

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 2008

[Full Table of Content](#)



Results of the  
Classical and other  
Long-term Experiments  
2008

---

## R/CS/477 & W/CS/478 Continuous Maize

### Rothamsted Research

Rothamsted Research (2009) *R/CS/477 & W/CS/478 Continuous Maize* ; Yields Of The Field Experiments 2008, pp 53 - 58 - DOI: <https://doi.org/10.23637/ERADOC-1-218>

08/R/CS/477

**CONTINUOUS MAIZE**

**Object:** To monitor the fate of organic carbon in the soil organic matter – Hoosfield

**Sponsors:** P. R. Poulton and A. J. Macdonald

The 12<sup>th</sup> year, forage maize and s. barley

For previous years see Yield Books for 97-07/R/CS/477

**Design:** 3 randomised blocks of 6 plots.

**Plot dimensions:** 12.0 x 25.0

**Treatments:-**

**CROP** Crop and straw treatments:

- M Continuous maize, stubble incorporated
- (M)B S. barley after five years maize, stubble incorporated
- MT Maize, stubble plus 10 t maize tops incorporated
- (B)M Maize, after three years of s. barley with straw removed
- BT Continuous spring barley, straw removed plus 10 t maize tops incorporated
- B Continuous spring barley, straw removed

**Experimental diary**

		Rate	Unit
27-Sep-07	a Apply maize tops, plots 3, 6, 9, 12, 16, and 18 @ 300 kg/plot	10.00	t/ha
2-Oct-07	f Muriate of Potash	181.00	kg/ha
	f Triple Superphosphate	171.00	kg/ha
10-Oct-07	a Plough/S		
2-Apr-08	a Combination Drilled		
	s Optic Tr Raxil Pro	350.00	seeds/m2
8-May-08	f Double Top	356.00	kg/ha
12-May-08	a Flexitined maize		
	a Power harrowed maize		
	a Nodet drilled maize		
	s Hudson tr measurool maize	10.20	seeds/m2
13-May-08	a Rolled barley and maize	1.00	
20-May-08	p Harmony M SX, barley	100.00	g/200 l/ha
	p Duplosan KV, barley	1.00	l/200 l/ha
	p Acanto Prima, barley	1.25	l/200 l/ha
2-Jun-08	p Decoy Wetex	5.00	kg/ha
5-Jun-08	p Decoy Wetex, barley and maize	5.00	kg/ha
9-Jun-08	p Acanto, barley	0.50	l/200 l/ha
	p Unix, barley	0.50	kg/200 l/ha
16-Jun-08	a Mow / Rotavate paths		

**08/R/CS/477**

		Rate	Unit
24-Jun-08	p Samson, maize	1.50	l/200 l/ha
29-Jun-08	p Callisto, maize	1.00	l/200 l/ha
25-Jul-08	a Rogue wild oats/thistles/weeds		
6-Aug-08	a Mow / Rotavate paths		
12-Sep-08	a Combine harvest, plots for yield		
	a Swath straw		
19-Sep-08	a Combine harvest		
	a Swath straw		
23-Sep-08	a Cut harvest strips, weighed and sampled, maize plots		
	a Forage harvest maize discards		
29-Sep-08	a Forage harvest maize discards completed		
	a Baled		

**MAIZE**

**WHOLE CROP (AT 100% DRY MATTER) TONNES/HECTARE**

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

Treatment	
M	6.79
(B)M	8.63
MT	7.21
Mean	7.54

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

Table	Treatment
s.e.d.	1.062

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	1.301	17.2

MEAN DM% 23.1

PLOT AREA HARVESTED 0.00108

08/R/CS/477

SPRING BARLEY

GRAIN TONNES/HECTARE

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

Treatment	
(M) B	3.75
BT	4.24
B	3.90
Mean	3.96

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

Table	Treatment
s.e.d.	0.263

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	0.322	8.1
GRAIN MEAN DM%	81.2		
PLOT AREA HARVESTED	0.00525		

08/W/CS/478

**CONTINUOUS MAIZE**

**Object:** To monitor the fate of organic carbon in the soil organic matter – Woburn, Stackyard AI

**Sponsors:** P. R. Poulton and A. J. Macdonald

The 12<sup>th</sup> year, forage maize and s. barley

For previous years see Yield Books for 97-07/W/CS/478

**Design:** 3 randomised blocks of 6 plots.

**Plot dimensions:** 9.0 x 25.00

**Treatments:-**

**CROP** Crop and straw treatments:

M Continuous maize, stubble incorporated  
(M)B S. barley after five years maize, stubble incorporated  
MT Maize, stubble plus 10 t maize tops incorporated  
(B)M Maize, after three years of s. barley with straw removed  
BT Continuous spring barley, straw removed plus 10 t maize tops incorporated  
B Continuous spring barley, straw removed

**Experimental diary**

		Rate	Unit
26-Sep-07	a Apply maize tops to MT and BT plots	10.00	t/ha
2-Oct-07	a Spread maize tops		
	a Topped		
14-Oct-07	f Triple Superphosphate	171.00	kg/ha
	f Muriate of Potash	181.00	kg/ha
22-Oct-07	a Plough/SW	1.00	
9-Apr-08	a Power Harrowed	1.00	
	a Accord Drilled	1.00	
	s Optic Raxil pro (awaiting seed sheet)	425.00	seeds/m2
	a Rolled		
14-May-08	a Power harrowed maize plots		
	a Nodet drilled maize plots		
	s Hudson tr measuroI maize plots	10.20	seeds/m2
18-May-08	p Acanto Prima Sp barley plots	1.25	kg/200 l/ha
	p Harmony M SX Sp barley plots	100.00	g/200 l/ha
	p Duplosan KV Sp barley plots	1.00	l/200 l/ha
6-Jun-08	p Samson- maize	1.50	l/200 l/ha
1-Jul-08	p Callisto maize plots	1.00	l/220 l/ha

**08/W/CS/478**

18-Sep-08	a	Combine harvest plots for yield barley plots
	a	Swath straw barley plots
19-Sep-08	a	Combine harvest discards
	a	Swath straw
21-Sep-08	a	Baled
26-Sep-08	a	Cut harvest strips, weighed and sampled maize plots
2-Oct-08	a	Forage harvest maize discards

**MAIZE**

**WHOLE CROP (AT 100% DRY MATTER) TONNES/HECTARE**

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

Treatment	
M	7.43
MT	10.15
(B)M	6.76
Mean	8.11

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

Table	Treatment
s.e.d.	0.570

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	0.699	8.6

MEAN DM% 29.7

PLOT AREA HARVESTED 0.00108

08/W/CS/478

SPRING BARLEY

GRAIN TONNES/HECTARE

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

Treatment	
(M) B	1.88
BT	2.43
B	1.85
Mean	2.05

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

s.e.d. 0.282

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	0.345	16.8

GRAIN MEAN DM% 83.2

PLOT AREA HARVESTED 0.00525