

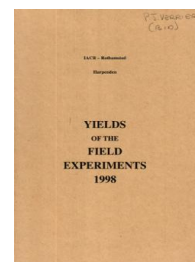
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1998

[Full Table of Content](#)



98/R/LP/3 Pod Development and Yield - Lupins

Rothamsted Research

Rothamsted Research (1999) *98/R/LP/3 Pod Development and Yield - Lupins* ; Yields Of The Field Experiments 1998, pp 172 - 173 - DOI: <https://doi.org/10.23637/ERADOC-1-52>

98/R/LP/3

LUPINS

POD DEVELOPMENT AND YIELD

Object: To monitor the role of nitrogen in pod abortion, development and yield. To determine the relationship between leaves and pods in supplying carbohydrate to the seed - Fosters West.

Sponsors: J.E. Leach, I.F. Shield.

Design: 2 randomised blocks of 2 plots split into 5.

Whole plot dimensions: 6.0 x 9.0.

Treatments:

Whole plots

1. **IRRIGATN** Irrigation:

0 None

I Irrigated

Sub-plots

2. **T** Nitrogen or leaf removal:

- None

SN Spring nitrogen

FN Foliar nitrogen

HR Half leaves removed

AR All leaves removed

Experimental diary:

27-Aug-97 : B : Ploughed and furrow pressed.

12-Sep-97 : B : Rolled, rotary harrowed, DTN 20, undressed, drilled at 60 seeds per m². Rolled.

15-Sep-97 : B : Stomp 400 SC at 5.0 l in 200 l.

18-Sep-97 : B : Spannit at 1.1 l in 200 l.

05-Dec-97 : B : Gesatop 500 SC at 2.3 l in 200 l.

19-Feb-98 : B : Folicur at 0.5 l in 200 l.

24-Feb-98 : B : Rovral Flo at 1.0 l in 200 l.

16-Mar-98 : B : Skirmish at 1.0 l in 200 l.

02-Apr-98 : B : Danadim Dimethoate 40 at 850 ml in 200 l.

08-Apr-98 : T : T SN: 46% N at 217 kg.

30-Apr-98 : T : T SN: 46% N at 217 kg.

09-May-98 : B : Laser at 1.25 l with Chiltern Cropoil at 1.0 l in 200 l.

20-May-98 : B : Folicur at 0.5 l in 200 l. Aphox at 280 g in 200 l.

04-Jun-98 : T : **IRRIGATN** I: Irrigated 12 mm.

05-Jun-98 : T : **IRRIGATN** I: Irrigated 12 mm.

12-Jun-98 : B : Alto 240 EC at 0.33 l with Bravo 500 at 1.5 l in 200 l.

03-Jul-98 : T : T FN: 46% N at 32.6 kg in 220 l.

15-Jul-98 : T : T FN: 46% N at 32.6 kg in 220 l.

98/R/LP/3

Experimental diary:

22-Jul-98 : T : T HR, AR: Leaf removal started.
 23-Jul-98 : T : IRRIGATN: Irrigated 25 mm.
 24-Jul-98 : T : T FN: 46% N at 32.6 kg in 220 l.
 31-Jul-98 : T : T FN: 46% N at 32.6 kg in 220 l.
 07-Aug-98 : T : T HR, AR: Leaf removal finished.
 12-Aug-98 : T : IRRIGATN: Irrigated 20 mm.
 25-Sep-98 : B : Combine harvested.

Previous crops: W. rape 1996, w. wheat 1997.

NOTE: Plants were sampled regularly for biomass production and nitrogen content. Leaf and pod photosynthesis was measured regularly and light interception weekly. Flowering date was also noted.

GRAIN TONNES/HECTARE

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

T	-	SN	FN	Mean
IRRIGATN				
O	3.50	3.05	3.12	3.34
I	3.04	2.77	2.90	2.96
Mean	3.27	2.91	3.01	3.15

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

T	IRRIGATN*
	T
0.216	0.305 min.rep
0.176	0.249 max-min

* within the same level of IRRIGATN only

min.rep Any of the remainder
 max-min - v any of the remainder

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	12	0.305	9.7
GRAIN MEAN DM%	69.9		
SUB-PLOT AREA HARVESTED	0.00223		