

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 2013



Results of the  
Classical and other  
Long-term Experiments  
2013

[Full Table of Content](#)

---

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

### Rothamsted Research

Rothamsted Research (2014) *R/CS/326 & W/CS 326 Amounts of Straw* ; Yields Of The Field Experiments 2013, pp 48 - 51 - DOI: <https://doi.org/10.23637/ERADOC-1-223>

13/R/CS/326 and 13/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:** A Macdonald and M. J. Glendining,

The 27<sup>th</sup> year, w. wheat

For previous years see Yield Books for 87-12/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	6.60	4.10
2 NORMAL	Twice normal	13.20	8.21
4 NORMAL	Four times normal	26.40	16.41

**Experimental Diary**

**Great Knott III (R)**

Date		Application	Rate	Units
23-Aug-12	a	Baled and weighed straw	See above	
20-Sep-12	a	Ploughed		
11-Oct-12	s	Drilled w/Crusoe dr Redigo Deter	145	kg/ha
13-Oct-12	f	Spread MOP	227	kg/ha
13-Oct-12	p	Sprayed Liberator EW	0.6	l/ha
18-Oct-12	p	Spread Slug Pellets - Gusto	6	kg/ha
25-Apr-13	f	Applied Nitram (second N application)	261	kg/ha
07-May-13	p	Sprayed Kingdom, Bravo and Cycocel	King@1.25 Brav@1.0 Cyco@2.0	l/ha l/ha l/ha
05-Jun-13	p	sprayed refine max, ignite, comet, hatchet	ref@75 ign@1.2 com@0.4 hat@0.75	g/ha l/ha l/ha l/ha
13-Jun-13	a	Cut Paths	—	—
18-Jun-13	p	Sprayed Cello	@0.55	l/ha

18-Jul-13	a	Cut Paths	—	—
13-Aug-13	a	Sampo - Harvested plots	—	—
13-Aug-13	a	Baled weighed and sampled plots	—	—

The first and third split N applications of Nitram were 148 and 261 kg/ha, but the application dates were not recorded.

### Far Field I (W)

Date		Application	Rate	Units
07-Sept-12	a	Straw weighed	See above	
20-Sep-12	a	Ploughed all plots	—	—
27-Oct-12	s	Drilled Crusoe trt Redigo Deter	400	seeds/m <sup>2</sup>
20-Feb-13	s	Drilled Crusoe trt Redigo Deter, re-drilled trial	500	seeds/m <sup>2</sup>
19-Apr-13	f	Applied Double Top Fertilizer	148	kg/ha
09-May-13	f	Applied Nitram	203	kg/ha
16-May-13	p	Sprayed Atlantis + Hadron + Biopower in 150 lt/ha water	At@0.4 Had@0.6 Bio@1.0	kg/ha kg/ha l/ha
31-May-13	f	Applied Nitram	203	kg/ha
10-Jun-13	p	Sprayed Bassoon and Gemstone	Ba 0.4 Ge 1.0	l/ha l/ha
05-Jul-13	p	Sprayed Ally Max, Ignite, Comet and Hatchet Xtra in 200 lt/ha water volume.	Al 42 Ig 1.1 Co 0.25 Ha 0.75	g/ha l/ha l/ha
02-Sep-13	a	Cut plots for yield	—	—
05-Sep-13	a	Straw weights done	—	—

13/R/CS/326

GRAIN TONNES/HECTARE

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

Straw	
-	6.71
1	6.75
2	6.91
4	7.23
Mean	6.90

Standard errors of differences of means

Table	Straw
s.e.d.	0.219

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	9	0.310	4.5
Grain mean DM%	87.6		

Straw tonnes/hectare

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

Straw	
-	3.47
1	3.50
2	3.70
4	3.94
Mean	3.65

Standard errors of differences of means

Table	Straw
s.e.d.	0.192

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	9	0.272	7.4
Straw mean DM%	91.1		
Plot area harvested	0.00284		

13/W/CS/326

Grain tonnes/hectare

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

Straw	
-	5.01
1	4.66
2	4.97
4	4.92
Mean	4.89

Standard errors of differences of means

Table	Straw
s.e.d.	0.443

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	6	0.542	11.1
Grain mean DM	88.6		

Straw tonnes/hectare

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

Straw	
-	2.47
1	2.56
2	2.73
4	2.53
Mean	2.57

Standard errors of differences of means

Table	Straw
s.e.d.	0.311

Stratum standard errors and coefficients of variation

Stratum	d.f.	s.e.	cv%
Blocks.Plots	6	0.381	14.8
Straw mean DM%	94.8		
Plot area harvested	0.00305		