

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 1993

[Full Table of Content](#)



### 93/R/BW/1 Companion Cropping - W. Barley

#### Rothamsted Research

Rothamsted Research (1994) *93/R/BW/1 Companion Cropping - W. Barley* ; Yields Of The Field Experiments 1993, pp 116 - 117 - DOI: <https://doi.org/10.23637/ERADOC-1-48>

93/R/BW/1

WINTER BARLEY

COMPANION CROPPING

**Object:** To measure the effect of companion cropping on pests, diseases, growth, yield and nutrient uptake of cereals - Great Harpenden I.

**Sponsor:** D.G. Christian.

**Design:** 3 blocks of 8 plots.

**Whole plot dimensions:** 6.0 x 10.0.

**Treatments:**

|          |   |
|----------|---|
| COMPCROP | Companion crops, broadcast before drilling w. barley: |
| NONE     | None (quadruplicated)                                 |
| MUST 1.5 | White mustard at 1.5 kg                               |
| MUST 3.0 | White mustard at 3.0 kg                               |
| MUST 6.0 | White mustard at 6.0 kg                               |
| RADISH   | Oil radish at 3.0 kg                                  |

**Experimental diary:**

29-Aug-92 : B : Straw baled.  
16-Sep-92 : B : Scythe at 2.0 l with Farmon Blue at 0.20 l in 200 l.  
21-Sep-92 : B : Ploughed, furrow pressed.  
28-Sep-92 : B : Rotary harrowed.  
01-Oct-92 : B : Puffin, dressed Cerevax, drilled at 350 seeds per square metre.  
          : T : COMPCROP MUST 1.5: White mustard (cv. Tilney) broadcast at 1.5 kg.  
          : T : COMPCROP MUST 3.0: White mustard (cv. Tilney) broadcast at 3.0 kg.  
          : T : COMPCROP MUST 6.0: White mustard (cv. Tilney) broadcast at 6.0 kg.  
          : T : COMPCROP RADISH: Oil radish (cv. Trick) broadcast at 3.0 kg.  
08-Mar-93 : B : 34.5% N at 120 kg.  
15-Apr-93 : B : Tigress at 2.5 l in 200 l.  
21-Apr-93 : B : Ally at 30 g and Starane 2 at 1.0 l in 200 l.  
18-May-93 : B : Calirus at 2.0 l and Corbel at 0.50 l in 200 l.  
02-Aug-93 : B : Combine harvested.

Previous crops: Potatoes 1991, w. wheat 1992.

**NOTE:** Plant samples were taken in December and April for dry weight, plant population and nitrogen uptake measurements, and in July to measure ear numbers, dry weights, nitrogen uptake and thousand grain weights.

93/R/BW/1

GRAIN TONNES/HECTARE

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

| COMPCROP |      |
|----------|------|
| NONE     | 7.11 |
| MUST 1.5 | 6.93 |
| MUST 3.0 | 6.54 |
| MUST 6.0 | 6.81 |
| RADISH   | 7.26 |
| Mean     | 6.99 |

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

| COMPCROP |         |
|----------|---------|
| 0.322    | min.rep |
| 0.255    | max-min |

| COMPCROP |                             |
|----------|-----------------------------|
| max-min  | None v any of the remainder |
| min.rep  | Any of the remainder        |

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

| Stratum             | d.f.    | s.e.  | cv% |
|---------------------|---------|-------|-----|
| BLOCK.WP            | 17      | 0.395 | 5.6 |
| GRAIN MEAN DM%      | 85.2    |       |     |
| PLOT AREA HARVESTED | 0.00230 |       |     |