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Yields of the Field Experiments 1964

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64/R/DG/1 Permanent Grass - N - Serve

Rothamsted Research

Rothamsted Research (1965) *64/R/DG/1 Permanent Grass - N - Serve* ; Yields Of The Field Experiments 1964, pp 243 - 245 - DOI: <https://doi.org/10.23637/ERADOC-1-160>

64/Dg/2.1

GRASS

Levels of N and K - Harwoods Piece 1964.

Design: 4 randomised blocks of 12 plots each.

Area of each plot: 0.0014. Area harvested: 1st and 2nd cuts - 0.0006, 3rd cut - 0.0008.

Treatments: All combinations of:-

1. N: None (N0), 0.3 (N1), 0.6 (N2), 0.9 (N3) cwt N per cut as 'Nitro-Chalk'.
2. K: None (K0), 0.6 (K1), 1.2 (K2) cwt K₂O per cut as muriate of potash.

Both applied in spring and after each cut except the last.

Basal dressing: 0.6 cwt P₂O₅ in seedbed as triple superphosphate.

Cultivations, etc.: Ploughed: Nov 18, 1963. Rotary cultivated, fertilisers applied, seed drilled at 30 lb: Apr 2, 1964. Cut 3 times: July 1, Aug 12, Oct 28. Fertilisers applied after first 2 cuts. Variety: S22 Italian Ryegrass. Previous crops: Barley 1962 and 1963.

NOTE: Samples were taken for estimation of soluble carbohydrate and dry matter in grass.

Standard errors per plot. Dry matter:

1st cut:	3.15 or 13.8% (33 d.f.)
2nd cut:	1.48 or 7.2% (33 d.f.)
3rd cut:	1.24 or 13.5% (33 d.f.)
Total of 3 cuts:	4.32 or 8.2% (33 d.f.)

64/DG/2.2

SUMMARY OF RESULTS

DRY MATTER

	NO	N1	N2	N3	Mean
1ST CUT					
(±1.58)					(±0.79)
K0	11.3	18.2	25.2	28.4	20.8
K1	13.7	23.1	28.7	32.9	24.6
K2	13.3	19.6	27.5	31.4	22.9
Mean (±0.90)	12.8	20.3	27.1	30.9	22.7
2ND CUT					
(±0.74)					(±0.36)
K0	6.9	18.8	26.5	30.1	20.5
K1	7.9	18.8	26.1	28.8	20.4
K2	7.6	19.1	26.2	29.5	20.6
Mean (±0.43)	7.5	18.9	26.3	29.4	20.5

Mean D.M. %: 1st cut 20.3
2nd cut 19.1

64/Dg/2.3

DRY MATTER					
	NO	N1	N2	N3	Mean
3RD CUT					
(±0.62)					
K0	1.6	7.5	11.6	12.4	8.3
K1	1.9	8.1	12.9	14.7	9.4
K2	1.9	8.8	13.1	15.1	9.7
Mean (±0.36)	1.8	8.1	12.5	14.1	9.1
TOTAL OF 3 CUTS					
(±2.16)					
K0	19.8	44.4	63.3	70.8	49.6
K1	23.4	49.9	67.8	76.4	54.4
K2	22.9	47.5	66.7	76.0	53.3
Mean (±1.25)	22.0	47.2	65.9	74.4	52.4
Mean D.M. %:	3rd cut		26.0		
	Total of 3 cuts		21.8		