

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 1979

[Full Table of Content](#)



## 79/R/WW/6 Effects of Septoria - W. Wheat

### Rothamsted Research

Rothamsted Research (1980) *79/R/WW/6 Effects of Septoria - W. Wheat ; Yields Of The Field Experiments 1979*, pp 275 - 276 - DOI: <https://doi.org/10.23637/ERADOC-1-45>

79/R/WW/6

WINTER WHEAT

EFFECTS OF SEPTORIA

Object: To study the effects of a range of treatments on the incidence of Septoria and on the yield of winter wheat - Gt. Harpenden II.

Sponsors: J.F. Jenkyn, J. King (M.A.F.F.).

Design: 2 randomised blocks of 8, all treatment combinations duplicated in each block.

Whole plot dimensions: 4.27 x 9.14.

Treatments: All combinations of:-

1. SEP SEED            Septoria infection of seed:  
    NONE  
    INFECTED
2. SEEDRESS           Seed dressing:  
    NONE                None  
    ORG MERC            Organo-mercury (as 'Agrosan GN' at 2.2 g per kg seed)
3. SEP STRW           Septoria infected of straw applied to seedbed on 17 Oct, 1978:  
    NONE  
    INFECTED

NOTES: (1) An intended test of foliar fungicide was not applied.  
(2) Infected straw was applied to plots at 600 kg per ha.  
(3) All plots were separated at their sides by 4.27 m and at their ends by 9.14 m. Separations were sown to winter barley, variety Athene, seed dressed with ethirimol.  
(4) Irrigation was applied to the whole experimental area once a week, overnight, at 5 mm per occasion, when there had been negligible rain in the preceding week. It was applied on 20 June, 27 June, 4 July, 11 July, 18 July, 25 July.

Basal applications: Manures: (0:20:20) at 310 kg. 'Nitro-Chalk' at 500 kg.  
Weedkillers: Dicamba with mecoprop and MCPA (as 'Banlene Plus' at 4.2 kg in 220 l). Growth regulator: Chlormequat at 1.7 kg in 220 l.

Seed: Atou, sown at 190 kg.

Cultivations, etc.: Ploughed: 11 Oct, 1978. Rotary harrowed, PK applied: 16 Oct. Power harrowed: 17 Oct. Seed sown: 18 Oct. N applied: 3 May, 1979.  
Weedkillers applied: 8 May. Growth regulator applied: 1 June. Winter barley separations harvested: 15 Aug. Plots combine harvested: 29 Aug. Previous cropping: Barley 1977, beans 1978.

NOTE: Seedling and leaf infection by Septoria was assessed periodically during the season.

79/R/WW/6

GRAIN TONNES/HECTARE

\*\*\*\*\* TABLES OF MEANS \*\*\*\*\*

|          |      |          |      |
|----------|------|----------|------|
| SEEDRESS | NONE | ORG MERC | MEAN |
| SEP SEED |      |          |      |
| NONE     | 6.33 | 6.22     | 6.27 |
| INFECTED | 6.13 | 6.29     | 6.21 |
| MEAN     | 6.23 | 6.25     | 6.24 |

|          |      |          |      |
|----------|------|----------|------|
| SEP STRW | NONE | INFECTED | MEAN |
| SEP SEED |      |          |      |
| NONE     | 6.37 | 6.17     | 6.27 |
| INFECTED | 6.20 | 6.22     | 6.21 |
| MEAN     | 6.29 | 6.20     | 6.24 |

|          |      |          |      |
|----------|------|----------|------|
| SEP STRW | NONE | INFECTED | MEAN |
| SEEDRESS |      |          |      |
| NONE     | 6.33 | 6.13     | 6.23 |
| ORG MERC | 6.24 | 6.26     | 6.25 |
| MEAN     | 6.29 | 6.20     | 6.24 |

|          |      |          |          |          |
|----------|------|----------|----------|----------|
| SEEDRESS | NONE |          | ORG MERC |          |
| SEP STRW | NONE | INFECTED | NONE     | INFECTED |
| SEP SEED |      |          |          |          |
| NONE     | 6.46 | 6.19     | 6.28     | 6.15     |
| INFECTED | 6.19 | 6.07     | 6.21     | 6.37     |

\*\*\*\*\* STANDARD ERRORS OF DIFFERENCES OF MEANS \*\*\*\*\*

| TABLE | SEP SEED             | SEEDRESS             | SEP STRW                         | SEP SEED<br>SEEDRESS |
|-------|----------------------|----------------------|----------------------------------|----------------------|
| SED   | 0.155                | 0.155                | 0.155                            | 0.219                |
| TABLE | SEP SEED<br>SEP STRW | SEEDRESS<br>SEP STRW | SEP SEED<br>SEEDRESS<br>SEP STRW |                      |
| SED   | 0.219                | 0.219                | 0.309                            |                      |

\*\*\*\*\* STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION \*\*\*\*\*

| STRATUM             | DF      | SE    | CV% |
|---------------------|---------|-------|-----|
| BLOCK.WP            | 23      | 0.438 | 7.0 |
| GRAIN MEAN DM%      | 85.0    |       |     |
| PLOT AREA HARVESTED | 0.00195 |       |     |