

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 1974

[Full Table of Content](#)



74/R/O/1 Sowing Dates, Aphids and Bydv - Winter Oats

74/R/O/1 *Sowing Dates, Aphids and Bydv - Winter Oats*, Rothamsted Research (1975) *Yields Of The Field Experiments 1974*, pp 320 - 322 - DOI: <https://doi.org/10.23637/ERADOC-1-119>

74/R/O/1

WINTER OATS

SOWING DATES, APHIDS AND BYDV

Object: To study the effects of dates of sowing and times of applying insecticides on the incidence of cereal aphids, barley yellow dwarf virus (BYDV) and yield of winter oats - Whittlocks.

Sponsors: R.T. Plumb, J.H. Stevenson.

Design: 3 randomised blocks of 19 plots.

Whole plot dimensions: 6.40 x 24.4. Area harvested: 0.00390.

Treatments: All combinations of:-

| 1. Sowing dates: | SOW DATE |
|--|------------|
| 27 September 1973 | 27 Sept |
| 26 October 1973 | 26 Oct |
| 22 November 1973 | 22 Nov |
| 2. Autumn/winter insecticide | INSTCDE(1) |
| None | None |
| Phorate at 5.0 kg a.i. as granules to seedbed on 25 Sept, 25 Oct and 20 Nov, 1973, respectively | Phorate |
| Menazon, (0.7 l 'Saphicol' in 450 l) as foliar spray at 4-leaf stage applied to Sept sowing on 20 Nov and to Oct and Nov sowings on 30 Apr, 1974 | Menazon |
| 3. Spring insecticide | INSTCDE(2) |
| None | None |
| Menazon (0.7 l 'Saphicol' in 450 l) as foliar spray on 20 May | Menazon |

Plus one extra treatment per block given dimethoate (0.8 l 'Rogor' in 450 l on 20 May) SOW DATE 27 Sept, INSTCDE(1) None, INSTCDE(2) Dimeth.

Basal applications: Manures: (0:20:20) at 310 kg, combine drilled. 'Nitro-Chalk' at 310 kg. Weedkiller: MCPA, mecoprop and dicamba ('Banlene Plus' at 5.6 l in 220 l).

Seed: Peniarth, sown at 190 kg.

74/R/0/1

Cultivations, etc.:— Deep-tine cultivated twice: 19 and 20 Sept, 1973.
Disced: 24 Sept. Rotary harrowed for first sowing: 26 Sept.
Power harrowed for second sowing: 25 Oct. Power harrowed for
third sowing: 20 Nov. N applied: 19 Apr, 1974. Weedkiller
applied: 22 Apr. Combine harvested: 15 Aug. Previous crops:
Barley 1972 and 1973.

NOTE: Assessments of seedling emergence were made in autumn and spring.
Aphid counts were made on three occasions and virus assessed on
two occasions.

Standard error per plot.

Grain, tonnes/hectare: 0.325 or 4.6% (36 d.f.)

74/R/0/1

TABLE OF MEANS

GRAIN: TONNES/HECTARE

| | INSC TCDE(1) | | | INSC TCDE(2) | | Mean |
|----------|--------------|--------------|---------|--------------|---------|------|
| | None | Phorate | Menazon | None | Menazon | |
| SOW DATE | | | | | | |
| 27 Sept | 6.73 | 6.94 | 6.84 | 6.78 | 6.89 | 6.84 |
| 26 Oct | 7.02 | 7.30 | 6.95 | 7.17 | 7.01 | 7.09 |
| 22 Nov | 7.42 | 7.43 | 7.54 | 7.53 | 7.39 | 7.46 |
| | | INSC TCDE(1) | | | | |
| | | None | | 7.09 | 7.02 | 7.06 |
| | | Phorate | | 7.30 | 7.15 | 7.23 |
| | | Menazon | | 7.09 | 7.12 | 7.11 |
| Mean | | | | 7.16 | 7.10 | 7.13 |

| INSC TCDE(1) INSC TCDE(2) | None | | | Phorate | | Menazon | |
|------------------------------|------|---------|--------|---------|---------|---------|---------|
| | None | Menazon | Dimeth | None | Menazon | None | Menazon |
| SOW DATE | | | | | | | |
| 27 Sept | 6.74 | 6.72 | 7.26 | 6.79 | 7.09 | 6.81 | 6.87 |
| 26 Oct | 7.09 | 6.96 | | 7.57 | 7.03 | 6.86 | 7.04 |
| 22 Nov | 7.45 | 7.39 | | 7.53 | 7.34 | 7.62 | 7.46 |

STANDARD ERRORS OF DIFFERENCES

| SOW DATE | INSC TCDE(1) | INSC TCDE(2) | SOW DATE | SOW DATE | INSC TCDE(1) |
|----------|--------------|--------------|--------------|--------------|--------------|
| | | | INSC TCDE(1) | INSC TCDE(2) | INSC TCDE(2) |
| 0.108 | 0.108 | 0.088 | 0.188 | 0.153 | 0.153 |

SOW DATE
INSC TCDE(1)
INSC TCDE(2)

0.265

Grand mean 7.14

Mean D.M. % 82.1