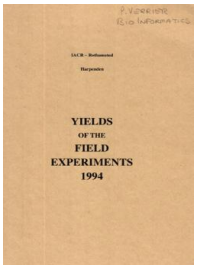
This work is licensed under a Creative Commons Attribution 4.0 International License.

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 readible, or you suspect there are some problems, please let us know and we will correct that.

Yields of the Field Experiments 1994

Full Table of Content



94/R/LP/3 Sowing Dates, Pests and Diseases - W. Lupins

Rothamsted Research

Rothamsted Research (1995) *94/R/LP/3 Sowing Dates, Pests and Diseases - W. Lupins ;* Yields Of The Field Experiments 1994, pp 145 - 149 **- DOI: https://doi.org/10.23637/ERADOC-1-49**

This work is licensed under a Creative Commons Attribution 4.0 International License.

94/R/LP/3

WINTER LUPINS

SOWING DATES, PESTS AND DISEASES

Object: To measure overwinter losses in early and late sown lupins and to identify any pests or diseases causing such losses - Great Harpenden I.

Sponsors: A.W. Ferguson, G. L. Bateman, G.F.J. Milford, I. Shield, J.M. Day.

Design: 3 blocks of a half-replicate of 2 x 2 x 2 x 2 x 2 plots.

Whole plot dimensions: 2.88 x 15.0.

Treatments:

1.	**SOW DATE**	Date of sowing:
	E	23 September, 1993
	L	20 October
2.	**SEED TRT**	Seed treatment:
	1-	None
	1T	Thiram
3.	**SOIL INS**	Soil-applied insecticide:
	2-	None
	2C	Chlorpyrifos
4.	**AUT SPRY**	Autumn fungicide:
	A-	None
	AP	Prochloraz
5.	**SUM FUNG**	Summer fungicide:
	F-	None
	FF	Iprodione and thiophanate-methyl
6.	**SUM INS**	Summer insecticide:
	I-	None
	IA	Pirimicarb
	ID	Dimethoate

NOTE: SEED TRT 1T: Thiram, as Agrichem Flowable Thiram, was applied at 900 g active ingredient per t of seed.

https://doi.org/10.23637/ERADOC-1-49

This work is licensed under a Creative Commons Attribution 4.0 International License.

94/R/LP/3

Experimental diary:

31-Aug-93 : B : Ploughed and furrow pressed.
23-Sep-93 : B : Rotary harrowed.
: **T** : **SOW DATE** E: CH 304/70 drilled at 40 seeds per m^2.
: **T** : **SOW DATE** E, **SOIL INS** 2C: Dursban 48E at 1.5 l in 220 l.
24-Sep-93 : **T** : **SOW DATE** E: Opogard 500 FW at 2.8 l in 200 l.
20-Oct-93 : **T** : **SOW DATE** L: Rotary harrowed, CH304/70 drilled at 40 seeds per m^2.
26-Oct-93 : **T** : **SOW DATE** L, **SOIL INS** 2C: Dursban 48E at 1.5 l in 220 l.
01-Nov-93 : **T** : **SOW DATE** L: Opogard 500 FW at 2.8 l in 220 l.
14-Dec-93 : **T** : **AUT SPRY** AP: Sportak 45 at 1.1 l in 220 l.
16-Feb-94 : B : Atlas Simazine at 1.0 l in 200 l.
13-Jun-94 : **T** : **SUM FUNG** FF: Compass at 3.0 l in 220 l.
12-Jul-94 : **T** : **SUM INS** IA: Pirimicarb 50 DG at 0.28 kg with Vassgro Spreader at 125 ml in 220 l.
: **T** : **SUM INS** ID: Atlas Dimethoate 40 at 0.85 l in 220 l.
06-Sep-94 : B : Combine harvested.

Previous crops: W. wheat 1992. w. barley 1993.

NOTE: Plant establishment was assessed in autumn, spring and summer. Aphid populations were assessed before and after insecticide treatments were applied. Diseases were assessed in summer.

GRAIN TONNES/HECTARE

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

SEED TRT	1-	1T	Mean
SOW DATE			
E	1.18	0.98	1.08
L	0.09	0.11	0.10
Mean	0.63	0.54	0.59

SOIL INS	2-	2C	Mean
SOW DATE			
E	1.25	0.91	1.08
L	0.10	0.09	0.10
Mean	0.68	0.50	0.59

SOIL INS	2-	2C	Mean
SEED TRT			
1-	0.75	0.52	0.63
1T	0.61	0.48	0.54
Mean	0.68	0.50	0.59

https://doi.org/10.23637/ERADOC-1-49

This work is licensed under a Creative Commons Attribution 4.0 International License.

94/R/LP/3

GRAIN TONNES/HECTARE

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

AUT SPRY SOW DATE	A-	AP	Mean
E	1.01	1.15	1.08
L	0.11	0.09	0.10
Mean	0.56	0.62	0.59

AUT SPRY SEED TRT	A-	AP	Mean
1-	0.63	0.63	0.63
1T	0.49	0.60	0.54
Mean	0.56	0.62	0.59

AUT SPRY SOIL INS	A-	AP	Mean
2-	0.67	0.68	0.68
2C	0.45	0.56	0.50
Mean	0.56	0.62	0.59

SUM FUNG SOW DATE	F-	FF	Mean
E	1.15	1.01	1.08
L	0.10	0.10	0.10
Mean	0.62	0.55	0.59

SUM FUNG SEED TRT	F-	FF	Mean
1-	0.65	0.62	0.63
1T	0.60	0.49	0.54
Mean	0.62	0.55	0.59

SUM FUNG SOIL INS	F-	FF	Mean
2-	0.67	0.68	0.68
2C	0.58	0.42	0.50
Mean	0.62	0.55	0.59

SUM FUNG AUT SPRY	F-	FF	Mean
A-	0.55	0.57	0.56
AP	0.70	0.54	0.62
Mean	0.62	0.55	0.59

https://doi.org/10.23637/ERADOC-1-49

This work is licensed under a Creative Commons Attribution 4.0 International License.

94/R/LP/3

GRAIN TONNES/HECTARE

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

SUM INS	I-	IA	ID	Mean
SOW DATE				
E	1.20	1.25	0.80	1.08
L	0.10	0.09	0.10	0.10
Mean	0.65	0.67	0.45	0.59

SUM INS	I-	IA	ID	Mean
SEED TRT				
1-	0.68	0.70	0.53	0.63
1T	0.62	0.65	0.37	0.54
Mean	0.65	0.67	0.45	0.59

SUM INS	I-	IA	ID	Mean
SOIL INS				
2-	0.80	0.77	0.46	0.68
2C	0.49	0.58	0.43	0.50
Mean	0.65	0.67	0.45	0.59

SUM INS	I-	IA	ID	Mean
AUT SPRY				
A-	0.59	0.64	0.46	0.56
AP	0.71	0.71	0.44	0.62
Mean	0.65	0.67	0.45	0.59

SUM INS	I-	IA	ID	Mean
SUM FUNG				
F-	0.65	0.76	0.47	0.62
FF	0.65	0.59	0.42	0.55
Mean	0.65	0.67	0.45	0.59

https://doi.org/10.23637/ERADOC-1-49

This work is licensed under a Creative Commons Attribution 4.0 International License.

94/R/LP/3

GRAIN TONNES/HECTARE

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

SOW DATE	**SEED TRT**	**SOIL INS**	**AUT SPRY**
0.081	0.081	0.081	0.081
SUM FUNG	**SUM INS**	**SOW DATE SEED TRT**	**SOW DATE SOIL INS**
0.081	0.099	0.115	0.115
SEED TRT SOIL INS	**SOW DATE AUT SPRY**	**SEED TRT AUT SPRY**	**SOIL INS AUT SPRY**
0.115	0.115	0.115	0.115
SOW DATE SUM FUNG	**SEED TRT SUM FUNG**	**SOIL INS SUM FUNG**	**AUT SPRY SUM FUNG**
0.115	0.115	0.115	0.115
SOW DATE SUM INS	**SEED TRT SUM INS**	**SOIL INS SUM INS**	**AUT SPRY SUM INS**
0.141	0.141	0.141	0.141
SUM FUNG SUM INS			
0.141			

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	20	0.281	47.7

GRAIN MEAN DM% 80.5

PLOT AREA HARVESTED 0.00216

https://doi.org/10.23637/ERADOC-1-49