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74/W/RN/14 Long Term Phosphate - Ley

74/W/RN/14 Long Term Phosphate - Ley, Rothamsted Research (1975) Yields Of The Field Experiments 1974, pp 128 - 129 - DOI: <https://doi.org/10.23637/ERADOC-1-119>

74/W/RN/14

LONG TERM PHOSPHATE

Object: To study the residual effects of superphosphate on a clover/grass ley - Woburn Stackyard III.

Sponsor: G.E.G. Mattingly.

The seventh year, clover/grass ley.

For previous years see 68/B/8(t), 69/W/RN/14, 70/W/RN/14(t), 71/W/RN/14(t), 72/W/RN/14(t) and 73/W/RN/14.

Design: 6 blocks of 6 plots, split into 2.

Whole plot dimensions: 8.53 x 15.8. Sub plot area harvested: 0.00145.

Treatments: All combinations of:

Whole plots: 1. Residues of superphosphate applied autumn 1967 and spring 1973 (kg P₂O₅):

1967	1973	Total	P ₂ O ₅ RES(73)
None	None	None (Duplicate plots)	0
188	172	360	360
376	344	720	720
753	687	1440	1440
1130	1030	2160	2160

Sub plots: 2. Residues of superphosphate applied in three equal dressings 1970-72 (kg P₂O₅, total):

	P ₂ O ₅ RES(72)
None	0
376	376

Basal applications: Manures: Ground chalk at 2.5 tonnes. K₂O at 110 kg as muriate of potash. MgO at 30 kg as Epsom salts.

Cultivations, etc.: - Ground chalk applied: 26 Sept, 1973. K and Mg applied: 21 Jan, 1974. Chain harrowed: 3 Apr. Cut once: 11 June.

Standard error per plot. Dry matter: tonnes/hectare.
 1st and only cut. Whole plot: 0.564 or 15.8% (26 d.f.)
 Sub plot: 0.315 or 8.8% (31 d.f.)

74/W/RN/14

TABLES OF MEAN

DRY MATTER: TONNES/HECTARE

1ST AND ONLY CUT

P205RES(73)

	0	360	720	1440	2160	Mean
P205RES(72)						
0	3.23	3.44	3.87	3.66	3.19	3.44
376	3.59	3.62	4.21	3.91	3.27	3.70
Mean	3.41	3.53	4.04	3.79	3.23	3.57

STANDARD ERRORS OF DIFFERENCES

	P205RES(72)	P205RES(73)	P205RES(72) P205RES(73)
	0.074		
0 v any of remainder		0.282	0.303
Between any of remainder		0.325	0.350
Except when comparing means with same level of P205RES(73)			
0			0.129
Between remainder			0.182

Mean D.M. % 28.8