

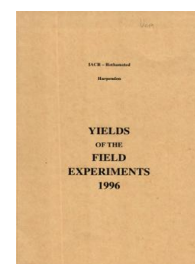
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1996

[Full Table of Content](#)



96/R/RAS/1 Sulphur and Magnesium for Spring Oilseed Rape

Rothamsted Research

Rothamsted Research (1997) *96/R/RAS/1 Sulphur and Magnesium for Spring Oilseed Rape* ; Yields Of The Field Experiments 1996, pp 127 - 128 - DOI: <https://doi.org/10.23637/ERADOC-1-51>

96/R/RAS/1

SPRING OILSEED RAPE

SULPHUR AND MAGNESIUM FOR SPRING OILSEED RAPE

Object: To study the effects of rates of sulphur and magnesium fertilizers on the yield and sulphur content of spring oilseed rape - Great Harpenden II.

Sponsors: S.P. McGrath, F. Zhao.

Design: 4 randomised blocks of 12 plots.

Whole plot dimensions: 3.0 x 15.0.

Treatments:

SULMAG Sulphur and magnesium, rate (kg) and form:			
	S	Mg	
-	None	None	(duplicated)
KS1	10	-	as potassium sulphate to seedbed
KS2	20	-	as potassium sulphate to seedbed
KS4	40	-	as potassium sulphate to seedbed
KS8	80	-	as potassium sulphate to seedbed
S2	20	-	as 'Thiovit' to seedbed
S4	40	-	as 'Thiovit' to seedbed
E2	20	15.4	as Epsom salts to crop
E4	40	30.8	as Epsom salts to crop
MG1	-	15.4	as magnesium chloride to crop
MG2	-	30.8	as magnesium chloride to crop

- NOTES:** (1) Potassium chloride as muriate of potash was applied to balance the potassium to supply 222 kg K₂O. Epsom salts and magnesium chloride dressings were split and applied one week apart and as two or four sprays on each occasion.
 (2) Thiovit contains 80% elemental S.

Experimental diary:

25-Oct-95 : B : Deep tine cultivated, twice.
 30-Jan-96 : B : Ploughed.
 01-Apr-96 : T : **SULMAG**: Potassium chloride applied.
 : T : **SULMAG**: Potassium sulphate applied.
 : B : Spring-tine cultivated.
 02-Apr-96 : T : **SULMAG**: Thiovit applied.
 : B : 34.5% N at 145 kg.
 : B : Treflan at 2.3 l in 300 l. Spring-tine cultivated.
 03-Apr-96 : B : Rotary harrowed, Starlight, dressed thiram, drilled at 7 kg.
 04-Apr-96 : B : Rolled.
 27-Apr-96 : B : Decis at 0.3 l in 200 l.
 08-May-96 : B : 34.5% N at 144 kg.
 13-May-96 : B : Cyperkill 10 at 250 ml in 200 l.

96/R/RAS/1

Experimental diary:

05-Jun-96 : T : **SULMAG**: Epsom salts and magnesium chloride applied with
Vassgro Spreader at 56 ml in 750 l.
 : B : Dow Shield at 0.5 l in 320 l.
12-Jun-96 : B : Fastac at 200 ml in 320 l.
13-Jun-96 : T : **SULMAG**: Epsom salts and magnesium chloride applied with
Vassgro Spreader at 56 ml in 750 l.
30-Aug-96 : B : Combine harvested.

Previous crops: W. barley 1994, potatoes 1995.

NOTE: Leaves were sampled for nitrogen and sulphur content at flowering.
Soil was sampled to measure sulphur content before drilling.

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

SULMAG	
-	2.87
KS1	2.62
KS2	2.84
KS4	2.88
KS8	2.72
S2	2.80
S4	2.81
E2	2.99
E4	2.72
MG1	2.92
MG2	2.90
Mean	2.83

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

SULMAG	
0.104	min.rep
0.090	max-min

SULMAG

min.rep Any of the remainder
max-min - v any of the remainder

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	34	0.147	5.2

GRAIN MEAN DM% 83.5

PLOT AREA HARVESTED 0.00299 (32 Plots) or 0.00253 (16 Plots)