

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 1994

[Full Table of Content](#)



94/R/RAW/10 Disease Pressure and Glucosinolates - W. Oilseed Rape

Rothamsted Research

Rothamsted Research (1995) *94/R/RAW/10 Disease Pressure and Glucosinolates - W. Oilseed Rape ; Yields Of The Field Experiments 1994*, pp 127 - 128 - DOI:

<https://doi.org/10.23637/ERADOC-1-49>

94/R/RAW/10

WINTER OILSEED RAPE

DISEASE PRESSURE AND GLUCOSINOLATES

Object: To study the effects on crop growth, yield and glucosinolate levels of winter oilseed rape grown under different disease pressures - Appletree.

Sponsors: K.J. Doughty, H.A. McCartney, D. Schmechel, M.E. Lacey.

Design: 4 randomised blocks of 4 plots split into 2 sub-plots.

Whole plot dimensions: 6.0 x 10.0.

Treatments: All combinations of:-

Whole plots

- | | |
|--------------------|--|
| 1. FUNGINOC | Fungicide spray application and level of inoculation using infected straw: |
| NOFUNG | No fungicide spray, no inoculation |
| FUNGDE | Fungicide spray applied autumn, spring and summer, no inoculation |
| INOC 1 | No fungicide spray. Inoculation level 1 |
| INOC 2 | No fungicide spray. Inoculation level 2 |

Sub-plots

2. **VARIETY**

- | | |
|----|-----------|
| CA | Capricorn |
| FA | Falcon |

NOTE: Infected straw from a previous experiment was used for the inoculation. INOC 1 received inoculation at one-quarter of the rate applied to INOC 2.

Experimental diary:

- 19-Jul-93 : B : Cultivated by rotary grubber.
29-Jul-93 : B : Deep tine cultivated with vibrating tines 60 cm apart, 45 cm deep.
02-Aug-93 : B : Rolled.
16-Aug-93 : B : PK as (0:18:36) at 1250 kg.
18-Aug-93 : B : Ploughed and furrow pressed, rolled.
25-Aug-93 : B : Disced twice, rotary harrowed twice.
 : T : **VARIETY** CA, FA: Varieties, dressed Lindex-Plus FS, drilled at 120 seeds per m².
07-Oct-93 : B : Draza at 5.5 kg.
14-Oct-93 : T : **FUNGINOC** INOC 1, INOC 2: Infected straw applied.
04-Nov-93 : B : Benazalox at 0.75 l with Butisan S at 1.5 l in 200 l.
16-Nov-93 : T : **FUNGINOC** FUNGDE: Sportak 45 at 1.1 l in 220 l.
08-Mar-94 : B : 34.5% N at 162 kg.

94/R/RAW/10

Experimental diary:

08-Apr-94 : T : FUNGINOC FUNGCDE: Sportak 45 at 1.1 l in 220 l.
 11-Apr-94 : B : 34.5% N at 346 kg.
 15-Jun-94 : T : FUNGINOC FUNGCDE: Rovral Flo at 2.0 l in 200 l.
 14-Jul-94 : B : Landgold Diquat at 3.0 l with Vassgro Spreader at 400 ml
 in 400 l.
 21-Jul-94 : B : Combine harvested.

Previous crops: Potatoes 1992, set-aside 1993.

NOTE: Assessments were made of disease progress, crop growth and canopy structure throughout the season. Samples were taken during vegetative growth and at harvest for the measurement of glucosinolate concentrations and oil content.

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

VARIETY	CA	FA	Mean
FUNGINOC			
NOFUNG	2.46	3.70	3.08
FUNGCDE	3.55	3.77	3.66
INOC 1	2.70	3.53	3.11
INOC 2	2.42	3.46	2.94
Mean	2.78	3.62	3.20

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

FUNGINOC	VARIETY	FUNGINOC VARIETY
0.119	0.032	0.127

Except when comparing means with the same level(s) of
FUNGINOC 0.064

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	9	0.168	5.2
BLOCK.WP.SP	12	0.090	2.8

GRAIN MEAN DM% 88.2

SUB PLOT AREA HARVESTED 0.00230