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# Collection of Plans for the Woburn Organic Manuring Experiment

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## W/RN/12 - Woburn Organic Manuring 1985 - 1989

### Rothamsted Research

Rothamsted Research (1966-1988) *W/RN/12 - Woburn Organic Manuring 1985 - 1989* ; Collection Of Plans For The Woburn Organic Manuring Experiment, pp 20 - 24

**WOBURN** 85/W/EN/12  
 Winter Rye & Grass/Clover  
 I  
 01 02 03 04 05 06 07 08  
 WR LC5 (Ln) ST (St) LC7 (Ln) (St) (Fm) (Dg) (Fm) (Fm) (Fm) WR WR WR  
 Winter Rye & Grass/Clover  
 II  
 09 10 11 12 13 14 15 16  
 S No LC6 (Fm) Dg (Dg) LC6 (Pt) LC4 (Ln) Fs (Fs) St (St) LC4 (Ln)  
 Winter Oats & Grass/Clover  
 III  
 17 18 19 20 21 22 23 24  
 WR WR FS (Fs) LC7 (Ln) LC5 (Ln) LC7 (Pt) (Fm) (Fm) (Fm) (Fm) WR WR  
 Winter Oats & Grass/Clover  
 IV  
 25 26 27 28 29 30 31 32  
 S No LC4 (Ln) Dg (Dg) LC6 (Pt) Fs (Fs) LC4 (Ln) Fd (Fd) St (St) LC6 (Ln)  
 28' paths 241.6' 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths  
 499' 2 drill widths 64 rows @ 12.5cm = 8m  
 3 rows 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths  
 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows

ORGANIC MANURING EXPERIMENT  
 Winter Oats & Grass/Clover  
 Spring  
 NOTE \* S Oats replaced failed W Oats 18.485.

21st year  
 STACKYARD 'B' 1985  
 Sponsor: A.E. Johnston

TREATMENTS per hectare (acre)  
 Organic Manures  
 Dg 50 tonnes (20 tons) FYM (No P, K or Mg as fertilizer)  
 St 7.5 tonnes (3 tons) Straw to all series  
 LC7, LC6 (Pt & Gm) Grass/Clover ley { Blocks I & III sown June 1979  
 { Blocks II & IV sown April 1980  
 LC5, LC4 (Ln) Grass/clover ley { Blocks I & III sown May 1981  
 { Blocks II & IV sown April 1982

Fertilizer (F)  
 Fd\* 1556kg (1388lb) of (0:18:36) 400kg (557lb) Kieserite  
 approximately equivalent to PKMg in Dg  
 St 700kg (644lb) of (0:20:20), 200kg (178lb) Kieserite  
 Fs 778kg (694lb) of (0:18:36), 200kg (178lb) Kieserite, 1/2 rate of 100 plots  
 \* One half before ploughing & one half after ploughing  
 Blocks I & III (plots not in ley)  
 WR Winter Rye Variety: Arimo Sown at: 200lb/2aok  
 Blocks II & IV (plots not in ley)  
 SO Spring Oats Variety: Trafalgar Sown at: 175lb (196kg) Date: 24 Oct  
 Residues of Organic Manures (applied annually 1965-71) & Ley (Sown 1965)  
 (Dg) 40 tonnes (16 tons) FYM. (St) 7.5 tonnes (3 tons) (Dm) Straw  
 (Pt) 7.5 tonnes (3 tons) (Dm) Peat. (Gm) Green Manure  
 (Ln) Grass/clover ley { Ploughed up 1971 Blocks I & III  
 (Ln) Grass ley with N { 1972 Blocks II & IV  
 Residues of Fertilizers (applied annually 1965-71)  
 (Fd) P, K, Mg equivalent to Dg (High P, K, Mg)  
 (Fs) K, Mg equivalent to Straw with P (Low P, K, Mg)  
 STANDARD MANURING per hectare (acre)  
 ALL blocks LC 778kg (694lb) of (0:18:36), 200kg (178lb) Kieserite  
 Do be applied in autumn/winter  
 W. Rye - Blocks I & III 30kg N as 'Nitro-Chalk' in Spring  
 W. Oats - Blocks II & IV 50kg N as 'Nitro-Chalk' in Spring

PLOT AREA  
 28' x 100' = 0.0643 acre (0.0260 ha)  
 Harvested S. Oats - W. Rye Eastern strip of each plot 1985  
 2.75m x 100m = 0.0207 acre (0.0084 ha)  
 S. OAT - W. RYE DRILLING  
 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths 28' paths  
 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows 20 rows

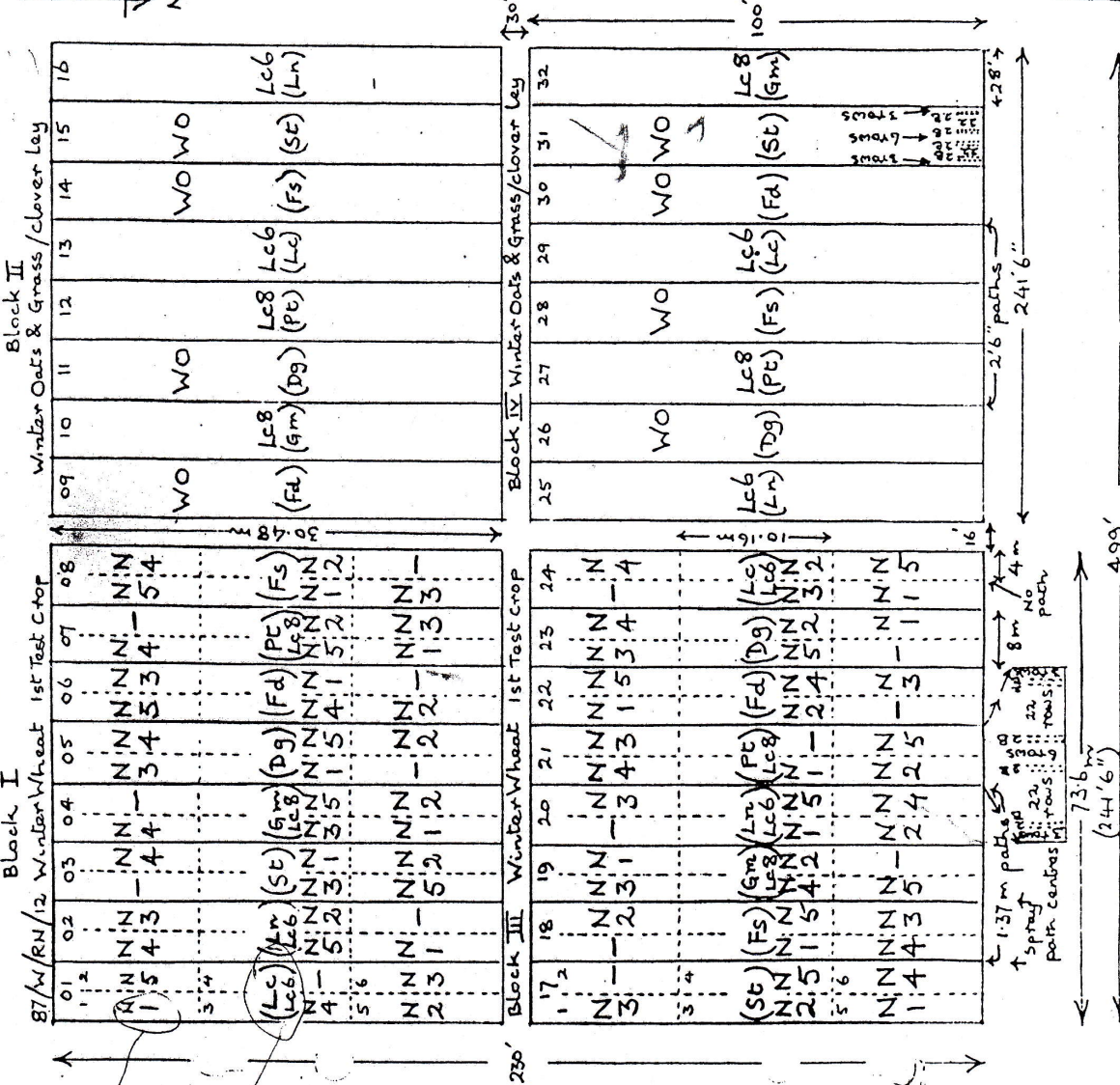






WOBURN ORGANIC MANURING EXPERIMENT

23rd year STACKYARD B 1987  
Sponsor: A.E. Johnston



TREATMENTS per hectare (acre)  
BLOCKS I & III - 1st Test Crop Winter Wheat  
Residues of Organic Manures (Applied in two pl)

(Dg) FYM (250t.) Applied (Dg) } Applied in  
(St) Straw (St) } 1981-  
(Gm) Green Manure annually (Gm) (Lc8) Ley (c  
(Pt) Peat 1965-71 (Pt) (Lc8) 1979 -

Residues of Fertilizer  
(Fd) P, K, Mg equivalent to Dg rate Applied annually  
(Fs) K, Mg equivalent to straw with P and 1981 -  
(late period 1/2 Dg rate)

Leys  
(Lc) Clover/grass ley } 1965-71 (Lc6) } Both clov  
(Ln) Grass ley with N (Lc6) } 1981-  
Sub Plots N treatments in spring kg ha.

- N1, N2, N3, N4, N5 = 0, 50, 100, 150, 200, 25  
STANDARD APPLICATIONS to Winter Wheat only  
Carbofuran at 7.5 kg/ha broadcast in the seedbed.  
(standard rate) must be applied 7-14 days before sowing, repi  
Date:

VARIETY: Mercia Sown at  
BASAL MANURING per hectare  
(0:18:36) at 556 kg. Manganese, foliar applic  
BLOCKS II & IV - Winter Oats

Residues of Organic Manures (applied annually)  
(Dg) FYM (St) Straw  
(Lc) clover/grass ley, (Ln) Grass Ley with N pl  
Residues of Fertilizer

(Fd) P, K, Mg equivalent to Dg Applied annua  
(Fs) P, K, Mg equivalent to 1/2 Dg and 1982-  
STANDARD MANURING per hectare

Lc8 (Gm), Lc6 (Ln) } 778 kg (0:18:36)  
Lc8 (Pt), Lc6 (Ln) } 200 kg (Kasevite) of  
WO Winter Oats; kg N as N from in spri

VARIETY: Penarth Sown at  
PLOT AREA  
Blocks I & III 8m x 30.48m = 0.0244ha  
Blocks II & IV 9.8' x 100' = 0.0643 acre (c  
Sowing date of W. wheat to be the same as for RN/13 Inter  
Plots drilled without paths between sub-plots, paths  
just before. No application to allow for maximum sampling





WOBURN ORGANIC MANURING EXPERIMENT 25TH YEAR STACKYARD ID 1989 204

Sponsors: A.L. Johnson, P.R. Poulton  
 TREATMENTS to Potatoes (P) and Winter Wheat (W)  
 Residues of Organic Manures

(Dg) FYM annually 1965-71 and 1981-85  
 (St) Straw annually 1965-71 and 1981-85  
 (Gn) Green Manure annually 1965-71 then (Lc8) Ley (clover/grass) 1979-86 (W) 1980-87 (P)  
 (Pt) Peat annually 1985-71 then (Lc8) 1979-86 (W) 1980-87 (P)  
 Residues of Fertilizers  
 (Fd) P, K, Mg equivalent to (Dg) rate, annually 1965-71 and 1981-86 (W) 7 (F)  
 (Fs) K Mg equivalent to straw with P, annually 1965-71 then 1/2 Dg rate, 1981-86 (P) 7 (W/W)

Leys  
 (Lc) Clover/grass Ley 1965-71 then (Lc6) 1981-6 (W) 7 (P) - clover grass ley  
 (Ln) Grass ley with N

SUB PLOTS N Treatments Kg ha<sup>-1</sup>

-1, 2, 3, 4, 5.	0, 70, 140, 210, 280, 350.	(P)
-1, 2, 3, 4, 5.	0, 50, 100, 150, 200, 250.	(W/W)

STANDARD APPLICATIONS per hectare

Manures: (O:18:36) @ 1390 kg and Mg as kieserite @ 667 kg (P)  
 (O:18:36) @ 556 kg (W/W)  
 Manganese foliar application in spring (W/W)  
 Nematicides to potato seedbed: Oxamyl @ 5.0 kg (P)  
 Carbosulfan @ 7.5 kg, Draxa pellets (standard rate) must be applied 7-14 days before sowing, repeated with seed (W/W)

VARIETIES: Pentland Crown (P)  
 Mercia (W/W) Sown @ 165 kg/ha on 31 Oct 1988

SUB PLOT AREA: 14' x 30' = 0.0039 ha (Dimensions shown depend on crop)

Sowing date of Potatoes to be the same for RN/13  
 Plots drilled without paths between sub-plots. Cross paths to be cut just before N application to allow for maximum sampling area before then.

