

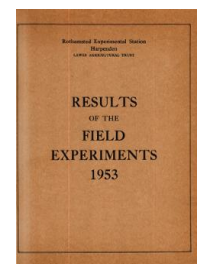
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Yields of the Field Experiments 1953

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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								Mean	
	No ferti- lizer	Superphosphate Broad- cast	Ploughed in	Muriate of Potash Broad- cast	Ploughed in	Superphosphate and Muriate of Potash Broad- cast	Ploughed in			
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								