

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Collection of Plans for the Fosters Ley-arable Experiment

[Full Table of Content](#)

All the Plans

Rothamsted Research

Rothamsted Research (1949-1990) *All the Plans* ; Collection Of Plans For The Fosters Ley-Arable Experiment, pp 1 - 20

FOSTERS FIELD

LEY AND ARABLE ROTATIONS Experiment

1949 1st Preliminary year

Present crop	W	W	W	R	W	Cg1	R	H	LI	Lul
	1	3	5	7	9	11	13	15	17	19
	a	b	a	b	a	b	a	b	a	b
	N	N	N	N	N	N	N	N	N	N
	1	2	1	2	1	1	1	2	2	2

	2	4	6	8	10	12	14	16	18	20
	a	b	a	b	a	b	a	b	a	b
	N	N	N	N	N	N	N	N	N	N
	2	1	2	1	2	2	2	1	1	1

Relation (L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)

Plot code letter	W	W	W	W	R	Cg1	Lul	R	H	
	21	23	25	27	29	31	35	37	39	
	a	b	a	b	a	b	a	b	a	
	N	N	N	N	N	N	N	N	N	
	1	2	1	2	2	2	1	1	1	

	22	24	26	28	30	34	36	40	42	
	a	b	a	b	a	b	a	b	a	
	N	N	N	N	N	N	N	N	N	
	1	2	1	2	1	1	2	2	2	

Relation (Lu) (Cg) (A) (L) (R) (Cg) (Lu) (L) (R) (A)

Test crop { W Wheat
H Seeds hay
Lul 1 cut then followed
Cg1 1st year lucerne
LI 1st year cut grass
R 1st year grazed ley
Permanet 3rd yr 2 cuts
grass grazed with sheep

Rotation	Treatment crops	Test crop
(A)	Hay, Potatoes, Barley	Wheat, Potatoes, Barley
(Lu)	1st yr, 2nd yr, 3rd yr lucerne	
(Cg)	1st yr, 2nd yr, 3rd yr cut grass	
(L)	1st yr, 2nd yr, 3rd yr grazed ley	

1/4 plot = 0.02205 acre

For harvested areas see Field notebooks
17 rows by 7 inch spacing by 124.5 links
82-17 feet

Symbol	Crop	cwt. N per acre as nitrochalk N1	cwt. N per acre as nitrochalk N2	Basal dressing per acre
W	Wheat	0.3	0.6	0.2 cwt. P ₂ O ₅ combine drilled with seed
H	Seeds hay	0.3	0.6	0.15 cwt. P ₂ O ₅ , 0.15 cwt. K ₂ O
Cg1	1st year cut grass	0.15 (i)	0.3	0.6 cwt. P ₂ O ₅ , 0.6 cwt. K ₂ O
LI	1st year grazed ley	0.075 (ii)	0.15	0.6 cwt. P ₂ O ₅ , 0.6 cwt. K ₂ O
R	Reseeded grass	0.075 (ii)	0.15	0.3 cwt. P ₂ O ₅ , 0.3 cwt. K ₂ O
Lul	1st year lucerne	-	-	0.6 cwt. P ₂ O ₅ , 0.6 cwt. K ₂ O

The basal dressing is applied as a granulated compound containing 13% P₂O₅ and 13% K₂O.

- (i) 1st dressing of N1 and N2 in spring. Repeated dressings of N1 and N2 at the same rates. After 1st, 2nd and 3rd cut.
- (ii) 1st dressing of N1 and N2 in spring. A second dressing of N1 and N2 later in summer at the same rates.

FOSTERS LEY AND ARABLE ROTATIONS EXPERIMENT

1951 3rd year



Code letter M

111	113	115	117	119	Present crop
a b	a b	a b	a b	a b	
N N	N N	N	N N N	N N	
2 1	1 1	1	1 2 2 1	1	

112	114	116	118	120	Rotation
a b	a b	a b	a b	a b	
N N	N N	N	N N N	N N	
1 2 2 2 1	2 2	2	1 2 2 1	1	

111	113	115	117	119	Rotation
(L) (Lu) (R) (A) (Cg)	(L) (Lu) (R) (A) (Cg)	(L) (Lu) (R) (A) (Cg)	(L) (Lu) (R) (A) (Cg)	(L) (Lu) (R) (A) (Cg)	

91	93	95	97	99	101	103	105	107	109	Rotation
a b	a b	a b	a b	a b	a b	a b	a b	a b	a b	
N N	N N	N N	N N	N	N	N	N	N	N	
2 2 2 1	1 2 2 2	2 2	2 2	1	2	2 1	2 1	2 1	2	

92	94	96	98	100	102	104	106	108	110	Rotation
a b	a b	a b	a b	a b	a b	a b	a b	a b	a b	
N N	N N	N N	N N	N	N	N	N	N	N	
1 1 2 1 2 1	1 1	1 1	1 1	2	2	2 1	2 1	2 1	1	

91	93	95	97	99	101	103	105	107	109	Rotation
(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	(Cg) (Lu) (L) (A) (R) (L) (A) (Cg) (Lu) (R)	

n,d on treatment crops
N,D on test crops (W,R,B)
(d)(D) residuals of 1950 dung treatments

grazed this yr

51	53	55	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	Rotation
(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	

52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	Rotation
(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	(Lu) (R) (L) (Cg) (A)	

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	Rotation
(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	Rotation
(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	(L) (A) (Lu) (R) (Cg) (R) (A) (L) (Lu)	

*1200 ft
1750 ft
35 ft*

16 MAR 1951

FOSTERS LEY AND ARABLE ROTATIONS EXPERIMENT

5 FEB 1952

1952 4th year

code letter M.

111	113	115	117	119
a, b	a, b	a, b	a, b	a, b
N	D	N	N	N
D	D	N	D	D

112	114	116	118	120
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

91	93	95	97	99	101	103	105	107	109
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	D	D	N	N	N	N	N	N

92	94	96	98	100	102	104	106	108	110
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	D	D	N	N	N	N	N	N

81	83	85	87	89
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

71	73	75	77	79
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

61	63	65	67	69	71	73	75	77	79
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	N	D	D	D	D	N	D	D

51	53	55	57	59	61	63	65	67	69
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	D	D	N	N	N	N	N	N

AREA MANURED
¼ plot - ¼5 acre (approx)

82	84	86	88	90
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

72	74	76	78	80
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

62	64	66	68	70	72	74	76	78	80
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	N	D	D	D	D	N	D	D

52	54	56	58	60	62	64	66	68	70
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	D	D	N	N	N	N	N	N

41	43	45	47	49
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

31	33	35	37	39
a, b	a, b	a, b	a, b	a, b
N	N	N	N	N
D	D	N	D	D

21	23	25	27	29	31	33	35	37	39
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	N	D	D	D	D	N	D	D

11	13	15	17	19	21	23	25	27	29
a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b	a, b
N	N	N	N	N	N	N	N	N	N
D	D	D	D	N	N	N	N	N	N

6 Year Cropping Cycles:-
 Treatment crops
 Lu = 3 years Lucerne
 L = 3 years Grazed Ley
 Cg = 3 years Cut Grass
 A = Hay, Potatoes, Barley
 R = Reseeded Permanent Grass 2 years grazed
 3rd year Hay.

Basal P.K. All rotations and permanent grass :- 13 cwt/a superphosphate . 4 cwt/a muriate of potash spread over 6 years (Equivalent Calcium carbonate applied once in 6 years before test crop barley.)

All crops (except Lucerne) have nitrogen at single (no symbol) or at double (N) rates
 N = 2 cwt N/c in spring, 2 cwt N/c after each cut.
 Cg = 1 cwt N/c in 1 cwt N/c later in season.
 Wheat (W) 4 cwt N/c, Barley (B) 2.7 cwt N/c, Hay (H) 4 cwt N/c.
 Potatoes (P) 5 cwt. sulphate of ammonia
 D = Dung at 12 tons per acre to potato crops only
 n = given in previous 3 year crop sequence
 d = to previous potato crop

LEY AND ARABLE ROTATIONS EXPERIMENT — FOSTERS — 1953 5th year

Code letter M.

91	93	95	97	99	101	103	105	107	109
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

92	94	96	98	100	102	104	106	108	110
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N



111	113	115	117	119
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

112	114	116	118	120
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

Rotation

Present crop

Area manured
1/4 plot - 1/45 acre
(approx.)

Block 10

51	53	55	57	59
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

52	54	56	58	60
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

Block 11

61	63	65	67	69	71	73	75	77	79
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

62	64	66	68	70	72	74	76	78	80
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

Block 7

21	23	25	27	29	31	33	35	37	39
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

22	24	26	28	30	32	34	36	38	40
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

Block 6

1	3	5	7	9	11	13	15	17	19
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

2	4	6	8	10	12	14	16	18	20
a	b	a	b	a	b	a	b	a	b
N	D	N	D	N	D	N	D	N	D
N	N	N	N	N	N	N	N	N	N

Block 1

6 Year cropping cycles :-
 Treatment crops
 Lu : 3 years Lucerne
 L : 3 years Grazed Ley
 Cg : 3 years Cut Grass
 A : Hay, Potatoes, Barley
 R : Reseeded Permanent Grass 2 years grazed
 3rd year hay.

Test crops

Wheat, Potatoes, Barley

Block 8

41	43	45	47	49
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

42	44	46	48	50
a	b	a	b	a
N	D	N	D	N
N	N	N	N	N

Block 4

Block 3

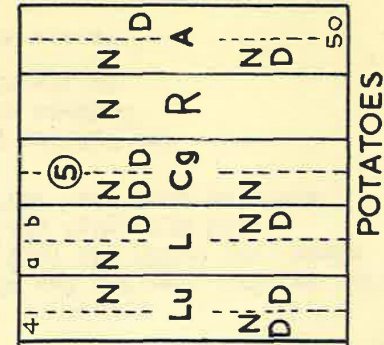
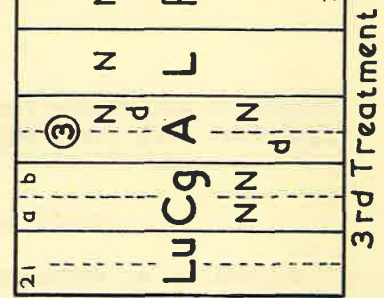
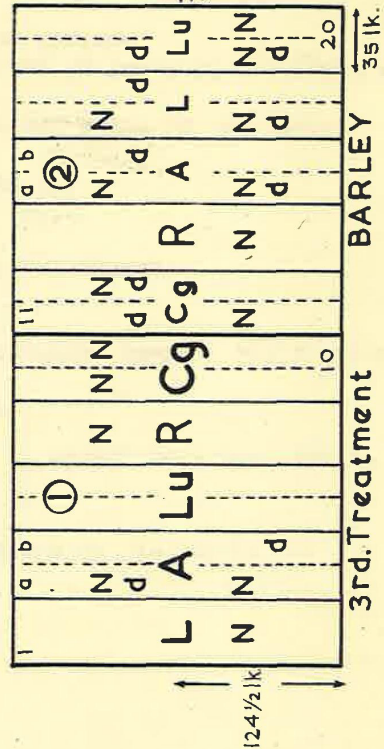
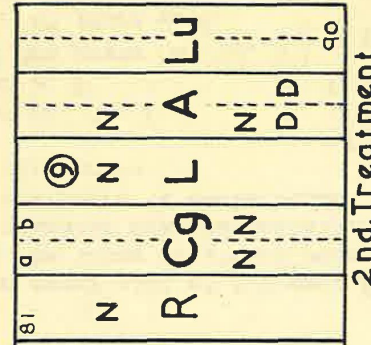
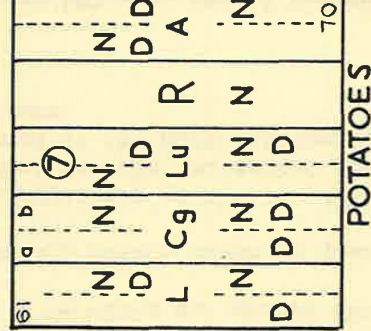
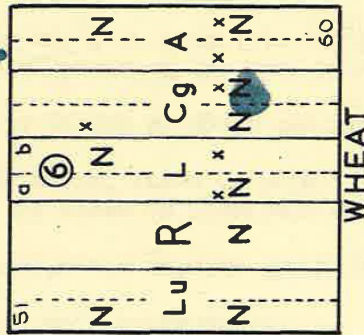
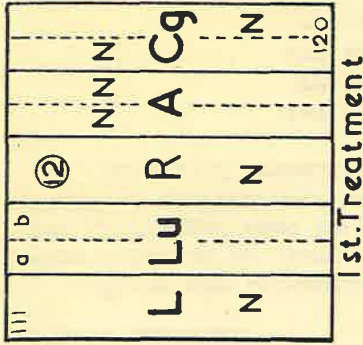
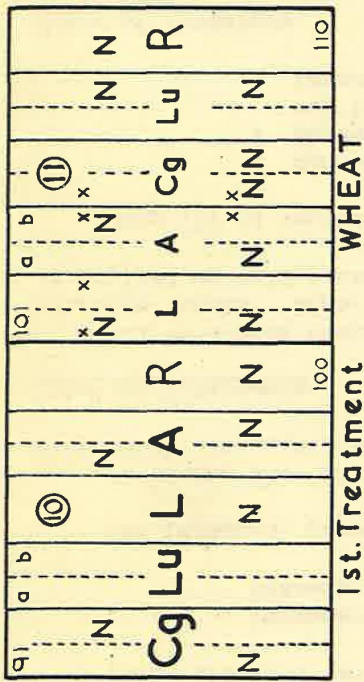
All crops (except Lucerne) have nitrogen at Single (no symbol) & at double (N) rates
 Cg :- 2 cwt. N/c in spring, 2 cwt. N/c after each cut.
 L :- 1 cwt. N/c in spring, 1 cwt. N/c later in season.
 Wheat (W) 4 cwt. N/c, Barley (B) 2.7 cwt. N/c, Hay (H) 4 cwt. N/c.
 Potatoes (P) 5 cwt. sulphate of ammonia.
 D = Dung at 12 tons per acre to potato crops only.
 U = High nitrogen given in previous 3 year crop sequence.
 D = Dung to previous potato crop.

Basal P.K. All rotations and permanent grass :- 13 c.p.a. Super. 4 c.p.a. Mur/potash spread over 6 years.

Rothamsted LEY-ARABLE Rotations FOSTERS 6th. year 1954



Code letter M



Area manured
1/4 plot - 1/45 acre
(approx.)

12 4/2.1K

3 1/2 cross path

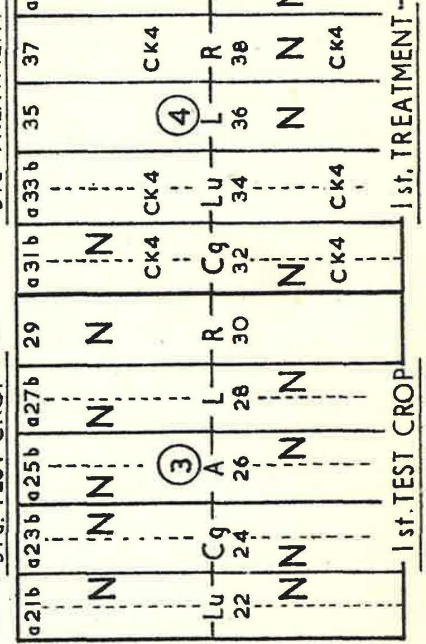
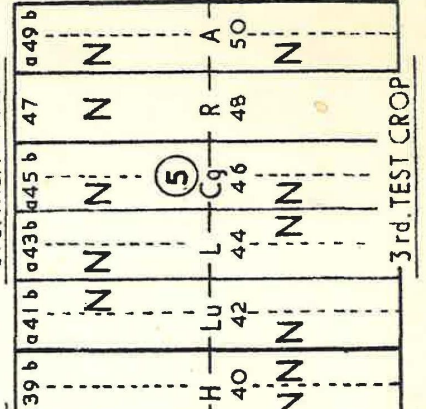
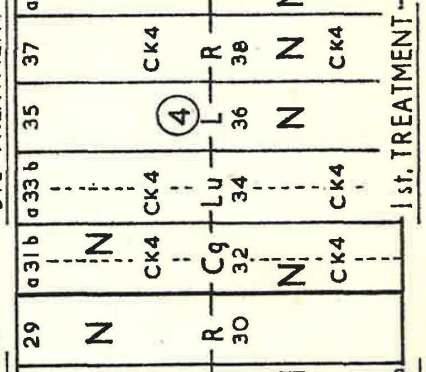
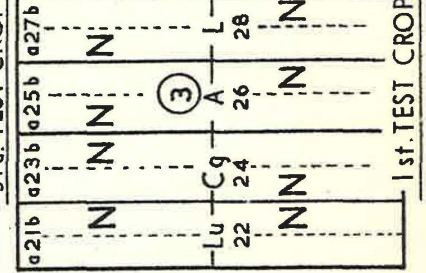
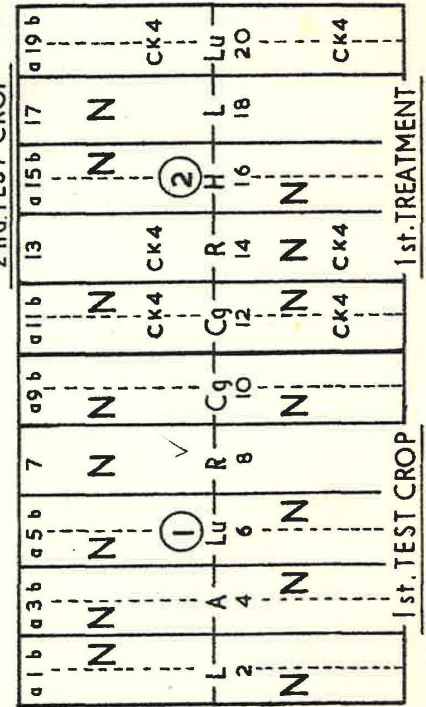
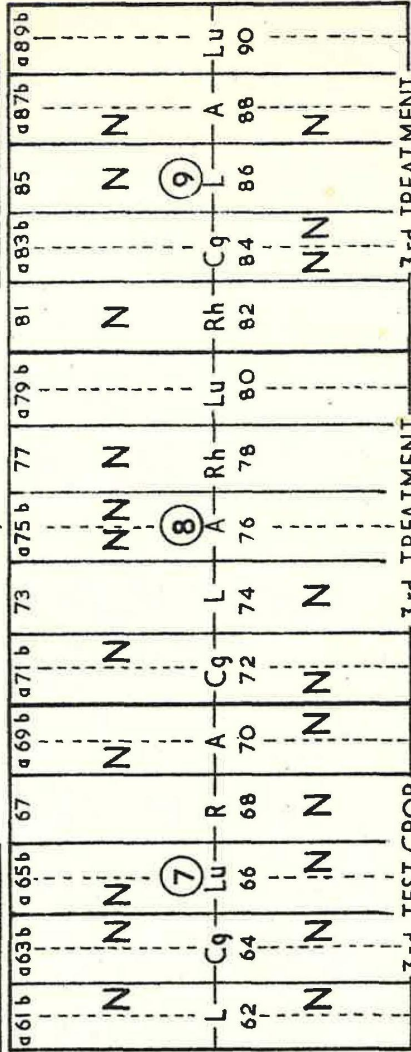
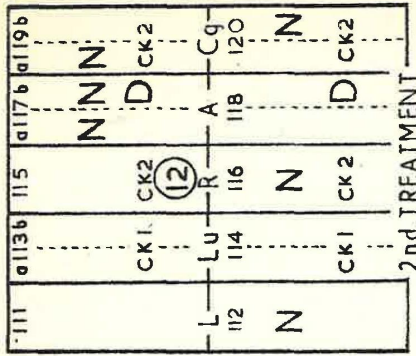
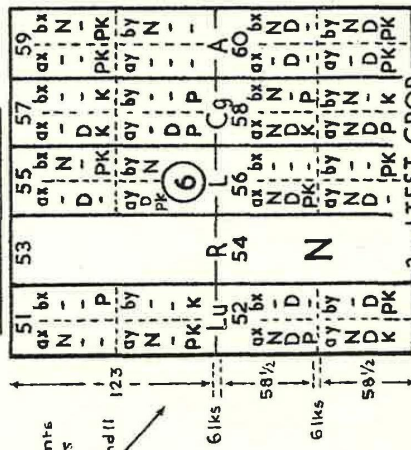
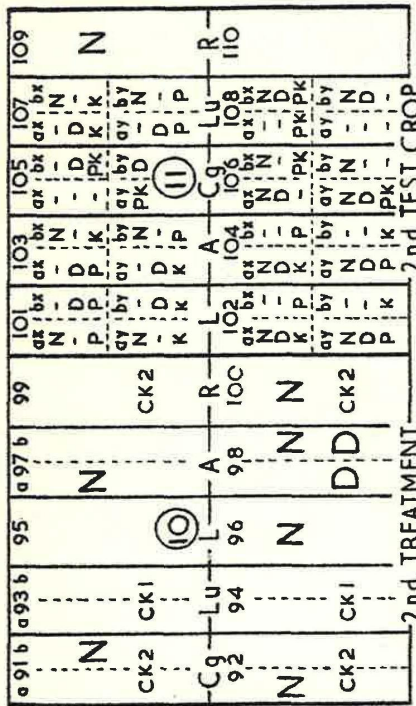
21 July 1954

Treatments overleaf

JUN 1955

LEY-ARABLE ROTATIONS FOSTERS

Code Letter M
SEVENTH YEAR
1955



LEY-ARABLE
ROTATIONS
FOSTERS
Code Letter M
EIGHTH YEAR
1956

18 OCT 1955

a91b	a93b	95	a97b	99	a101b	a103b	a105b	a107b	109
N	N	(10)	N	N	N	N	(11)	N	N
Cg	Lu	L	A	R	L	A	Cg	Lu	R
92	94	96	98	100	102	104	106	108	110
N	N	N	N	N	N	N	N	N	N

3rd. Treatment Barley

a51b	53	a55b	a57b	a59b
N	N	(6)	N	N
Lu	R	L	Cg	A
52	54	56	58	60
N	N	N	NN	N

35 lks Barley

a61b	a63b	a65b	67	a69b	a71b	a73b	a75b	77	a79b	81	a83b	a85b	a87b	a89b
N	N	(7)	N	N	N	N	(8)	N	N	N	N	(9)	N	N
L	Cg	Lu	Rh	H	Cg	L	A	R	Lu	R	Cg	L	A	Lu
62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
N	N	N	N	N	N	N	NN	NN	NN	NN	N	N	N	N

1st. Treatment Wheat

a11b	13	a15b	17	a19b
N	N	(2)	N	N
Cg	R	A	L	Lu
12	14	16	18	20
N	N	ND	N	N

2nd. Treatment Potatoes

a21b	a23b	a25b	a27b	a29b	a31b	a33b	35	a37b	a39b	a41b	a43b	a45b	a47b	a49b
ax	bx	ax	bx	N	N	N	(4)	R	D	N	N	(5)	N	N
-	-	-	-	-	-	-	L	A	A	Lu	L	Cg	Rh	H
22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
N	N	N	N	N	N	N	N	N	NN	N	N	N	N	N

1st. Treatment Potatoes

W heat - 1/2 of row per
quarter plot sampled

3 lks
Cross path
124 1/2

123
6 lks
58 1/2
6 lks
58 1/2

Wheat 8' of row per plot sampled.

LEY-ARABLE ROTATIONS FOSTERS Code Letter M NINTH YEAR 1957

a91b 3 N	a93b 1 N	a95b 2 N	a97b 4 N	99 - N	101 - N	a103b 1 N	a105b 1 N	107b - N	109 - N
Cg	Lu	L	A	R	L	H	Cg	Lu	Rh
92 3 3	94 1 1	96 2 2	98 4 4	100 - N	102 - -	104 - N	106 - N	108 110 - -	-

a111b 3 N	a113b 1 N	115 - N	117b 4 N	a119b 3 N
L	Lu	R	A	Cg
112 2 2	114 1 1	116 2 2	118 4 4	120 3 3

a51b - N	53 - N	a55b - N	a57b - N	a59b - N
Lu	Rh	L	Cg	H
52 - N	54 - N	56 - N	58 - N	60 - N

61 - N	a63b - N	a65b - N	67 - N	a69b - N
L	Cg	Lu	R	P
62 - -	64 - N	66 - N	68 - N	70 - D

71 - N	73 - N	75 - N	77 - N	79 - N	81 - N	83 - N	85 - N	87 - N	89 - N
Cg	L	R	A	P	Lu	Cg	L	A	Lu
72 - N	74 - N	76 - N	78 - -	80 - N	82 - -	84 - N	86 - N	88 - N	90 - N

a11b - N	a13b - N	a15b - N	a17b - N	a19b - N
Lu	Cg	R	O	Lu
12 - N	14 - N	16 - N	18 - -	20 - -

a21b - N	a23b - N	a25b - N	a27b - N	a29b - N	a31b - N	a33b - N	a35b - N	a37b - N	a39b - N	a41b - N	a43b - N	a45b - N	a47b - N	a49b - N
Lu	Cg	A	L	R	Cg	Lu	L	R	O	Lu	L	Cg	R	P
22 - N	24 - N	26 - N	28 - N	30 - -	32 - N	34 - N	36 - N	38 - N	40 - N	42 - N	44 - -	46 - N	48 - -	50 - D

7 - N	a5b - N	a3b - N	a1b - N	a19b - N
R	Lu	A	L	Lu
8 - -	6 - N	4 - N	2 - N	20 - -



23'0" 2'0" Cross path 82'0" 81'0" 4'0" 38'6" 4'0" 38'6"

7 FEB 1957

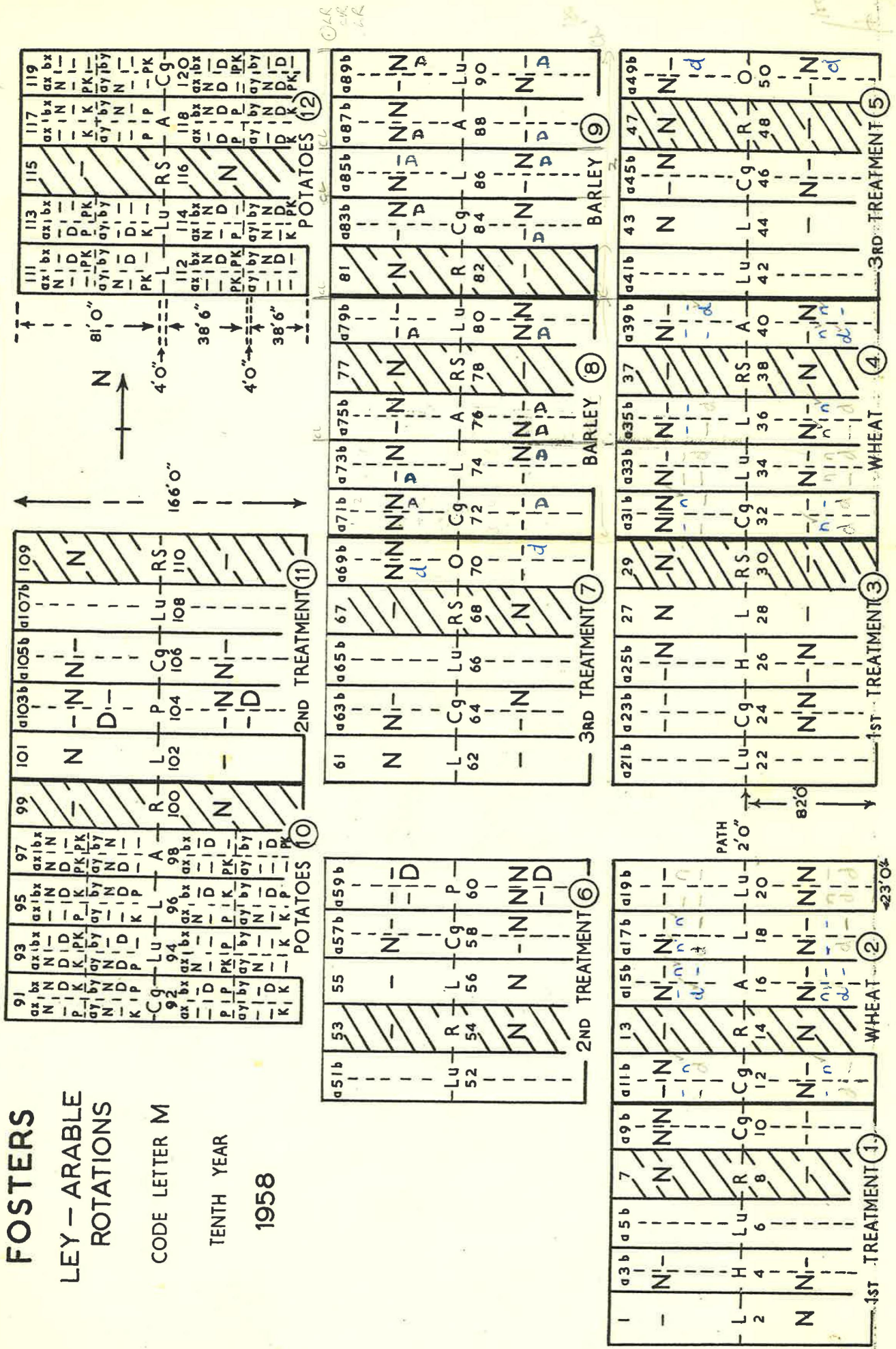
FOSTERS

LEY - ARABLE ROTATIONS

CODE LETTER M

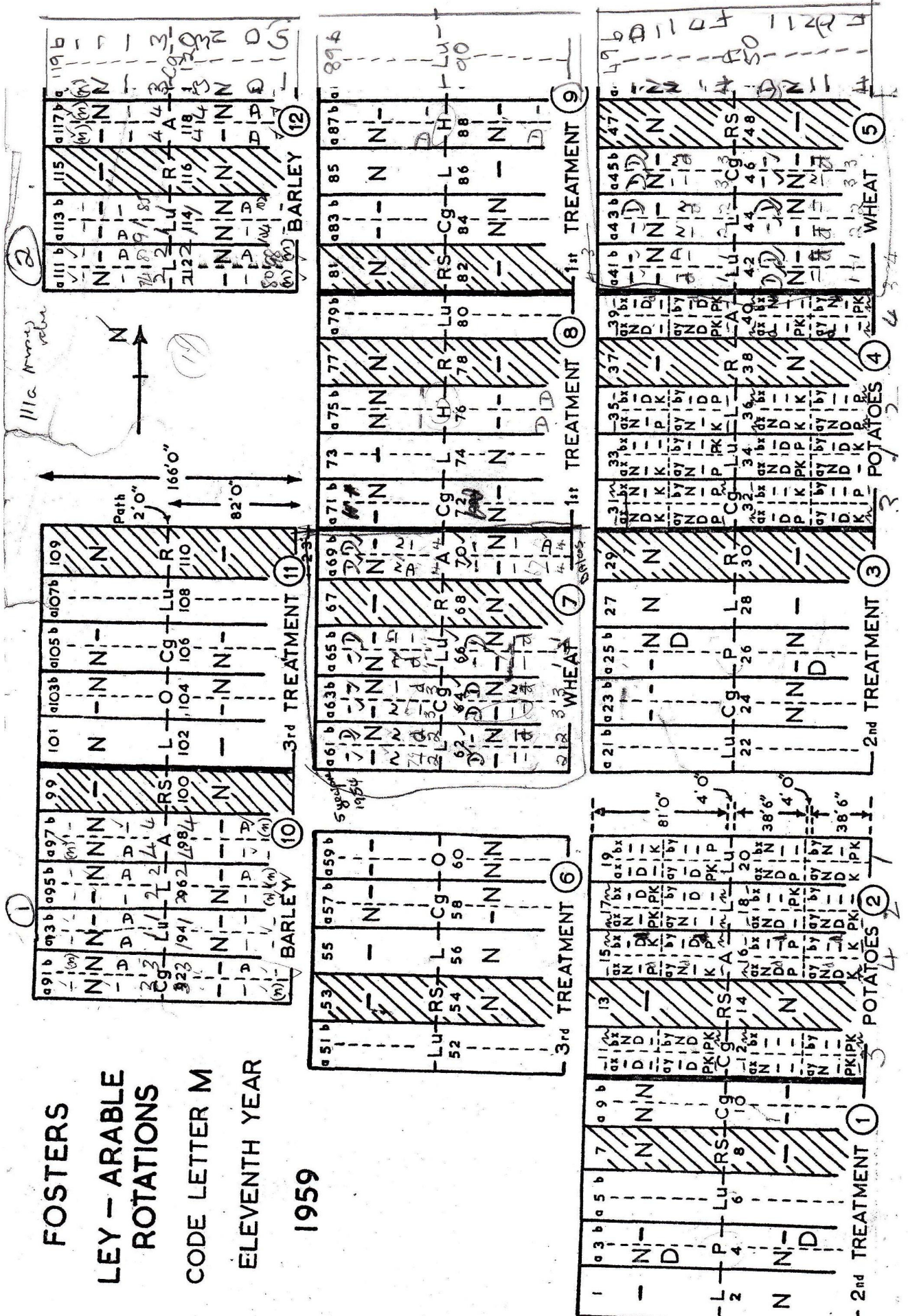
TENTH YEAR

1958



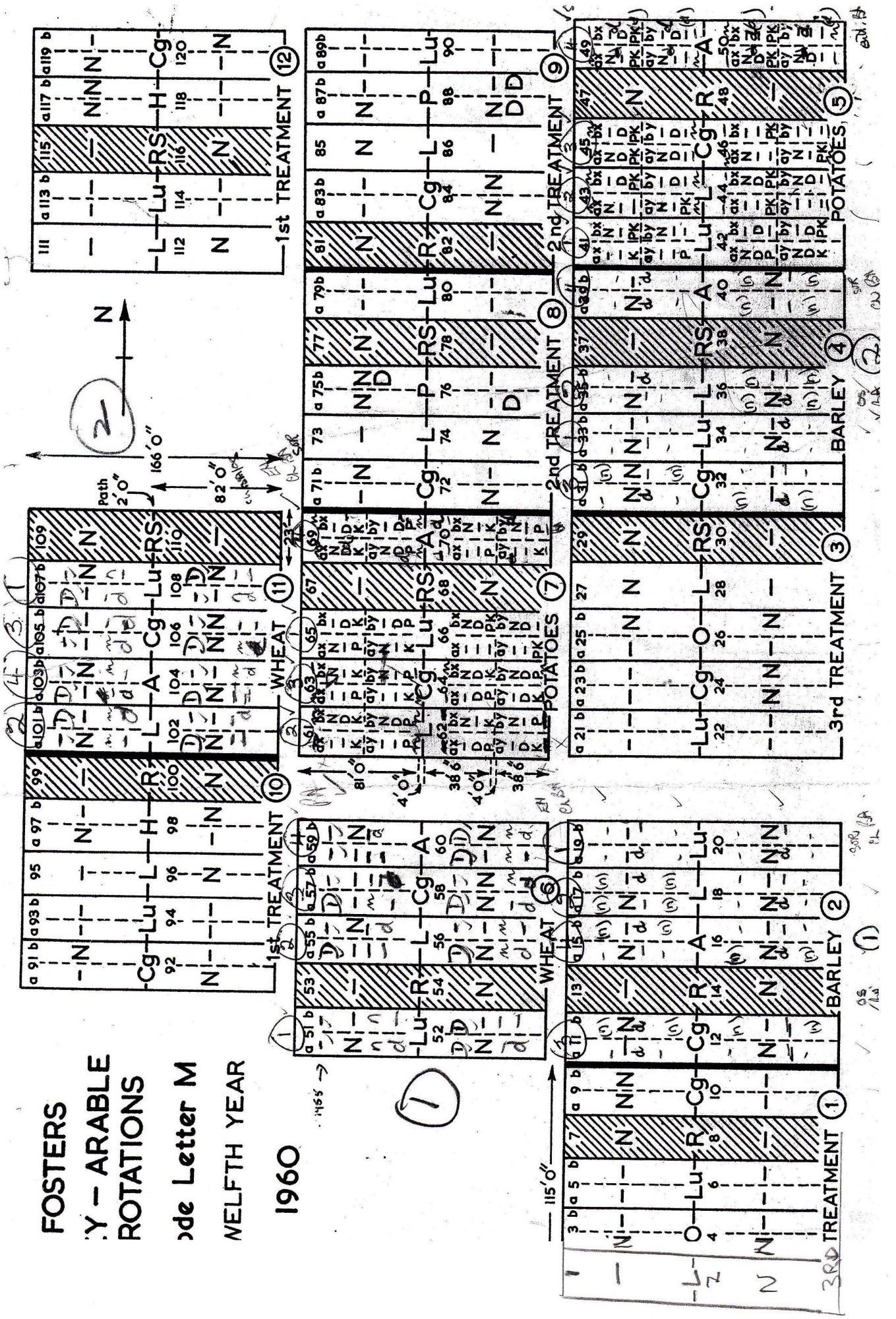
**FOSTERS
LEY - ARABLE
ROTATIONS
CODE LETTER M
ELEVENTH YEAR**

1959



**FOSTERS
3-YEAR ARABLE
ROTATIONS
code Letter M
WELFTH YEAR**

1960



14th YEAR 1962

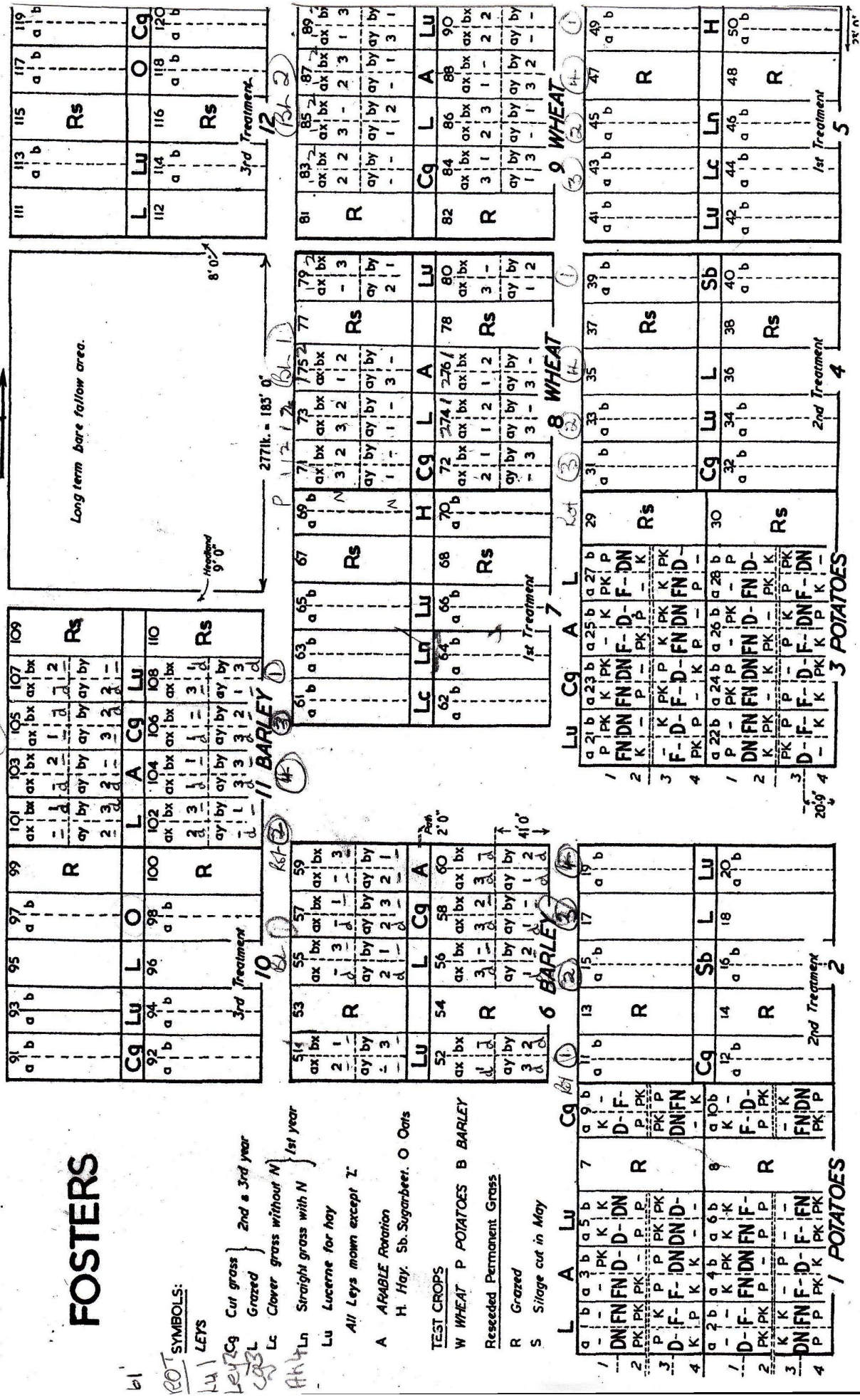
Code letter: FLA

LEY-ARABLE ROTATIONS

ROTHAMSTED

FOSTERS

- ROTS SYMBOLS:**
 LU1 LEYS
 Ley Cg Cut grass } 2nd & 3rd year
 Cg3 L Grazed }
 Lc Clover grass without N } 1st year
 A H4 Straight grass with N }
 Lu Lucerne for hay }
 All Leys mown except L'
 A ARABLE Rotation
 H Hay, Sb. Sugarbeet, O Oats
TEST CROPS
 W WHEAT P POTATOES B BARLEY
 Reseeded Permanent Grass
 R Grazed
 S Silage cut in May



61 Rot Rep. N
n = N 15 Wheat 1962

Rothamsted:

LEY ARABLE ROTATION

Code letter: FLA

15th Year: 1963

FOSTERS

Symbols:

- LEYS
- Cg Cut grass } 3rd year
- L Grazed
- L Clover grass without N
- Lc Straight grass with N
- Lucerne for hay

All Leys mown except 'L'

ARABLE Rotation
H Hay Sb Sugar-beet
O Oats

Reseeded grass ploughed up.

T. CROPS
WHEAT P POTATOES
BARLEY

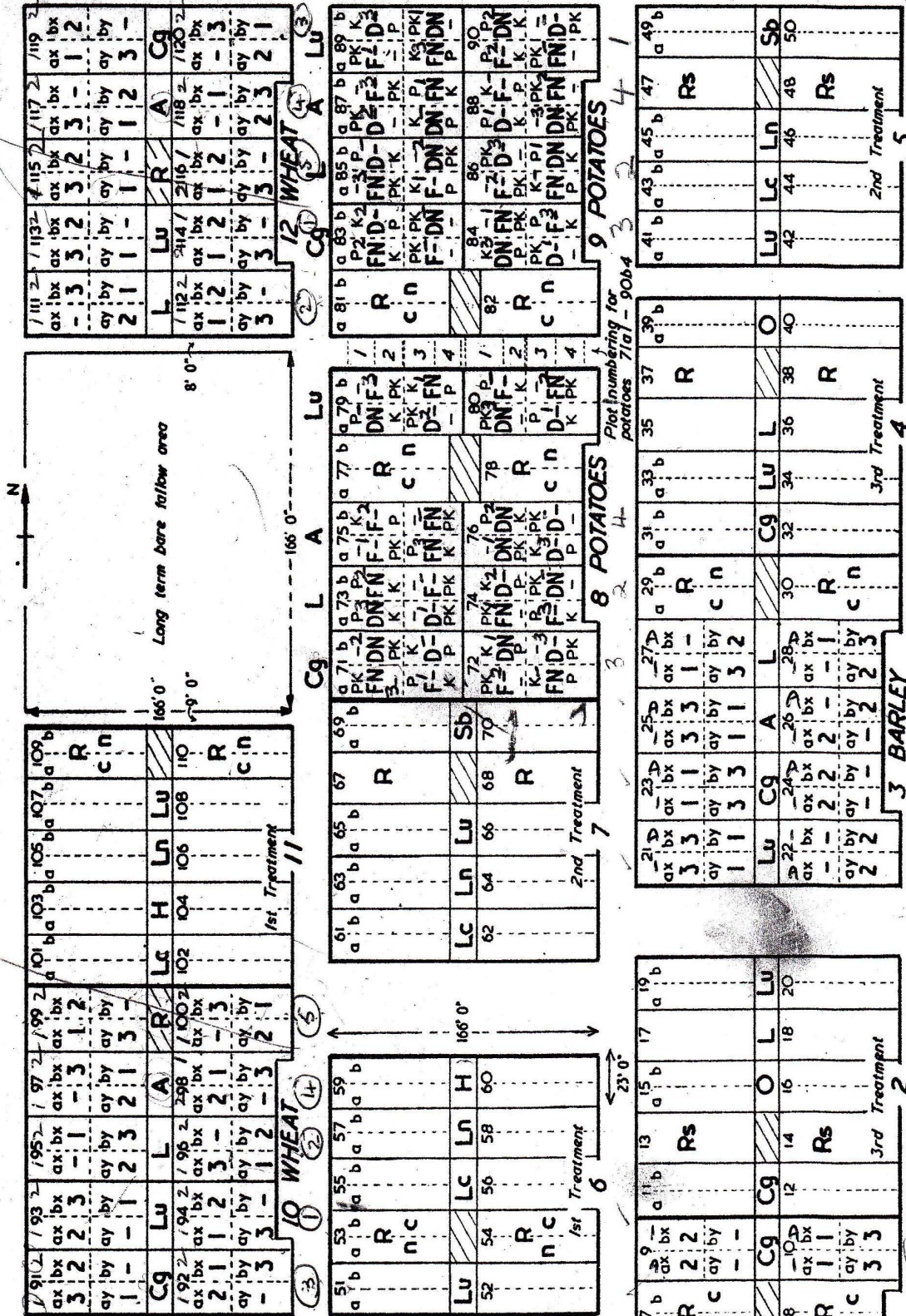
seeded and Old Permanent Grass

& G Grazed

Silage cut in May

c & Gc No N } Mown

Ln & Gn With N }



sc1
22/81
3311 33110
Block 2
Block 1
① ② ③ ④ ⑤

Rothamsted

LEY - ARABLE ROTATION

Code letter FLA

16th. Year 1964.

FOSTERS

SYMBOLS

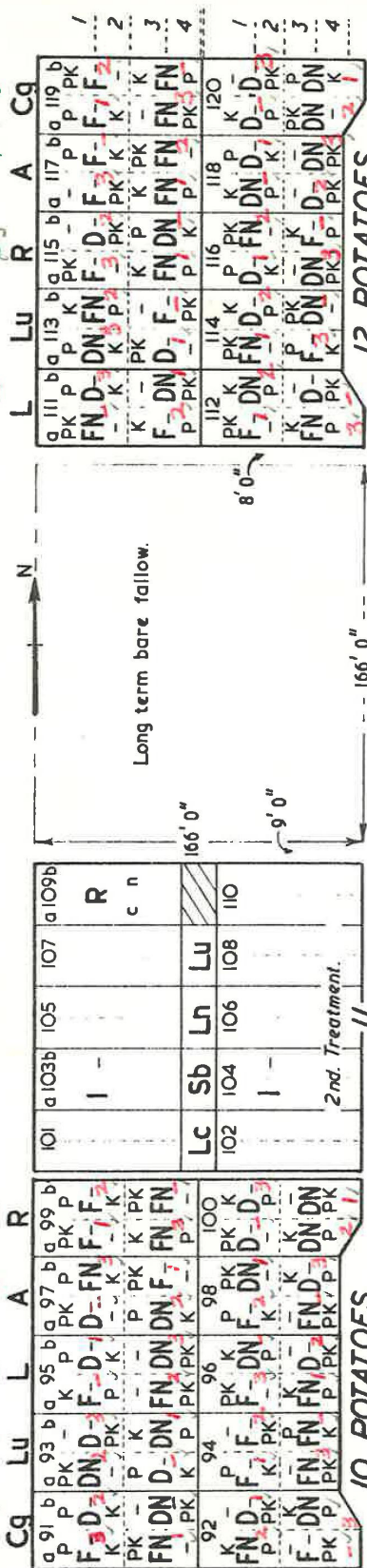
- Rotations. All 3yr. leys cut.
- Lc Grass/clover-NoN.(L) 4
- Ln Grass-with N. (Cg)
- Lu Lucerne.
- A Arable: H Hay.
- Sb Sugarbeet.
- O Oats.
- L Previously Grazed ley.
- Cg Previously Cut grass.

TEST CROPS:

- P Potatoes.
- W W. Wheat.
- B Barley.

Reseeded & Old Permanent Grass.

- R & G Grazed.
 - s Cut for silage in May.
 - Rc, Gc Without N } Cut
 - Rn, Gn With N }
- Note: From Autumn 1964 R is ploughed up as each block comes into Test Crop Wheat.



Plot numbering for potatoes IIIa1 - 120 b 4

10 POTATOES

91 b	93 b	95 b	97 b	99 b
PK P	PK P	PK P	PK P	PK P
F ₃ D	F ₃ D	F ₃ D	F ₃ D	F ₃ D
K	K	K	K	K
PK	PK	PK	PK	PK
FN	FN	FN	FN	FN
DN	DN	DN	DN	DN
PK	PK	PK	PK	PK
92	94	96	98	100
PK P	PK P	PK P	PK P	PK P
F ₃ D	F ₃ D	F ₃ D	F ₃ D	F ₃ D
K	K	K	K	K
PK	PK	PK	PK	PK
FN	FN	FN	FN	FN
DN	DN	DN	DN	DN
PK	PK	PK	PK	PK

12 POTATOES

101	103b	105	107	109b
Lc	Sb	Ln	Lu	R
102	104	106	108	110
2nd Treatment.	2nd Treatment.	2nd Treatment.	2nd Treatment.	2nd Treatment.

9 POTATOES

81 b	83	85	87	89
ax	bx	ax	bx	ax
1	3	1	2	2
ay	by	ay	by	ay
3	1	3	2	3
Cg	L	A	Lu	Lu
82	84	86	88	90
ax	bx	ax	bx	ax
2	2	3	1	3
ay	by	ay	by	ay
2	1	2	1	3

8 BARLEY

71	73	75	77 b	79
ax	bx	ax	bx	ax
3	3	3	3	3
ay	by	ay	by	ay
1	2	1	2	1
Cg	L	A	Lu	Lu
72	74	76	78	80
ax	bx	ax	bx	ax
2	3	1	2	1
ay	by	ay	by	ay
1	2	3	1	3

9 BARLEY

61	63	65	67	69
Lc	Ln	Lu	O	Rs
62	64	66	68	70
3rd Treatment	3rd Treatment	3rd Treatment	3rd Treatment	3rd Treatment

4 WHEAT

21	23	25	27	29 b
Lu	Ln	H	Lc	R
22	24	26	28	30
1st Treatment	1st Treatment	1st Treatment	1st Treatment	1st Treatment

2 WHEAT

1	3	5	7 b	9
Lc	H	Lu	Ln	R
2	4	6	8	10
1st Treatment	1st Treatment	1st Treatment	1st Treatment	1st Treatment

3 WHEAT

31	33	35	37	39
ax	bx	ax	bx	ax
1	3	3	1	2
ay	by	ay	by	ay
3	2	1	2	3
Cg	Lu	L	R	A
32	34	36	38	40
ax	bx	ax	bx	ax
2	3	1	2	3
ay	by	ay	by	ay
1	3	1	2	3

4 WHEAT

41	43	45	47	49
Lu	Lc	Ln	R	O
42	44	46	48	50
3rd Treatment	3rd Treatment	3rd Treatment	3rd Treatment	3rd Treatment

9 BARLEY

81 b	83	85	87	89
ax	bx	ax	bx	ax
1	3	1	2	2
ay	by	ay	by	ay
3	1	3	2	3
Cg	L	A	Lu	Lu
82	84	86	88	90
ax	bx	ax	bx	ax
2	2	3	1	3
ay	by	ay	by	ay
2	1	2	1	3

Rothamsted LEY - ARABLE 17th Year F.L.A FOSTERS 1965 10

SYMBOLS

TREATMENT CROPS

3 year Leys 1962 - Cut.

Lc Grass/clover - No N.

Lr Grass with N.

Lul Lucerne

3 year Leys 1949 - 64

L Grazed ley

Cg Cut grass

3 years Arable "A"

H Hay Sb Sugar beet

O Oats

R Long-term

Reseeded grass

TEST CROPS

W WHEAT

P POTATOES

B BARLEY

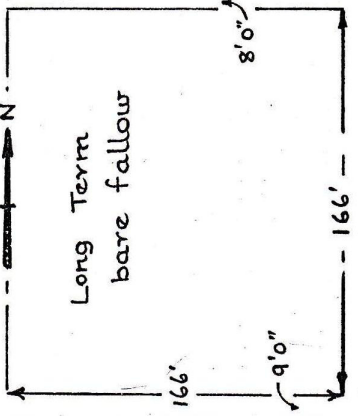
Old Permanent Grass

& Reseeded Grass

Gc, Rc Without N } cut

Gr, Rn With N }

91	93	95	97	99	101	103	105	107	109
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	Lc	O	Lr	Lul	a:b
2	1	-	2	3					R
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx					c:n
-	3	2	1	-					
Cg	Lul	L	A	R					
92	94	96	98	100	102	104	106	108	110
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx					
3	2	-	3	2					
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx					
1	-	2	1	-					



111	113	115	117	119	112	114	116	118	120
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
3	2	-	3	3	2	3	-	1	-
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
1	-	2	1	2	-	1	1	-	3
L	Lul	R	A	Cg					

51	53	55	57	59	61	63	65	67	69
a:b	R	c:n			ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
					-	3	1	-	3
					ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
					2	1	3	2	1
Lul					Lc	Lr	Lul	R	A
52	54	56	58	60	62	64	66	68	70
					ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
					2	1	-	-	1
					ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
					-	3	-	2	3

71	73	75	77	79	81	83	85	87	89
Lr	Lc	H		Lul					

71	73	75	77	79	81	83	85	87	89
Lr	Lc	H		Lul					

81	83	85	87	89	82	84	86	88	90
a:b									
R									
c:n									

11	13	15	17	19	21	23	25	27	29
a:b	a:b	a:b	a:b	a:b	Lul	Lr	Sb	Lc	
D:D	D:F	F:D	F:D	D:F					

21	23	25	27	29	31	33	35	37	39
a:b				a:b	a:b	a:b	a:b	a:b	a:b
				R	D:F	F:F	F:D	F:F	D:D
				c:n					

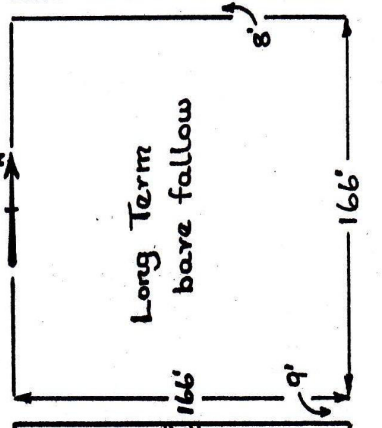
31	33	35	37	39	41	43	45	47	49
a:b	a:b	a:b	a:b	a:b	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
D:F	F:F	F:D	F:F	D:D	2	3	-	3	-
					ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
					-	1	2	3	-

41	43	45	47	49	42	44	46	48	50
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
2	3	-	3	2	2	1	1	3	-
ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx	ax:bx
-	1	2	3	-	-	3	-	3	1

11

Rothamsted LEY-ARABLE 18th Year FLA FOSTERS 1966

111	113	115	117	119
		R	H	
LC	L _u		H	L _r
112	114	116	118	120
1st Treatment				



101	103	105	107	109
				R
LC	A	L _r	L _u	
102	104	106	108	110
WHEAT				

91	93	95	97	99
				R
L _r	L _u	L _c	H	
92	94	96	98	100
1st Treatment				

SYMBOLS

TREATMENT CROPS

- 3 year Leys 1962 - cut.
- Lc Grass/clover - No N.
- Lr Grass with N.
- L_u Lucerne
- 3 year Leys 1949-64
- L Grazed ley
- Cg Cut grass
- 3 years Arable "A"
- H Hay
- Sb Sugarbeet
- O oats

TEST CROPS

- W WHEAT
- P POTATOES
- B BARLEY
- Old Permanent Grass & Reseeded Grass
- Gc, Rc Without N } cut
- Gn, Rn With N }

51	53	55	57	59
	R			
L _u	L _c	L _r	L _u	A
52	54	56	58	60
WHEAT				

71	73	75	77	79
			R	
L _r	L _c	Sb		L _u
72	74	76	78	80
2nd Treatment				

81	83	85	87	89
L _r	L _c	Sb		L _u
82	84	86	88	90
2nd Treatment				

1	3	5	7	9
			R	
L _c	L _u			L _r
2	4	6	8	10
3rd Treatment				

11	13	15	17	19
Cg	L _u	A	L _r	L _u
12	14	16	18	20
2 BARLEY				

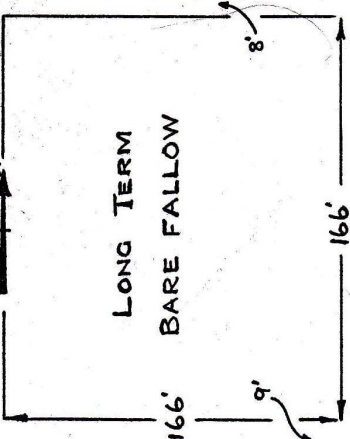
21	23	25	27	29
				R
L _u	L _r	O	L _c	
22	24	26	28	30
3rd Treatment				

31	33	35	37	39
Cg	L _u	L	R	A
32	34	36	38	40
4 BARLEY				

41	43	45	47	49
L _u	L _c	L _r	R	A
42	44	46	48	50
5 POTATOES				

Rothamsted LEY-ARABLE 19th Year
 FOSTERS 1967
 FLA
 N 1966
 12

111	a	b	113	a	b	115	a	b	117	a	b	119	a	b			
												(R)					
Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb			
												112	114	116	118	120	
												2nd Treatment					



101	a	b	103	a	b	105	a	b	107	a	b	109	a	b					
												F	D	F	D	F	D	F	D
Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb					
												102	104	106	108	110			
												D F D F D F D							

91	a	b	93	a	b	95	a	b	97	a	b	99	a	b			
												(R)					
Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb	Lc	Lu	Sb			
												92	94	96	98	100	
												2nd Treatment					

51	a	b	53	a	b	55	a	b	57	a	b	59	a	b					
												F	F	R	c	F	F	F	F
Lu	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu					
												52	54	56	58	60			
												D F D F D D							

71	a	b	73	a	b	75	a	b	77	a	b	79	a	b			
												R	c	n			
Ln	Lc	O	Ln	Lc	O	Ln	Lc	O	Ln	Lc	O	Ln	Lc	O			
												72	74	76	78	80	
												3rd Treatment					

27	a	b	29	a	b	31	a	b	33	a	b	35	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	H	Lu	Lc	H	Lu	Lc	H	Lu	Lc	H			
												32	34	36	38	40	
												1st Treatment					

31	a	b	33	a	b	35	a	b	37	a	b	39	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	H	Lu	Lc	H	Lu	Lc	H	Lu	Lc	H			
												32	34	36	38	40	
												1st Treatment					

61	a	b	63	a	b	65	a	b	67	a	b	69	a	b			
												(R)					
Lu	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu			
												62	64	66	68	70	
												3rd Treatment					

71	a	b	73	a	b	75	a	b	77	a	b	79	a	b			
												(R)					
Lu	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu			
												72	74	76	78	80	
												3rd Treatment					

81	a	b	83	a	b	85	a	b	87	a	b	89	a	b			
												(R)					
Ln	Lc	O	Ln	Lc	O	Ln	Lc	O	Ln	Lc	O	Ln	Lc	O			
												82	84	86	88	90	
												3rd Treatment					

1	a	b	3	a	b	5	a	b	7	a	b	9	a	b			
												(R)					
Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu	Lc	Lu	Lu			
												2	4	6	8	10	
												1st Treatment					

11	a	b	13	a	b	15	a	b	17	a	b	19	a	b			
												(R)					
Ln	H	H	Ln	H	H	Ln	H	H	Ln	H	H	Ln	H	H			
												12	14	16	18	20	
												1st Treatment					

21	a	b	23	a	b	25	a	b	27	a	b	29	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	A	Lu	Lc	A	Lu	Lc	A	Lu	Lc	A			
												22	24	26	28	30	
												1st Treatment					

31	a	b	33	a	b	35	a	b	37	a	b	39	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	A	Lu	Lc	A	Lu	Lc	A	Lu	Lc	A			
												32	34	36	38	40	
												1st Treatment					

41	a	b	43	a	b	45	a	b	47	a	b	49	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	A	Lu	Lc	A	Lu	Lc	A	Lu	Lc	A			
												42	44	46	48	50	
												1st Treatment					

51	a	b	53	a	b	55	a	b	57	a	b	59	a	b			
												(R)					
Lu	Lu	Lu	Ln	Lc	A	Lu	Lc	A	Lu	Lc	A	Lu	Lc	A			
												52	54	56	58	60	
												1st Treatment					

SYMBOLS
 Treatment Crops.
 3 year Leys. Cut:
 Lc Grass/Clver, No N
 Ln Grass with N
 Lu Lucerne
 3 years Arable 'A' (R)
 H Hay Sb Sugarbeet
 O Oats
 (R) Long-term reseeded grass. Ploughed up for TEST crops.

TEST CROPS
 W Wheat
 P Potatoes
 B Barley
 Old Permanent & Reseeded Grass. Cut:
 Ge, Rc No N
 Gn, Rn with N

Rothamsted LEY-ARABLE 20th. Year FLA FOSTERS 1968 12

SYMBOLS

Treatment Crops
3 year Leys, cut:

Lc Grass/clover, No N.
Ln Grass with N
Lu Lucerne.

3 years Arable A'(R)(G)
H Hay Sb Sugarbeet
O Oats

(G),(R) Permanent & Long-term reseeded grass ploughed up for TEST crops.

TEST CROPS

Sequence 1949 - 1969
(W) P B W*
(W* 1968 only)

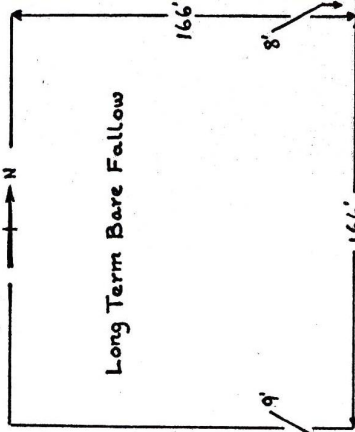
Sequence 1968 -

P* W B
W Wheat, P Potatoes
B Barley

Old Permanent (Highfield) & Reseeded Grass, cut:

Gc, Rc No nitrogen
Gr, Rn With nitrogen.

91/b	93	95	97	99	101	103	105	107	109
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
Ln	Lu	Lc	O	O	Lc	A	Ln	Lu	R
92	94	96	98	100	102	104	106	108	110
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
Ln	Lu	Lc	O	O	Lc	A	Ln	Lu	R



a/11/b	113	115	117	119
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lc	Lu	O	O	Ln
112	114	116	118	120
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Ln	Lu	Lc	Ln	Lu

Numbering 7(a) to 9(b)4

71/b	73/b	75/b	77/b	79/b	81/b	83/b	85/b	87/b	89/b
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
Ln	Lc	AH	(R)	Lu	(R)	Ln	Lc	AH	Lu
72/b	74/b	76/b	78/b	80/b	82/b	84/b	86/b	88/b	90/b
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
Ln	Lc	AH	(R)	Lu	(R)	Ln	Lc	AH	Lu

61	63	65	67	69	70
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3
Lc	Ln	Lu	(R)	A	WHEAT
62	64	66	68	70	71
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3
Lc	Ln	Lu	(R)	A	WHEAT

51	53	55	57	59	60
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3
Lu	Lc	Lc	Lc	AH	BARLEY
52	54	56	58	60	61
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3	2/3
Lu	Lc	Lc	Lc	AH	BARLEY

41	43	45	47	49
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lu	Lc	Ln	(R)	A
42	44	46	48	50
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lu	Lc	Ln	(R)	A

31/b	33	35	37	39
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Ln	Lu	Lc	Sb	Sb
32	34	36	38	40
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Ln	Lu	Lc	Sb	Sb

21/b	23	25	27	29
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lu	Ln	A	Lc	Lc
22	24	26	28	30
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lu	Ln	A	Lc	Lc

a/b	3	5	7	9
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lc	A	Lu	Ln	Ln
4	6	8	10	12
ax/bx	ax/bx	ax/bx	ax/bx	ax/bx
2/3	2/3	2/3	2/3	2/3
Lc	A	Lu	Ln	Ln