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## Yields of the Field Experiments 1997

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### 97/W/CS/478 Continuous Maize - Maize, S. Barley

#### Rothamsted Research

Rothamsted Research (1998) 97/W/CS/478 *Continuous Maize - Maize, S. Barley* ; Yields Of The Field Experiments 1997, pp 98 - 99 - DOI: <https://doi.org/10.23637/ERADOC-1-53>

97/W/CS/478

**CONTINUOUS MAIZE**

**Object:** To monitor the fate of organic carbon in the soil organic matter -  
Woburn, Stackyard A I.

**Sponsors:** P.R. Poulton, J. Gaunt.

The first year, maize and s. barley.

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

**Plot dimensions:** 9.0 x 25.0.

**Treatments:**

<b>CROP</b>	Crop and straw treatments:
BM	Spring barley, straw removed then maize after three years
BTM	Continuous spring barley plus 10 t maize tops incorporated, then s. barley after five years
B	Continuous spring barley, straw removed
M	Continuous maize, stubble incorporated
MB	Maize, stubble incorporated then s. barley after five years
MTB	Maize, stubble plus 10 t maize tops incorporated, then s. barley after five years

**Experimental diary:**

28-Jan-97 : B : Scythe LC at 3.0 l in 200 l.  
14-Mar-97 : B : Ploughed.  
17-Mar-97 : B : PK as (0:24:24) at 145 kg, muriate of potash at 91.6 kg  
and gypsum (17.5% S) at 171 kg.  
18-Mar-97 : B : Rotary harrowed.  
18-Mar-97 : T : CROP BM, BTM, B: Cooper, dressed Raxil S, drilled at 375  
seeds per m<sup>2</sup>.  
08-Apr-97 : T : CROP BM, BTM, B: Scythe LC at 3.0 l in 300 l.  
09-Apr-97 : T : CROP BM, BTM, B: Rotary harrowed, Cooper, dressed Raxil S,  
re-drilled at 420 seeds per m<sup>2</sup>.  
01-May-97 : T : CROP M, MB, MTB: Rotary harrowed, Hudson, dressed Mesuro1,  
drilled at 11.5 seeds per m<sup>2</sup>.  
13-May-97 : B : 34.5% N at 278 kg.  
29-May-97 : T : CROP BM, BTM, B: MSS Optica at 2.0 l with Vindex at 1.0 l  
in 200 l.  
17-Jun-97 : T : CROP M, MB, MTB: Mutiny at 2.4 l in 300 l.  
24-Jun-97 : T : CROP BM, BTM, B: Dorin at 1.0 l in 300 l.  
20-Aug-97 : T : CROP BM, BTM, B: Combine harvested.  
01-Sep-97 : T : CROP BM, BTM, B: Straw removed.  
16-Sep-97 : T : CROP M, MB, MTB: Hand harvested.  
29-Sep-97 : T : CROP MTB, BTM: Spread chopped maize at 10 t.

Previous crops: Lupins 1995, w. wheat 1996.

**NOTE:** Samples of whole crop maize and barley grain were taken for chemical  
analysis.

97/W/CS/478 MAIZE

WHOLE CROP YIELD TONNES/HECTARE

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

CROP	
M	9.16
MB	10.04
MTB	11.15
Mean	10.12

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

CROP
0.457

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	4	0.560	5.5

CROP MEAN DM% 41.8

PLOT AREA HARVESTED 0.00108

BARLEY

GRAIN TONNES/HECTARE

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

CROP	
BM	4.32
BTM	4.75
B	4.38
Mean	4.49

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

CROP
0.089

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	4	0.109	2.4

GRAIN MEAN DM% 89.9

PLOT AREA HARVESTED 0.00550