

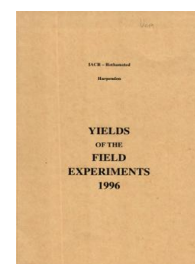
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1996

[Full Table of Content](#)



Winter Oilseed Rape

Rothamsted Research

Rothamsted Research (1997) *Winter Oilseed Rape* ; Yields Of The Field Experiments 1996, pp 120 - 126 - DOI: <https://doi.org/10.23637/ERADOC-1-51>

96/R/RAW/5

WINTER OILSEED RAPE

DISEASE CONTROL

Object: To compare standard and forecast fungicidal spray programmes for control of light leaf spot and canker in w. oilseed rape - Great Knott II.

Sponsors: B.D.L. Fitt, S. Mitchell.

Design: 4 randomised blocks of 6 plots.

Whole plot dimensions: 3.0 x 20.0.

Treatments:

FUNGICIDE	Fungicide rate and timing:	Autumn	Winter	Spring
-	None (duplicated)	-	-	-
S3	Standard	0.5	0.5	0.5
S2	Standard	1.0	-	0.5
F3	Forecast	0.5	0.5	0.5
F2	Forecast	1.0	-	0.5

NOTE: 1.0 = Full rate, 0.5 = Half rate.

Experimental diary:

05-Aug-95 : B : PK as (0:20:32) at 1407 kg.
07-Aug-95 : B : Ploughed and furrow pressed.
04-Sep-95 : B : Irrigated 20 mm.
05-Sep-95 : B : Rotary harrowed, Envol, dressed Lindex-Plus FS, drilled at 120 seeds per m².
02-Oct-95 : B : Butisan S at 1.5 l with Cyperkill 10 at 250 ml and Agral at 200 ml in 200 l.
12-Oct-95 : B : Draza at 5.5 kg.
07-Nov-95 : T : FUNGICIDE S3: Folicur at 0.5 l in 220 l.
 : T : FUNGICIDE S2: Folicur at 1.0 l in 220 l.
10-Jan-96 : T : FUNGICIDE F3: Folicur at 0.5 l in 220 l.
 : T : FUNGICIDE F2: Folicur at 1.0 l in 220 l.
27-Feb-96 : T : FUNGICIDE S3, F3: Folicur at 0.5 l in 220 l.
29-Feb-96 : B : 34.5% N at 174 kg.
02-Apr-96 : T : FUNGICIDE S3, S2, F3, F2: Folicur at 0.5 l in 220 l.
09-Apr-96 : B : 34.5% N at 348 kg.
25-Apr-96 : B : Fastac at 200 ml in 200 l.
19-Jul-96 : B : Standon Diquat at 3.0 l with Vassgro Spreader at 390 ml in 390 l.
30-Jul-96 : B : Combine harvested.

Previous crops: W. wheat 1994, set-aside 1995.

NOTE: Plant samples were taken regularly to assess the incidence and severity of diseases on leaves, stems and pods.

96/R/RAW/5

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

FUNGCIDE

-	3.92
S3	4.12
S2	4.36
F3	4.16
F2	4.18
Mean	4.11

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

FUNGCIDE

0.142	min.rep
0.123	max-min

FUNGCIDE

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	16	0.200	4.9

GRAIN MEAN DM% 89.5

PLOT AREA HARVESTED 0.00391

96/R/RAW/6

WINTER OILSEED RAPE

GROWTH OF WEEDS AND RAPE

Object: To investigate factors influencing the vigour of w. rape grown in competition with chickweed and volunteer barley - Fosters.

Sponsor: P.J.W. Lutman.

Design: 3 blocks of 2 plots split into 3 x 3 sub-plots.

Sub-plot dimensions: 3.0 x 14.0.

Treatments:

Whole plots

1. SOW DATE	Sowing date:
SE	Early, 06-Sep-95
SL	Late, 21-Sep-95

Sub-plots

2. CROP DEN	Crop density, seeds per m ² :
DL	100
DM	180
DH	260

3. WEED	Weed type and seed rate:
-	None
WC	Chickweed (<i>Stellaria media</i>), sown at 2000 seeds per m ²
WB	S. barley (cv. Magie, dressed Rappor), sown at 320 seeds per m ²

NOTE: Weeds were broadcast just before drilling the w. rape.

Experimental diary:

05-Aug-95 : B : Ploughed and furrow pressed. Rolled.
05-Sep-95 : B : Irrigated 20 mm.
06-Sep-95 : T : SOW DATE SE: Rotary harrowed, Apex, dressed Lindex-Plus FS, drilled.
21-Sep-95 : T : SOW DATE SL: Rotary harrowed, Apex, dressed Lindex-Plus FS, drilled.
22-Sep-95 : B : Draza at 5.5 kg.
23-Sep-95 : B : Cyperkill 10 at 250 ml with Agral at 300 ml in 300 l.
29-Sep-95 : T : SOW DATE SE, WEED -, WB: Butisan S at 1.5 l in 220 l.
30-Oct-95 : T : SOW DATE SL, WEED -: Butisan S at 1.5 l in 220 l.
10-Jan-96 : T : SOW DATE SE, WEED WC: Carbetamex at 3.0 kg in 220 l.
29-Feb-96 : B : 34.5% N at 174 kg.
09-Apr-96 : B : 34.5% N at 348 kg.
11-Apr-96 : B : Folicur at 0.5 l in 300 l.

96/R/RAW/6

Experimental diary:

25-Apr-96 : B : Decis at 0.5 l in 200 l.
 22-Jul-96 : B : Reglone at 3.0 l with Vassgro Spreader at 390 ml in 390 l.
 31-Jul-96 : B : Combine harvested.

Previous crops: W. wheat 1994, set-aside 1995.

NOTES: (1) Rape and weed plant densities were assessed in autumn. Crop and weed samples were taken on four occasions for dry matter assessments.

(2) Crop failed on three plots with treatment combinations:

SOW DATE SE SL SE
 CROP DEN DL DL DH
 WEED WB - WC

Estimated values were used in the analysis.

(3) A sub-sample was taken to measure weed contamination in the grain. Estimated cleaned grain yields are presented

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

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

CROP DEN	DL	DM	DH	mean
SOW DATE				
SE	3.62	3.88	4.04	3.84
SL	2.85	3.18	3.07	3.03
mean	3.23	3.53	3.55	3.44
WEED	-	WC	WB	mean
SOW DATE				
SE	4.85	4.66	2.02	3.84
SL	4.31	2.92	1.87	3.03
mean	4.58	3.79	1.95	3.44
WEED	-	WC	WB	mean
CROP DEN				
DL	4.64	3.76	1.30	3.23
DM	4.68	3.96	1.96	3.53
DH	4.43	3.66	2.58	3.55
mean	4.58	3.79	1.95	3.44
WEED	-	WC	WB	
SOW DATE	CROP DEN			
SE	DL	4.85	4.69	1.33
	DM	4.82	4.79	2.04
	DH	4.90	4.52	2.69
SL	DL	4.43	2.83	1.28
	DM	4.53	3.13	1.88
	DH	3.96	2.80	2.46

96/R/RAW/6

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

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

CROP DEN	WEED	SOW DATE*
		CROP DEN
0.209	0.209	0.295
SOW DATE*	CROP DEN	SOW DATE*
WEED	WEED	CROP DEN
		WEED
0.295	0.361	0.511

* Within the same level of SOW DATE only

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	29	0.626	18.2

GRAIN MEAN DM% 88.2

SUB-PLOT AREA HARVESTED 0.00281 (36 Plots) or 0.00258 (18(Plots)

96/R/RAW/7

WINTER OILSEED RAPE

PHEROMONES IN W. RAPE

Object: To test the effects of aphid sex pheromones on aphid parasitoids in w. rape - Great Knott II.

Sponsors: R. Glinwood, W. Powell.

Design: 4 x 4 Latin square balanced for neighbours.

Whole plot dimensions: 6.0 x 6.0.

Treatments:

PHERMONE	Pheromones:
C	None
L	Nepetalactone
LO	Nepetalactol
R	Nepetalactone and nepetalactol

Experimental diary:

07-Aug-95 : B : Ploughed and furrow pressed.
11-Sep-95 : B : Rotary harrowed, Envol, dressed Lindex-Plus FS, drilled at 120 seeds per m².
02-Oct-95 : B : Butisan S at 1.5 l with Cyperkill 10 at 250 ml in 200 l.
29-Feb-96 : B : 34.5% N at 174 kg.
09-Apr-96 : B : 34.5% N at 348 kg.
11-Apr-96 : B : Folicur at 0.5 l in 300 l.
13-May-96 : T : **PHERMONE** L, LO, R: Pheromones in vials placed in the crop.
30-Jul-96 : B : Combine harvested.

Previous crops: S. beans 1994, set-aside 1995.

NOTE: Samples of aphids and parasitoids were taken weekly.

96/R/RAW/7

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

 PHERMONE

C	4.03
L	3.71
LO	3.62
R	3.62

Mean	3.74
------	------

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

 PHERMONE

 0.126

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

Stratum	d.f.	s.e.	cv%
ROW.COL	6	0.178	4.7

GRAIN MEAN DM% 84.8

PLOT AREA HARVESTED 0.00138