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## Yields of the Field Experiments 1996

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### 96/R/RAW/6 Growth of Weeds and Rape - W. Oilseed Rape

#### Rothamsted Research

Rothamsted Research (1997) *96/R/RAW/6 Growth of Weeds and Rape - W. Oilseed Rape* ; Yields Of The Field Experiments 1996, pp 122 - 124 - DOI: <https://doi.org/10.23637/ERADOC-1-51>

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<sup>2</sup>:  
  
    DL                              100  
    DM                              180  
    DH                              260

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

**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
<b>SOW DATE</b>				
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
<b>WEED</b>	-	WC	WB	mean
<b>SOW DATE</b>				
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
<b>WEED</b>	-	WC	WB	mean
<b>CROP DEN</b>				
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
<b>SOW DATE</b>	<b>WEED</b>	-	WC	WB
	<b>CROP DEN</b>			
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))