

# Rothamsted long term liming experiment R/CS/10 Plan 1962-1973

Not to scale

Sawyers

Lime and PK plot treatments

N

Plot	1	2	3	4	5	6	7	8	Block 1  1  2  2  76.8m  51.2m
Lime	O	O	H	L	O	M	L	H	
PK	P	K	none	P	PK	none	none	P	
	9	10	11	12	13	14	15	16	
	M	O	L	L	M	H	H	M	
	K	none	PK	K	PK	K	PK	P	
	17	18	19	20	21	22	23	24	
	M	M	M	O	M	L	O	L	
	K	PK	none	P	P	K	PK	P	
	25	26	27	28	29	30	31	32	
	L	O	H	H	O	L	H	H	
	PK	none	K	PK	K	none	P	none	

## Treatment factors:

**Lime** t CaCO<sub>3</sub> ha<sup>-1</sup>, total 1962-1973

O	0
L	5
M	10
H	20

<b>PK treatment:</b>	kg ha <sup>-1</sup> yr <sup>-1</sup>	
<b>1962-1980:</b>	P	K
none	0	0
K	0	104
P	27.5	0
PK	27.5	104

No P or K in fallow years, and different rate for potatoes.

Plot area 6.4m x 18.3m (6.4m x 18m 1968) Fallow 1969

# Rothamsted long term liming experiment R/CS/10

## Plan 1974-1980

Not to scale

Sawyers

Mg applied to sub-plots

Lime and PK whole plot treatments

N

Sub-plot	011	021	031	041	051	061	071	081	Block 1    76.8m    2    2
Mg	Mg	Mg	Mg	-	-	-	Mg	Mg	
Lime	O	O	H	L	O	M	L	H	
Mg	-	-	-	Mg	Mg	Mg	-	-	
PK	P	K	none	P	PK	none	none	P	
Sub-plot	012	022	032	042	052	062	072	082	
	091	101	111	121	131	141	151	161	1    76.8m    2    2
	Mg	-	Mg	Mg	Mg	-	-	Mg	
	M	O	L	L	M	H	H	M	
	-	Mg	-	-	-	Mg	Mg	-	
	K	none	PK	K	PK	K	PK	P	
	092	102	112	122	132	142	152	162	
	171	181	191	201	211	221	231	241	2    2
	-	Mg	Mg	-	-	Mg	-	Mg	
	M	M	M	O	M	L	O	L	
	Mg	-	-	Mg	Mg	-	Mg	-	
	K	PK	none	P	P	K	PK	P	
	172	182	192	202	212	222	232	242	
	251	261	271	281	291	301	311	321	2
	-	-	-	-	Mg	-	-	Mg	
	L	O	H	H	O	L	H	H	
	Mg	Mg	Mg	Mg	-	Mg	Mg	-	
	PK	none	K	PK	K	none	P	none	
	252	262	272	282	292	302	312	322	

51.2m

### Treatment factors:

Lime	t CaCO <sub>3</sub> ha <sup>-1</sup> , total 1962-1980
O	0
L	7
M	15
H	30

Mg	kgMg ha <sup>-1</sup> yr <sup>-1</sup>
-	0
Mg	112
Mg applied 1974, 1976-78	

PK treatment	kg ha <sup>-1</sup> yr <sup>-1</sup>	
1962-1980:	P	K
none	0	0
K	0	105
P	27.5	0
PK	27.5	105

No P or K in fallow years, and different rate for potatoes.

See plans for previous years (1962-1973) for further details

Plot area 6.4m x 18.3m (6.4m x 18m 1974, 1976) Fallow 1979 & 1980

# Rothamsted long term liming experiment R/CS/10 Plan 1981-1986

Not to scale

Sawyers

Lime and P plot treatments

N

Plot	1	2	3	4	5	6	7	8	Block 1  1  2  2  76.8m  51.2m
Lime	O	O	H	L	O	M	L	H	
P	P2	P1	P0	P2	P3	P0	P0	P2	
	9	10	11	12	13	14	15	16	
	M	O	L	L	M	H	H	M	
	P1	P0	P3	P1	P3	P1	P3	P2	
	17	18	19	20	21	22	23	24	
	M	M	M	O	M	L	O	L	
	P1	P3	P0	P2	P2	P1	P3	P2	
	25	26	27	28	29	30	31	32	
	L	O	H	H	O	L	H	H	
	P3	P0	P1	P3	P1	P0	P2	P0	

## Treatment factors:

**Lime** t CaCO<sub>3</sub> ha<sup>-1</sup>, total 1962-1986

O	0
L	14
M	23
H	50

PK treatment	P treatment	kgP ha <sup>-1</sup> total	
1962-1980:	1981-1988:	1962-80	1981-86
None	P0	0	0
K	P1	0	50
P	P2	495	75
PK	P3	495	150

See plans for previous years (1962-1980) for further details

Plot area 6.4m x 18.3m (6.0m x 18m 1983, 1985, 1986) Fallow 1984

# Rothamsted long term liming experiment R/CS/10

## Plan 1987-1990

Not to scale

Sawyers

Mn applied to sub-plots  
Lime and P whole plot treatments

N

Sub-plot	011	021	031	041	051	061	071	081	Block 1
Mn	Mn	Mn	Mn	Mn	Mn	Mn	Mn	Mn	
Lime	O	O	H	L	O	M	L	H	
Mn	-	-	-	-	-	-	-	-	
P	P2	P1	P0	P2	P3	P0	P0	P2	
Sub-plot	012	022	032	042	052	062	072	082	
76.8m									
	091	101	111	121	131	141	151	161	Block 2
	-	-	-	-	-	-	-	-	
	M	O	L	L	M	H	H	M	
	Mn	Mn	Mn	Mn	Mn	Mn	Mn	Mn	
	P1	P0	P3	P1	P3	P1	P3	P2	
	092	102	112	122	132	142	152	162	
	171	181	191	201	211	221	231	241	Block 3
	Mn	Mn	Mn	Mn	Mn	Mn	Mn	Mn	
	M	M	M	O	M	L	O	L	
	-	-	-	-	-	-	-	-	
	P1	P3	P0	P2	P2	P1	P3	P2	
	172	182	192	202	212	222	232	242	
	251	261	271	281	291	301	311	321	Block 4
	-	-	-	-	-	-	-	-	
	L	O	H	H	O	L	H	H	
	Mn	Mn	Mn	Mn	Mn	Mn	Mn	Mn	
	P3	P0	P1	P3	P1	P0	P2	P0	
	252	262	272	282	292	302	312	322	
51.2m									

### Treatment factors:

**Lime:** t CaCO<sub>3</sub> ha<sup>-1</sup>, total 1962-1987

O 0  
L 15  
M 24.5  
H 52.5

**Mn spray treatment**

**1987-1990:**

- not applied  
Mn foliar spray applied

**PK treatment**

**1962-1980:**

None  
K  
P  
PK

**P treatment**

**1981-1988:**

P0  
P1  
P2  
P3

kgP ha<sup>-1</sup> total

1962-80 1981-88

0 0  
0 75  
495 100  
495 225

See plans for previous years (1962-1986) for further details

Plot area 6.0m x 18.3m

# Rothamsted long term liming experiment R/CS/10

Not to scale

## Plan 1991-1996

S applied to sub-plots

Sawyers

Lime and P whole plot treatments

N

Sub-plot	011	021	031	041	051	061	071	081	Block
S	-	-	-	-	S	S	S	-	1
Lime	O	O	H	L	O	M	L	H	
S	S	S	S	S	-	-	-	S	
P	P2	P1	P0	P2	P3	P0	P0	P2	
Sub-plot	012	022	032	042	052	062	072	082	
091	101	111	121	131	141	151	161		1
S	S	-	S	S	-	-	S		
M	O	L	L	M	H	H	M		
-	-	S	-	-	S	S	-		
P1	P0	P3	P1	P3	P1	P3	P2		
092	102	112	122	132	142	152	162		
171	181	191	201	211	221	231	241		2
S	-	S	-	S	S	S	-		
M	M	M	O	M	L	O	L		
-	S	-	S	-	-	-	S		
P1	P3	P0	P2	P2	P1	P3	P2		
172	182	192	202	212	222	232	242		
251	261	271	281	291	301	311	321		2
S	S	S	-	S	-	-	-		
L	O	H	H	O	L	H	H		
-	-	-	S	-	S	S	S		
P3	P0	P1	P3	P1	P0	P2	P0		
252	262	272	282	292	302	312	322		

51.2m

### Treatment factors:

**Lime:** t CaCO<sub>3</sub> ha<sup>-1</sup>, total 1962-1987

O	0
L	15
M	24.5
H	52.5

### S treatment

1991-1996:	kgS ha <sup>-1</sup> yr <sup>-1</sup>
-	0
S	30

### PK treatment

**1962-1980:**

None
K
P
PK

### P treatment

**1981-1988:**

P0
P1
P2
P3

kgP ha <sup>-1</sup> total	
1962-80	1981-88
0	0
0	75
495	100
495	225

See plans for previous years (1962-1990) for further details

Plot area 6.0m x 18.3m 1991, 1992; 5.76m x 16.1m 1993, 1994; 6.0m x 16.1m 1995, 1996