

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 2001

[Full Table of Content](#)

Yields of the
Classical
and other
Long-term Experiments
2001

IRACR - Rothamsted

01/R/CS/477 - Rothamsted Continuous Maize

Rothamsted Research

Rothamsted Research (2002) 01/R/CS/477 - Rothamsted Continuous Maize ; Yields Of The Field Experiments 2001, pp 51 - 52 - DOI: <https://doi.org/10.23637/ERADOC-1-258>

01/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 fifth year, forage maize and s. barley.

For previous years see 97-00/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
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
(B)M	Maize, after three years of s. barley with straw removed
BTM	Continuous spring barley, straw removed plus 10 t maize tops incorporated
B	Continuous spring barley, straw removed

Experimental diary:

11-Oct-00 : T : BTM, MTB: Maize tops at 300 kg per plot.
17-Oct-00 : B : Sulphate of potash at 217 kg.
 : B : Triple superphosphate at 171 kg.
20-Oct-00 : B : Ploughed, /n.
31-Mar-01 : T : B, BTM: Combination drilled, Optic, tr. Raxil S, at 350 s/m² with the Accord drill.
19-May-01 : T : B, BTM: tm)Ally at 20 g in 100 l.
 : T : B, BTM: tm)Starane 2 at 0.5 l in 100 l.
21-May-01 : T : M, MB, MTB, (B)M: Rotary harrowed.
 : T : M, MB, MTB, (B)M: Drilled, Hudson, tr. Mesuro1 at 102,000 seeds/ha, with the Nodet Gougis drill.
 : T : M, MB, MTB, (B)M: Sting ECO at 4.0 l in 200 l to maize plots.
31-May-01 : B : 33.5% N at 300 kg.
11-Jun-01 : T : B, BTM: Opus at 0.4 l in 100 l.
02-Jul-01 : T : B, BTM: Folicur at 0.5 l in 200 l.
03-Jul-01 : T : M, MB, MTB, (B)M: Mutiny at 2.4 l in 200 l.
05-Sep-01 : T : B, BTM: Cut and baled straw, headlands.
06-Sep-01 : T : B, BTM: Combine harvested plots for yield, swathed straw.
07-Sep-01 : T : B, BTM: Combine harvested, all remaining barley, swathed and straw.
29-Oct-01 : T : M, MB, MTB, (B)M: Cut yield areas by hand, weighed and sampled.
31-Oct-01 : T : M, MB, MTB, (B)M: Cut maize discards.

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

MAIZE

WHOLE CROP TONNES/HECTARE

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

Treatment	
M	9.16
MB	8.60
MTB	9.05
(B)M	9.40
Mean	9.05

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

Treatment	
1.093	

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

Stratum	d.f.	s.e.	cv%
Blocks.Plots	6	1.338	14.8

GRAIN MEAN DM% 26.1

PLOT AREA HARVESTED 0.00108

S. BARLEY

GRAIN TONNES/HECTARE

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

Treatment	
BTM	2.98
B	2.66
Mean	2.82

GRAIN MEAN DM% 79.5

PLOT AREA HARVESTED 0.00600