

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 1995

[Full Table of Content](#)



95/W/CS/440 Take-all Control - W. Wheat

Rothamsted Research

Rothamsted Research (1996) *95/W/CS/440 Take-all Control - W. Wheat* ; Yields Of The Field Experiments 1995, pp 95 - 96 - DOI: <https://doi.org/10.23637/ERADOC-1-50>

95/W/CS/440

TAKE-ALL CONTROL

Object: To test the efficacy of seed treatments for the control of take-all (*Gaeumannomyces graminis*) at various rates of nitrogen fertilizer - Woburn, Stackyard III.

Sponsors: G.L. Bateman, J.F. Jenkyn, R.J. Gutteridge.

Design: 8 blocks of 3 plots split into 3 sub-plots.

Whole plot dimensions: 3.0 x 46.0.

Sub-plot dimensions: 3.0 x 15.0.

Treatments: All combinations of:-

Whole plots

1. SEED TRT	Seed treatment:
UT	Untreated
BY	Fuberidazole + triadimenol
NT	New treatment

NOTE: NT is under commercial development, composition undisclosed.

Sub-plots

2. N RATE	Nitrogen fertilizer (kg N) as 27% N:	
	Early	Later
N1	0	80
N2	30	50
N3	30	130

Experimental diary:

08-Sep-94 : B : PK as (0:20:32) at 781 kg.
26-Sep-94 : B : Barclay Gallup at 4.0 l in 200 l.
06-Oct-94 : B : Ploughed.
17-Oct-94 : B : Rotary harrowed, Hussar drilled at 325 seeds per m², rolled.
28-Nov-94 : B : Panther at 2.0 l with Decis at 200 ml in 200 l.
06-Mar-95 : T : **N RATE** N2, N3: 27% N at 111 kg.
26-Apr-95 : T : **N RATE** N1: 27% N at 296 kg, N2 at 185 kg and N3 at 481 kg.
02-May-95 : B : Halo at 2.0 l in 200 l.
01-Jun-95 : B : Cyclone at 1.0 l with Mallard 750 EC at 0.3 l in 200 l.
29-Jun-95 : B : Pirimicarb 50 DG at 280 g in 300 l.
05-Aug-95 : B : Combine harvested.

NOTE: Plant establishment was assessed in autumn and spring. Plant samples were taken in November, April and June to assess take-all infection.

95/W/CS/440

GRAIN TONNES/HECTARE

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

N RATE SEED TRT	N1	N2	N3	Mean
UT	2.36	2.95	3.71	3.01
BY	2.29	3.22	3.25	2.92
NT	2.68	3.91	4.29	3.63
Mean	2.44	3.36	3.75	3.18

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

SEED TRT	N RATE	SEED TRT N RATE
0.318	0.197	0.422
Except when comparing means with the same level(s) of		
SEED TRT		0.341

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	14	0.636	20.0
BLOCK.WP.SP	42	0.682	21.4

GRAIN MEAN DM% 89.9

SUB-PLOT AREA HARVESTED 0.00326