

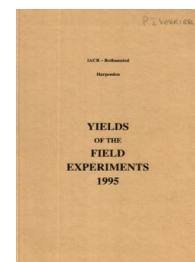
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95/R/RAW/7 Winter Rape Density and Chickweed - W. Oilseed Rape

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95/R/RAW/7

WINTER OILSEED RAPE

W. RAPE DENSITY AND CHICKWEED

Object: To measure the effects of crop density, autumn nitrogen and the density of chickweed (*Stellaria media*) on the yield of w. rape - Highfield IV/Road Piece East.

Sponsor: P.J.W. Lutman.

Design: 3 randomised blocks of 4 x 2 x 2 plots.

Whole plot dimensions: 3.0 x 14.0.

Treatments: All combinations of:-

1. CROP DEN	Target w. rape density, plants per m ² :
C1	25
C2	50
C4	100
C8	200

NOTES: (1) C1 rate was achieved by using 50% dead seed and drilling at the C2 rate.
(2) Owing to slug damage, a range of 13-222 plants per m² was established.

2. WEED DEN	Chickweed density, average established plants per m ² :
W0	0
W1	262
3. N	Nitrogen in autumn, kg N:
N0	0
N1	50

Experimental diary:

27-Jul-94 : B : Dolomite at 5.0 t.
01-Aug-94 : B : Ploughed and furrow pressed.
25-Aug-94 : B : Spring-tine cultivated.
 : T : N N1: 34.5% N at 145 kg.
 : T : WEED DEN W1: Chickweed broadcast.
 : T : CROP DEN C1, C2, C4, C8: Rotary harrowed, Apex, dressed
 Lindex-Plus FS, drilled.
26-Aug-94 : B : Rolled.
20-Sep-94 : B : Draza at 5.5 kg.
02-Nov-94 : B : Fusilade 5 at 1.0 l with Vassgro Spreader at 260 ml in
 260 l.
22-Feb-95 : B : 34.5% N at 174 kg.
21-Mar-95 : B : 34.5% N at 348 kg.
11-Apr-95 : B : Barclay Eytak at 1.1 l in 200 l.

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Experimental diary:

- 19-Apr-95 : B : Fastac at 0.2 l in 200 l.
- 12-Jul-95 : B : Reglone at 3.0 l with Vassgro Spreader at 400 ml in 400 l.
- 17-Jul-95 : B : Combine harvested.

Previous crops: W. barley 1993, set-aside 1994.

NOTES: (1) Crop failed on six plots due to slugs with treatment combinations:

CROP DEN	C1	C2	C1	C4
WEED DEN	W0 (twice)	W0 (twice)	W0	W1
	N	N0	N0	N1

Estimated values were used in the analysis.

- (2) Crop and weed density was assessed in September and October. Crop and weed growth was recorded in December, April, May and July.

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

WEED DEN	W0	W1	Mean		
CROP DEN					
C1	3.84	2.90	3.37		
C2	3.70	3.91	3.80		
C4	4.29	4.02	4.16		
C8	4.49	4.15	4.32		
Mean	4.08	3.75	3.91		
	N	N0	N1	Mean	
CROP DEN					
C1		2.98	3.76	3.37	
C2		3.77	3.84	3.80	
C4		3.95	4.36	4.16	
C8		4.37	4.27	4.32	
Mean		3.77	4.06	3.91	
		N	N0	N1	Mean
WEED DEN					
W0			3.92	4.24	4.08
W1			3.61	3.88	3.75
Mean			3.77	4.06	3.91
		WEED DEN	W0	W1	
CROP DEN		N	N0	N1	N0
					N1
C1			3.79	3.89	2.18
C2			3.35	4.04	4.18
C4			4.08	4.50	3.81
C8			4.46	4.51	4.27
					4.03

95/R/RAW/7

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

CROP DEN	WEED DEN	N	CROP DEN
			WEED DEN
0.145	0.103	0.103	0.206
CROP DEN	WEED DEN	CROP DEN	
N	N	WEED DEN	
		N	
0.206	0.145	0.291	

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	24	0.356	9.1
GRAIN MEAN DM%	82.4		
PLOT AREA HARVESTED	0.00267		