

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 1980

[Full Table of Content](#)



## 80/R/O/1 Spring Oats Varieties and Stem Nematode

### Rothamsted Research

Rothamsted Research (1981) *80/R/O/1 Spring Oats Varieties and Stem Nematode* ; Yields Of The Field Experiments 1980, pp 276 - 277 - DOI: <https://doi.org/10.23637/ERADOC-1-31>

80/R/0/1

SPRING OATS

VARIETIES AND STEM NEMATODE

Object: To study the effects of the stem nematode, *Ditylenchus dipsaci*, on resistant and susceptible varieties of oat - Fosters O & E VI W and Highfield O & E III.

Sponsor: A.G. Whitehead.

Design: On each site: 3 randomised blocks of 7 plots.

Whole plot dimensions: 2.29 x 3.05.

Treatments: On each site:

VARIETY	Varieties and susceptibility to stem nematode:
MA AB R	Manod, ex Aberystwyth, resistant
MA RO R	Manod, ex Rothamsted, resistant
OSPREY S	Maris Osprey, susceptible
PANEMA R	Panema, resistant
PENNAL R	Pennal, resistant
PENRTH R	Peniarth, resistant
TABARD S	Tabard, susceptible

Standard applications:

To both sites: Manures: (20:10:10) at 390 kg. Weedkillers: Mecoprop with bromoxynil and ioxynil (as 'Brittox' at 3.5 l) in 220 l.

To Highfield only: Weedkillers: Dicamba with mecoprop and MCPA on two occasions (as 'Tetralex Plus', at 5.3 l on the first and at 7.0 l on the second occasion) in 220 l. Fungicide: Triadimefon at 0.13 kg in 220 l.

Seed: Sown at 190 kg.

Cultivations, etc.:-

Fosters: NPK applied, spring-tine cultivated: 28 Feb, 1980. Spike rotary cultivated, seed sown: 29 Feb. Weedkillers applied: 6 May. Combine harvested: 22 Aug. Previous crops: W. oats 1978, fallow 1979.

Highfield: NPK applied, spring-tine harrowed, spike rotary cultivated, seed sown: 4 Mar, 1980. 'Brittox' applied: 5 May. 'Tetralex Plus' applied: 19 May. Fungicide applied: 22 May. 'Tetralex Plus' applied: 4 June. Combine harvested: 28 Aug. Previous crops: W. oats 1978, s. beans 1979.

NOTE: Stem nematodes in the soil were assessed at sowing and after harvest. Infestation of plants was assessed in mid May.

80/R/0/1

FOSTERS

GRAIN TONNES/HECTARE

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

VARIETY	MA AB R	MA RO R	OSPREY S	PANEMA R	PENNAL R	PENRTH R	TABARD S	MEAN
	4.64	5.53	5.29	6.72	7.15	6.41	7.70	6.21

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

TABLE	VARIETY
-----	-----
SED	0.376

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

STRATUM	DF	SE	CV%
BLOCK.WP	12	0.461	7.4
GRAIN MEAN DM%	83.7		
PLOT AREA HARVESTED	0.00039		

HIGHFIELD

GRAIN TONNES/HECTARE

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

VARIETY	MA AB R	MA RO R	OSPREY S	PANEMA R	PENNAL R	PENRTH R	TABARD S	MEAN
	2.40	4.60	4.33	4.71	4.46	4.84	5.80	4.45

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

TABLE	VARIETY
-----	-----
SED	0.368

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

STRATUM	DF	SE	CV%
BLOCK.WP	12	0.450	10.1
GRAIN MEAN DM%	79.8		
PLOT AREA HARVESTED	0.00039		