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# Yields of the Field Experiments 2002

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Yields of the  
Classical  
and other  
Long-term Experiments  
2002

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## 02/R/CS/477 - Rothamsted Continuous Maize

### Rothamsted Research

Rothamsted Research (2003) 02/R/CS/477 - Rothamsted Continuous Maize ; Yields Of The Field Experiments 2002, pp 51 - 52 - DOI: <https://doi.org/10.23637/ERADOC-1-259>

02/R/CS/477

## CONTINUOUS MAIZE

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

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

The sixth year, forage maize and s. barley.

For previous years see 97-01/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:

06-Nov-01 : B : Sulphate of potash at 217 kg.  
          : B : Triple superphosphate at 171 kg.  
          : T : BT, MT: Maize tops at 300 kg per plot.

12-Nov-01 : B : Ploughed, started.  
13-Nov-01 : B : Ploughed, completed.

08-Apr-02 : B : (M)B, BT, B: Sting ECO at 4.0 l in 200 l.

09-Apr-02 : T : (M)B, BT, B: Combination drilled, Optic, tr. Raxil S, at 350 seeds/m<sup>2</sup> with the Accord 2 drill.

10-Apr-02 : T : (B)M, MT, M: Flexitined.  
          : T : (M)B, BT, B: Rolled.

02-May-02 : B : 33.5% N at 284 kg.

03-May-02 : T : (B)M, MT, M: Rotary harrowed.  
          : T : (B)M, MT, M: Drilled, Hudson, tr. Mesuro1, at 102,000 seeds/ha with the Nodet Gougis drill.  
          : T : (M)B, BT, B: tm)Ally at 30 g in 200 l.  
          : T : tm)Duplosan KV at 1.0 l in 200 l.  
          : T : tm)Amistar at 0.4 l in 200 l.  
          : T : tm)Unix at 0.5 kg in 200 l

19-Jun-02 : T : (B)M, MT, M: tm)Lentagran WP at 1.5 kg in 200 l.  
          : T : tm)Mutiny at 0.6 l in 200 l.

27-Aug-02 : T : (M)B, BT, B: Combine harvested plots for yield. Swathed straw.

28-Aug-02 : T : (M)B, BT, B: Combine harvested discards, started. Swathed straw.

02-Sep-02 : B : (M)B, BT, B: Combine harvested all remaining barley. Swathed straw. Baled straw.

03-Sep-02 : B : (M)B, BT, B: Carted bales.

11-Sep-02 : T : (B)M, MT, M: Cut discard maize. Cut sample areas by hand, weighed and sampled.

NOTE: Forage maize and barley grain samples were taken for N analysis.

02/R/CS/477 MAIZE

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

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

Treatment	
M	9.22
(B)M	9.29
MT	9.40
Mean	9.30

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

Treatment
1.412

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	1.729	18.6

GRAIN MEAN DM% 25.1

PLOT AREA HARVESTED 0.00108

S. BARLEY

GRAIN TONNES/HECTARE

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

Treatment	
(M)B	3.57
BT	2.76
B	2.55
Mean	2.96

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

Treatment
0.237

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	4	0.290	9.8

GRAIN MEAN DM% 83.9

PLOT AREA HARVESTED 0.00525