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## Yields of the Field Experiments 1998

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

#### Rothamsted Research

Rothamsted Research (1999) *98/W/CS/478 Continuous Maize - Maize, S. Barley* ; Yields Of The Field Experiments 1998, pp 102 - 103 - DOI: <https://doi.org/10.23637/ERADOC-1-52>

98/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 second 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.
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:**

29-Sep-97 : **T** : **CROP** MTB, BTM: Chopped maize tops at 10 t.  
          : **B** : PK as (0:20:32) at 235 kg and (0:24:24) at 138 kg.  
20-Oct-97 : **B** : Ploughed.  
24-Mar-98 : **B** : Rotary harrowed.  
24-Mar-98 : **T** : **CROP** BM, BTM, B: Copper, dressed Raxil S, drilled at 375  
                  seeds per m<sup>2</sup>.  
13-May-98 : **B** : 34.5% N at 278 kg.  
14-May-98 : **T** : **CROP** M, MB, MTB: Rotary harrowed, Hudson, dressed Thiram  
                  and Methiocare, drilled at 10.9 seeds per m<sup>2</sup>.  
20-May-98 : **T** : **CROP** BM, BTM, B: Asset at 2.0 l with Astix at 1.0 l in  
                  200 l. Opus at 0.2 l in 200 l.  
14-Aug-98 : **T** : **CROP** BM, BTM, B: Combine harvested.  
15-Sep-98 : **T** : **CROP** M, MB, MTB: Hand harvested.

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

**98/W/CS/478 MAIZE**

**WHOLE CROP YIELD TONNES/HECTARE**

\*\*\*\*\* TABLES OF MEANS \*\*\*\*\*

CROP	
M	9.49
MB	10.49
MTB	10.95
Mean	10.31

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

CROP
0.470

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	4	0.576	5.6
CROP MEAN DM%	29.7		
PLOT AREA HARVESTED	0.00108		

**BARLEY**

**GRAIN TONNES/HECTARE**

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

CROP	
BM	1.51
BTM	2.18
B	1.65
Mean	1.78

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

CROP
0.455

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	4	0.557	31.4
GRAIN MEAN DM%	86.7		
PLOT AREA HARVESTED	0.00575		