

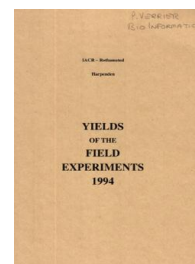
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1994

[Full Table of Content](#)



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

Rothamsted Research

Rothamsted Research (1995) *94/R/RAW/7 Winter Oilseed Rape Density and Chickweed - W. Oilseed Rape* ; Yields Of The Field Experiments 1994, pp 121 - 123 - DOI:

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

94/R/RAW/7

WINTER OILSEED RAPE

WINTER OILSEED RAPE DENSITY AND CHICKWEED

Object: To study the effects of crop density and autumn nitrogen on the competitive effects of chickweed (*Stellaria media*) - Appletree.

Sponsor: P.J.W. Lutman.

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

Whole plot dimensions: 3.0 x 14.0.

Treatments:

1. **CROP DEN** W. rape density, plants per m²:

| | |
|----|-----|
| C1 | 26 |
| C2 | 55 |
| C3 | 118 |
| C4 | 202 |

2. **WEED DEN** Chickweed density, plants per m²:

| | |
|----|-----|
| W0 | 0 |
| W1 | 119 |
| W2 | 584 |

3. **AUT N** Fertilizer nitrogen in autumn, kg N:

| | |
|----|----|
| N0 | 0 |
| N1 | 50 |

NOTE: Target chickweed densities were: W0 0, W1 100 and W2 500 plants per m².

Experimental diary:

19-Jul-93 : B : Cultivated with rotary grubber.
29-Jul-93 : B : Deep tine cultivated with vibrating tines, 60 cm apart and 45 cm deep.
02-Aug-93 : B : Rolled.
16-Aug-93 : B : PK as (0:18:36) at 1250 kg.
18-Aug-93 : B : Ploughed and furrow pressed, rolled.
20-Sep-93 : T : **AUT N** N1: 34.5% N at 145 kg.
22-Sep-93 : B : Rotary harrowed.
 : T : **CROP DEN** C1: Rotary harrowed, Falcon, dressed Lindex-Plus FS, drilled at 57 seeds (50% dead) per m².
 : T : **CROP DEN** C2, C3, C4: Rotary harrowed, Falcon, dressed Lindex-Plus FS, drilled at 57, 115 and 230 seeds per m² respectively.
 : T : **WEED DEN** W1, W2: Chickweed seed broadcast by hand.
07-Oct-93 : B : Draza at 5.5 kg.

94/R/RAW/7

Experimental diary:

31-Jan-94 : B : Carbetamex at 3.0 kg in 200 l.
 08-Mar-94 : B : 34.5% N at 162 kg.
 11-Apr-94 : B : 34.5% N at 346 kg.
 21-Jul-94 : B : Landgold Diquat at 3.0 l with Vassgro Spreader at 300 ml
 in 300 l.
 27-Jul-94 : B : Combine harvested.

Previous crops: Potatoes 1992, set-aside 1993.

NOTE: Crop and weed densities were assessed and samples were taken to measure plant growth in winter, spring and summer.

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

| WEED DEN | W0 | W1 | W2 | Mean |
|-----------------|--------------|-----------|-------------|------|
| CROP DEN | | | | |
| C1 | 3.74 | 3.23 | 2.74 | 3.24 |
| C2 | 4.12 | 3.82 | 3.48 | 3.81 |
| C3 | 3.76 | 3.31 | 3.73 | 3.60 |
| C4 | 3.77 | 3.69 | 3.63 | 3.70 |
| Mean | 3.85 | 3.51 | 3.39 | 3.59 |
| AUT N | N0 | N1 | Mean | |
| CROP DEN | | | | |
| C1 | 3.00 | 3.48 | 3.24 | |
| C2 | 3.81 | 3.80 | 3.81 | |
| C3 | 3.55 | 3.65 | 3.60 | |
| C4 | 3.78 | 3.62 | 3.70 | |
| Mean | 3.53 | 3.64 | 3.59 | |
| AUT N | N0 | N1 | Mean | |
| WEED DEN | | | | |
| W0 | 3.83 | 3.87 | 3.85 | |
| W1 | 3.50 | 3.53 | 3.51 | |
| W2 | 3.28 | 3.51 | 3.39 | |
| Mean | 3.53 | 3.64 | 3.59 | |
| WEED DEN | W0 | W1 | W2 | |
| CROP DEN | AUT N | N0 | N1 | |
| C1 | | 3.45 | 4.03 | 3.25 |
| C2 | | 4.16 | 4.08 | 3.71 |
| C3 | | 3.80 | 3.71 | 3.22 |
| C4 | | 3.91 | 3.64 | 3.81 |
| | | | | 3.21 |
| | | | | 3.92 |
| | | | | 3.40 |
| | | | | 3.58 |
| | | | | 2.29 |
| | | | | 3.57 |
| | | | | 3.62 |
| | | | | 3.62 |
| | | | | 3.19 |
| | | | | 3.39 |
| | | | | 3.84 |
| | | | | 3.64 |

94/R/RAW/7

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

| | | | |
|----------|----------|-------|----------------------|
| CROP DEN | WEED DEN | AUT N | CROP DEN WEED DEN |
| 0.115 | 0.099 | 0.081 | 0.198 |

| | | |
|----------|----------|----------|
| CROP DEN | WEED DEN | CROP DEN |
| AUT N | AUT N | WEED DEN |
| | | AUT N |
| 0.162 | 0.140 | 0.280 |

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

| | | | |
|----------|------|-------|-----|
| Stratum | d.f. | s.e. | cv% |
| BLOCK.WP | 23 | 0.280 | 7.8 |

GRAIN MEAN DM% 85.9

PLOT AREA HARVESTED 0.00253