

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 2009

[Full Table of Content](#)



Results of the
Classical and other
Long-term Experiments
2009

R/CS/326 & W/CS/326 Amounts of Straw

Rothamsted Research

Rothamsted Research (2010) *R/CS/326 & W/CS/326 Amounts of Straw* ; Yields Of The Field Experiments 2009, pp 50 - 53 - DOI: <https://doi.org/10.23637/ERADOC-1-219>

09/R/CS/326 and 09/W/CS/326

AMOUNTS OF STRAW

Object: To study the effects of different amounts of straw, incorporated into the soil, on w. wheat – Rothamsted (R) Great Knott III, Woburn (W) Far Field I

Sponsors: M. J. Glendining, P. C. Brookes

The 23rd year, w. wheat

For previous years see Yield Books for 87-08/R & W/CS/326

Design: 4 randomised blocks of 4 plots (R)
3 randomised blocks of 4 plots (W)

Whole plot dimensions: 3.0 x 13.5 (R). 0.004 ha
3.0 x 14.5 (W).

Treatments:

STRAW Amounts of straw incorporated into the seedbed (t/ha), cumulative to previous annual dressings:

		R	W
NONE	None	-	-
NORMAL	Normal	6.00	3.98
2 NORMAL	Twice normal	12.00	7.96
4 NORMAL	Four times normal	24.00	15.92

Experimental Diary

Great Knott III (R)

			Rate	Unit
28-Aug-08	a	Load straw Normal plots	24.30	kg/plot
	a	Load straw x 2 Plots	48.60	kg/plot
	a	Load straw x 4 Plots	97.20	kg/plot
	a	Topped to chop straw		
12-Sep-08	p	Dow Agrosiences Glyphosate 360	2.00	l/200 l/ha
02-Oct-08	a	Plough/ E		
04-Oct-08	a	Cultipressed		
16-Oct-08	a	Combination Drilled		
	s	Hereward tr Anchor	350.00	seeds/m2
22-Oct-08	p	Liberator	0.60	l/200 l/ha
24-Oct-08	p	Decoy Wetex	7.00	kg/ha
20-Nov-08	p	Karan	5.00	kg/ha
27-Nov-08	p	Avadex Excel 15G	15.00	kg/ha
10-Dec-08	p	Alpha Pendimethalin 330 EC	4.00	l/ha
	p	Arelon 500	3.00	l/ha
	p	Hallmark with Zeon Technology	50.00	ml
03-Mar-09	f	Double Top	185.00	kg/ha
14-Apr-09	p	Pacifica	0.40	kg/ha
	p	Biopower	1.00	l/ha
21-Apr-09	f	Nitram	174.00	kg/ha

09/R/CS/326 and 09/W/CS/326

			Rate	Unit
02-May-09	p	Splice	1.00	l/ha
	p	Bravo 500	1.00	l/ha
	p	Talius	0.13	l/ha
	p	BASF 3C Chlormequat 720	2.25	l/ha
04-May-09	p	Ally Max SX	42.00	g/ha
	p	Agriguard Fluroxypyr	0.75	l/ha
14-May-09	f	Nitram	145.00	kg/ha
28-May-09	p	Brutus	1.50	l/ha
	p	Amistar Opti	1.25	l/ha
25-Jun-09	a	Mow / Rotavate paths		
13-Aug-09	a	Combine harvest discards		
15-Aug-09	a	Combine harvest, plots for yield		
	a	Sample, bale and weigh straw		
19-Aug-09	a	Sample, bale and weigh straw		

Far Field I (W)

			Rate	Unit
16-Sep-08	a	Load straw Normal plots	17.31	kg/plot
	a	Load straw x 2 Plots	34.63	kg/plot
	a	Load straw x 4 Plots	69.25	kg/plot
25-Sep-08	a	Topped to chop straw		
14-Oct-08	a	Plough/ NW		
	a	Power Harrowed		
	a	Accord Drilled		
	s	Hereward tr Anchor	350.00	seeds/m2
	a	Rolled	1.00	
11-Dec-08	p	Avadex Excel 15G	15.00	kg/ha
11-Mar-09	f	Double Top	185.00	kg/ha
20-Apr-09	p	Pacifica	0.50	kg/ha
	p	Biopower	1.00	l/ha
29-Apr-09	f	Nitram	145.00	kg/ha
10-May-09	p	Cherokee	1.25	l/ha
	p	Cycocel	2.25	l/ha
	p	Headland Manganese 500	1.00	L in 200 l/ha
03-Jun-09	p	Opus	0.80	L in 200 l/ha
	p	Amistar	1.00	L in 200 l/ha
05-Jun-09	f	Nitram	116.00	kg/ha
24-Aug-09	a	Combine harvest, plots for yield		
	a	Sample, bale and weigh straw		

09/R/CS/326

GRAIN TONNES/HECTARE

**** Tables of means ****

Treatment	
-	7.68
1	7.97
2	8.28
4	8.39
Mean	8.08

Standard errors of differences of means

Table	Treatment
s.e.d.	0.308

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	9	0.436	5.4
Grain mean dm%		85.6	

STRAW TONNES/HECTARE

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

Treatment	
-	4.27
1	4.23
2	4.67
4	4.71
Mean	4.47

Standard errors of differences of means

Table	Treatment
s.e.d.	0.387

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Straw (at 85% dry matter) tonnes/hectare			
Blocks.Plots	9	0.548	12.3
Straw mean dm%		89.4	
Plot area harvested		0.00270	

09/W/CS/326

GRAIN TONNES/HECTARE

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

Treatment	
-	4.58
1	5.23
2	4.91
4	4.80
Mean	4.88

Standard errors of differences of means

Table	Treatment
s.e.d.	0.569

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	6	0.697	14.3

GRAIN MEAN DM% 88.3

STRAW TONNES/HECTARE

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

Treatment	
-	3.21
1	3.18
2	3.21
4	3.04
Mean	3.16

Standard errors of differences of means

Table	Treatment
s.e.d.	0.406

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	6	0.497	15.7

STRAW MEAN DM% 86.8

Plot area harvested 0.00290