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RESEARCH

# Collection of Plans for the Woburn Organic Manuring Experiment

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## W/RN/12 - Woburn Organic Manuring 1975 - 1979

### Rothamsted Research

Rothamsted Research (1966-1988) *W/RN/12 - Woburn Organic Manuring 1975 - 1979* ; Collection Of Plans For The Woburn Organic Manuring Experiment, pp 10 - 14

WOBURN

ORGANIC MANURING EXPERIMENT

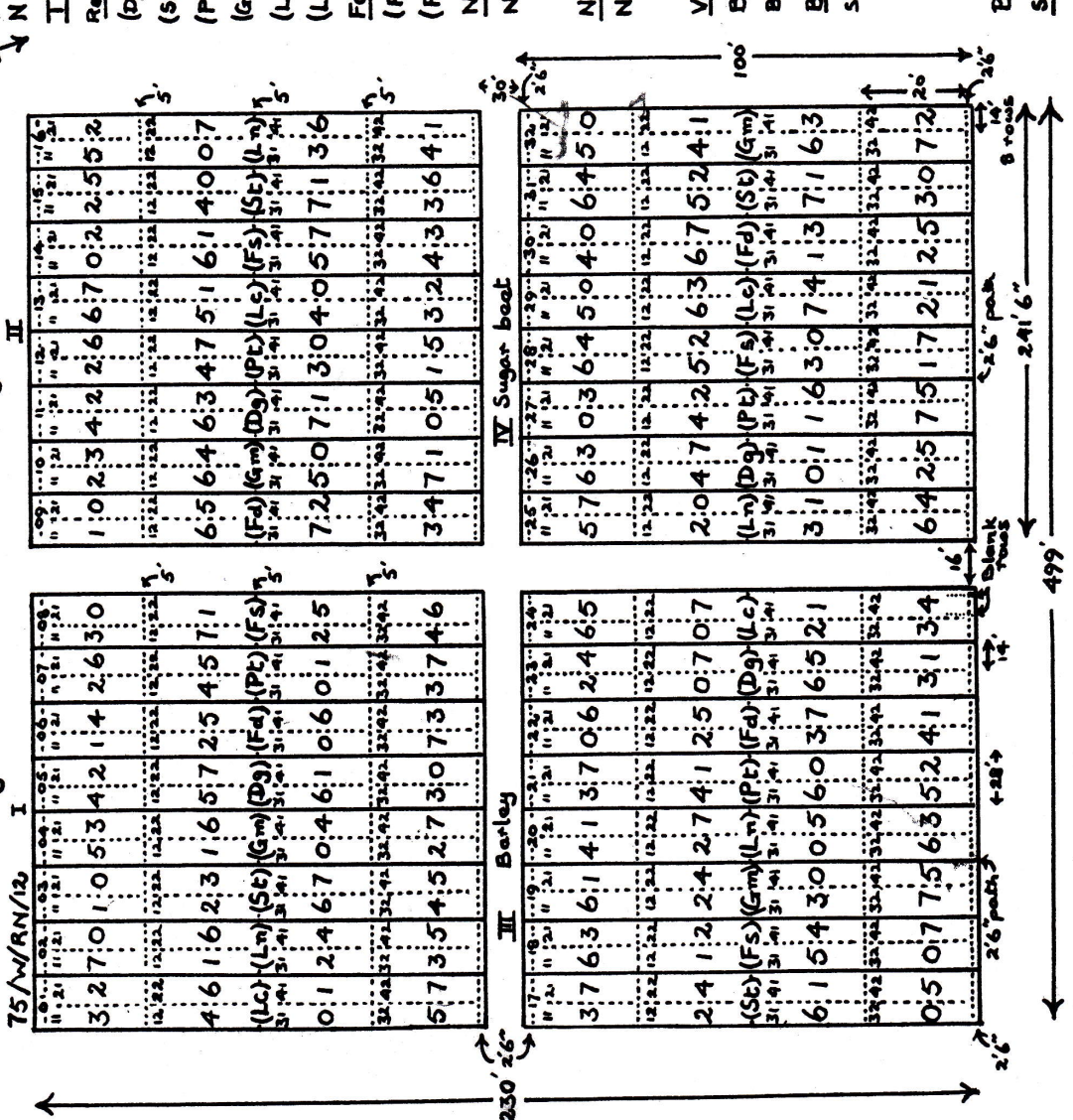
11th year

Stackyard B 1975

Sponsor: G.E.G. Mattingly

Sugar beet

Barley



**Barley**

**I**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**II**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**III**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**IV**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**Sugar beet**

**I**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**II**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**III**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**IV**

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

**TREATMENTS** per acre (hectare)  
 Residues of Organic Manures (applied annually 1965-71) and Ley (sown 1965)  
 (Dg) 4 tons (10 tonnes) (DM) FYM, (16 tons [40 tonnes] FYM)  
 (St) 3 tons (7.5 tonnes) (DM) Straw  
 (Pt) 3 tons (7.5 tonnes) (DM) Peat  
 (Gm) Green Manure  
 (Lc) Grass-clover ley { ploughed up 1971 Blocks I & III  
 (Ln) Grass ley with N { 1972 Blocks I & IV

**Fertilisers**  
 (Fd) P, K, Mg equivalent to Dg (High PKMg)  
 (Fs) K, Mg equivalent to straw with P (Low PKMg)  
 Nitrogen to Barley 1975 Blocks I & III  
 No - None, N1-0.2, N2-0.4, N3-0.6, N4-0.8, N5-1.0, N6-1.19, N7-1.39 e.L.N.00  
 0 25 50 75 100 125 150 175 kg NITRO-CHALK 25  
 Nitrogen to Sugar beet 1975 Blocks II & IV  
 No - None, N1-0.3, N2-0.6, N3-0.9, N4-1.3, N5-1.6, N6-1.9, N7-2.2 cut. N.00  
 0 40 80 120 160 200 240 280 kg NITRO-CHALK 25

**VARIETIES**  
 Blocks I & III Barley - Julie sown at: 140 lb (157 kg) Date: 4 Mar  
 Blocks II & IV Sugar beet - Klein E sown at: 5 lb (5.6 kg) Date: 29 Apr

**BASAL MANURING** per acre (hectare)  
 Sugar beet - 0.9 cut (114 kg) P<sub>2</sub>O<sub>5</sub> as Superphosphate, 1.4 cut (180 kg) K<sub>2</sub>O as  
 muriate of potash ploughed in in autumn. 510 lb (572 kg) COMPOUND  
 fertiliser (0:20:20), 891 lb (100 kg) MgO as Epsom salts in the seed bed  
 7.3 lb (8.2 kg) B<sub>2</sub>O<sub>3</sub> as 'Solubor' in June. 2 tons (5 tonnes) CHALK  
 IN AUTUMN

Barley - 255 lb (286 kg) compound fertiliser (0:20:20) c.i.b.  
 Sub-plot area  
 14' x 26' = 0.0064 acre (0.0026 ha)

**WOBURN ORGANIC MANURING EXPERIMENT**      12th year      **STACKYARD B 1976**      204  
 Sponsor: G.E.G. Mattingly

**Winter Oats**

76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96
(3)(2)(7)(0)	(0)(6)(5)(4)(2)	(0)(4)(3)(6)(3)(0)	(1)(6)(2)(3)(0)(6)(5)(7)	(3)(5)(7)(3)(5)(4)(5)(10)	(1)(L)(S)(G)(D)(P)(F)(S)	(0)(1)(2)(4)(0)(7)(0)(4)(5)(0)(2)(5)	(5)(7)(9)(5)(0)(5)(3)(7)(3)(7)(6)(6)	(1)(7)(1)(19)(20)(21)(22)(23)(24)	(3)(7)(6)(3)(6)(0)(6)(0)(6)(9)(6)(6)	(9)(4)(0)(2)(4)(9)(0)(0)(2)(5)(0)(7)(0)(7)	(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)	(9)(0)(6)(3)(9)(6)(6)(0)(0)(0)(6)(2)(0)	(0)(5)(0)(7)(7)(5)(6)(3)(6)(0)(3)(0)(3)(6)						

**Barley**

76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96													
1:0	2:3	4:2	2:6	6:7	0:2	2:5	5:2	6:5	6:4	6:3	4:7	5:1	6:1	4:0	0:7	(F)(G)(D)(P)(L)(C)(F)(S)(L)	7:2	5:0	7:1	3:0	4:0	5:7	7:1	3:6	3:4	7:1	0:5	1:5	3:2	4:3	3:6	4:1

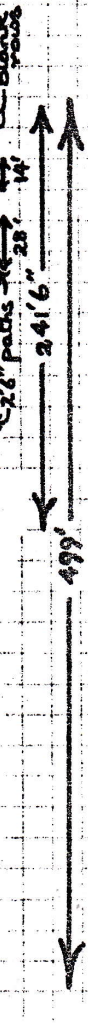
**IV Barley**

76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96													
5:7	6:3	0:3	6:4	5:0	4:0	6:4	5:0	2:0	4:7	4:2	5:2	6:3	6:7	5:2	4:1	(L)(D)(P)(F)(L)(C)(F)(S)(G)	3:1	0:1	1:6	3:0	7:4	1:3	7:1	6:3	6:4	2:5	7:5	1:7	2:1	2:5	3:0	7:2

**TREATMENTS** per acre (hectare)  
Residues of Organic Manures (applied annually 1965-77) and Ley (Sown 1965)  
 (Dg) 4 tons (10 tonnes) DM FYM, (16 tons (40 tonnes) FYM)  
 (St) 3 tons (7.5 tonnes) DM Straw  
 (Pt) 3 tons (7.5 tonnes) DM Peat  
 (Gm) Green Manure  
 (Ln) Grass-clover ley { ploughed up 1971 Blocks I & II  
 (Lc) Grass ley with N { 1972 Blocks II & IV  
**Fertilisers**  
 (Fd) P, K, Mg equivalent to Dg (High P, K, Mg)  
 (Fs) K, Mg equivalent to straw with P (Low P, K, Mg)  
 Nitrogen to Barley 1975 Blocks I & II  
 No-N, N1-0-2, N2-0-4, N3-0-6, N4-0-8, N5-1-0, N6-1-19, N7-1-29 cast N on  
 0 25 50 75 100 125 150 175 kg Nitro-chalk 25  
Residues of Nitrogen to Barley 1975 Blocks I & II W. S. Oct 1975  
 (0) -None (P) -0.2 (2) -0.4 (3) -0.6 (4) -0.8 (5) -1.0 (6) -1.19 (7) -1.39 cast N  
 0 25 50 75 100 125 150 175 kg N

**VARIETIES** (200kg)  
 Blocks I & II Winter Oats - Peniarth Sown at 20lb Date: 27 Oct  
 Blocks III & IV Barley - Julia Sown at 145 lb (16.2kg) Date: 8 Mar  
**BASAL MANURING** per acre (hectare)  
 Winter Oats - 2.70 lb (303 kg) compound fertiliser (0:20:20) c.o.  
 Spring Barley - 2.60 lb (291 kg) compound fertiliser (0:20:20) c.o.

**SUB-PLOT AREA**  
 14' x 20' = 0.0664 acre (0.0266 ha)



15th year STACKYARD B' 1977 201  
 Sponsor: G.E.G. Mattingly

ORGANIC MANURING EXPERIMENT

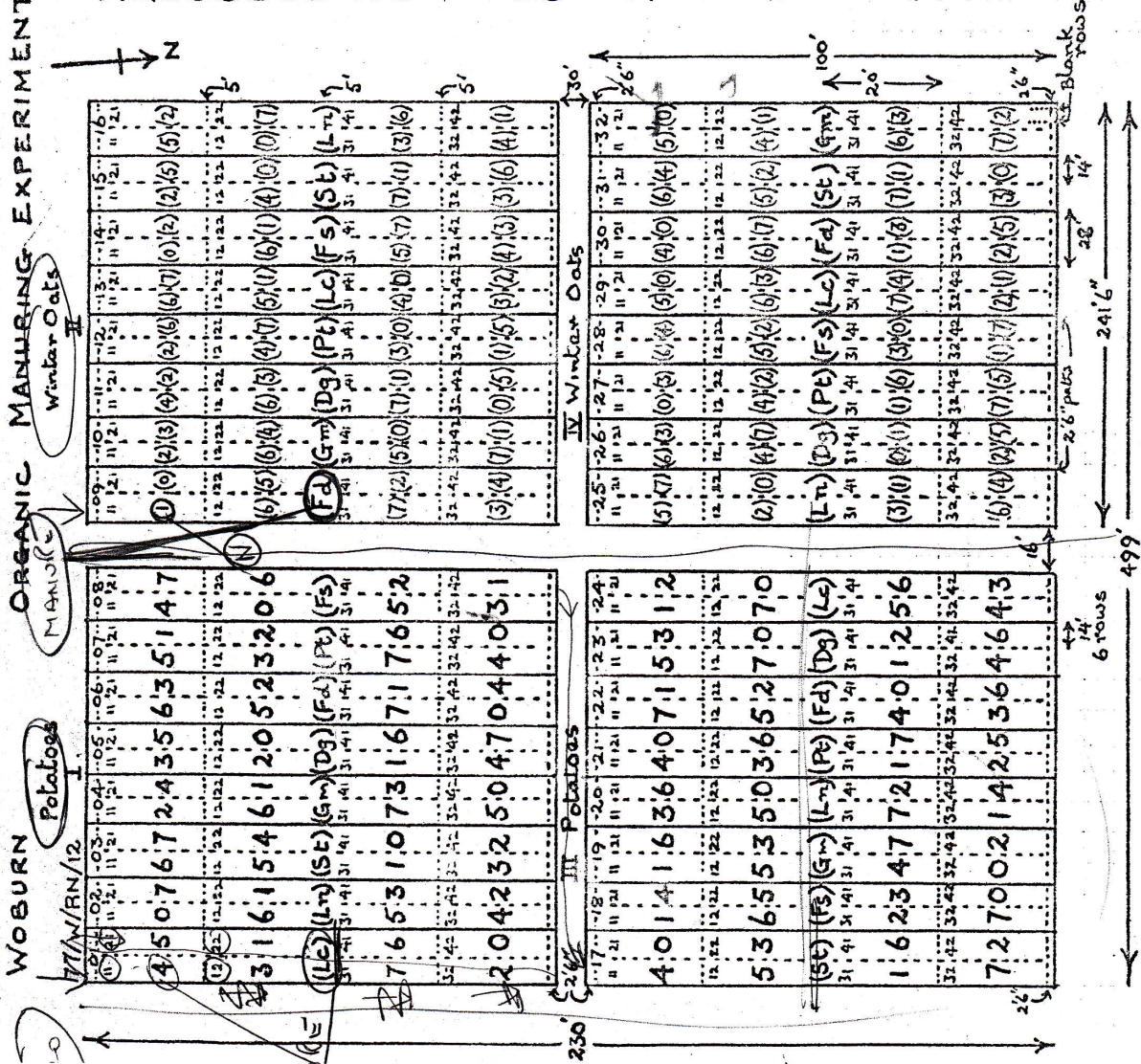
WOBURN 1977/78/79/80  
 Potatoes  
 MANURE  
 Winter Oats

0.4	0.2	0.3	0.4	0.5	0.6	0.7	0.8
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
4.5	0.7	6.7	2.4	3.5	6.3	5.1	4.7
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
3.1	6.1	5.4	6.1	2.0	5.2	3.2	0.6
(Lc)	(Lm)	(St)	(Gm)	(Dg)	(Fd)	(Pt)	(Fs)
7.6	5.3	1.0	7.3	1.6	7.1	7.6	5.2
2.0	4.2	3.2	5.0	4.7	0.4	4.0	3.1
1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4
4.0	1.4	1.6	3.6	4.0	7.1	5.3	1.2
5.3	6.5	5.3	5.0	3.6	5.2	7.0	7.0
(St)	(Fs)	(Gm)	(Lm)	(Pt)	(Fd)	(Dg)	(Lc)
1.6	2.3	4.7	7.2	1.7	4.0	1.2	5.6
7.2	7.0	0.2	1.4	2.5	3.6	4.6	4.3

0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
0.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
6.0	5.0	4.0	3.0	2.0	1.0	0.0	0.0
(Fd)	(Gm)	(Dg)	(Pt)	(Lc)	(Fs)	(St)	(Lm)
7.2	5.0	7.0	3.0	4.0	5.0	7.0	3.0
3.2	4.2	3.2	4.2	3.2	4.2	3.2	4.2
3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
5.0	4.0	3.0	2.0	1.0	0.0	0.0	0.0
1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1
0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
(Lm)	(Dg)	(Pt)	(Fs)	(Lc)	(Fd)	(St)	(Gm)
3.2	4.2	3.2	4.2	3.2	4.2	3.2	4.2
3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
1.6	2.3	4.7	7.2	1.7	4.0	1.2	5.6

TREATMENTS per acre (hectare)  
 Residues of Organic Manures (applied annually 1965-7) & lay down (1965)  
 (Dg) 4 tons (10 tonnes) (D.M.) FYM, (16 tons [40 tonnes] FYM)  
 (St) 3 tons (7.5 tonnes) (D.M.) Straw  
 (Pt) 3 tons (7.5 tonnes) (D.M.) Peat  
 (Gm) Green Manure  
 (Lc) Grass-clover ley { ploughed up 1971 Blocks I & III  
 (Lm) Grass ley with N 1972 Blocks II & IV  
 Fertilisers  
 (Fd) P, K, Mg equivalent to Dg (High PKMg)  
 (Fs) K, Mg equivalent to Straw with P (Low PKMg)  
 Nitrogen to Potatoes 1977 Blocks I & III  
 0 - None, 1-0.6, 2-1.19, 3-1.79, 4-2.39, 5-2.99, 6-3.58, 7-4.18 cwt N  
 0 75 150 225 300 375 450 525 kg N  
 Residues of Nitrogen to Barley 1976 Blocks II & IV w. Oct 1977  
 (D) - None, (1)-0.2, (2)-0.4, (3)-0.6, (4)-0.8, (5)-1.0, (6)-1.19, (7)-1.39 cwt N  
 0 25 50 75 100 125 150 175 kg N

VARIETIES  
 Blocks I & III Potatoes - Fertiland Crown Planted;  
 Blocks II & IV Winter Oats - Peniarth sown @ 180 lb (82) Date: 8 Nov  
 BASAL MANURING per acre (hectare)  
 Winter Oats - 260 lb (291 kg) compound fertiliser (0:20:20) C/O  
 Potatoes - 1020 lb (1123 kg) compound fertiliser (0:20:20) in autumn, 1075 lb (1205 kg) compound fertiliser (0:20:20) in the seedbed plus 336 lb (377 kg) Kieserite  
 SUB-PLOT AREA  
 14' x 20' = 0.0064 acre (0.0026 ha)



**ORGANIC MANURING EXPERIMENT 14th year STACKYARD 'B' 1978 204**  
 Sponsor: G.E.G. Mattingly

**WOBURN**  
 Winter Wheat

78/W/RN/12	01-02	03	04	05	06	07	08
(Lc)	4.5	0.7	6.7	2.4	3.5	6.3	5.1
(Lc)	3.4	6.1	5.4	6.1	2.0	5.2	3.2
(Lc)	7.6	5.3	1.0	7.3	1.6	7.1	7.6
(Lc)	2.0	4.2	3.2	5.0	4.7	0.4	0.3
(Lc)	5.3	6.5	5.3	5.0	3.6	5.2	7.0
(Lc)	4.0	1.4	1.6	3.6	4.0	7.1	5.3
(Lc)	2.0	1.4	1.6	3.6	4.0	7.1	5.3
(Lc)	5.3	6.5	5.3	5.0	3.6	5.2	7.0
(Lc)	4.0	1.4	1.6	3.6	4.0	7.1	5.3
(Lc)	2.0	1.4	1.6	3.6	4.0	7.1	5.3
(Lc)	5.3	6.5	5.3	5.0	3.6	5.2	7.0

78/W/RN/12	09	10	11	12	13	14	15
(Lc)	6.7	5.4	3.5	5.1	1.0	7.5	5.2
(Lc)	1.2	1.3	1.4	3.0	2.6	1.6	3.7
(Lc)	0.5	2.7	0.6	4.7	3.7	2.0	0.6
(Lc)	4.3	0.6	7.2	6.2	4.5	3.4	4.1
(Lc)	2.5	2.6	2.7	2.8	2.9	3.0	3.1
(Lc)	2.0	1.4	7.4	1.3	2.7	3.7	1.3
(Lc)	5.7	3.0	3.5	2.5	1.4	1.0	2.5
(Lc)	4.6	7.6	6.1	4.7	0.3	6.4	0.6
(Lc)	1.3	5.2	0.2	6.0	5.6	5.2	4.7

**TREATMENTS per acre (hectare)**  
 Residues of Organic Manures (applied annually 1965-71) 18 Ley (sown 1965)  
 (Dg) 4 tons (10 tonnes) (DM) FYM, (16 tons [40 tonnes] FYM)  
 (St) 3 tons (7.5 tonnes) (DM) Straw  
 (Pt) 3 tons (7.5 tonnes) (DM) Peat  
 (Gm) Green Manure  
 (Lc) Grass-clover ley { ploughed up 1971 Blocks I & II  
 (Lm) Grass ley with N { 1972, Blocks II & IV  
 Fertilisers

(Fd) P, K, Mg equivalent to Dg (High P, K, Mg)  
 (Fs) K, Mg equivalent to Straw with P (Low P, K, Mg)  
 Nitrogen to Winter Wheat 1978 Series I & II

0-None, 1-0.24, 2-0.48, 3-0.72, 4-0.96, 5-1.20, 6-1.44, 7-1.68 cut N  
 0 30 60 90 120 150 180 210 kg N  
 Nitrogen to Potatoes 1978 Series I & II

0-None, 1-0.6, 2-1.19, 3-1.79, 4-2.39, 5-2.99, 6-3.58, 7-4.18 cut N  
 0 75 150 225 300 375 450 525 kg N

**VARIETIES**  
 Block I & II Winter Wheat - Maris Huntsman sown at: 19.0 lb (20.0 kg)  
 Block II & IV Potatoes - Pentland Crown Planted: 2.4 Apr. [Date: 14 Nov

**BASAL MANURING per acre (hectare)**  
 Winter Wheat - 0.9 cut (14 kg) P<sub>2</sub>O<sub>5</sub> as superphosphate  
 0.48 cut (60 kg) K<sub>2</sub>O as Muriate of potash  
 Potatoes - 1080 lb (1210 kg) compound fertiliser (0:20:20  
 in autumn, 1080 lb (1210 kg) compound fertiliser  
 (0:20:20) in the seedbed plus 372 lb (417 kg)  
 Kieserite

**SUB-PLOT AREA**  
 14' x 20' = 0.0064 acre (0.0026 ha)

**ORGANIC MANURING EXPERIMENT** 15th year

Stackyard B 1979  
Sponsor: G.E.G. Mattingly

**WOBURN** Sugar beet & Grass/Clover

01	02	03	04	05	06	07	08
11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
4.5	0.7	6.7	3.5	6.3	2.0	5.2	0.6
12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
3.1	6.1	5.4	3.1	6.1	5.4	3.1	6.1
(Lc)	(Lm)	(St)	(Dg)	(Fd)	(Lc)	(Fg)	(Fs)
31.41	31.41	31.41	31.41	31.41	31.41	31.41	31.41
7.6	5.3	1.0	1.6	7.1	5.2	3.1	
32.42	32.42	32.42	32.42	32.42	32.42	32.42	
2.0	4.2	3.2	4.7	0.4	3.1		

**III Sugar beet & Grass/Clover**

09	10	11	12	13	14	15	16
11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
4.0	1.4	5.3	6.5	7.0	7.0	7.0	7.0
12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
3.1	6.5	7.2	7.0	7.0	7.0	7.0	7.0
(St)	(Fs)	(Lm)	(Lc)	(Dg)	(Fd)	(Dg)	(Lc)
31.41	31.41	31.41	31.41	31.41	31.41	31.41	31.41
1.6	2.3	7.2	7.2	7.2	7.2	7.2	7.2
32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42
7.2	7.0	4.3	4.6	4.6	4.3		

**Winter Wheat**

17	18	19	20	21	22	23	24
11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
4.0	1.4	5.3	6.5	7.0	7.0	7.0	7.0
12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
3.1	6.5	7.2	7.0	7.0	7.0	7.0	7.0
(St)	(Fs)	(Lm)	(Lc)	(Dg)	(Fd)	(Dg)	(Lc)
31.41	31.41	31.41	31.41	31.41	31.41	31.41	31.41
1.6	2.3	7.2	7.2	7.2	7.2	7.2	7.2
32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42
7.2	7.0	4.3	4.6	4.6	4.3		

**IV Winter Wheat**

25	26	27	28	29	30	31	32
11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
2.0	1.4	7.4	1.3	2.7	3.7	1.3	2.7
12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
5.7	3.0	3.5	2.5	1.4	1.0	2.5	3.6
(Lm)	(Dg)	(Pt)	(Fs)	(Lc)	(Fd)	(St)	(Gm)
31.41	31.41	31.41	31.41	31.41	31.41	31.41	31.41
4.6	7.6	6.1	4.7	0.3	6.4	0.6	1.4
32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42
1.3	5.2	0.2	6.0	5.6	5.2	4.7	0.5

**TREATMENTS per acre (hectare)**  
 Residues of Organic Manures (applied annually 1965-1967) 11d Ley (SOAN 1965)  
 (Dg) 4 tons (10 tonnes) FYM (16 tons [20 tonnes] FYM)  
 (St) 3 tons (7.5 tonnes) (DM) Straw  
 (Pt) 3 tons (7.5 tonnes) (DM) Peat  
 (Gm) Green Manure  
 (Lc) Grass-clover ley { ploughed up 1971 Blocks I & II  
 (Mn) Mixed Grass ley with N { 1972 Block II & IV  
 Fertilisers  
 (Fd) P, K, Mg equivalent to Dg (High PK, Mg)  
 (Fs) K Mg equivalent to Straw with F (Low PK, Mg)  
 Blocks I & II 1979  
 LC (Pt) Grass/clover } To be sown on whole plots  
 LC (Gm) Grass/clover } in Spring 1979  
 Remaining plots sown with Sugar beet - variety variety  
 Nitrogen to Sugar beet Sown at 5 lb (56 kg), Dates: May  
 0 - None, 1-0.32, 2-0.64, 3-0.96, 4-1.27, 5-1.59, 6-1.91, 7-2.23, 8-2.55, 9-2.87, 10-3.19, 11-3.51, 12-3.83, 13-4.15, 14-4.47, 15-4.79, 16-5.11, 17-5.43, 18-5.75, 19-6.07, 20-6.39, 21-6.71, 22-7.03, 23-7.35, 24-7.67, 25-8.00, 26-8.32, 27-8.64, 28-8.96, 29-9.28, 30-9.60, 31-9.92, 32-10.24

**BASAL MANURING per acre (hectare)**  
 Winter Wheat - 0.9 cwt (114 kg) P<sub>2</sub>O<sub>5</sub> as superphosphate  
 0.48 cwt (60 kg) K<sub>2</sub>O as Muriate of potash  
 Sugar beet - 1080 lb (1210 kg) compound ferti. LISSER (0.20:20)  
 & Clover/grass in autumn. 540 lb (605 kg) compound fertiliser  
 (0.20:20) in the seedbed plus 357 lb (400 kg)  
 Kieserite. 731 lb (822 kg) Br<sub>2</sub> as 'Solubor'  
 in June (Sugar beet only)  
 Blocks I & II - 2 tons (5 tonnes) Ground chalk

**Blank rows**  
 14' x 20' = 0.0064 acre (0.0026 ha)  
**SUB PLOT AREA**