

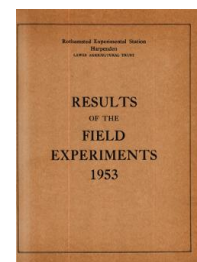
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1953

[Full Table of Content](#)



53/CG/1 Lucerne - Fertilizer Placement - Rothamsted

Rothamsted Research

Rothamsted Research (1954) *53/CG/1 Lucerne - Fertilizer Placement - Rothamsted* ; Yields Of The Field Experiments 1953, pp 101 - 102 - DOI: <https://doi.org/10.23637/ERADOC-1-173>

LUCERNE

Fertilizer placement - Highfield 5 1953 - the 2nd year.

System of replication: 8 randomized blocks of 8 plots each, a high order interaction being confounded with block differences.

Area of each plot: 0.0136 acre.

Treatments, applied 1952: All combinations of:-

P₂O₅: None; 1.0 cwt per acre applied as superphosphate.

K₂O: None; 1.0 cwt per acre applied as muriate of potash.

Method of placement: Broadcast on seed bed; Ploughed in 10".

Starter: None; 2 cwt granular superphosphate per acre placed beneath seed.

Basal dressing: None.

Cultivations, etc.: Cut and weighed green: three times - June 30, Aug 11 and Oct 20. Variety: Du Puits.

Standard errors per plot. Dry Matter:

1st cut: 3.89 cwt per acre or 6.8% (42 d.f.)

2nd cut: 2.52 cwt per acre or 12.9% (42 d.f.)

3rd cut: 1.21 cwt per acre or 10.5% (42 d.f.)

Total of 3 cuts: 5.20 cwt per acre or 5.9% (42 d.f.)

Note: For the 1st year's results see "Results of the Field Experiments 1952", Section Cf/1.

Summary of Results

Dry Matter: cwt per acre Treatments applied 1952								
Starter	No fertilizer	Superphosphate		Muriate of Potash		Superphosphate and Muriate of Potash		Mean
		Broad-cast	Ploughed in	Broad-cast	Ploughed in	Broad-cast	Ploughed in	
1st cut								
None	55.0 ⁽¹⁾	55.8	57.3	57.9	60.1	57.7	56.1.	56.9
Granular Super	56.1 ⁽¹⁾	55.5	57.1	60.3	59.1	58.6	58.3	57.6
Mean (±1.37)	55.5 ⁽²⁾	55.6	57.2	59.1	59.6	58.1	57.2	57.2
Difference (±2.75)	+1.1 ⁽³⁾	-0.3	-0.2	+2.4	-1.0	+0.9	+2.2	+0.7 ⁽²⁾
		(1) ±1.37	Mean Dry Matter %: 23.0					
		(2) ±0.97						
		(3) ±1.94						

53/Cg/1.2

Starter	Dry Matter: cwt per acre Treatments applied 1952										
	No ferti- lizer	Superphosphate Broad- cast	Ploughed in	Muriate of Potash Broad- cast	Ploughed in	Superphosphate and Muriate of Potash Broad- cast	Ploughed in	Mean			
2nd cut											
None	16.5 ⁽¹⁾	19.0	18.2	(±1.26)		18.3	20.7	22.5	21.0	19.1	
Granular											
Super	19.4 ⁽¹⁾	18.6	20.8	20.6	19.9	20.8	21.0	20.8	21.0	20.1	
Mean (±0.89)	17.9 ⁽²⁾	18.8	19.5	19.5	20.3	21.6	21.0	21.6	21.0	19.6	
Difference (±1.78)	+2.9 ⁽³⁾	-0.4	+2.6	+2.3	-0.8	-1.7	0.0	-1.7	0.0	+1.0 ⁽²⁾	
		(1) ±0.89	Mean Dry Matter %: 37.5								
		(2) ±0.63									
		(3) ±1.26									
3rd cut											
None	10.6 ⁽¹⁾	11.1	9.5	(±0.60)		12.6	11.3	12.4	12.0	11.3	
Granular											
Super	10.9 ⁽¹⁾	10.7	12.1	11.5	13.1	12.7	11.6	12.7	11.6	11.7	
Mean (±0.43)	10.8 ⁽²⁾	10.9	10.8	12.1	12.2	12.6	11.8	12.6	11.8	11.5	
Difference (±0.85)	+0.3 ⁽³⁾	-0.4	+2.6	-1.1	+1.8	+0.3	-0.4	+0.3	-0.4	+0.4 ⁽²⁾	
		(1) ±0.43	Mean Dry Matter %: 26.2								
		(2) ±0.30									
		(3) ±0.60									
Total of 3 cuts											
None	82.1 ⁽¹⁾	85.8	85.1	(±2.60)		88.9	92.1	92.6	89.1	87.2	
Granular											
Super	86.4 ⁽¹⁾	84.7	89.9	92.4	92.1	92.0	90.9	92.0	90.9	89.4	
Mean (±1.84)	84.3 ⁽²⁾	85.3	87.5	90.6	92.1	92.3	90.0	92.3	90.0	88.3	
Difference (±3.67)	+4.3 ⁽³⁾	-1.1	+4.8	+3.5	0.0	-0.6	+1.8	-0.6	+1.8	+2.2 ⁽²⁾	
		(1) ±1.84	Mean Dry Matter %: 28.9								
		(2) ±1.30									
		(3) ±2.60									