

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 1999

[Full Table of Content](#)



---

### 99/W/CS/491 Efficiency of S Fertilizers - W. Rape

#### Rothamsted Research

Rothamsted Research (2000) *99/W/CS/491 Efficiency of S Fertilizers - W. Rape* ; Yields Of The Field Experiments 1999, pp 95 - 97 - DOI: <https://doi.org/10.23637/ERADOC-1-34>

99/R/CS/488

Previous crops: W. rape 1997, w. wheat 1998.

# GRAIN TONNES/HECTARE

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

| FUNGCIDE<br>CULTIVAR | -    | P    | C    | Z    | D    | Mean |
|----------------------|------|------|------|------|------|------|
| L                    | 7.01 | 6.32 | 7.12 | 5.99 | 6.57 | 6.60 |
| A                    | 6.50 | 6.00 | 6.61 | 6.49 | 7.20 | 6.56 |
| M                    | 5.61 | 6.31 | 6.68 | 6.67 | 7.02 | 6.46 |
| S                    | 6.11 | 6.67 | 5.51 | 7.26 | 5.05 | 6.12 |
| Mean                 | 6.31 | 6.32 | 6.48 | 6.60 | 6.46 | 6.43 |

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

| CULTIVAR | FUNGCIDE | CULTIVAR<br>FUNGCIDE |
|----------|----------|----------------------|
| 0.284    | 0.318    | 0.636                |

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

| Stratum  | d.f. | s.e.  | cv%  |
|----------|------|-------|------|
| BLOCK.WP | 57   | 0.899 | 14.0 |

GRAIN MEAN DM% 88.3

PLOT AREA HARVESTED 0.00228

99/W/CS/491

### EFFICIENCY OF S FERTILIZERS

**Object:** To measure the effect of different forms of sulphur on yields of wheat and a subsequent rape crop with and without fresh sulphur - Woburn, Stackyard III.

**Sponsors:** F.J. Zhao, S.P. McGrath.

The second year, w. rape.

For previous year see 98/W/CS/491.

**Design:** 4 randomised blocks of 4 x 2 + 1 split into 2.

**Whole plot dimensions:** 4.0 x 12.0.

**Sub-plot dimensions:** 2.0 x 12.0.

**Treatments:** All combinations of:-

Whole plots:

|                  |                                |
|------------------|--------------------------------|
| 1. <b>S FORM</b> | Form of sulphur in 1998:       |
| (T+A)            | Tiger 90 and ammonium sulphate |
| (AS)             | Ammonium sulphate              |
| (T90)            | Tiger 90                       |
| (NAS)            | Sodium thiosulphate            |

|                    |                              |
|--------------------|------------------------------|
| 2. <b>APP TIME</b> | Time of application in 1998: |
| (SB)               | To the seedbed               |
| (MAR)              | 17-Mar-98                    |

Sub-plots:

|                   |                           |
|-------------------|---------------------------|
| 3. <b>GYP SUM</b> | Gypsum (17.5% S) in 1999: |
| SG                | Sulphur at 30 kg          |
| S-                | None                      |

#### EXTRA

|   |                   |
|---|-------------------|
| - | None (duplicated) |
|---|-------------------|

#### Experimental diary:

|           |       |                                                                                                                        |
|-----------|-------|------------------------------------------------------------------------------------------------------------------------|
| 02-Sep-98 | : B : | : Ploughed and pressed.                                                                                                |
| 04-Sep-98 | : B : | : Rotary harrowed. Drilled Apex, tr. Lindex-Plus FS Seed Treatment, at 120 seeds/m <sup>2</sup> with the Accord drill. |
| 16-Sep-98 | : B : | : 34.5% N at 101 kg.                                                                                                   |
| 17-Sep-98 | : B : | : tm)Butisan S at 1.0 l in 200 l.                                                                                      |
|           | : B : | : tm)Cyperkill 10 at 250 ml in 200 l.                                                                                  |
| 02-Dec-98 | : B : | : tm)Cyperkill 10 at 250 ml in 200 l.                                                                                  |
|           | : B : | : tm)Punch C at 0.4 l in 200 l.                                                                                        |
| 22-Feb-99 | : B : | : 34.5% N at 290 kg.                                                                                                   |

99/W/CS/491

**Experimental diary:**

23-Feb-99 : B : : Punch C at 0.4 l in 200 l.  
 15-Apr-99 : T : SG : Gypsum at 171 kg.  
 06-May-99 : B : : Bavistin DF at 1.0 kg in 200 l.  
 : B : : Fastac at 200 ml.  
 13-Jul-99 : B : : tm)Reglone at 3.0 l in 400 l.  
 : B : : tm)Enhance at 400 ml in 400 l.  
 22-Jul-99 : B : : Combine harvested.

**NOTE:** One sub-plot with treatment **EXTRA** - received the wrong treatment an estimated value was used in the analysis.

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

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

| APP TIME      | (SB) | (MAR) | Mean |
|---------------|------|-------|------|
| <b>S FORM</b> |      |       |      |
| (T+A)         | 3.02 | 2.85  | 2.94 |
| (AS)          | 2.59 | 2.90  | 2.75 |
| (T90)         | 2.72 | 3.10  | 2.91 |
| (NAS)         | 2.78 | 2.74  | 2.76 |
| Mean          | 2.78 | 2.90  | 2.84 |

| GYPSUM        | SG   | S-   | Mean |
|---------------|------|------|------|
| <b>S FORM</b> |      |      |      |
| (T+A)         | 3.41 | 2.47 | 2.94 |
| (AS)          | 3.21 | 2.28 | 2.75 |
| (T90)         | 3.51 | 2.32 | 2.91 |
| (NAS)         | 3.36 | 2.16 | 2.76 |
| Mean          | 3.37 | 2.31 | 2.84 |

| GYPSUM          | SG   | S-   | Mean |
|-----------------|------|------|------|
| <b>APP TIME</b> |      |      |      |
| (SB)            | 3.28 | 2.27 | 2.78 |
| (MAR)           | 3.46 | 2.34 | 2.90 |
| Mean            | 3.37 | 2.31 | 2.84 |

| S FORM | GYPSUM          | SG   | S-   |
|--------|-----------------|------|------|
|        | <b>APP TIME</b> |      |      |
| (T+A)  | (SB)            | 3.49 | 2.55 |
|        | (MAR)           | 3.32 | 2.39 |
| (AS)   | (SB)            | 3.20 | 1.98 |
|        | (MAR)           | 3.22 | 2.58 |
| (T90)  | (SB)            | 3.21 | 2.22 |
|        | (MAR)           | 3.80 | 2.41 |
| (NAS)  | (SB)            | 3.22 | 2.33 |
|        | (MAR)           | 3.50 | 1.98 |

**EXTRA** - 1.88

GRAND MEAN 2.73