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Collection of Plans for the Woburn Ley-arable Experiment

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WOBURN Arable and Ley Rotation STACKYARD FIELD 20th year: 1957

code letter G

- 4 MAR 1957

TREATMENT SYMBOLS

Rotation	Crops
A	Potatoes, Rye, Carrots
Ah	Potatoes, Rye (undersown) Hay (2 cuts)
Lu	Lucerne cut for hay for 3 years
L	Ley grazed for 3 years
Lu, A etc.	indicate last two rotations (in order)

1 D3 P	Ah, Ah	2
5 D3 P	A, A	6
9 Lu 1	L, A	10
13 D3 L 1	L, L	14
17 R	Ah, Ah	18
21 D4 L 2	Lu, A	22
25 D4 R	Ah, L	26
29 Lu 2	Lu, Lu	30

33 D2	Lu	34
37 L	Ah	38
41 L	A	42
45 Ah	Ah	D2
49 D5	Lu 3	L, A
53 H	Ah, Ah	D5
57 D5	L 3	L, L
61 H	A, L	D5

600' 6"	
	Path 18'

35 D2	Ah	36
39 D2	A	40
43 D2	L	44
47 D2	A	48
51 Lu	D2	52

55 C	Lu	56
59 D5	Lu 3	60
63 D5	C A	A
67 D5	Ah	-
71 H	A, L	D5

64	
17' 2"	284'
17'	—
24' 9"	—
24' 9"	—

65 D	N	66 D	N	67 D	N
x	-	x	-	x	-
x	-	K	L	D - K	N -
y	-	N	-	y	-
z	-	N	K	z	DN -

69 W	N	70 D	N	71 W	-
w	-	n	k	w	-
x	-	K	A	x	DN -
y	-	L	D - K	y	N -
z	-	N	-	z	DN -

72 D	-
73 D	-
74 N	-
75 D	-
76 K	-

77 D	N	78 D	N	79 D	W
x	-	y	-	x	-
y	D - K	A	-	y	DN -
z	DN -	A	-	z	DN -
w	-	N -	-	w	-

80 D	K	81 D	N	82 D	N
x	-	y	-	x	-
y	-	Lu	-	y	-
z	-	N	-	z	DN -
w	-	DN K	-	w	-

83 D	N
x	-
y	-
z	-
w	-

Test crop: Sugarbeet

65 D	N	66 D	N	67 D	N
x	-	x	-	x	-
y	-	y	-	y	-
z	-	DN -	-	z	DN -
w	-	N -	-	w	-

Block 5 Test crop: Sugarbeet

65 D	N	66 D	N	67 D	N
x	-	x	-	x	-
y	-	y	-	y	-
z	-	DN -	-	z	DN -
w	-	N -	-	w	-

Block 5 Test crop: Sugarbeet

28	2'	17'	24' 9"	24' 9"
			—	—
			CRESTED	CRESTED

Barey. Some plots sown later than others.

Stackyard 21st year 1958

Woburn Arable and Ley Rotation

TREATMENT SYMBOLS

	D ₄	R	A _h , A _h	2	3	L _u 2	L _u , L _u	D ₄ 4
5	D ₄	R	A A	6	7	R	A _h , L _u	D ₄ 8
9	D ₄	R	L _u 2	L _u A D ₄	10	D ₄	R	12
13	D ₄	L 2	L L	14	15	L 2	L _u , A _h	D ₄ 16

	D ₃	P	A _h , L	36
33	D ₃	L u 1	L _u , L _u	34
37	L u 1	L	A _h	38
41	L 1	L	A _h D ₃	42
45	P	A _h , A _h , D ₃	D ₃ 46	47

	D ₃	P	A _h , L _u	D ₃ 48
35	D ₃	P	A _h , L	36
39	D ₃	P	A, A	40
43	L 1	L	D ₃ 44	44
47	P	A _h , L _u	D ₃ 48	48

60'6"

	Rotation		Crops
1	A		Potatoes, Rye, Carrots
Ah			Potatoes, Rye (undersown) Hay (2 cuts)
L _u			Lucerne cut for hay for 3 years
L			Ley grazed for 3 years

L_u, A etc. indicate last two rotations (in order)
 Test Crops Sugar beet, barley

D Dung at 15 t.p.a. D₂, etc. residual in 2nd etc.
 N 0.72 cwt N.p.a. as Nitro-Chalk } in addition
 K 0.9 cwt K₂O P-a as muriate } basal man

Block 4 TEST CROP: SUGAR BEET

1	S _w - N -	S _w D N K
X	- N K	L D - -
Y	- -	D - K
Z	- - K	- Z D N -
SS	- - K	S _w D N K
X	- N - K	X - N - K G A D N -
Y	- N K	Y - N K D - K
Z	- - -	Z D N -
SS	- - -	Z D - -
X	- D - -	X D N - L U - -
Y	D - K	Y D - - N K
Z	D N -	Z D N K - Z - N -
SS	D - -	S _w D - -
X	- - -	X D N - A A - N -
Y	- K	Y D - K D N -
Z	D N K	Z D N K - Z - N K

WOBURN Arable and Ley Rotations N Code letter G STACKYARD FIELD 22nd year 1959

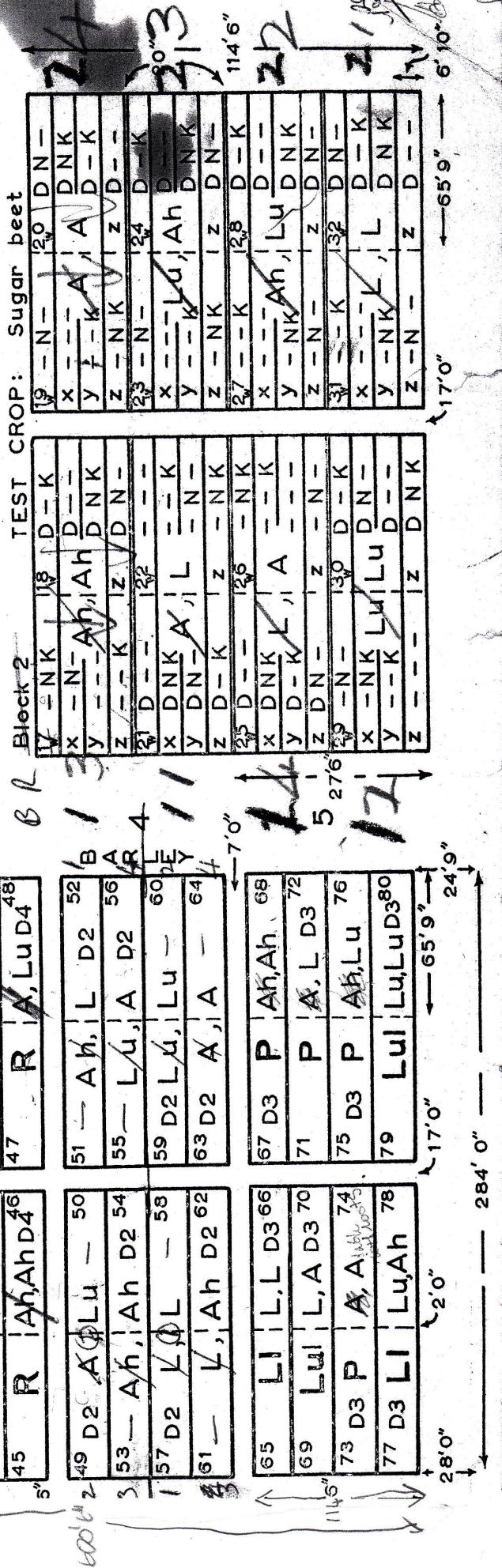
TREATMENT SYMBOLS		
Rotation	Crops	
A	Potatoes, Rye, Carrots.	
Ah	Potatoes, Rye (Cundersown), Hay (2 cuts).	
Lu	Lucerne cut for hay for 3 years.	
L	Ley grazed for 3 years	
Lu,A	Ley etc. indicate last two rotations (in order)	

CROP Sugar beet ³²		
33 D 4 Lu 2	Lu,Lu	34 R Ah,L 36
37 Lu 2 L,Ah D 4 ³⁸	L,Ah D 4	39 D 4 R A,A 40
41 L 2 Lu,A D 4 ⁴²	Lu,A D 4	43 L 2 L,L D 4 ⁴⁴
45 R Ah,Ah D 4 ⁴⁶	R Ah,Ah D 4 ⁴⁸	

TEST CROPS: Sugar beet barley		
D	Dung at 15 t.p.a. D2 etc. residual in 2nd etc. crop	
N	0.72 cwt N.p.a. as 'Nitro-Chalk'	
K	0.9 cwt K ₂ O p.a. as muriate of potash } basal NPK	

TEST CROPS: Sugar beet		
D	Dung at 15 t.p.a. D2 etc. residual in 2nd etc. crop	
N	0.72 cwt N.p.a. as 'Nitro-Chalk'	
K	0.9 cwt K ₂ O p.a. as muriate of potash } basal NPK	

TEST CROPS: Sugar beet		
D	Dung at 15 t.p.a. D2 etc. residual in 2nd etc. crop	
N	0.72 cwt N.p.a. as 'Nitro-Chalk'	
K	0.9 cwt K ₂ O p.a. as muriate of potash } basal NPK	



WOBURN

Avable and Ley Rotations

Code letter G STACKYARD FIELD 23rd year 1960

Block	TEST CROP	Sugar beet	16
3	A	A	20B
17	A/Ak 3 D2 ¹⁸	A	
21	D2	A/L 1	22
25	D2	Y/A 4	26
29	Pots 18"	K/Lu 2 D2 ³⁰	27
33	D5 Lu 3 Lulin	A/L	31
37	Lu 3 L/Ak	D5 38	35
41	L 3	Lu A D5 42	43
45	H	A/Lu D5 46	47
49	D3	P A/L D3 52	51
53	P	A/Lu A D3 54	55
57	D3	L 1 L	58
61	-	L/Lu D3 63	62
65	L 2	L 1 D4	66
69	D4	R A/L Ak	68
73	D4	R A/L D4	71
77	D4	R A/L Lu	76
81	D4	L 2 L/A D4	78
85	D4	A/A	84
89	D4	L 2 Lu Ak	80

TREATMENT SYMBOLS

Rotation

A
Ak
Lu
L

Lu²
AH³

Hay¹

Potatoes, Rye (Wilson) Carrots
Potatoes. Rye (Wilson) Hay (2 cuts)
Lucerne cut for hay for 3 years
Ley grazed for 3 years

Lu, A etc indicate last 2 rotations in order.
Ak followed by best crops Sugar beet, barley
D during 15 ton/ha, D2 etc residual in 2nd etc crop
N, K : 0.92 wt% N, 0.9 wt% K₂O in addition to basal

1	Block	TEST CROP	Sugar Beet
2	3	A	NK
3	4	D-K	D -
4	5	DN-A	DNK
5	6	DNK	DN -
6	7	D-	D - K
7	8	DN	NK
8	9	D-K	DN -
9	10	DN	D -
10	11	NK	DNK
11	12	DNK	- -
12	13	D-K	DN -
13	14	DN	D - K
14	15	NK	DN
15	16	D-K	N -
16	17	DN	K -
17	18	DN	DN -
18	19	NK	D -
19	20	DN	DN -
20	21	NK	D - K
21	22	DN	D -
22	23	NK	DN
23	24	DN	NK
24	25	NK	DN
25	26	DN	NK
26	27	NK	DN
27	28	DN	NK
28	29	NK	DN
29	30	DN	NK
30	31	NK	DN
31	32	DN	NK
32	33	NK	DN
33	34	DN	NK
34	35	NK	DN
35	36	DN	NK
36	37	NK	DN
37	38	DN	NK
38	39	NK	DN
39	40	DN	NK
40	41	NK	DN
41	42	DN	NK
42	43	NK	DN
43	44	DN	NK
44	45	NK	DN
45	46	DN	NK
46	47	NK	DN
47	48	DN	NK
48	49	NK	DN
49	50	DN	NK
50	51	NK	DN
51	52	DN	NK
52	53	NK	DN
53	54	DN	NK
54	55	NK	DN
55	56	DN	NK
56	57	NK	DN
57	58	DN	NK
58	59	NK	DN
59	60	DN	NK
60	61	NK	DN
61	62	DN	NK
62	63	NK	DN
63	64	DN	NK
64	65	NK	DN
65	66	DN	NK
66	67	NK	DN
67	68	DN	NK
68	69	NK	DN
69	70	DN	NK
70	71	NK	DN
71	72	DN	NK
72	73	NK	DN
73	74	DN	NK
74	75	NK	DN
75	76	DN	NK
76	77	NK	DN
77	78	DN	NK
78	79	NK	DN
79	80	DN	NK
80	81	NK	DN
81	82	DN	NK
82	83	NK	DN
83	84	DN	NK
84	85	NK	DN
85	86	DN	NK
86	87	NK	DN
87	88	DN	NK
88	89	NK	DN
89	90	DN	NK
90	91	NK	DN
91	92	DN	NK
92	93	NK	DN
93	94	DN	NK
94	95	NK	DN
95	96	DN	NK
96	97	NK	DN
97	98	DN	NK
98	99	NK	DN
99	100	DN	NK

WOBURN GRUBBLE AND LEG ROTATIONS. Code letter 6. STACKYARD FIELD 2nd year 1961

TREATMENT SYMBOLS

3	L _u	L _u	D ₂	B
7	L _u	A	D ₂	g
6	A	A	A	
9	A	L _u	D ₂	10
11	D ₂	L	A ₁	L
15	D ₂	L	L	14

Potatoe
Potatoe
Potatoe's
Potatoe's
Potatoe's
Potatoe's
Potatoe's
Potatoe's
Potatoe's
Potatoe's
Potatoe's

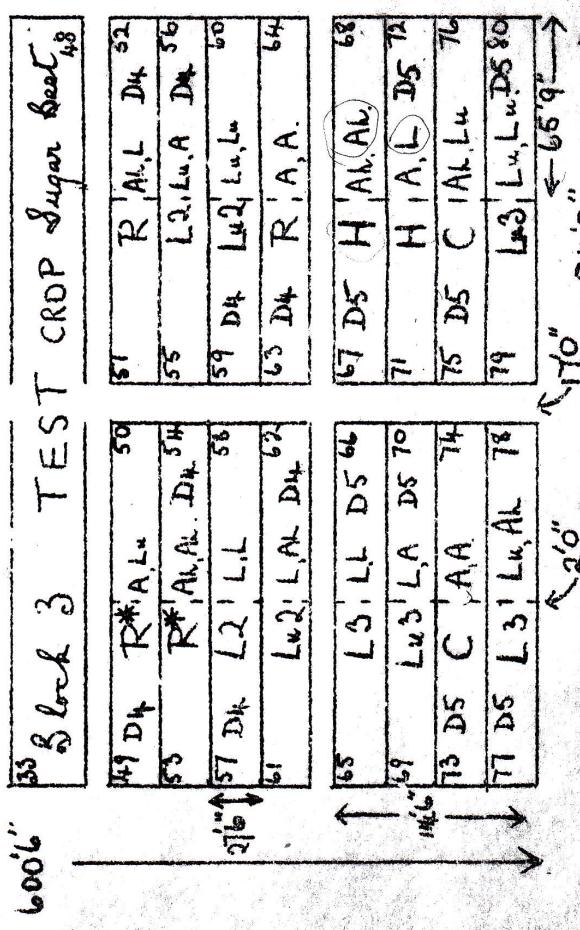
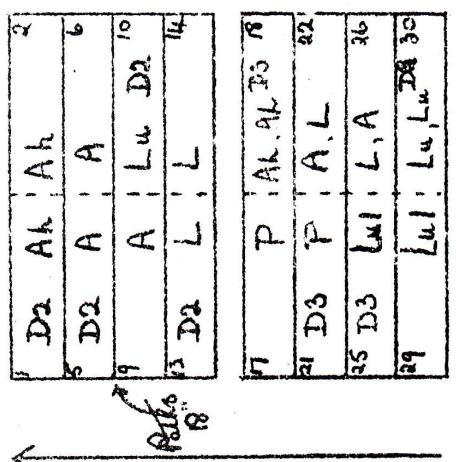
(R) Barn Yard
(R) Barn Yard (2 cuts)
Barn yard cut for hay for 3 years.
Barn yard grazed for 3 years.

L_u: A site indicates plant 2 rotations in order.

TEST CROPS FOLLOWED BY TEST CROPS SUGAR BEET, SUGAR BEET, D₂ SUGAR BEET, D₂ RESIDUAL IN 2nd TEST CROP
1 P: A, A, D₃ 20
23 L₁ L_u A₁ D₃ 24
27 P: A₁, L_u 28
31 L₁ L_u D₃ 32
32 D₂ 34 - NK
X D₂ L_u X 1 Y L_u K
Y D₂ -

TEST CROP SUGAR BEET 48

19 D ₄	R [*] A ₁ L _u	50	31	R [*] A ₁ L _u	32	51	R [*] A ₁ L _u	52	59	-N-	38	DNK	1,2	-N-	40	-N-	
53	R [*] A ₁ A ₁ D ₄	54	53	L ₂ , L _u , A	D ₄	56	X - A ₁ L _u	57	54	D N -	D N -	A	-NK	20	D N -	A	-NK
57	D ₄	L ₂ L ₁	56	59	D ₄	L _u L _u	60	Y ---	58	DNK	A	-NK	D N K		DNK	A	-NK
61	L _u L _u A ₁ D ₄	62	63	D ₄	R ₁ A ₁	64	Z --- K	62	64	D - K	D - K	---	D - K	1146	D - K	---	D - K
65	L ₃ L ₁ D ₅	66	67	D ₅	H [*] A ₁ A ₁	68	65	-N-	66	NK	D N -	69	DNK		DNK		
69	L _u L ₁ A	70	71	H ₁ A ₁	L	D ₅	72	Z - NK	73	-K	DN -	75	D N K		DN -		
73	D ₅ C	74	75	D ₅ C	A ₁ L _u	76	76	X - N - A ₁	77	A ₁ L _u	DNK	78	-K	A ₁ L _u	DNK		
77	D ₅ L ₃ L _u A ₁	78	79	L ₃ L _u D ₅	80		79	Y ---	79	D - K	D - K	80	-N -	1	D - K		



1960 plots (35, 36) and (47, 48) crop in 1960, residual is sited: (A) field blocked.

WOBURN Arable and Ley Rotations

W.L.A /		N	
1 D3	P Ah	- 2	Lui Lu D3 4
5 D3	P A	- 6	L1 Lu A D3 8
Paths 9 -	P A.L.	D3' 10	" D3 Lu Ak - 12
13 D3	L1 L	- 14	P Ah(L) D3' 16

BARLEY TEST CROP		33 - 48	
33 D2	2 Lu	- 34	Lu Ak
37 -	2 Ah Lu D2	- 38	A
41 -	1 A.L. D2	- 42	D2
45 -	3 Ah D2	- 46	D2
49 DS	H A.L.	- 50	C Ah, L
53 -	H Ah	- 54	D5
57 DS	L3 L	- 58	D5
61 -	L03 Lu Ah	- 62	D5

Ah L		52 /	
49 DS	C Ah, L	D5	Lu3 Lu
53 -	H Ah	D5	C A
57 DS	L3 L	- 58	D2
61 -	L03 Lu Ah	- 62	D5

65 Block 5	Cont S. in brick	50	17' 0"
17' 0"	65' 9"	2' 0" back	133' 6"
32' 10 1/2	133' 6"	2' 0" back	17' 0"

WOBURN Arable and Ley Rotations

W.L.A./

1 d4	R*	Ah.	- 2	3 - Lu2: Lu.	d 4
5 d	R	A.	- 6	7 - Lu2: Lu.	A. d 8
18"	9 - R*	A, Lu.	d 10	11 d Lu2: L.	Ah. - 12
					13 d Lu2: L.
					- 14 R Ah, L. d 16

7' 0" ↗

600' 6" ↗

35 d3 Lu1 ↗

34 Lu1 ↗

39 d P A. - 40

43 - P A, L. d 42

47 - P Ah. d 46

49 Block 4: Test crop sugarbeet.

64 1 BARLEY ↗

65 - 1 d 66

69 - 2 2 A, Lu. d 70

73 d2 1 4 A. - 74

77 d 21 Ah, L. - 78

2' 0" path = soil fumigated 25.10.62

17' 0" ← 65' 9" ← 284' 0" →

32' 10 1/2" ← 133' 6" ← 65' 6" ← 2' 0" path

STACKYARD 26th year 1963

SYMBOLS.

Rotations:

3 years Arable

3 years Ley

TREATMENTS TO SUGAR BEET

D FYM at 15 tons per acre

[d = FYM residuals]

N 0.72 cut N per acre as Nitro-Chalk 21

K 0.9 cut K₂₀ per acre as muriate of potash.

Mg 500lb Magnesium sulphate per acre.

BLOCK 4 TEST CROP SUGAR BEET.

a Lu, Mg D - o

b Lu, Mg D - o

c Lu, Mg D - o

d Lu, Mg D - o

e Lu, Mg D - o

f Lu, Mg D - o

g Lu, Mg D - o

h Lu, Mg D - o

i Lu, Mg D - o

j Lu, Mg D - o

k Lu, Mg D - o

l Lu, Mg D - o

m Lu, Mg D - o

n Lu, Mg D - o

o Lu, Mg D - o

TREATMENT Crops.

Potatoes (P) Rye (R) Carrots (C)

Potatoes (P) Rye U/S (R) Hay (H)

Lu Lucerne cut for hay

L Ley grazed.

SUGAR BEET, BARLEY. (In 4th and 5th year)

FYM at 15 tons per acre [d = FYM residuals]

N 0.72 cut N per acre as Nitro-Chalk 21

K 0.9 cut K₂₀ per acre as muriate of potash.

Mg 500lb Magnesium sulphate per acre.

TEST CROP SUGAR BEET.

a Lu, Mg D - o

b Lu, Mg D - o

c Lu, Mg D - o

d Lu, Mg D - o

e Lu, Mg D - o

f Lu, Mg D - o

g Lu, Mg D - o

h Lu, Mg D - o

i Lu, Mg D - o

j Lu, Mg D - o

k Lu, Mg D - o

l Lu, Mg D - o

m Lu, Mg D - o

n Lu, Mg D - o

o Lu, Mg D - o

WOBURN Arable and Ley Rotations

STACKYARD 27th year. 1964 449

WLA/

1 d5	H	Ah	- 2	Lu	d 4
5 d	C	A	- 6	Lu, A	d 8
9 -	H	A, Lu	d'10	Lu	Ah - 12
18" paths	L3	L3	L	- 14	C Ah, L d'16
17 Block 2 Test crop sugar-beet				32	
33 d4	Lu2	Lu	- 34		
37 -	R	Ah, Lu	d 38		
41 -	R*	A, L	d 42	Lu2	L
45 -	R*	Ah	d 46	Lu, A	d 48
49 d2	3	Lu, Ah	- 50	B	Lu, A d 52
53 -	3	Ah	d 54	A, L	d 56
57 d	1	L	- 58	E	Lu, - 60
61 -	2	Ah, Lu	d 62	Lu	A - 64
65 -	L1	L	d 66	P Ah,	- 68
69 -	P	A, Lu	d 70	S1	Lu, Ah d 72
73 d3	P	A	- 74	Lu	Lu, A - 76
77 d	P	Ah, L	- 78	S1	Lu d 80

SYMBOLS:

Rotations:

3 years ARABLE

3 years LEY

TREATMENTS TO SUGAR BEET: per acre.

-D None, 15 tons Farmyard manure. (d = FYM residuals)

-N 0.35, 0.7 cut N after 'L' and 'Lu' { N as 'Nitro-Chalk' 21
0.7, 1.05 cut N after 'A' and 'Ah' }

-K None, 0.9 cut K₂O as muriate of potash.

To sub-plot (as above, etc.) P None, 1.5 cut P₂O₅ as super.

Treatment Crops

Potatoes (P) Rye (R) Carrots (C)

Ah Potatoes (P) Rye (R*) Hay (H)

Lu Lucerne cut for hay. 's' Saintoin

L Ley grazed

C Barley (In 4th and 5th year)

TEST CROPS: Sugar-beet, Barley (In 4th and 5th year)

TREATMENTS TO SUGAR BEET: per acre.

-D None, 15 tons Farmyard manure. (d = FYM residuals)

-N 0.35, 0.7 cut N after 'L' and 'Lu' { N as 'Nitro-Chalk' 21
0.7, 1.05 cut N after 'A' and 'Ah' }

-K None, 0.9 cut K₂O as muriate of potash.

To sub-plot (as above, etc.) P None, 1.5 cut P₂O₅ as super.

Test Crop Sugar-beet.

a b a b a

17R - - - - D NK P W 19. - NK P 20 D - K P

P - NK - P D - K - X - N - P P D -- - D N - P A 1/4

P - N - - P N - P Y P - K - P Y P - K P P D - K -

Ah - - K P - D -- P Z P - - P D NK -

21.P D NK - 22. - NK P W 23. - N - P 24. D N - P

P D N - - P X P - - P D NK -

Ah - D - K P - - K P Y - - K P P D - K -

P D - - - P - N - - Z P - NK - - D -- P

25 D N - P 26. - N - P W 27. - N - P 28.P D NK -

A, Lu P D NK - P - NK - X - - NK P - D N - P Lu, A 2

- D - K P - - P Y - - K P P D -- -

P D - - - P - K - Z P - - P D K 1 -

29 - - K P 30.P D N - W 31.P - N - 32.P D -- -

Lu P - - - D - - P X - - K P - D N - P L 1

P - NK - P D - K - Y P - NK - - D NK P L 1

Z " - - P D NK - P D - K - 6'10%"

65'9" ← 176" → 284'0" → 133'6" → 32'10%"

20" ← 176" → 284'0" → 133'6" → 32'10%"

Note: change of Ley 1964: Common Saintoin in place of Lucerne, 1st year

WOBURN Arable & Ley Rotations

WLA/		BLOCK 1 Test Crop: SUGARBEET		16		SYMBOLS Rotations		TREATMENT CROPS	
P 3 ✓	17 -	Ah Ah	d ₂ 18	19 -	A A	d ₂ 20	P ₄ ✓	3 years ARABLE: A	Potatoes (P) Rye(R)
A 3 ✓	21 d ₂	L, Ah	- 22	A 23	Ah, L	d ₂ 24	A ₁ ✓	Ah	Potatoes (P) Rye(R*)
A 2 ✓	25 d ₂	A, Lu	- 26	E -	Lu, A	d ₂ 28	A ₄ ✓	Lu	Carrots (C) Lucerne cut for hay. Sainfoin (as 1s)
P 2 ✓	29 -	Lu Lu	d ₂ 30	Y -	Lu Lu	d ₂ 31	P ₁ ✓	L	Hay (H) Ley grazed.
TEST CROPS: Sugar-beet Barley (in 4th & 5th years)									
P 33	S x Lu	- 34	d ₅	S*	Lu, Ah	= 36	-	K	None, 0.9 cwt K ₂ O as muriate of potash.
37 -	C	Ah, Lu	d ₅ 38	39 d ₅	C	A - 40	BLOCK 1	Basal manuring: per acre	2.0 cwt P ₂₀₅ as superphosphate, 500lb magnesium sulphate.
41 -	H	A, L	d ₅ 42	43 -	L 3	L d ₅ 44	Test CROP	Nitrogen at 4 levels, rates according to rotation	(d = residuals of F.Y.M.)
45 -	H	Ah	d ₅ 46	47 -	L 3	Lu, A d ₅	Sugar Beet	0.35, 0.7, 1.05, 1.40, 1.75, 2.10 cwt N	as Nitro-Chalk' 21
TREATMENTS TO SUGAR BEET per acre									
49 d ₃	L 1	Lu, Ah	- 50	51 -	S 1	- L, Ah d ₃ 52	Ah	1.3K D 4 - 3K	1.2K D 2K
53 -	P	Ah	d ₃ 54	P A, L d ₃ 56	53 K D 5 - 4	- 2K 1/2	Lu	1.3K D 4 - 3K	1.2K D 2K
57 d ₃	L 1	L	- 58	59 d ₃	S 1	Lu - 60	Ah	1.3K D 4 - 3K	1.2K D 2K
600' 6"									
61 -	P	Ah, Lu	d ₃ 62	63 d ₃	P A	- 64	Lu, Ah	1.2 - D 3 - 2	1.2 - 5 - 4
65 -	L 2	L	d ₄ 66	67 d ₄	R* Ah	- 68	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
69 -	R*	A, Lu	d ₄ 70	71 -	S 2	L, Ah d ₄ 72	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
73 d ₄	R	A	- 74	75 d ₄	L 2	Lu, A - 76	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
77 d ₄	R	Ah, L	- 78	79 -	S 2	Lu d ₄ 80	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
27' 6"									
Paths									
114' 6"	R*	A, Lu	d ₄ 70	115' -	G - 4 - 2	24 - D 6 - 6	Lu	1.2 - D 3 - 2	1.2 - 5 - 4
13 d ₄	R	A	- 74	132 K	D 4 K	14 - 2 - 1 K	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
77 d ₄	R	Ah, L	- 78	78 d ₄	S 2	Lu d ₄ 80	Ah	1.2 - D 3 - 2	1.2 - 5 - 4
284'									
65' 9"									
17' 0"									
133' 6"									
284'									
17' 0"									
65' 9"									

x Sainfoin in place of 3rd year Lucerne.
Plot area: 65' 9" x 27' 6" = 0.0415 acre

Sub-plot: 32' 10 1/2" x 6' 10 1/2" = 0.00519 acre

WOBURN Arable & Ley Rotations

STACKYARD 29th year 1966

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WLA/

1 d ₂	P	(Ah)	- 2	P Lu	d ₂ 4
5 d ₂	P	Ah	- 6	A A,L	d ₂ 8
9 -	R	Lu,Ah	d ₂ 10	L d ₂	A Ah,Lu - 12
13 d ₂	P	Lu	- 14	E	A,L,Ah d ₂ 16
17 -	P	Ah	d ₃ 18	19 -	P A d ₃ 20
21 d ₃	S1	L,Ah	- 22	23 -	P Ah,L d ₃ 24
25 d ₃	P	A,Lu	- 26	27 -	L1 Lu,A d ₃ 28
29 -	S1	Lu	d ₃ 30	31 -	L1 L d ₃ 32

BLOCK 3 Test Crop: SUGARBEET					
51 -	S2	L,A	d ₄ 52	55 -	R* Ah d ₄ 56
59 d ₄	S2	Lu	- 60	61 -	R Ah d ₄ 62
49 d ₄	L2	Lu,Ah	- 50	53 -	R* Ah d ₄ 54
57 d ₄	L2	L	- 58	27 d ₄	R Ah,Lu d ₄ 62

65 -	L3	L	d ₅ 66	67 d ₅	H Ah - 68
69 -	H	A,Lu	d ₅ 70	71 -	S3 L,Ah d ₅ 72
73 d ₅	C	A,R	- 74	75 d ₅	L3 Lu,A - 76
77 d ₅	Ley C	Ah,Ley	- 78	79 -	S3 Lu d ₅ 80

SYMBOLS Rotations

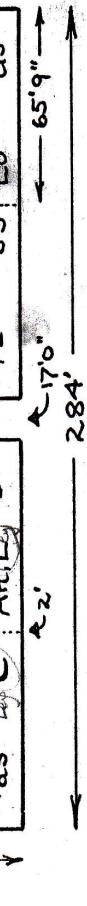
3 years ARABLE A: Potatoes P. Rye R. Carrots C.
 Ah: Potatoes P, Rye & R* Hay H.
 Lu: Lucerne cut for hay S: Sainfoin (as Lu)
 L: Ley grazed.

TEST CROPS: Sugarbeet, Barley (In 4th & 5th years)

TREATMENTS to SUGARBEET per acre
 -, D None, 15 tons F.Y.M. (d = Residuals of FYM)
 N to 1/8th sub-plots (N at 4 levels, rates according to rotation
 N 1, 2, 3, 4, 5, 6 0.35, 0.7, 1.05, 1.40, 1.75, 2.10 cut N as N/C 21
 -, K None, 0.9 cut K₂O as muriate of potash.
 Basal P & Mg.

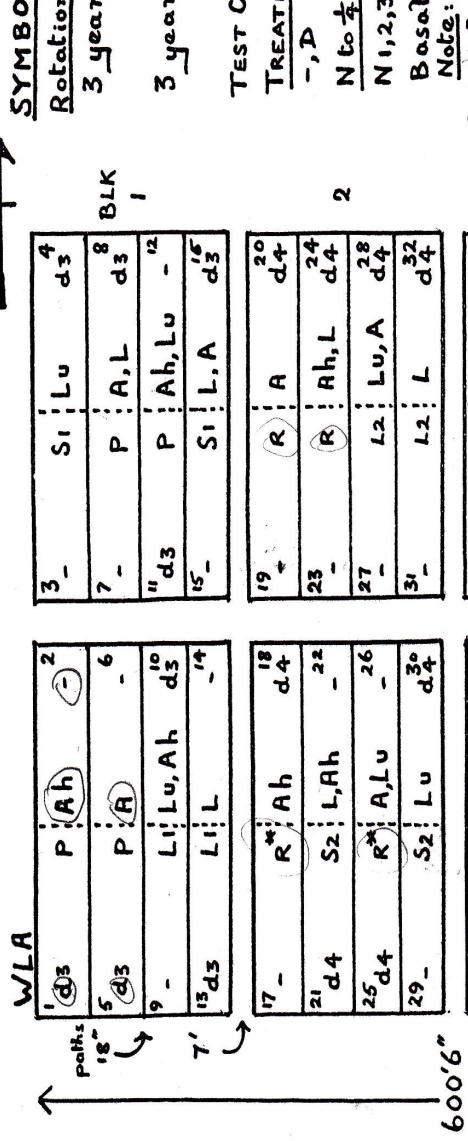
BLOCK 3 Test Crop SUGARBEET

332K D 1-	342-	1K	W 351K D 3-	363K - 4-	A
1K D 2-	4 -	3 -	X 2 - D 4K	3 - - 1K	Ah, (L) x
4 - D 3K	4K - 2K	Y 2K D 4 -	Z 1 - D 3K	2 - - 1 -	(Lu,L,S)x
4K D 3-	3K - 1-	Y 2K D 4 -	X 3 - D 5 -	4 - - 2 -	Q
372K - 3K	383 - D 2 -	W 392 - D 4 -	X 404K - 3K		
- 3 - - 4K	4K D 5 -	X 3K D 4K	Y 2K - 5 -		
5 - - 5K	4 - D 5K	Z 5K D 2K	Z 3 - - 5K		
2 - - 4 -	2K D 3K				
415 - - 3K	425 - D 6 -	W 433K - 4K	Y 441 - D 4K		
4K - 5K	3 - D 4K	X 2 - - 2K	1K D 2K	PL	E
3 - - 4 -	5K D 6K	Y 4 - - 3 -	2 - D 3K		
6K - 6 -	4 - D 3K	Z 1K - 1 - 3 -	D 4 -		
453K - 4 -	463 - D 5 -	W 472K - 4 -	482K D 3K		
6 - - 3 -	6 - D 4K	X 1 - - 2 -	D 1 -	A, L E	
5 - - 6K	6K D 5K	Y 1K - 3 - 4 -	D 1K		
5K - 4K	3K D 4 -	Z 4K - 3K	3 - D 4K	6'10%" / 10%	



Rye Crop failed due to late sowing

WOBBURN Arable & Ley Rotations



WLA		SYMBOLS		ROTATIONS		3 Years ARABLE		3 Years LEY		TREATMENT CROPS	
3 -	S1	Lu	d3 ⁴	-		A	A: Potatoes P, Rye R, Carrots C.			A: Potatoes P, Rye % R*, Hay H.	
7 -	P	A, L	d3 ⁸								
" d3	P	Ah, Lu	- ¹²								
15 -	S1	L, A	d3 ¹⁶								
17 -	R*	A	d4 ²⁰	(R)	A						
23 -	R	Ah, L	d4 ²⁴								
27 -	L2	Lu, A	d4 ²⁸								
31 -	L2	L	d4 ³²								
17 -	R*	Ah	d4 ¹⁸								
21 d4	S2	L Ah	- ²²								
25 d4	R*	A Lu	- ²⁶								
29 -	S2	Lu	d4 ²⁰								
33 d2	(SA)	- ³⁴	B d2								
37 -	S(Ah)	d2 ³⁸									
18" 41 -	L(Ah)	d2 ⁴²									
45 -	(Ah)	d2 ⁴⁶									

BLOCKS		TEST CROP		SUGARBEET	
65 -	1	'66	4	A	W 67 2
3 LF	- 4	2	2	X	X 5 3
3 P	- 2	1	1	Y	Y 3 1
	- 3	3	3	Z	Z A 6 4
	-				
69 -	3 1	'70	5 3 2	W 71 -	W 72 3 D
	- 4 2	6 4 2	X -	X - 4	X - 3 D
L, Ah	- 6 4	5 1 2	Y -	Y - 3	Y - 3 D
A	- 5 3	4 2 2	Z -	Z - 1	Z - 2 A
	-				
73 D 2 1	'74	3 2 -	W 75 D 2	W 76 1 -	
4 AH	2 3	2 1 -	X 76 2	X 76 1 -	
P	A 3 2	Y 2 -	Z 76 2	Z 76 1 -	
A	5 4	Z 3 -	A 76 2	A 76 1 -	
	-				
77 A 4 3	'78	2 1 -	W 79 - 4	W 80 3 D	
A	5 4	3 2 -	X 80 3 D	X 80 3 D	
A	2 1	5 4 -	Y 80 3 D	Y 80 3 D	
A	3 2	4 3 -	Z 80 3 D	Z 80 3 D	
	-				
65' Blocks Test Crop :	SUGARBEET	80	284'	17' 6"	→ 17' 6" → 65' 9" → 284' → 17' 6" → 65' 9" → 284' →

WOOBURN **ARABLE & LEY ROTATIONS** **1968**

WLA **H** **A** **L** **N**

		SYMBOLS			Treatment Crops
3 -		S ₂ : L ₀	d ₄ ⁴		A = Potatoes P, Rye, R, Carrots C.
7 -	R*: Ah	-	d ₄ ⁸		Ah = Potatoes P, Rye, % R*, Hay H.
5 d ₄	R: A	-	d ₄ ⁸		S = Sainfoin cut for hay (Lu = Lucerne)
9 -	L ₂ : LuAh	d ₄ ¹⁰	-		L = Ley grazed
13 d ₄	L ₂ : L	-	d ₄ ¹⁴		1967, 68 Sugar Beet, Barley } In 4 th
17 -	H Ah	d ₅ ¹⁸	d ₅ ²⁰		1968, 69 Barley, Potatoes } 5 th years.
21 d ₅	S ₃ : L Ah	-	d ₅ ²⁴		
25 d ₅	H A Lu	-	d ₅ ²⁸		
29 -	S ₃ : Lu	d ₅ ³⁰	d ₅ ³²		

		a	b	c	a	b	c
33 d ₅	S, Lu	34	F ₂	4	P(A) S A	F ₄	336
-		-	-	-			
37 -	L, LuA	38	F ₂	4	P(A) R ₂	F ₄	340

		a	b	c	a	b	c
41 -	S, L Ah	d ₃	-		L, L		
3* 45: 3 -	P(A) h	2	F ₃	3	P(A) F ₂	3	448
3* 45: 4 -	P(A) h	2	F ₃	3	P(A) F ₂	3	448
3* 45: 5 -	P(A) h	2	F ₃	3	P(A) F ₂	3	448

BLOCK 4 1ST TEST

CROP BARLEY

		a	b	c	a	b	c
65 -	P(L E)	L	66 R	P(A H)	Ah	-	
	d ₂	d ₂	Ah	Ah	Ah		
69 -	A (AH)	Lu Ah	d ₂ ¹⁰	A (SA)	Ah S	d ₂ ¹²	
114' 6' 73 d ₂	P(AC)	A	d ₂ ⁷⁵	P(LE)	A(L E)	d ₂ ⁷⁶	
71' 284' 7 d ₂	A(AC)	LA	d ₂ ⁷⁸	P(SA)	S	d ₂ ⁸⁰	

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2

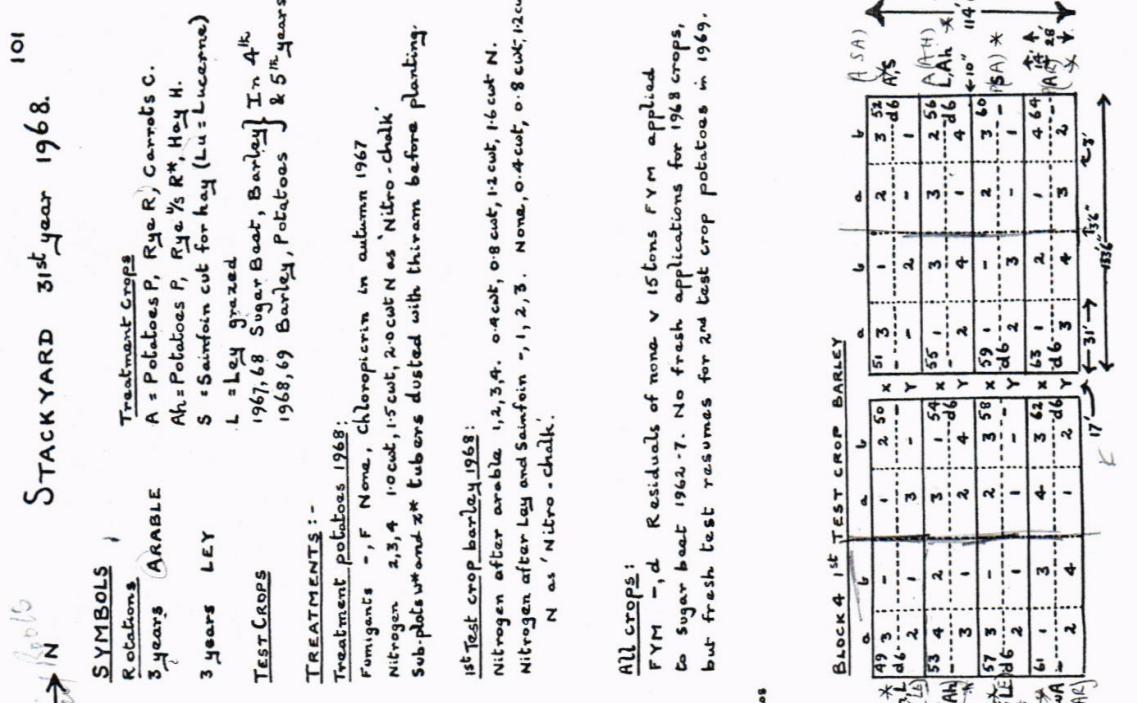
284' 17' 2

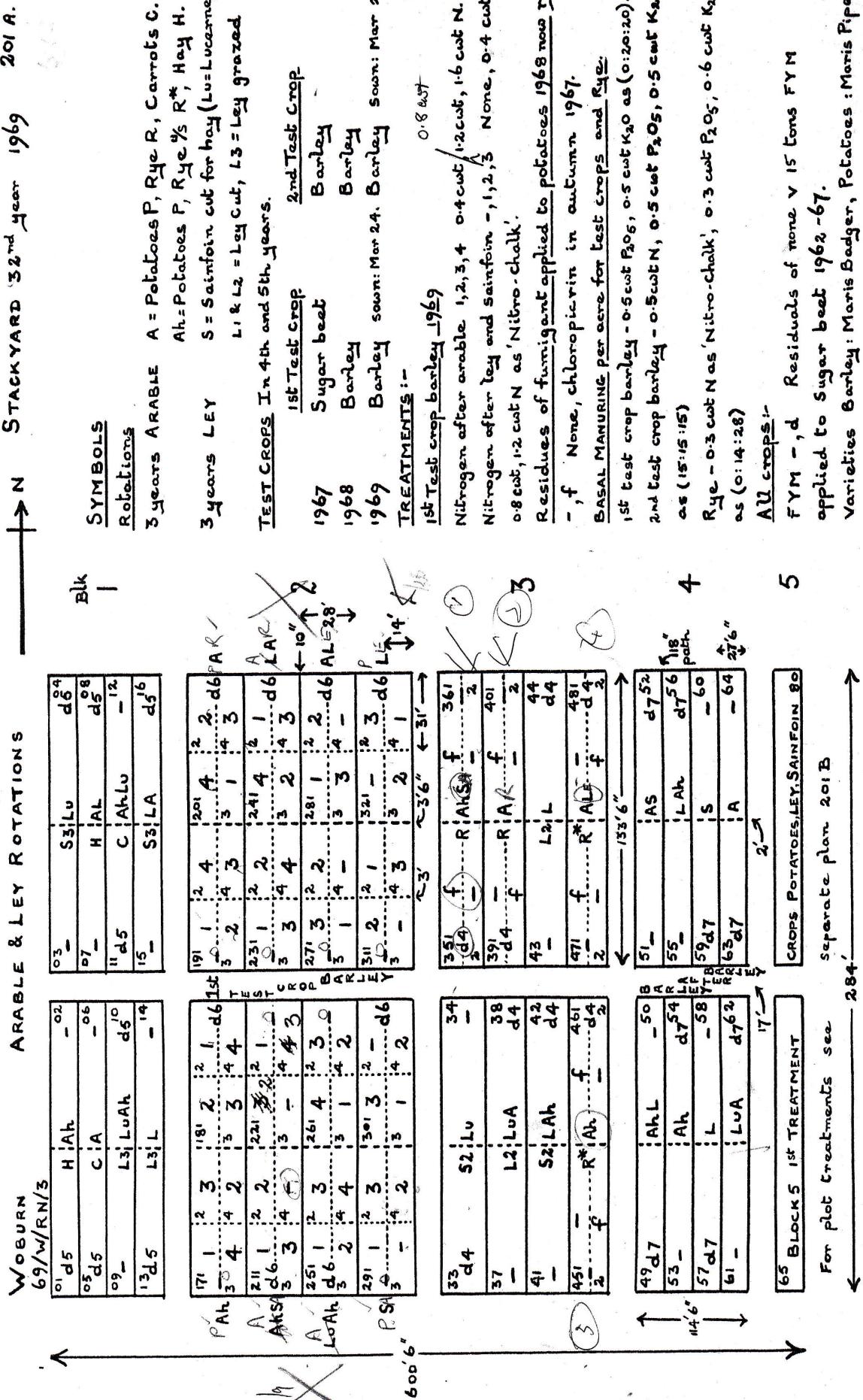
284' 17' 2

284' 17' 2

284' 17' 2

284' 17' 2





WOBURN ARABLE AND LEY ROTATIONS → N 70/W/RN/3 201 A

ARABLE AND LEY ROTATIONS

	1)	2)	3)	4)	5)	6)
Ah	4	2	100' 2	2	3	1st 100' 3
ds	1	3	1	4	—	1st 100' 3
A	3	1	100' 3	2	4	1st 100' 3
d6	2	4	5	1	—	1st 100' 3
O9	—	2	1	100' 1	—	1st 100' 3
Ah	2	4	3	3	4	1st 100' 3
L	2	4	3	3	4	1st 100' 3
d6	—	2	3	3	4	1st 100' 3
L	2	4	1	3	2	1st 100' 3

SYMBOLS
R = Rotation
A = Arable
L = Ley

1)	Ah	19	1A	2d7	2	1st 100' 3
2)	Ah	24	1A	2d7	2	1st 100' 3
3)	LuAh	26	1AL	2d7	2	1st 100' 3
4)	S	32	1L	3d7	2	1st 100' 3
5)	S3:Lu	34	1C:AhS	3d7	2	1st 100' 3
6)	L3:LuA	36	1C:A	3d7	2	1st 100' 3
7)	S3:LAh	38	1L3:L	4d7	2	1st 100' 3
8)	H:Ah	40	1H:AL	4d7	2	1st 100' 3

9)	S3:Lu	34	1C:AhS	3d7	2	1st 100' 3
10)	L3:LuA	36	1C:A	3d7	2	1st 100' 3
11)	S3:LAh	38	1L3:L	4d7	2	1st 100' 3
12)	H:Ah	40	1H:AL	4d7	2	1st 100' 3
13)	—	—	—	—	—	1st 100' 3

600' 6"

1)	Ah	19	1A	2d7	2	1st 100' 3
2)	Ah	24	1A	2d7	2	1st 100' 3
3)	LuAh	26	1AL	2d7	2	1st 100' 3
4)	S	32	1L	3d7	2	1st 100' 3
5)	S3:Lu	34	1C:AhS	3d7	2	1st 100' 3
6)	L3:LuA	36	1C:A	3d7	2	1st 100' 3
7)	S3:LAh	38	1L3:L	4d7	2	1st 100' 3
8)	H:Ah	40	1H:AL	4d7	2	1st 100' 3
9)	—	—	—	—	—	1st 100' 3

2

TREATMENTS:
1st Test crop barley 1970
Nitrogen after arable 1, 2, 3, 4.
Nitrogen after ley and sward - 1, 2, 3. None, 0-4, 0-8, 1-2 cwt N
as 'Nitro-chalk' 2t.

Carrots
3

3)	Lu	36	1C:AhS	3d7	2	1st 100' 3
4)	LuA	38	1C:A	3d7	2	1st 100' 3
5)	LuAh	40	1L3:L	4d7	2	1st 100' 3
6)	—	—	—	—	—	1st 100' 3
7)	—	—	—	—	—	1st 100' 3

8)	Lu	36	1C:AhS	3d7	2	1st 100' 3
9)	LuA	38	1C:A	3d7	2	1st 100' 3
10)	LuAh	40	1L3:L	4d7	2	1st 100' 3
11)	—	—	—	—	—	1st 100' 3
12)	—	—	—	—	—	1st 100' 3

600' 6"

3

3 years ARABLE A = Potatoes P, Rye R, Carrots C.
AH = Potatoes P, Rye R, Hay H.
S = Sainfoin cut for hay (Lu = Lucerne)
L = Ley cut (No more grazing)

CROPS POTATOES, LEY, SANFOIN 64
separate plan 201b RYE

49 BLOCK 4 1st TREATMENT
For plot treatments see

600' 6"

4

SYMBOLS
P = Potatoes
R = Rye
A = Arable
L = Ley
S = Sainfoin
R = Residues of manure applied to test crops and Rye
All crops:-
FYM - d. Residues of manure v 15 tons FYM applied to
Rye - 0-8 cwt N as Nitro-chalk; 0-3 cwt P₂O₅, 0-6 cwt K₂O as (0:14:28)
Sugar beet rate - 67
Varieties: Barley: Maris Widgeon, Potatoes: Marie Piper,
2nd test crop Barley: Tulip

5)	L2:L	49	1C:R	3d7	2	1st 100' 3
6)	L2:LuAh	72	1C:R	3d7	2	1st 100' 3
7)	(—) R AR	74	1C:R	3d7	2	1st 100' 3
8)	72	79	1C:R	3d7	2	1st 100' 3
9)	72	79	1C:R	3d7	2	1st 100' 3

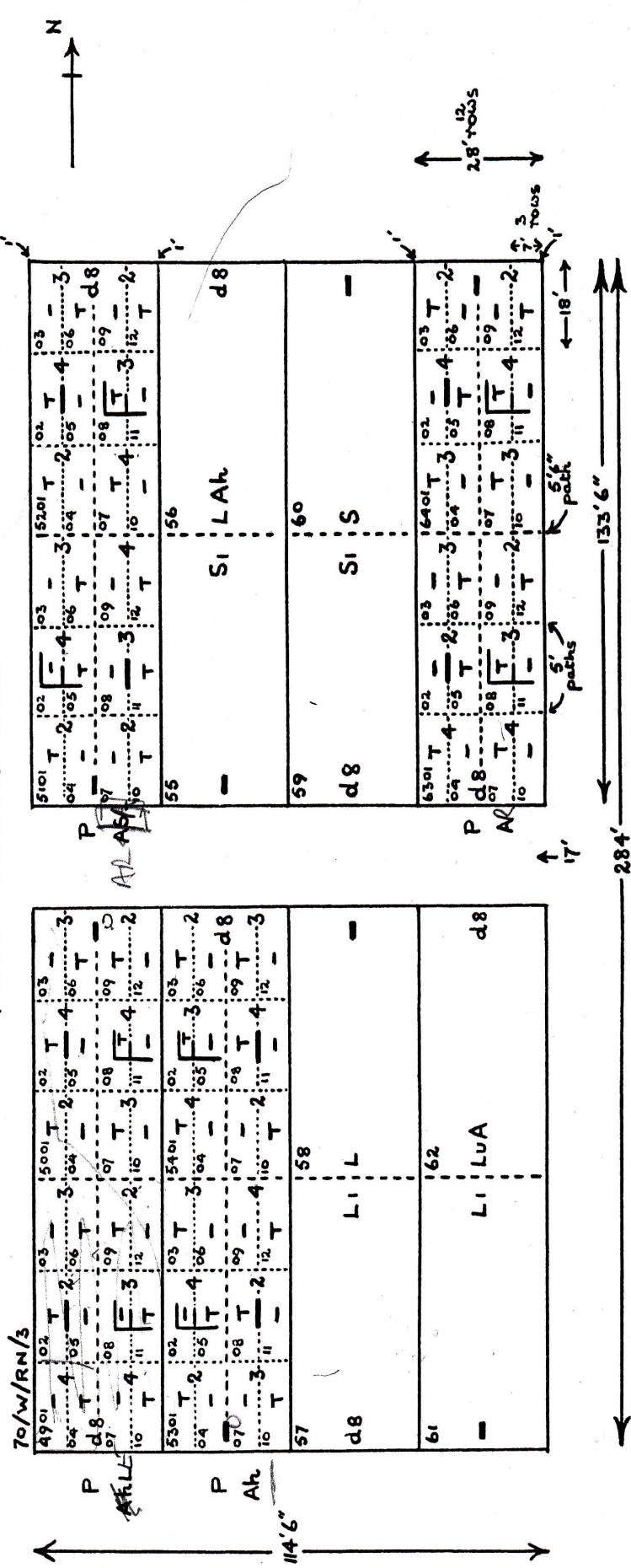
10)	LuAh	74	1C:R	3d7	2	1st 100' 3
11)	—	74	1C:R	3d7	2	1st 100' 3
12)	—	74	1C:R	3d7	2	1st 100' 3
13)	—	74	1C:R	3d7	2	1st 100' 3
14)	—	74	1C:R	3d7	2	1st 100' 3

600' 6"

WOBURN

ARABLE & LEY ROTATIONS
Potato Treatments Block 4

STACKYARD D 1970 LOI B

TREATMENTS per acreWhole plots

-, d8 None, FYM residues - applied 1963

Half plots - Fumigant

-, F None, chloropicrin at 400lb

1/6 Plots - Nitrogen rates

2, 3, 4 1.0, 1.5, 2.0 cwt N as 'Nitro-chalk' 21

1/12 Plots - Nematicide

-, T None, Temik at 100lb of 10% granules.

BASEL MANURING per acre

0.9 cwt P2O5, 1.8 cwt K2O as compound fertiliser (0:14:28)

336 lb Epsom saltsVARIETY: Maris Piper

Planted: 22 Apr.

PLOT AREA 18' x 7' = 0.0029 acre
harvested one row 2'4" x 18' = 0.0010 acre

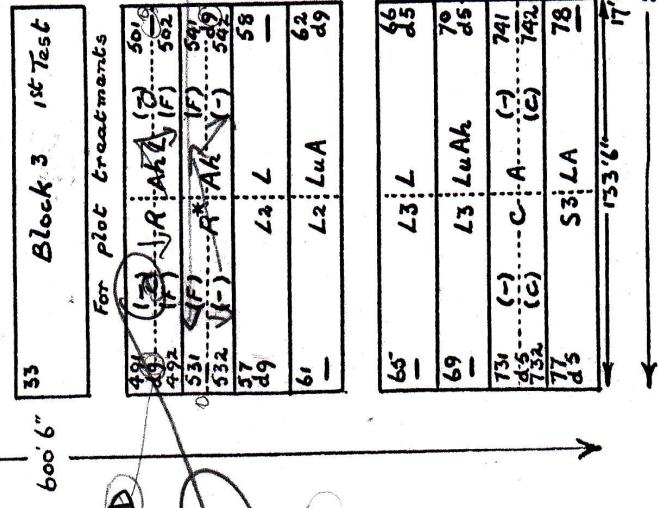
WOBURN ARABLE AND LEY ROTATIONS

STACKYARD "D" 34th year 1971 20/A

600' 6"

T1/RN/3	blk	blk
01 d7 Ah	03 d7 S	04 d7
05 d7 A	06 d7 LAh	08 d7
09 d7 AhL	10 d7 " LA	12
13 d7 L	15 d7 AS	16

53 Block 3 1st Test	For plot treatments
49 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68
49 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68
49 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68
49 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68



SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Rye R, Carrots C.

Ah = Potatoes P, Rye R*, Hay H.

3 years LEY S = Sainfoin cut for hay (Lu = Lucerne)

L = Ley cut (No more grazing)

TEST CROPS In 9th and 5th years

1st Test Crop 2nd Test Crop

Barley Barley @ 150lb (168kg)

Potatoes Planted: 30 Mar. Sown: 10 Mar.

TREATMENTS:-

Residues of Fumigant applied to potatoes 1969 now carrots

(-) (C) None, chloropicrin in autumn 1968

Residues of Fumigant applied to potatoes 1970 now 1970

(-) (F) None, chloropicrin in autumn 1969 BASAL MANURING per acre/hectare for 2nd last crop & treatment

2nd test crop barley - Julia.

0.5 cwt (63kg) N, 0.5 cwt (63kg) P₂O₅, 0.5 cwt (63kg) K₂O as (15: 15: 15)

1st treatment crop-potatoes - Maris Piper

2.0 cwt (252kg) N, 2.0 cwt (252kg) P₂O₅, 3.0 cwt (376kg) K₂O as (13: 13: 20)

2nd treatment crop-rye - King II

0.3 cwt (38kg) N as 'Nitro-chalk' 2, 0.3 cwt (38kg) P₂O₅, 0.6 cwt (76kg) K₂O as (0: 14: 28).

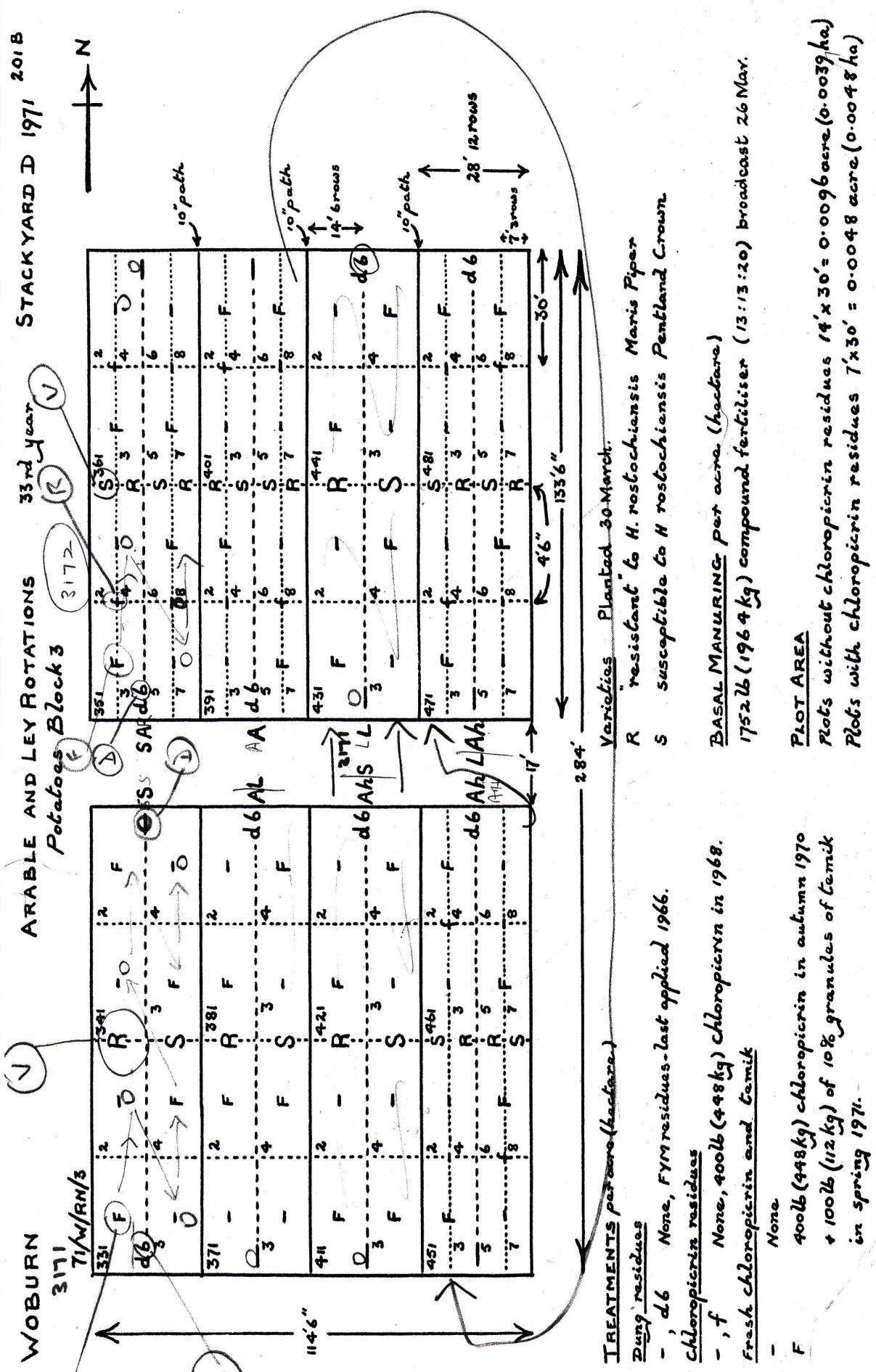
3rd treatment crop carrots - Autumn King

0.6 cwt (76kg) N as 'Nitro-chalk' 2, 0.6 cwt (76kg) P₂O₅ as superphosphate

1.8 cwt (226kg) K₂O as muriate of potash

All crops :-

FYM - d. Residues of none v 15 tons FYM applied to sugar beet 1962-67



201 A

WOBURN

ARABLE AND LEY ROTATIONS

blk	N
72; N1/RN13	P : A : F
01. d. 8	02. 4. 0
05. 8	02. 4.
09. 2.	P : A : F
13. d. 8	L : L
17	B ^m ; Ah
21. 9	B : Ah
25. 9	L ₂ ; LUAh
29	C 2; S
33	N ³ 2
37	N ² 4
3	N ² 4
27	N ³ 2
3	N ² 4
600. 6 [*]	N ³ 2
411	N ² 2
3	N ² 4
451	N ² 2
3	N ² 4
49	B : AHL
53	H : Ah
57	L 3 ; L
61	L 3 ; LUAh
65	Block 5 1st Test
	For plot treatments

SYMBOLS

Rotations	
3 years	ARABLE A : Potatoes P, Barley B, Barley B.
	Ah = Potatoes P, Barley B ^{1/2} , Hay H.
1	L = Red clover cut for hay (S = Salford, Lu = Lucerne).
3 years	LEY C = Red clover cut for hay (S = Salford, Lu = Lucerne).
	L = Ley cut

TEST CROPS IN 4th and 5th years

1	2	3
19	B : A	20
23	C 2; LAH	24
27	B ^m ; AL	28
31	L 2; L	31

TREATMENTS:-

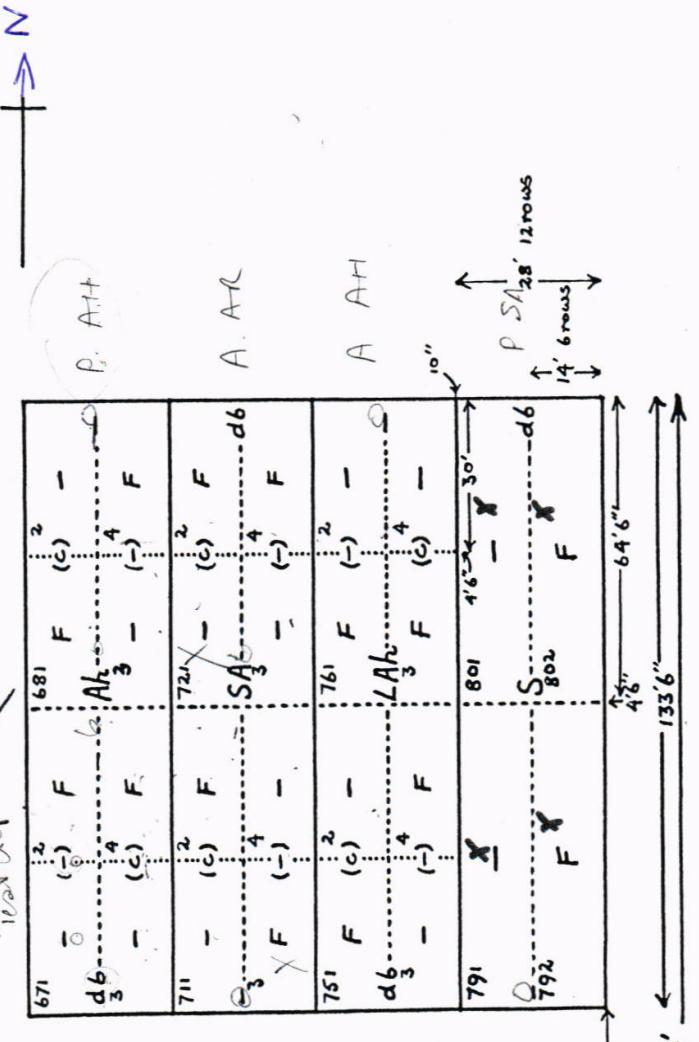
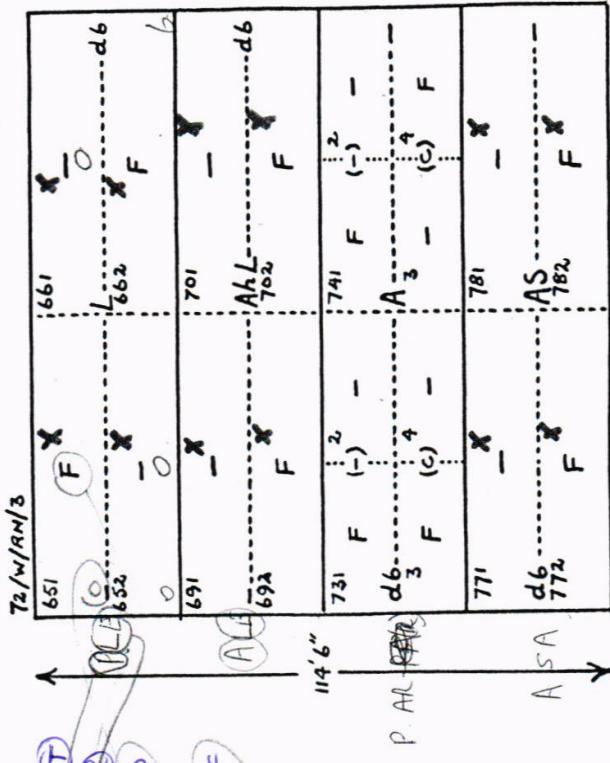
1	2nd Test Crop <u>Wheat</u> - coppele dressed diadrin & fungicide
2	<u>Nitrogen Rates/and Residues of Fumigants to Potatoes</u> 1972
3	(-) (f) None, 0.5cut(63kg), 1.0cut(136kg), 1.5cut(189kg) Nas Nitro-chalk 21 (-) (f) None, 0.002lb(498kg) chloropicrin + 0.02lb(112kg) of 10% granules of Temik <u>Basal Manuring per acre (hectare)</u>
4	2nd Test crop <u>Wheat</u> - 260lb (291kg) of compound fertiliser (0.20/20) c.d. 2nd & 3rd Treatment crop <u>Barley</u> - Julia at 137lb (154kg) 37lb of compound fertiliser (415kg) (51/15/15) c.d. 3rd Treatment crop <u>Hay</u> 26/71 in Baye
5	1.0cut(126kg) Nas Nitro-chalk 21, 0.6cut(75kg) K ₂ O as (0:14:28) in spring, obcut(75kg) N, 0.4cut(50kg) K ₂ O as (26:0:16) after 1st cut. <u>Treatment & Basal Manuring per acre/hectare</u> 1st Treatment crop -potatoes -, F None, 400lb(144kg) chloropicrin in autumn 1971+50lb(56kg) 10% Temik in spring. 2.0cut(252kg) N, 2.0cut(252kg) P ₂ O ₅ , 3.0cut(316kg) K ₂ O as (13:13:20). (56kg aldc(0.16b) Variety - Maris Piper planted 129 March All Crops:- EYM - d Residuals of Neme v. 16 tons (38 tonnes) FYM applied to sugar beet 1962-67 (1st test crop).

2018

ARABLE AND LEY ROTATION
Potatoes Block 5

35th year

W/O BURN



TREATMENTS per acre (hectare)

Dung residues

- d6 None, FYM residues - last applied 1967

Chloropicrin residues

(-) (C) None 400lb (448kg) chloropicrin in 1969

Fresh chloropicrin and temik

None

400lb (448kg) chloropicrin in autumn 1971 + soils (56kg) of 10% granules of temik in spring 1972

VARIETY 'resistant' to H. rostochiensis Maris Piper

Planted: 29 Mar.

BASEL MANURING per acre (hectare)

1752 lb (1964 kg) compound fertiliser (13:13:20)

PLOT AREA

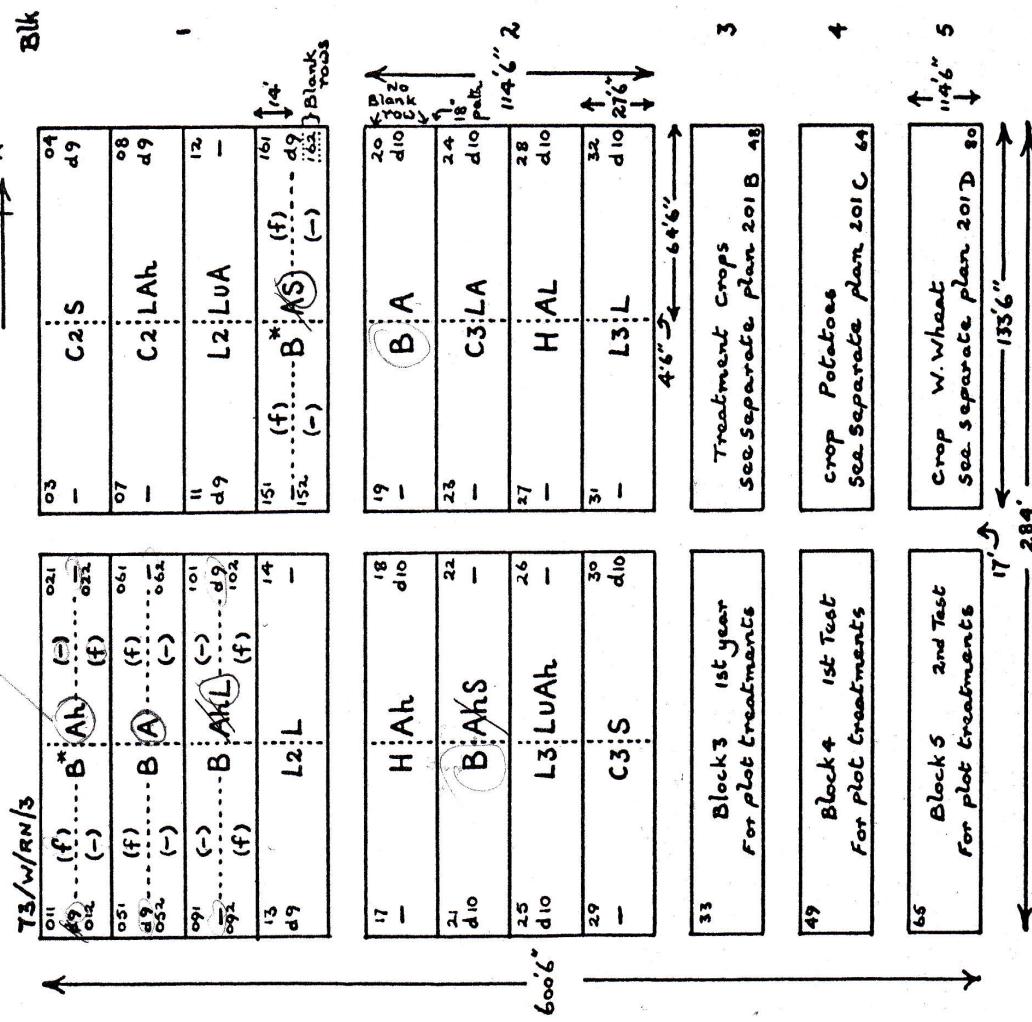
Plots with chloropicrin residues $14' \times 30' = 0.0096$ acre (0.0039 ha)
Plots without chloropicrin residues $14' \times 64' = 0.0207$ acre (0.0081 ha)

WO BURN

ARABLE AND LEY ROTATION

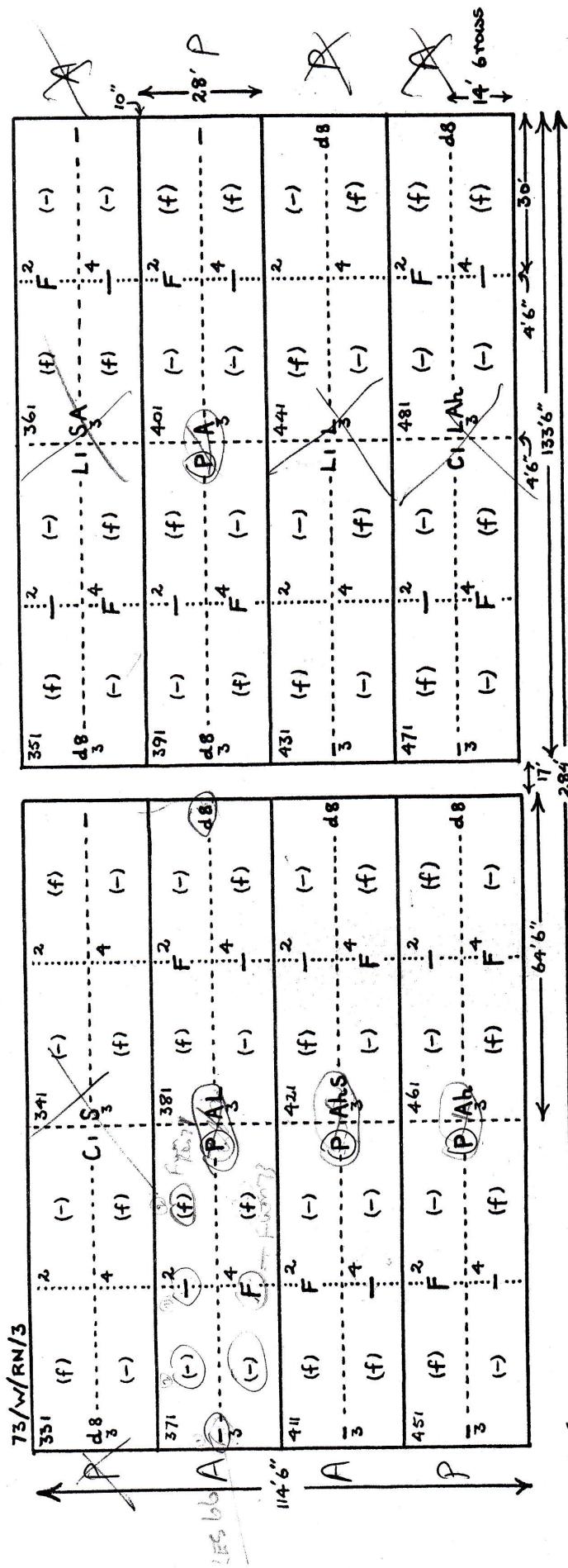
36th year

STACKYARD 'D' 1973 201A



WOBURN ARABLE AND LEY ROTATION Block 3

36th year 1973 201 B
→ N



SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.
Ah = Potatoes P, Barley B^{4s*}, Hay H
3 years LEY C = Red clover cut for hay (S = Sainfoin)
L = Ley cut

TREATMENTS per acre (hectare) Fumigant
- , F None 900lb (408kg) chloropicrin + 60lb (67kg)
of aldicarb (applied to plots 35/36 & 47/48 in error)

Residues of Fumigants applied to Potatoes 1971

(-) (f) None, 400lb (408kg) chloropicrin + 10 lb (10kg) of aldicarb

VARIETY Potatoes - Maris Piper

BASEAL MANURING per acre (hectare) - Potatoes
1730lb (783kg) compound fertiliser (13:13:20)

Sub-PLOT AREA 14' x 36' = 0.0096 acre (0.0039ha)

WOBBURN

ARABLE AND LEY ROTATION
Fumigates 1973
Potatoes Block 4

Plot	1st Test	Crop	501	541	581	621	661	701
491	-	F	(-) 2	(-) 4	(C) F	(-) 4	(-) 2	(-) -
531	-	F	(C) -	(C) F	(-) 2	(-) -	(C) F	(C) -
532	-	Ah _s	(-) 4	(C) F	(-) 4	(-) -	(C) F	(C) -
571	-	F	(-) -	(C) F	(-) -	(-) -	(C) F	(C) -
d11	-	F	-	-	-	-	-	-
572	-	F	-	-	-	-	-	-
611	-	F	-	-	-	-	-	-
612	-	F	-	-	-	-	-	-

Plot	1st Test	Crop	511	551	561	562	591	601
491	-	F	(-) 2	(-) 4	(-) -	(C) F	(-) 2	(-) -
531	-	F	(C) -	(C) F	(-) -	(C) F	(C) -	(C) F
532	-	Ah _s	(-) 4	(C) F	(-) -	(C) F	(C) -	(C) F
571	-	F	(-) -	(C) F	(-) -	(-) -	(C) F	(C) -
d11	-	F	-	-	-	-	-	-
572	-	F	-	-	-	-	-	-
611	-	F	-	-	-	-	-	-
612	-	F	-	-	-	-	-	-

36th year
STACKYARD D 1973 201 c
1st Test Crop
→ N
→ S
30/7/73

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A

A

P

P

Type
Manure

Planted: 9 Apr.

Rotation
FYM RES 6
FUM RES 10
FUM RES 13
FUM 173

BASAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20)

PLOT AREA

Plots with chloropicrin residues $14' \times 30' = 0.0096$ acre (0.0039ha)
Plots without chloropicrin residues $14' \times 64'6'' = 0.0207$ acre (0.0084ha)

TREATMENTS per acre (hectare)

F.Y.M. residues

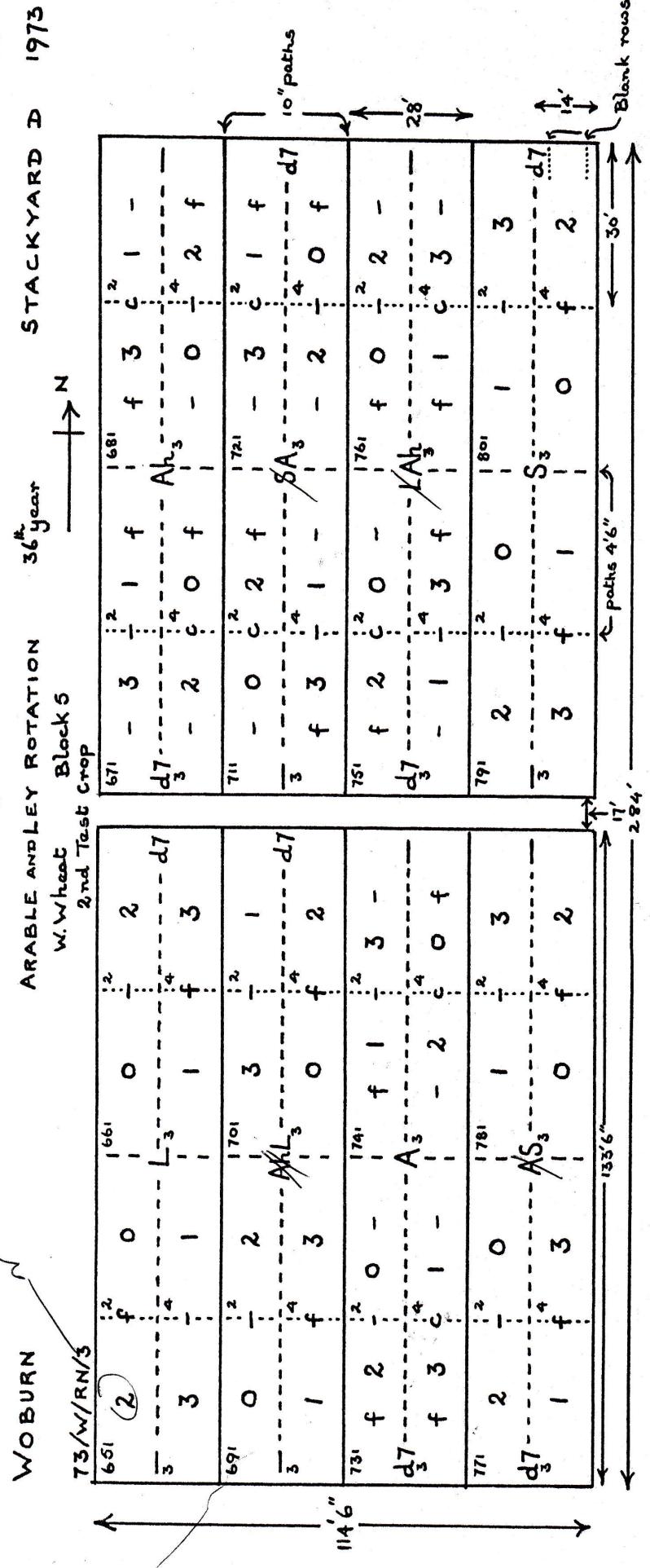
-, d11 None, F.Y.M. residues - last applied 1963
chloropicrin residues

(-), (c) None, 400lb (448kg) chloropicrin for potatoes 1970
Fresh Fumigant

- None

F 400lb (448kg) chloropicrin in early spring 1978
+ 6.6lb (67kg) of adicants

201 D

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).TREATMENTS per acre (hectare)F.Y.M. residues

-, d7 None, F.Y.M. residues - last applied 1967.

Chloropicrin + oldcarb residues-, f None, 400lb (448kg) chloropicrin in autumn
1971 + 10lb (11kg) oldcarb in spring 1972.chloropicrin residues

-, c None, 400lb (448kg) chloropicrin in 1969

Harvested 9'4" x 36' = 0.0064 acre (0.0026 ha).

Nitrogen

o, 1, 2, 3 None, 0.5, 1.0, 1.6 cwt N (63, 126, 189kg) as 'Nitro-chalk' 25

BASAL MANURING per acre (hectare)

265lb (297kg) compound fertiliser (0:20:20).

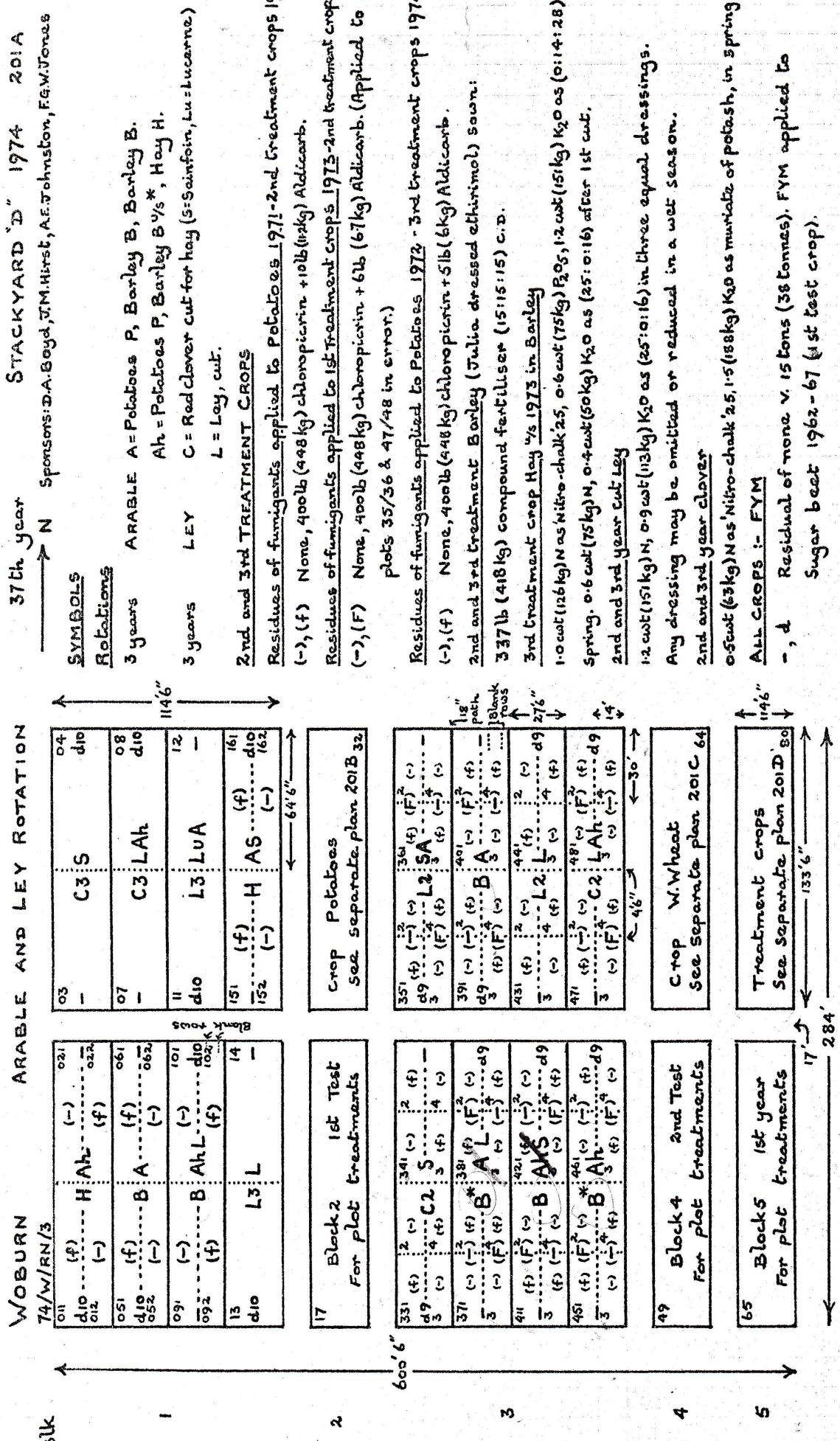
VARIETY

Cappelle (dressed seedling) sown at 175lb (196kg) Date: 24 Nov.

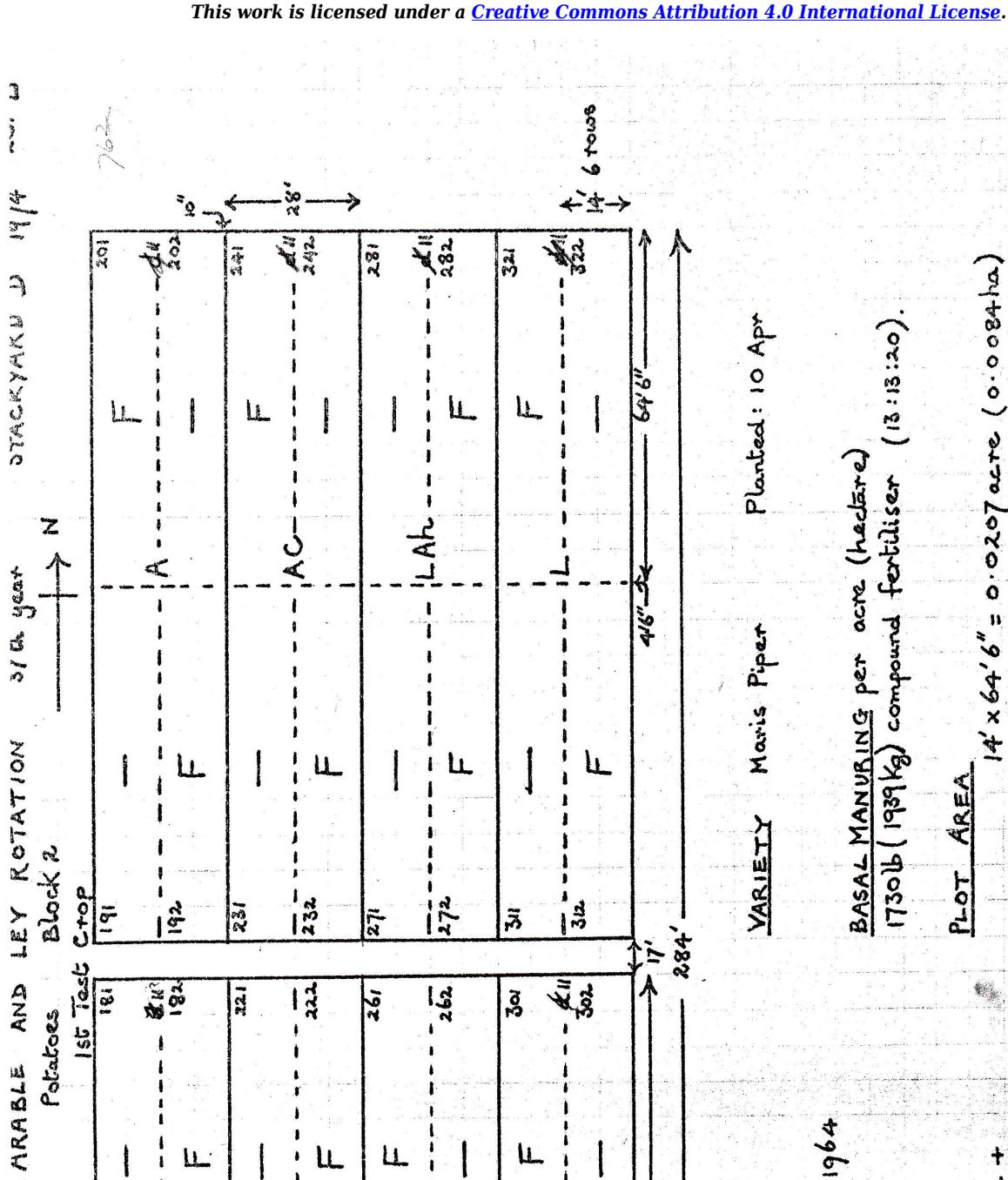
PLOT AREA

14' x 36' = 0.0096 acre (0.0039 ha).

Harvested 9'4" x 36' = 0.0064 acre (0.0026 ha).



WO BURN

TREATMENTS per acre (hectare)FYM residues

- d, l, None, FYM residues - last applied 1964

VARIETY Maris Piper

Planted: 10 Apr

BASAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20).

FUMIGANTS

- None
- 200lb (224kg) 'Taloma' in autumn + 6lb (6.7kg) adicarb in spring

PLOT AREA

$$14' \times 64' 6'' = 0.0207 \text{ acre (0.0084 ha)}$$

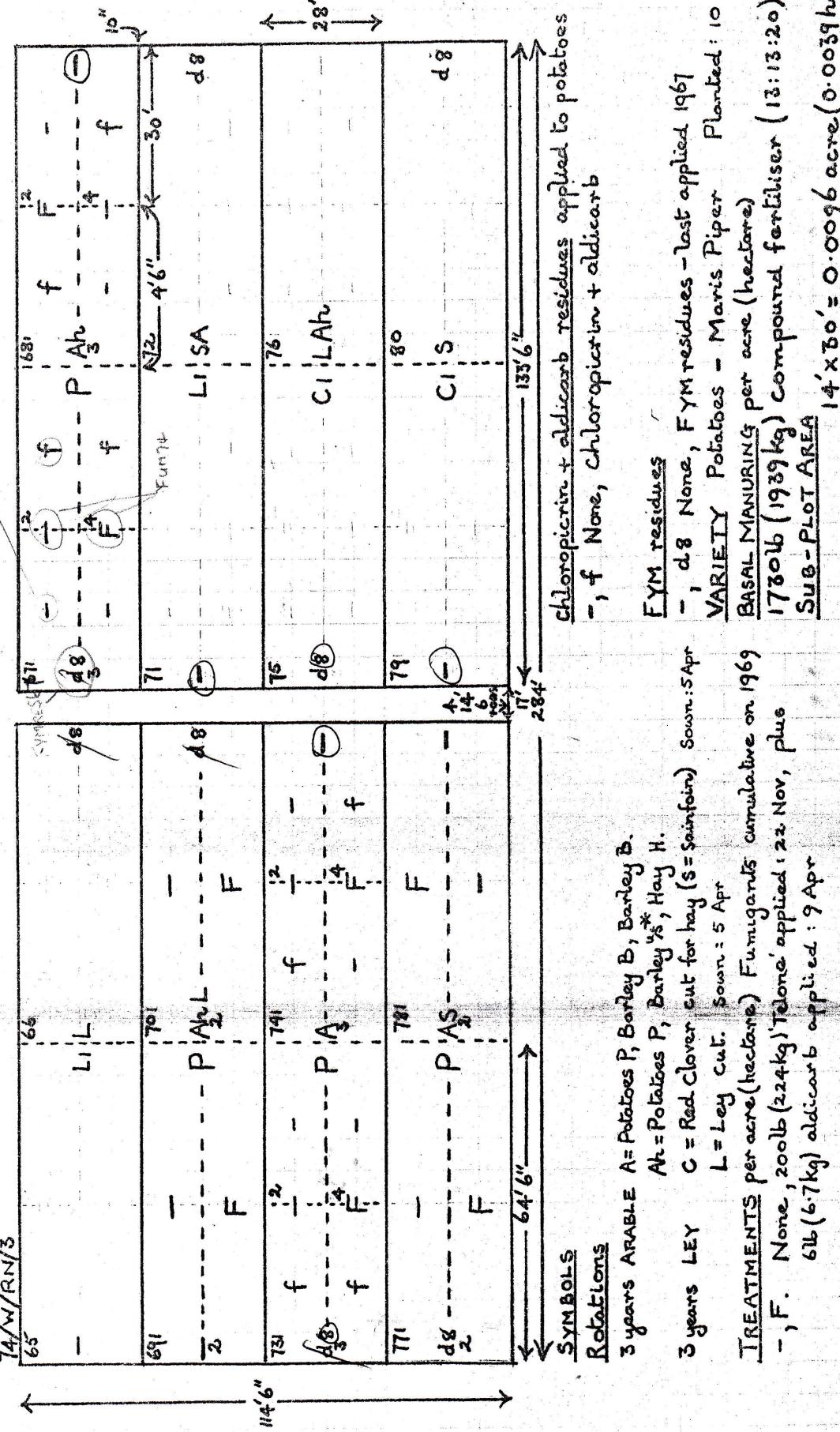
WOBURN

ARABLE AND LEY ROTATION Block 5'

1st treatment crops

37th year
FERTILISERS 72

STACKYARD D 1974 201D



SYMBOLS ROTATIONS

3 years ARABLE A = Potatoes P, Barley B, Barley B.

Ah = Potatoes P, Barley "S", Hay H.
Ah = Red Clover cut for hay (S = Sainfoin)

C = Red Clover cut for hay (S = Sainfoin)
Sown: 5 Apr

L = Ley cut. Sown: 5 Apr

TREATMENTS per acre(hectare) Fumigants cumulative on 1969

-, F. None, 200lb (224kg) "Talone" applied 22 Nov, plus

6lb (6.7kg) aldicarb applied 9 Apr

FYM RESIDUES

-, d.8 None, FYM residues - last applied 1967

VARIETY Potatoes - Maris Piper

BASAL MANURING per acre (hectare)

1780lb (1939kg) compound fertiliser (13:13:20)

Sub-PLOT AREA

$$14' \times 30' = 0.0096 \text{ acre} (0.0039 \text{ ha})$$

WOBURN ARABLE AND LEY ROTATION

38th year 1975

Sponsor: D.A. Boyd, J.M. Hirist, A.E. Johnston, F.G.W. Jones

75/w/RM/3

o Block 1 1st Test
For plot treatments

crop Potatoes
see separate plan 201B 16

17 Block 2 2nd Test
For plot treatments

crop W.Wheat
see separate plan 201C 32

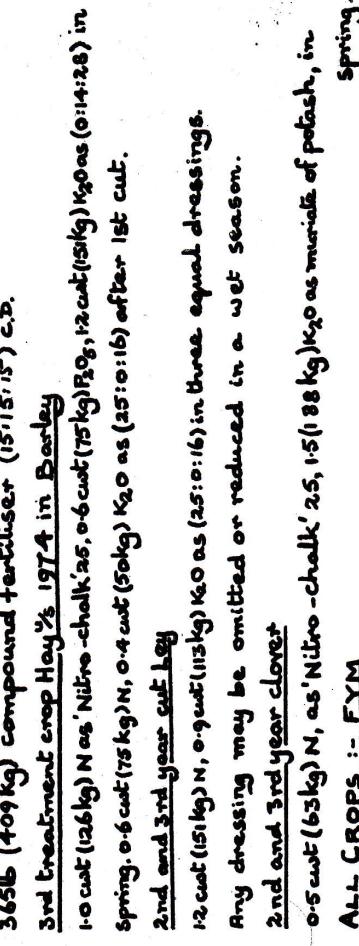
CROPS											
331 (f)	2 (-)	341 (-)	2 (f)	351 (f)	2 (-)	361 (f)	(F) ² (-)	371 (f)	2 (-)	381 (f)	-
d10 (-)	4 (-)	C3 (-)	5 (-)	d10 (-)	4 (-)	L3	S1A (-)	T3	4 (-)	d10 (-)	-
3 (-)	(F)	(F)	(F)	3 (-)	(F)	(F)	(F)	4 (-)	(F)	(F)	-
371 (-)	(F)	(F)	(F)	381 (-)	(F)	401 (-)	(F) ² (-)	R	(F)	(F)	-
5 (-)	(F)	(F)	H	3L (-)	(F)	d10 (-)	B	A	(F)	(F)	-
411 (-)	(F)	(F)	(F)	421 (-)	(F)	431 (-)	(F)	441 (-)	(F)	2 (-)	-
3 (-)	(F)	(F)	(F)	4 (-)	(F)	5 (-)	(F)	6 (-)	(F)	(F)	-
451 (-)	(F)	(F)	B	461 (-)	(F)	471 (-)	(F)	481 (-)	(F)	491 (-)	-
5 (-)	(F)	(F)	Ah	5 (-)	(F)	N	(F)	6 (-)	(F)	7 (-)	-
600'6"	(F)	(F)	N	600'6"	(F)	T	(F)	600'6"	(F)	600'6"	-
5 (-)	(F)	(F)	H	5 (-)	(F)	6 (-)	(F)	6 (-)	(F)	6 (-)	-

49 Block 4 1st year
For plot treatments

Treatment crops
see separate plan 201D 41

CROPS											
65	66	67	68	69	70	71	72	73	74	75	76
L2 L	L	(F)	(F)	(F)	(F)	-	L2 SA	(F)	(F)	(F)	(F)
-	-	-	-	-	-	-	d9	-	-	-	-
69	(F)	(F)	(F)	(F)	(F)						
70	(F)	(F)	(F)	(F)	(F)						
71	(F)	(F)	(F)	(F)	(F)						
-	-	-	-	-	-	-	-	-	-	-	-
72	73	74	75	76	77	78	79	80	81	82	83
SA	(F)	(F)	(F)	(F)	(F)						
d9	d9	d9	d9	d9	d9	d9	d9	d9	d9	d9	d9

5



All CROPS :- FYM

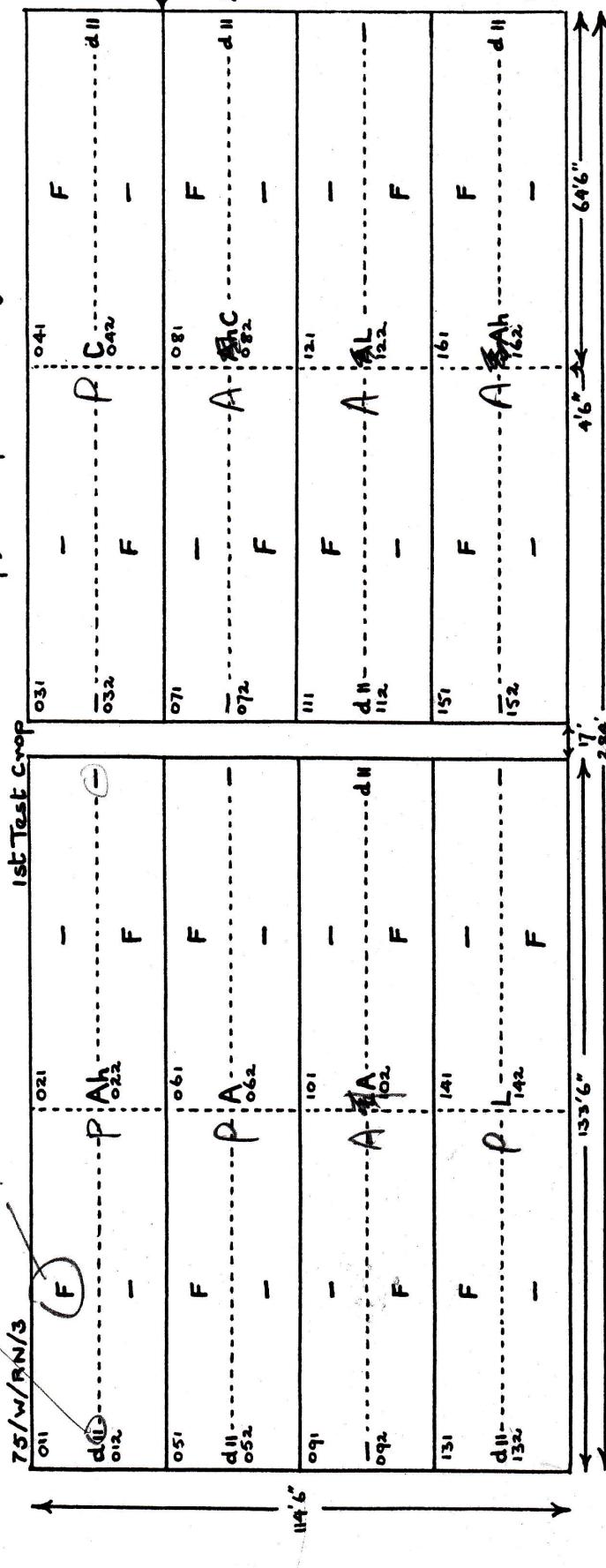
- d Residual of none v. 15 tons (38 tonnes). FYM applied to sugar beet 1962-67 (1st test crop).

15/7/1975

WOBURN FUMETS

ARABLE AND LEY ROTATION

Potatoes Block 1 → N Sponsors: D.A. Boyd, J.M. Hirst, A.E. Johnston, F.G.W. Jones



TREATMENTS per acre (hectare)

FYM residues

- d II None, FYM residues - last applied 1965.

VARIETY Maris Piper

Planted: 5 May

BASEAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20)

FUMIGANTS

- None
- F 200lb (224kg) 'Telone' in autumn + 10lb (11.2kg) adicarb in spring

PLOT AREA

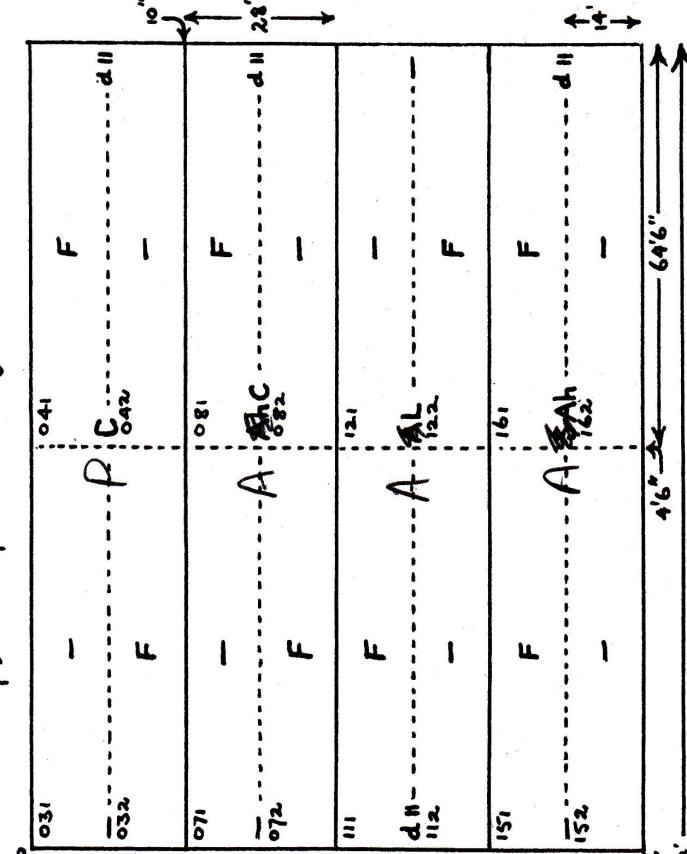
$$14' \times 64' 6'' = 0.0207 \text{ acre (0.0084 ha)}$$

201 B

STACKYARD D 1975

38th year

Sponsors: D.A. Boyd, J.M. Hirst, A.E. Johnston, F.G.W. Jones



Planted: 5 May

BASEAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20)

PLOT AREA

$$14' \times 64' 6'' = 0.0207 \text{ acre (0.0084 ha)}$$

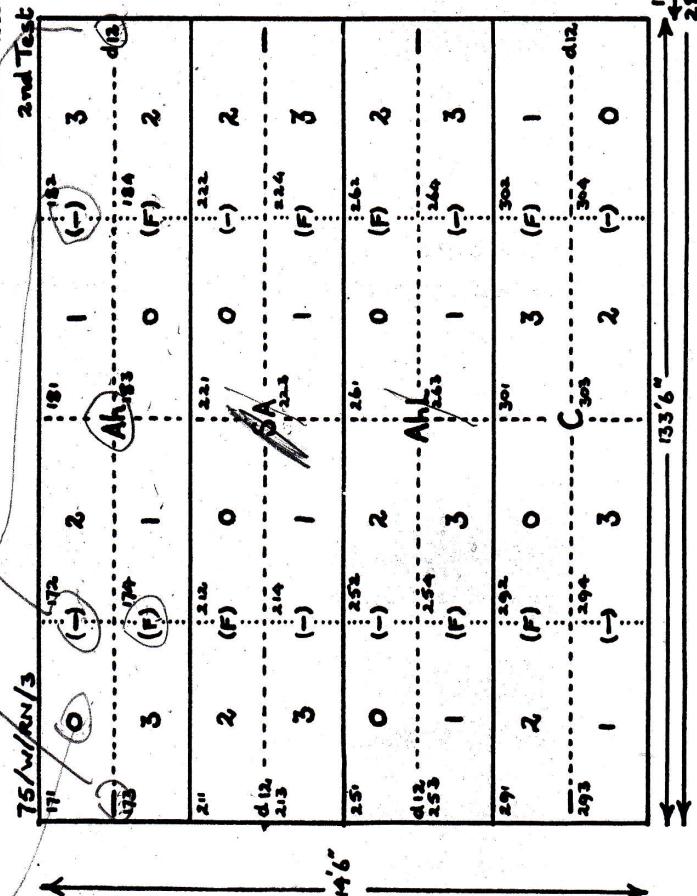
75 WOBURN

Farm PRESSURE

/ Farm RES 74

ARABLE AND LEY ROTATION 38th year
Winter Wheat 2nd Test

75/w/kn/3	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
-d12	0	(F)	1	0	Ah	0	0	1	1	1	1	1	1	1	1
211	2	(F)	0	221		222		223	1	2	2	2	2	2	2
d12 213	3	(-)	1	214	Ah	224		225	1	(F)	1	(F)	1	(F)	1
251	0	(-)	2	252	261	262		263	2	(F)	3	(F)	2	(F)	2
d12 253	1	(F)	3	291	Ah	292	293	294	273	274	275	276	277	278	279
291	2	(F)	0	301	302	303	304	305	311	312	313	314	315	316	317
293	1	(-)	3	303	2	304	305	306	323	324	325	326	327	328	329
									133'6"	133'6"	133'6"	133'6"	133'6"	133'6"	133'6"
									284'	284'	284'	284'	284'	284'	284'



per m A-1

TREATMENTS per acre (hectare)

FYM residues

- d12 None, FYM residues last applied 1964

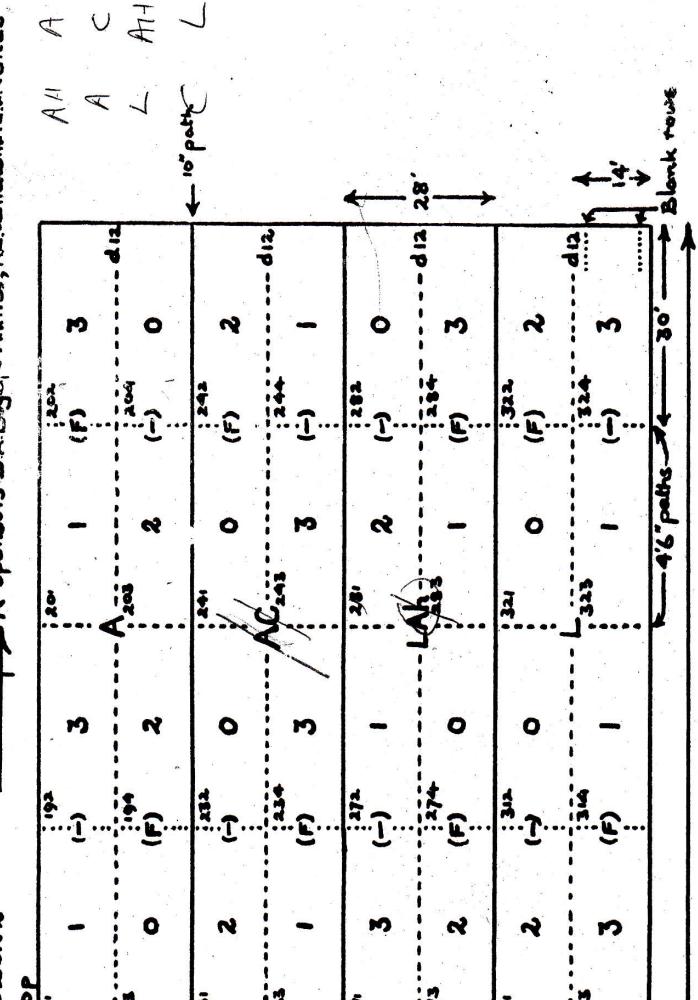
Nitrogen = 0, 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N (63, 126, 189 kg) as Nitro-chalk 25% BASAL MANURING per acre (hectare)

260lb (290kg) of (0:20:20) C.D.

Fungicides - applied for potatoes 1974

(-) None

(F) Residues of 200lb (224kg) Telone
+ 6lb (67kg) aldicarb.



per m A-1

Nitrogen

0, 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N (63, 126, 189 kg) as Nitro-chalk 25%

BASAL MANURING per acre (hectare)

260lb (290kg) of (0:20:20) C.D.

VARIETY Capelle dressed diadrin
PLOT AREA

Sown @ 175lb (196kg) Date: 8 Nov 1974

14' x 30' = 0.0096 acre (0.0039 ha)
Harvested: 14' x 30' = 0.0064 acre (0.0026 ha)

(1) Fertiliser 73

WOBURN
ARABLE AND LEY ROTATION
Block 4

75' W/RN/3

1st treatment crops

491	-	²	f	²	501	f	²	-
d13	-	⁴	Ch	⁴	-	Ch	⁴	-
3	-	f	-	f	-	-	-	-
531	-	²	F*	²	541	f	²	-
-	-	-	-	-	P	Ah	⁴	d13
-	-	²	F*	²	-	3	f	-
-	-	⁴	3	⁴	-	-	-	-
571	-	-	-	-	581	f	-	-
d13	-	²	L	²	-	C1	-	-
2	-	f	-	f	-	C2	-	-
611	-	²	621	²	-	631	-	-
3	-	F	-	P	A	641	-	-
-	-	⁴	3	⁴	3	-	²	f
-	-	f	-	f	-	-	-	f

511	-	²	Ch	²	521	f	²	-
3	-	f	-	f	3	SAh	⁴	d13
551	-	²	f	²	-	Ch	-	-
-	-	⁴	3	⁴	-	-	-	-
-	-	²	561	²	-	2	-	-
-	-	⁴	4	⁴	-	4	-	d13
591	-	²	601	²	-	-	-	-
d13	-	²	-	f	-	-	-	-
2	-	f	-	-	-	-	-	-
631	-	²	641	²	-	-	-	-
3	-	F	-	f	A	-	²	f
-	-	⁴	3	⁴	3	-	⁴	F*
-	-	f	-	f	-	-	-	f

Symbols
Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.

Ah = Potatoes P, Barley $\frac{1}{2}$ s*, Hay H. Sown : 1 May

3 years LEY C = Red Clover cut for hay. Sown : 2 May
L = Ley cut. Sown 2 May

TREATMENTS per acre (hectare) Fumigants cumulative on 1970 (e)*
and 1973 (f)

- None

F 200lb (22.4kg) Telone in autumn + 100lb (11.2kg) addicarb in spring

chlоропиерин residues applied for potatoes 1970

- Ch None, 400lb (448kg) chlоропиерин
chlоропиерин + addicarb residues applied for 1st test crop potatoes 1973

- f None, 400lb (448kg) chlоропиерин + 6lb (6.7kg) addicarb.
FYM residues - , d13 None, FYM residues - last applied 1963.

VARIETY Potatoes - Maris Piper
BASAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20)

SUB-PLOT AREA 14' x 30' = 0.0096 acre (0.0039 ha)

WOBURN
T6/N/RN/3
or BLOCK TEST
For PLOT TREATMENTS

ARABLE AND LEY ROTATION

17	(Ah)	¹⁸ B	d13	19	(Ah)	²⁰ F	d13
21	(SA)	²² LLc1	-	23	(AC)	²⁴ LLc1*	d13
d13	(AH)	²⁵ Lln1*	-	27	(AH)	²⁶ Lln1	d13
29	(C)	²⁷ Lc1	d13	31	(L)	²⁸ Ln1	d13
33	Block 3 1st Plot test treatments	Crop Winter Wheat See Separate Plan 201 C 43	49' 6"	51	(SAh)	³² Lln2	d14
44	(1A)	³⁰ LLc2	-	55	(Ah S)	³² LLc2*	d14
45	(Ah)	³⁴ B	d14	57	(C)	³⁴ Lc2	-
57	(1)	³⁸ Ln2	-	63	(A)	³⁴ d14	-
61	(AL)	⁶² Lln2*	d14	67	(L)	³² Ln3	d10
65	(L)	⁶² Lc2	-	69	(Ah)	⁶² O	-
69	(AH)	⁷⁰ Lln3*	d10	71	(SA)	⁷² LLn3	d10
73	(A)	⁷⁴ O	-	75	(LAh)	⁷⁶ LLc3	-
76	(AS)	⁷⁸ LLc3*	-	79	(C)	⁸⁰ Lc3	d10
81	133' 6"	46' 2"	2.84'	84	133' 6"	64' 6"	2.84'

39th year
→ N

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Sponsors: Dr A.S. Boyd, K. Evans, A.C. Johnston, F.W. Jones, & A. Salt.

SYMBOLS

From 1976 major revisions have been made:-

Previous Rotations: (R), (Ah), (C), (L) (S) not defined on this plan.

From 1976 AH Barley B, Barley S, Oats O.

A Fellow F, Fellow F, Oats O.

LC 3 years clover/grass ley (no N)

LN 3 years all grass ley (with N)

LLc & LLn 8 year leys treated as above. * = ploughed up in less than 8 years initially during phasing in.

Normally followed by Test crops. Wheat and Barley (Wheat in 1976 to complete previous cycle)

Note: LC & LN 2 & 3 are all fresh sowings 1976.

To all crops: - , d/c residues of none v 15 t/ha/acre (38t/ha) FYM last applied n years ago.

Basal Manuring per acre (hectare)

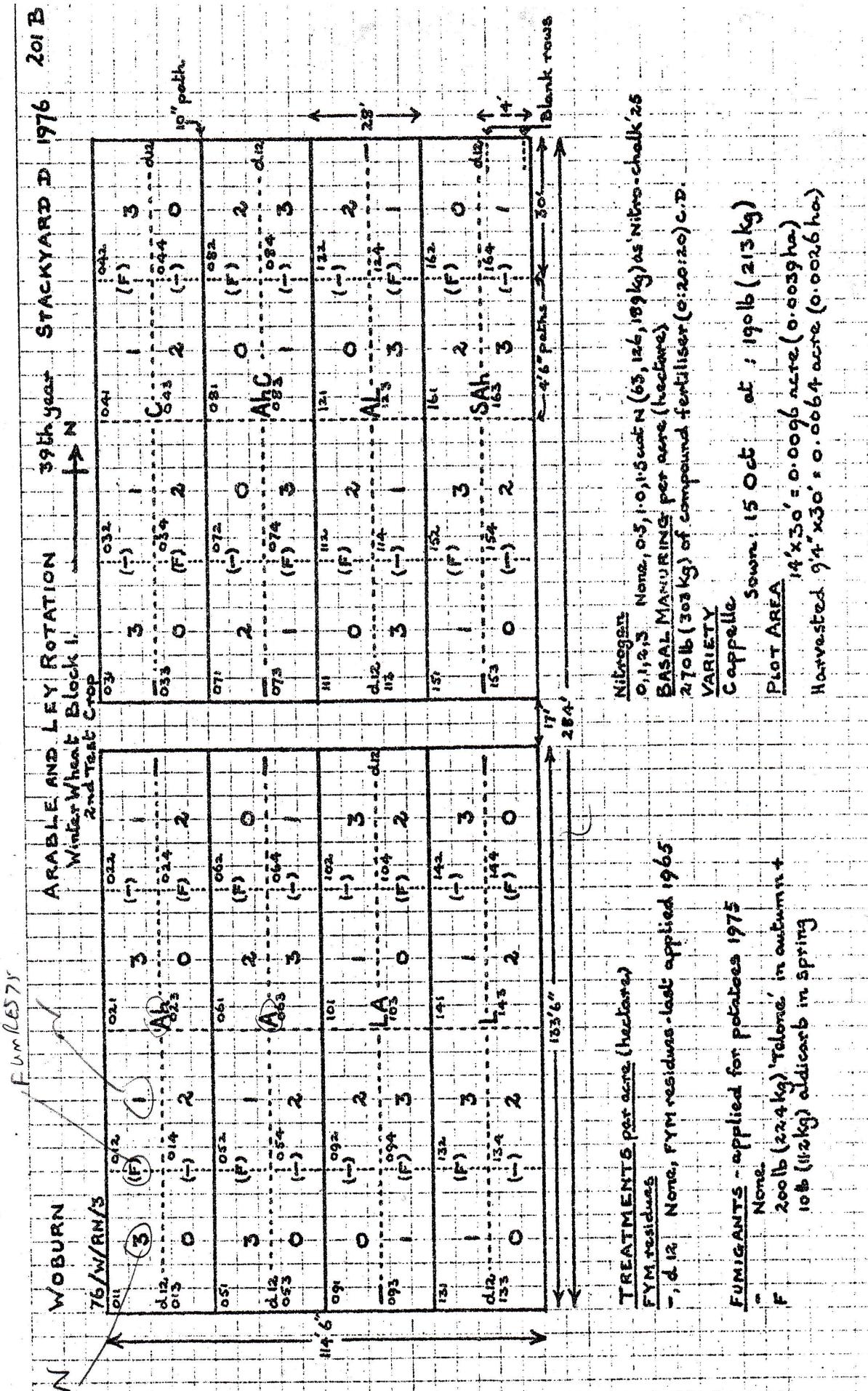
Barley - Julia (dressed with strawmanure) 3600 lb (400kg) compound fertiliser
Oats - Named @ 170 lb (90kg)
All - grass ley

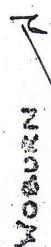
1st year: 75 kg (67lb) N as Nitro-chalk 26, 76 kg (67lb) P2O5, 155 kg (134lb) K2O as (0:14:28) in the seedbed. 75 kg (67lb) N, 48 kg (43lb) K2O as (26:0:16) after each cut except the last.
2nd + years: 75 kg (67lb) P2O5, 150 kg (134lb) K2O as (0:14:28) in winter. 75 kg (67lb) N, 48 kg (43lb) K2O as (25:0:16) in Spring and after each cut except the last.

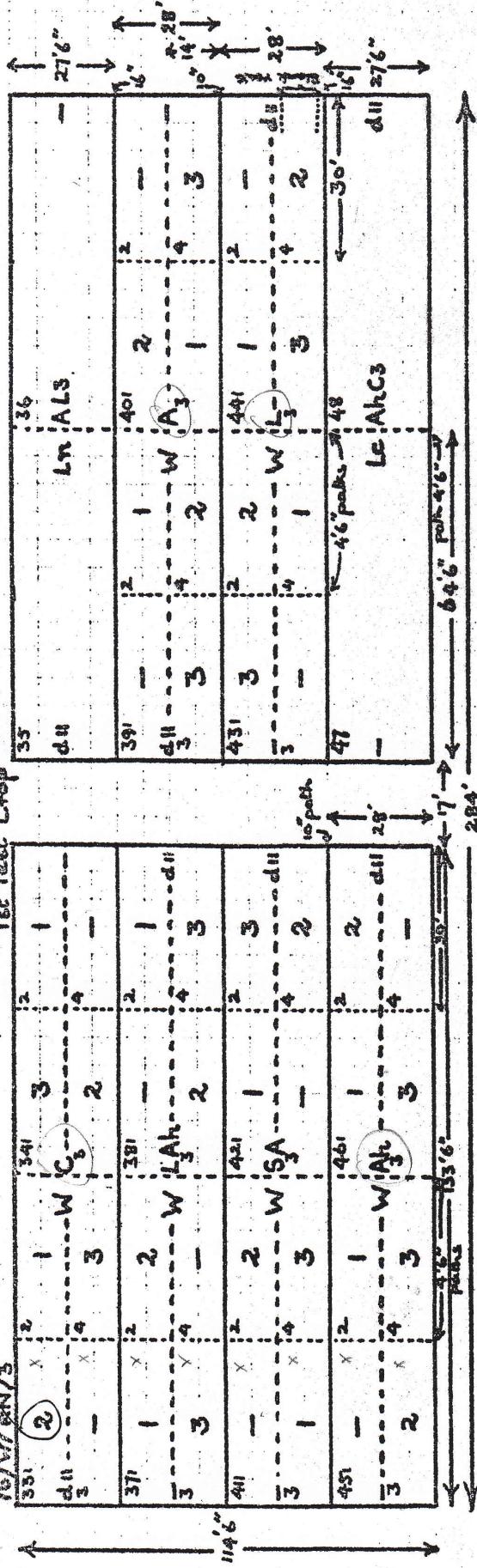
clover/grass ley - as Lc but omitting N. K per cut as mixture of potash.
1st year: 75 kg (67lb) P2O5, 150 kg (134lb) K2O as (0:14:28) in the seedbed.
48 kg (43lb) K2O as Muriate of Potash after each cut except the last.
2nd + years: 75 kg (67lb) P2O5, 150 kg (134lb) K2O as (0:14:28) in winter.
48 kg (43lb) K2O as Muriate of Potash in spring, and after each cut except the last.

Leys drilled : 22 Apr.

Leys sown : 22 Apr.
Leys drilled : 22 Apr.
Leys sown : 22 Apr.



WOBURN 
 ARABLE AND LEY ROTATION 39th year
 Winter Wheat Block 3 N
 1st Test Crop



TREATMENTS per acre (hectare)

FYM residues - none, FYM residues - last applied 1966

- d II - None, FYM residues - last applied 1966

Cropping Winter Wheat Variety: Cargille Sown: 10 Nov
 W @ 190lb (213 kg) (dressed rank bulb, fly &
 fungicide, seed dressing)
 sown in spring 1976 without
 ploughing previous year

Ln Ley with N
 Lc Ley with clover
 Lc Ley with N and clover
 Nitrogen to Winter Wheat
 1, 2, 3, None, 0.5, 1.0, 1.5 cwt N
 (63, 126, 189 kg) as Nitro-chalk 25

BASAL APPLICATION to Winter Wheat only
 Aldicarb at 10kg / ha (9kg / acre)

BASEL MANURING per acre (hectare)

Winter Wheat: 270lb (300kg) compound fertiliser (0:20:20) C.P.

Ley with N: 460lb (500kg) of (0:14:28) 300lb (350kg) of (15:16:16) after
 each cut except the last.

Ley with clover: Nitro-chalk 25 50lb (60kg) of muriate of
 potash after each cut
 except the last.

PLAT ALBS

Winter Wheat: 14' x 30' = 0.0096 acre (0.0039 ha)

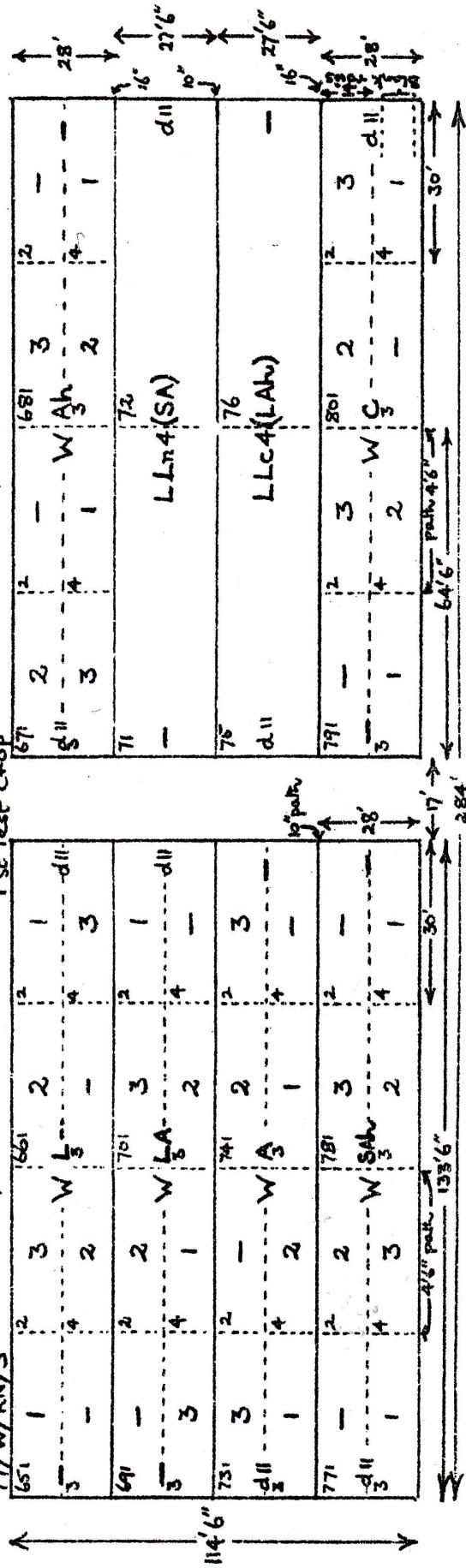
Harvested: 9' 4" x 30' = 0.0064 acre (0.0026 ha)

Ley with N and
 Ley with clover: 27' 6" x 64' 6" = 0.0097 acre (0.0065 ha)

WOBURN Bk 77/W/RN/3		ARABLE AND LEY ROTATION		40th year	
1	01	(AH) B	02	-	
	d13	(AH) B	d13	(C) Lc1	d13
2	05	(A) F	06	-	
	d13	(A) F	d13	(Ah) Lc1*	d13
3	09	(LA) L	10	-	
	d13	(LA) L	d13	(AL) Lln1*	-
4	13	(L) Ln1	14	-	
	d13	(L) Ln1	d13	(SAh) Llc1	d13
5	17	(AH) B	18	-	
	-	(AH) B	d14	(A) F	d14
6	21	(SA) L	22	-	
	d14	(SA) L	d14	(AC) Lc2*	d14
7	25	(AH) L	26	-	
	d14	(AH) L	d14	(LAh) Lln2	d14
8	29	(C) Lc2	30	-	
	-	(C) Lc2	d14	(L) Lm2	d14
9	600' 6"				
10	33	Block 3 2nd Test See Separate plan 20/F/23	14'6"	1st year:	75 kg (67lb) N as Nitro-chalk 25, 75 kg (67lb) K.O.S, 75 kg (67lb) K.O.O as (0:14:28) in winter.
	49	(LA) L	50	2nd + years:	75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in winter.
11	53	(AH) O	54		75 kg (67lb) N, 48 kg (43lb) K.O as (25:0:16)
	-	(AH) O	d15		150kg (134lb) K2O as (0:14:28) in spring and after each cut except the last.
12	57	(L) L	58		75 kg (67lb) N, 48 kg (43lb) K.O as (25:0:16)
	d15	(L) L	d15	(C) Lc3	-
13	61	(AL) L	62	-	150kg (134lb) K2O as (0:14:28) in winter.
	-	(AL) L	d15	(A) O	-
14	65	Block 5 1st Test For plot treatments	17'	2nd + years:	75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in winter.
					48 kg (43lb) K.O as Muriate of potash after each cut except the last.
15	66	Crop Winter Wheat See Separate plan 20/F/20	13'6"		75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in winter. 48 kg (43lb) K.O as Muriate of potash in spring, and after each cut except the last.
					Oats sown at 180 lb (202kg) on 8 Apr
16	284				Bartley sown at 145 lb (162kg) on 8 Apr

→ N S Y M B O L S →
 From 1976 major rotations have been made:-
 Previous Rotations: (A) AH, (L), (C), (Lc1), (Lc2), (Lc3)* not defined on this plan.
 From 1976 AH: Barley B, Barley S, Oats O.
 A: Fallow F, Fallow F, Oats O.
 Lc: 3 years clover/grass ley (no N)
 Ln: 3 years all grass ley (with N)
 Llc & Lln: 8 year leys treated as above.
 * = Ploughed up in less than 8 years initially during phasing in.
 Followed by Test Crops Wheat W, Barley B.
 NOTE: All Lc, Ln, Llc and Lln 2 & 3 failed in 1976 and resown in autumn 1976
 To all crops - dry Residues of manure/straw/ace (38t/ha) FYM last applied n years ago.
 BASAL MANURING per acre (hectare) to treatment crops:
 Barley - Tuna (dressed with animal) 360 lb (400kg) compound
 Oats - Manure
 All - Grass ley
 1st year: 75 kg (67lb) N as Nitro-chalk 25, 75 kg (67lb) K.O.S, 75 kg (67lb) K.O.O as (0:14:28) in winter.
 2nd + years: 75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in spring and after each cut except the last.
 Clover/grass ley as Lr but omitting N, K per cut as Muriate of potash 150kg (134lb) K2O as (0:14:28) in winter.
 1st year: 75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in winter.
 2nd + years: 75 kg (67lb) P2O5, 150kg (134lb) K2O as (0:14:28) in winter. 48 kg (43lb) K.O as Muriate of potash after each cut except the last.
 17' ← 13'6" →
 284' →

WOBURN → N
ARABLE AND LEY ROTATION 40th year Winter Wheat Block 5' Sponsors: K. Evans, AE, Johnston, F. G. Jones, GA, Salt 1st Test Crop



TREATMENTS per acre (hectare)

FYM residues - d. II

None, FYM residues last applied 1967

Cropping Winter wheat variety: Cappelle (dressed)

Anti-Bulb-fly & Fungicide seed dressing.

Sown at 190lb (213kg) Date: 24 Nov

Ley with N { resinom 30lb (34kg)

Ley with Clover } 13 Oct 35lb (39kg)

Nitrogen to winter wheat

- 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N

(63, 126, 189kg) Nas 'Nitra-chalk' 25

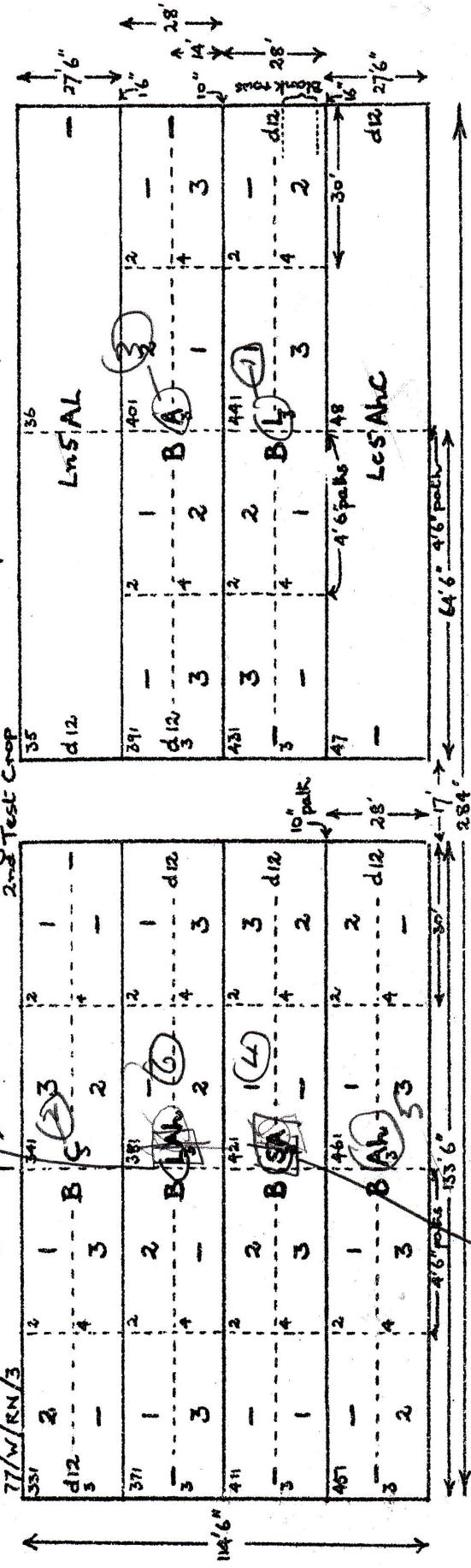
STANDARD APPLICATION to winter wheat only
Alardicarb at 10kg/ha (9lb/acre) applied. 24 Nov

BASAL MANURING per acre (hectare)
Winter Wheat: 300kg (270lb) compound fertiliser (0:20:20) c. D.
Ley with N 74 kg (66lb) N, 47kg (42lb) K₂O as (25:0:16) applied
in the Spring and after each cut except
the last.
Ley with clover: 48 kg (43lb) K₂O as manure of potash in the
spring and after each cut except the last.

PLOT AREA

Winter Wheat: 14' x 30' = 0.0096 acre (0.0039ha)
Harvested: 9'4" x 30' = 0.0064 acre (0.0026ha)
Ley with N and
Ley with clover: 27'6" x 64'6" = 0.0407 acre (0.0165ha)

WOBBURN ARABLE AND LEY ROTATION 40th year
Stackyard 'D' 1977 201 C
Block 3
sponsors: K.Evans, AE.Jackson, F.W.Jones, EA.Salt



TREATMENTS per acre (hectare)

FYM residues - L
- d12 None, FYM residues - last applied 1966

Cropping Barley variety: Julia (dressed with
lime) Solvent: 145 lb (162 kg)
Date: 8 Apr

Ln Ley with N } resown in autumn 1976
Lc Ley with clover } after failure of spring sowing

Nitrogen to Barley
- 1, 2, 3 N rate, 0, 4, 0-8, 1-2 cwt N/acre
(50, 160, 150 kg/Ha) Nitro-chalk 25

BASAL APPLICATION to Barley only
Aldicarb at 10kg/ha (9lb/acre)

BASAL MANURING per acre (hectare)
Barley: 270lb (300kg) compound fertiliser (0.20:20) cd.
Ley with N:
74kg (66lb) N, 47kg (42lb) K₂O as (25:0:16) applied
in the spring and after each cut except the last
Ley with clover: 48kg (43lb) K₂O as muriate of potash in the
spring and after each cut except the last

PLOT AREA
Barley: 14' x 30' = 0.0096 acre (0.0039 ha)
Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)
Ley with N and
Ley with clover: 27'6" x 64'6" = 0.0407 acre (0.0165 ha)

WOBBURN ARABLE AND LEY ROTATION

BLK 78/W/RN/3
1978 201A
41st year STACKYARD D 1978 201A

N → ← Sponsors: A.E.Johnston, F.G.W.Jones, G.A.Salt

1.	05 d 14 (Ah) B	02 -	04 (C) Lc2	d14
09 -	06 (A) F	08 -	(Ah) LLc2*	d14
" d 14	" (A) F	" -	(AL) LLn2*	-
13 -	10 (LA) Ln2	14 d14	(AL) LLn2*	-
13 d 14	14 (L) Ln2	-	(SAh) Llc2	d14
17 -	18 (Ah) O	15 d15	19 (A) O	20 d15
21 d 15	22 (SA) LLc3	-	23 (AC) LLc3*	24 d15
25 d 15	26 (Ah) Ln3*	-	27 (LAh) Ln3	28 d15
29 -	30 (C) Lc3	d15	31 (L) Ln3	32 d15
600' 6"				
33 d 13	34 (C) Lc1	-	35 (AL) Ln6	36 -
37 -	38 (LAh) Ln1	d13	39 (A) F	40 -
3. 41 -	42 (SA) LLc1	d13	43 (L) Ln1	44 d13
45 -	46 (Ah) B	d13	47 (Ah) Llc6	48 d13
4. 49	Block 4 1st Test For Plot treatments		4' 6" → 64' 6" →	14' 6" ↓
5. 65	Block 5 2nd Test For Plot treatments		Crop Barley Winter Wheat See Separate Plan 201B 64	17' ← 133' 6" → 284'
			Crop Barley See Separate plan 201C 80	

SYMBOLS

From 1976 major revisions have been made:-
Previous Rotations: (A), (Ah), (C), (L), (S) not defined on this plan
From 1976 AH: Barley B, Barley B, Oats O.
A : Fallow F, Fallow F, Oats O.

LC : 3 years clover/grass ley (no N)
Ln : 3 years all grass ley (with N)
LLc & LLn 8 year leys treated as above.

* = ploughed up in less than 8 year leys treated as above.
Followed by Test Crops Wheat W, Barley B.

NOTE: All LC, Ln, LLc and LLn 2 & 3 failed in 1976 and resown in autumn 1976.

To all crops: - d in Residues of none visitors/acre (385/ha) FYM
BASAL MANURING per acre (hectare) to treatment crops:
Barley - Porthos (dressed with ethirimol) 360lb (400kg) compound
Oats - Manod

All - Grass ley
Last applied in years ago.

1st year: 75kg (67lb) N as Nitro-chalk 25, 75kg (67lb) P₂O₅ 150kg (134lb) K₂O as (0:14:28) in the seedbed, 75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) after each cut except the last.

2nd + years: 75kg (67lb) P₂O₅ 150kg (134lb) K₂O as (0:14:28) in winter, 75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) in spring, and after each cut except the last.

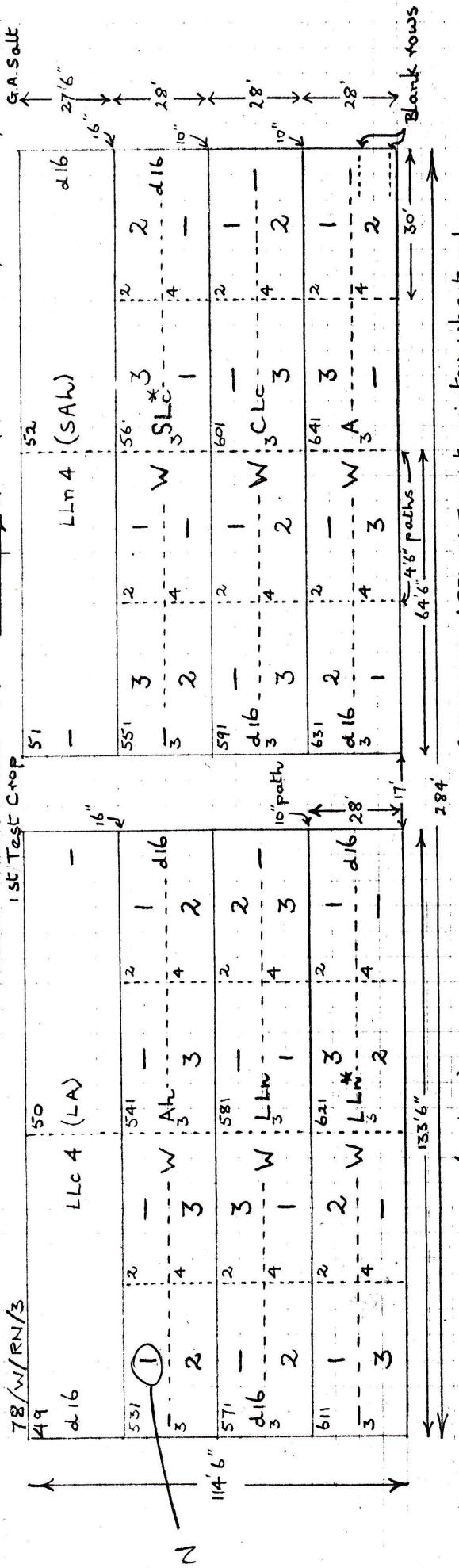
Clover/grass ley as LN, but omitting N, K per gal as Muriate of potash
1st year: 75kg (67lb) P₂O₅ 150kg (134lb) K₂O as (0:14:28) in the seedbed, 48kg (43lb) K₂O as Muriate of potash after each cut except the last.

2nd + years: 75kg (67lb) P₂O₅ 150kg (134lb) K₂O as (0:14:28) in winter, 48kg (43lb) K₂O as Muriate of potash after each cut except the last.

Barley sown at 145lb (162kg)
Oats sown at 180lb (202kg)

Date: Redrilled 7 Apr
Date: 13 Mar

WOBURN ARABLE AND LEY ROTATION 41st year
Winter wheat Block 4 N Sponsors: K Evans, A.E. Johnston, F.G.W. Jones,
G.A. Salt 1st Test Crop



TREATMENTS per acre (hectare)

- d16 None, FYM residues last applied 1962

STANDARD APPLICATION to winter wheat only

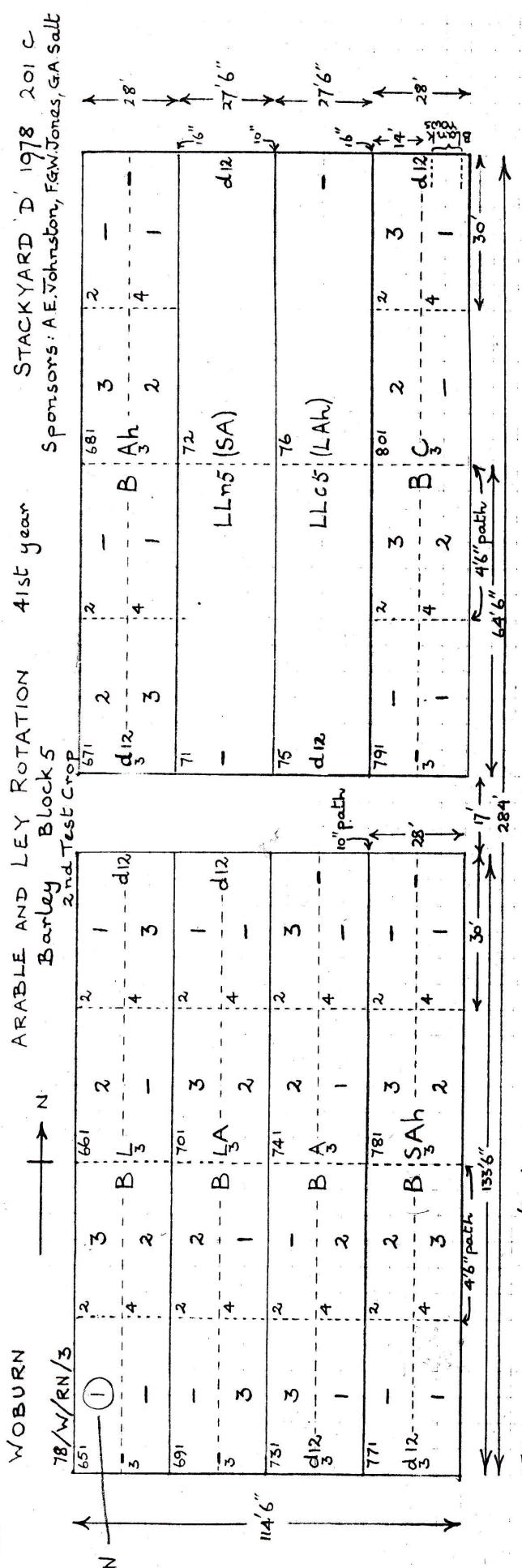
Aldicarb at 10kg/ha (9lb/acre) applied by farm

BASAL MANURING per acre (hectare)

Winter Wheat: 314 kg (280lb) compound fertiliser (0:20:20) + 2
Ley with N 75 kg (67lb) P₂O₅, 150 kg (134lb) K₂O as (0:14:28) in winter.
Ley with N 75 kg (67lb) N, 48 kg (43lb) K₂O as (25:0:16) applied
in spring and after each cut except the last.
Ley with clover: 75 kg (67lb) P₂O₅, 150 kg (134lb) K₂O as (0:14:28) in winter.
48 kg (43lb) K₂O as muriate of potash in the spring
and after each cut except the last.

Nitrogen to Winter Wheat
None, 0.5, 1.0, 1.5 cwt N
(63, 126, 189kg) N as Nitro-chalk 25

PLOT AREA
Winter Wheat: 14' x 30' = 0.0096 acre (0.0039ha)
Harvested: 9'4" x 30' = 0.0064 acre (0.0026ha)
Ley with N and
Ley with clover: 27'6" x 64'6" = 0.0407 acre (0.0165ha)



TREATMENTS per acre (hectare)

FYM residues - last applied 1967
 - , d12, None, FYM residues - last applied 1967

Cropping Barley Variety: Porthos (dressed with ethirimol)
 Sown at: 145 lb/ha Date: 3 April

LLn5 Ley with N Resown 13 Oct 1976
 LLc5 Ley with clover 13 Oct 1976

Nitrogen to Barley -
 - , 1, 2, 3 Nitro, 0.4, 0.8, 1.2 cut N/acre
 (50, 100, 150 kg/ha) N as Nitro-chalk' 25

STANDARD APPLICATION to Barley only
 Aldicarb at 10kg/ha (9lb/acre)

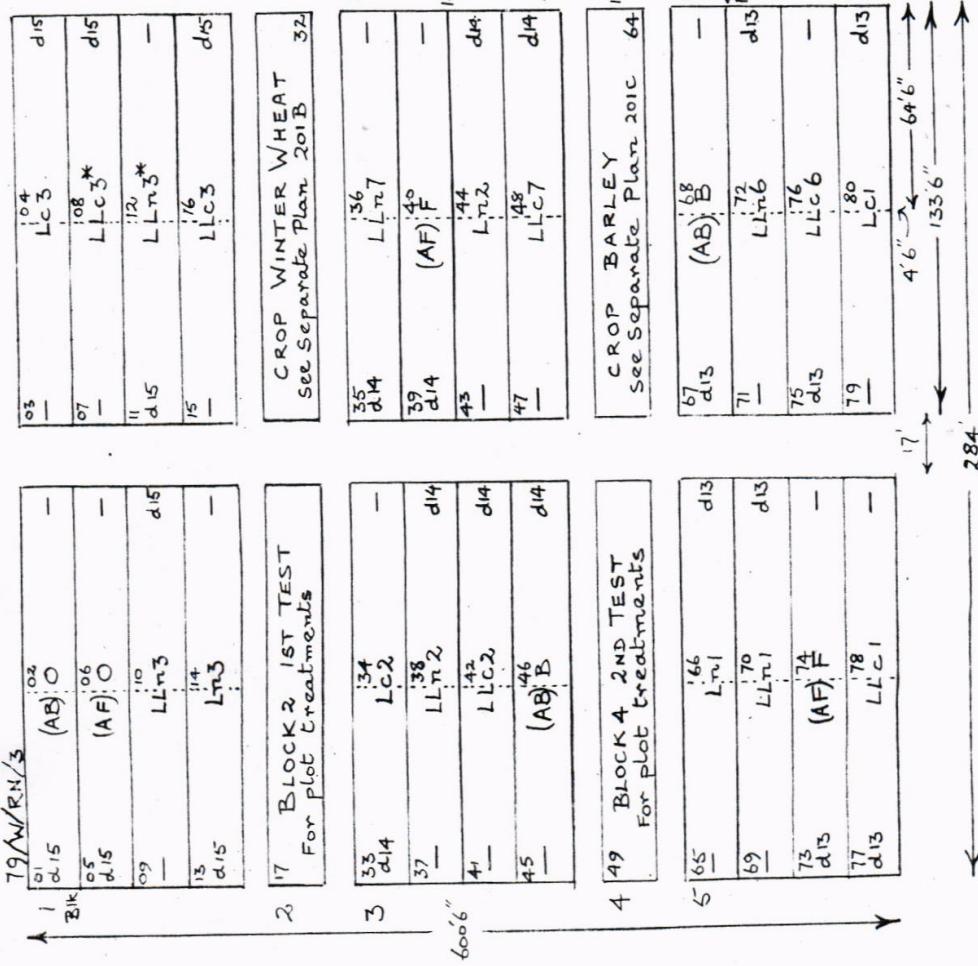
BASEL MANURING per acre (hectare)

Barley: 270 lb (300 kg) compound fertiliser (0:20:20) C.D.
 Lay with N: 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) applied in the
 spring and after each cut except the last
 Ley with clover: 48 kg (43 lb) K₂O as muriate of potash in the spring
 and after each cut except the last.

PLOT AREA

Barley: 14' x 30' = 0.0096 acre (0.0039 ha)
 Harvested: 9' 4" x 30' = 0.0064 acre (0.0026 ha)
 Lay with N and
 Lay with clover 27' 6" x 64' 6" = 0.0407 acre (0.0165 ha)

WOBURN ARABLE AND LEY ROTATION 1979 - 201A
Sponsor: A.E. Johnston, F.G.W. Jones, G.A. Salt.



SYMBOLS

3 year treatment crops before wheat (1st), Barley (2nd) test crops
 AB : Barley B, Barley B, Oats O.
 AF : Fallow F, Fallow F, Oats O.
 Lc : 3 years clover/grass ley (No N)
 Ln : 3 years all grass ley (with N)

8 year ley

LLC : clover/grass ley (No N)
 LLn : all grass ley (with N)

* = ploughed up in less than 8 years initially, during phasing in.
 To all crops: - d.m. Residues of none v. 15 tons/acre (38 t/ha)

FYM last applied n years ago.

VARIETIES

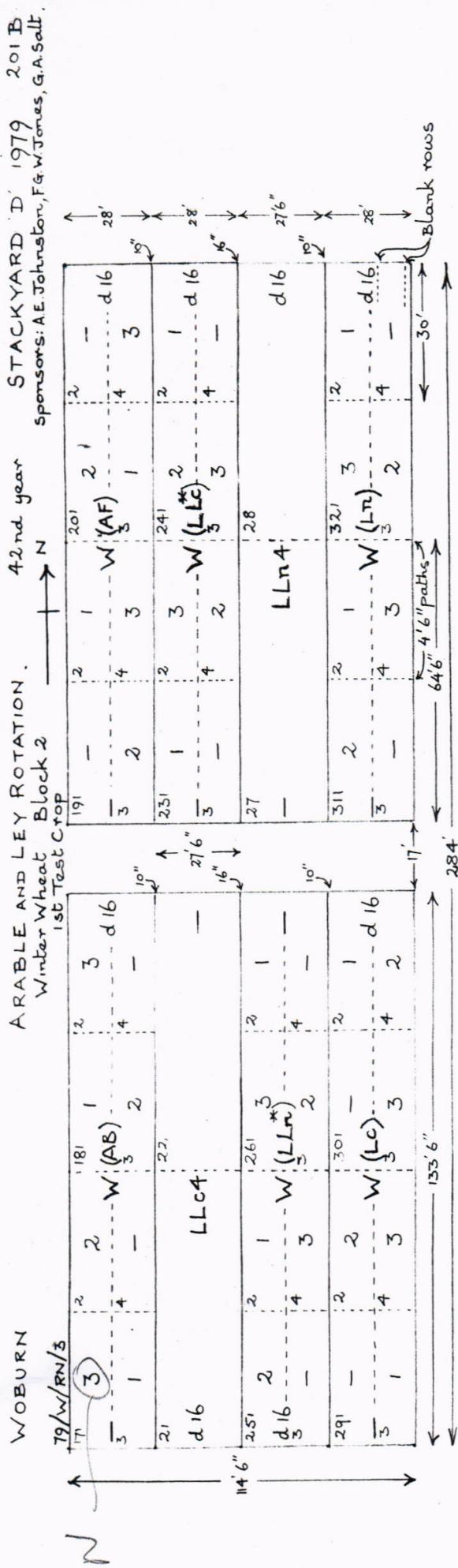
Barley (dressed with ethamonal) - Porthos sown at 140lb (157kg) Date: 3 May
 Oats - Manod Sown at

BASAL MANURING per acre (hectare) to treatment crops

Barley and Oats 360lb (400kg) compound fertiliser (20:14:14) c.d.

All Grass ley

1st year: 75 kg (67 lb) N as Nitro-chalk' 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O
 as (0:14:28) in the seedbed, 75 kg (67 lb) N, 48 kg (43 lb) K₂O
 as (25:0:16) after each cut except the last.
 2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter
 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) in spring, and after
 each cut except the last.



TREATMENTS per acre (hectare)
-, d16 None, FYM residues - last applied 1963

CROPPING
Winter wheat Variety: Flinders
Sown at: 160kg Date: 9 Nov.

Other crop symbols - see main plan

Nitrogen to Winter wheat
-, 1, 2, 3 None, 0.5, 1.0, 1.5 cut N
(63, 126, 189kg) N

* Previously in the alternating rotation

STANDARD APPLICATION to winter wheat only
Aldicarb at 10 kg/ha (9lb/acre) applied by farm

BASAL MANURING per acre (hectare)

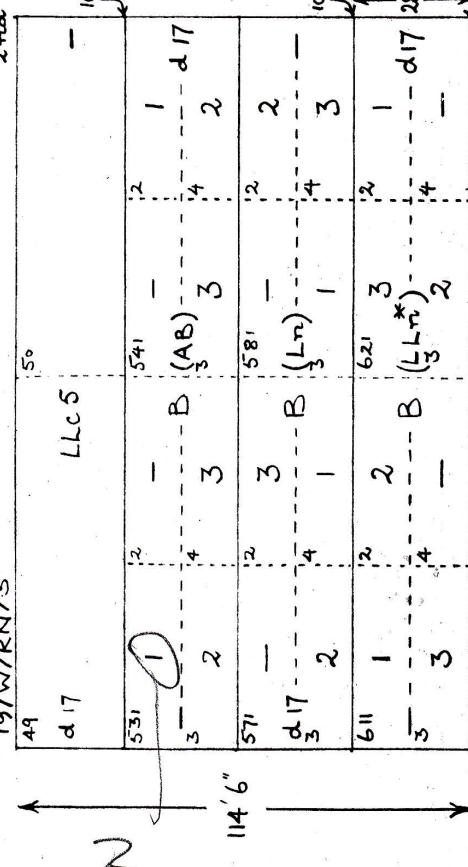
Winter Wheat: 314kg (280lb) compound fertiliser (0:20:20) CD
Ley with N : 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in winter.
75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) applied
in spring and after each cut except the last.
Ley with clover: 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in winter.
48kg (43lb) K₂O as muriate of potash in the spring
and after each cut except the last.

PLOT AREA
Winter Wheat : 14' x 30' = 0.0096 acre (0.0039 ha)
Harvested : 9'4" x 30' = 0.0064 acre (0.0026 ha)
Ley with N and
Ley with clover: 27'6" x 64'6" = 0.0407 acre (0.0165 ha)

WOBURN

ARABLE AND LEY ROTATION 42nd year STACKYARD 'D' 1979 201c
Barley Block 4 Sponsors: A.E. Johnston, F.G.W. Jones, G.A. Salt

79/RN/3



TREATMENTS per acre(hectare)
- d 17 None, FYM residues - last applied 1962

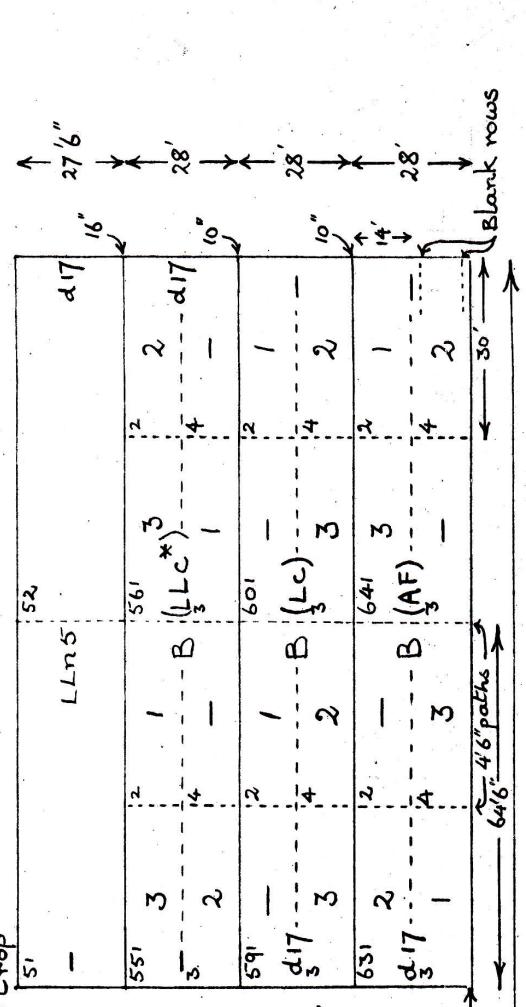
Cropping Barley Variety: Porthos (dressed with ethirimol)
Sown at: 140lb (137kg) Date: 3 May
8 year Grass ley with N Resown 13 Oct 1976
3 year treatment cropping: Barley, barley, Oats
3 year treatment cropping: Fallow, Fallow, Oats
Ley with N Previous alternating rotations.
Ley with clover ultimately 8 yr leys treated as 3 yr leys (4 in)
during phasing in:
(Lc)
(Lc*)
(Lc*)
(Lc*)

3 year grass ley with N.

3 year grass/clover ley, No N.

Nitrogen to Barley

- 1, 2, 3 None, 0.4, 0.8, 1.2 cwt N/acre
(None 50, 100, 150 kg/ha) N as 'Nitro-chalk' 26



STANDARD APPLICATION to Barley only
Aldicarb at 10kg/ha (9lb/acre)

Basal Manuring per acre (hectare)

Barley: 270lb (300kg) compound fertiliser (0:20:20) C.D
Ley with N: 75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) applied in
the spring and after each cut except the last.
Ley with clover: 48kg (43lb) K₂O as manure of Potash in the
spring and after each cut except the last.

Plot Area

Barley = 14' x 30' = 0.0096 acre (0.0039 ha)
Harvested = 9'4" x 30' = 0.0064 acre (0.0026 ha)
Ley with N and
Ley with clover 27" x 64" = 0.0407 acre (0.0165 ha)