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79/W/RN/14 Long-term Phosphate - Ley

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79/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 12th 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 73-78/W/RN/14.

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

Whole plot dimensions: 8.53 x 15.8.

Treatments: All combinations of:-

Whole plots

1. P205RES(73) Residues of superphosphate applied autumn 1967 and spring 1973 (kg P205):

	1967	1973	Total
0	None	None	None (Duplicate plots)
360	188	172	360
720	376	344	720
1440	753	687	1440
2160	1130	1030	2160

Sub plots

2. P205RES(72) Residues of superphosphate applied in three equal dressings 1970-72 (kg P205, total):

0
376

Basal applications: Manures: K2O at 240 kg as muriate of potash. MgO at 30 kg as Epsom Salts in winter. K2O at 48 kg as muriate of potash after the first cut.

Cultivations, etc.:- K and Mg applied: 6 Feb, 1979. Cut twice: 21 June, 7 Sept. K applied: 5 July.

79/W/RN/14

1ST CUT (21/6/79) DRY MATTER TONNES/HECTARE

***** TABLES OF MEANS *****

P205RES(73) P205RES(72)	0	360	720	1440	2160	MEAN
0	4.94	5.21	4.90	6.06	4.92	5.16
376	5.10	5.27	4.84	5.30	4.42	5.01
MEAN	5.02	5.24	4.87	5.68	4.67	5.08

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	P205RES(73)	P205RES(72)	P205RES(73) P205RES(72)	
SED	0.328		0.368	MIN REP
	0.284	0.096	0.319	MAX-MIN
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:				
P205RES(73)			0.235	MIN REP
			0.167	MAX REP

P205RES(73)
 MAX REP 0
 MAX-MIN 0 V ANY OF REMAINDER
 MIN REP ANY OF REMAINDER

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.568	11.2
BLOCK.WP.SP	31	0.408	8.0

1ST CUT MEAN DM% 20.3

1ST CUT PLOT AREA HARVESTED 0.00145

79/W/RN/14

2ND CUT (7/9/79) DRY MATTER TONNES/HECTARE

***** TABLES OF MEANS *****

P205RES(73) P205RES(72)	0	360	720	1440	2160	MEAN
0	0.77	0.97	0.71	0.93	0.76	0.82
376	0.90	0.80	0.84	0.84	0.66	0.82
MEAN	0.83	0.89	0.77	0.88	0.71	0.82

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	P205RES(73)	P205RES(72)	P205RES(73) P205RES(72)	
SED	0.170		0.176	MIN REP
	0.147	0.027	0.152	MAX-MIN
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:				
P205RES(73)			0.067	MIN REP
			0.047	MAX REP

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.294	35.8
BLOCK.WP.SP	31	0.116	14.1

2ND CUT MEAN DM% 24.6 2ND CUT PLOT AREA HARVESTED 0.00129

TOTAL OF 2 CUTS DRY MATTER TONNES/HECTARE

***** TABLES OF MEANS *****

P205RES(73) P205RES(72)	0	360	720	1440	2160	MEAN
0	5.71	6.18	5.61	6.99	5.68	5.98
376	6.00	6.07	5.67	6.14	5.09	5.83
MEAN	5.85	6.12	5.64	6.57	5.38	5.90

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	P205RES(73)	P205RES(72)	P205RES(73) P205RES(72)	
SED	0.452		0.485	MIN REP
	0.392	0.101	0.420	MAX-MIN
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:				
P205RES(73)			0.248	MIN REP
			0.176	MAX REP

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.783	13.3
BLOCK.WP.SP	31	0.430	7.3

TOTAL OF 2 CUTS MEAN DM% 22.5