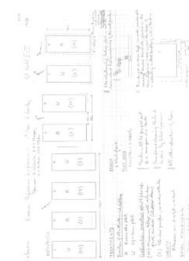


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ROTHAMSTED
RESEARCH

Collection of Plans for the Woburn Erosion Reference Experiment



[Full Table of Content](#)

Collection of Plans for the Woburn Erosion Reference Experiment - 1988 - 1998

Rothamsted Research

Rothamsted Research (1988-1998) *Collection of Plans for the Woburn Erosion Reference Experiment - 1988 - 1998* ; Collection Of Plans For The Woburn Erosion Reference Experiment, pp 1 - 11

206

Woburn

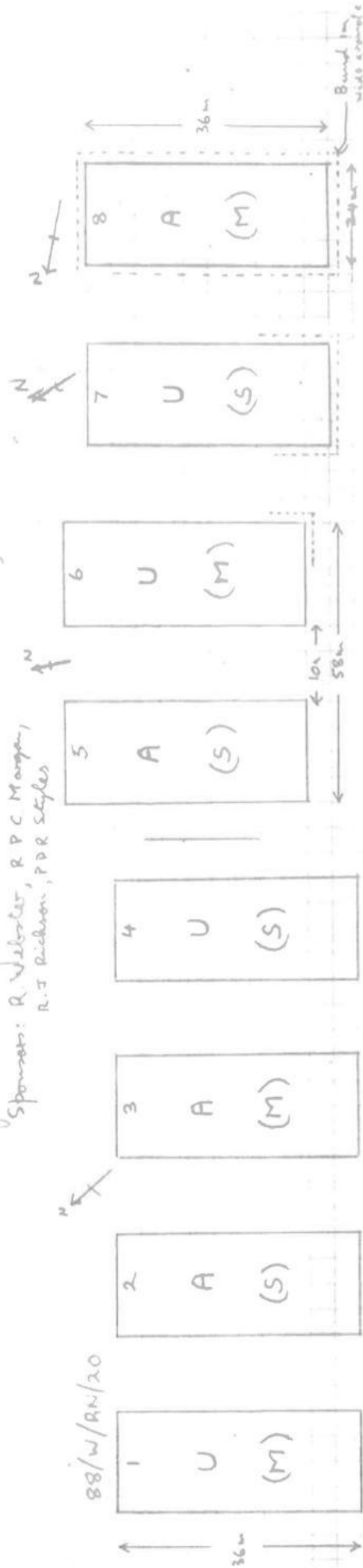
Erona Reference Experiments 1st Year S barley

Sponsors: R. Webster, R.P.C. Morgan, R.F. Rickson, P.R. Styles

88/W/AN/20

Ert Hill II/III

1988



The relationship between plots is not as shown above but as indicated by the north points:-

DESIGN

2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864ha$

TREATMENTS

Direction of all cultivations and drilling

A Across the plots

U Up & down plots

Cultivation practices, applied to first cuts

(M) Minimum tillage with retention of crop residues (chopped straw)

(S) Standard practice, no residue retention

VARIETY

Blascon, sown at 150 kg/ha on 30 March

BASAL MANURING 160 kg

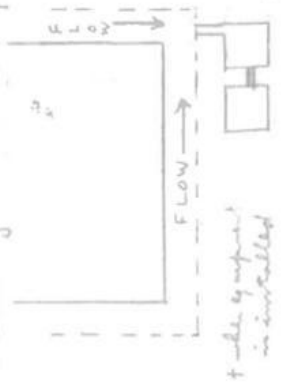
'Nitram' at 340 kg on 5 May

Tanks will be pumped out to a main gun or a tanker

Pumping & cleaning tanks to be done by Silcoff & Sonsons

All other operations by Farm

Bunds are 10-30cm high, 1m wide, erected after mowing, tractor-traversable, graded on the down-slope and 1:200 across the slope to a collecting outlet emptying into a tank:-



206

Woburn

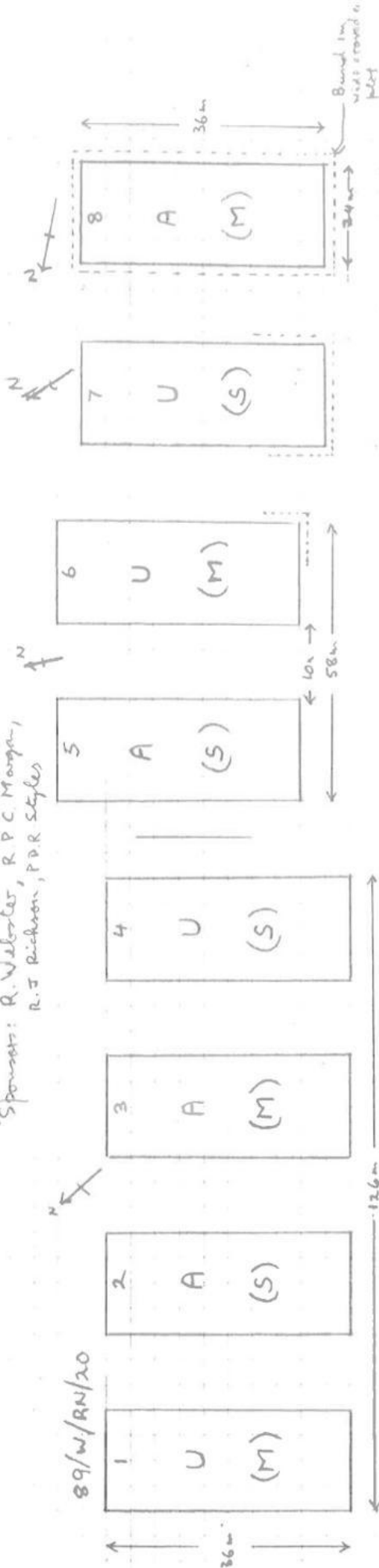
Erosion Reference Experiment 2nd Year Potatoes

St Hill II / III

1989

Sponsors: R. Webster, R.P.C. Morgan, R.F. Rickson, P.R. Styles

89/W/RN/20



TREATMENTS

Direction of all cultivations and plantings

- A Across the plots
- U Up & down plots

Cultivation practice

- (M) Minimum tillage: 1988 barley straw chopped & tined into 10cm. 1989 potato haulm pulverized & retained
- (S) Standard practice: 1988 barley straw baled & removed. 1989 potato haulm removed.

VARIETY

Estima, planted 10 May
BASAL MANURING 160 kg
 (15:13:20) at 1800 kg

DESIGN

2 block of 2x2

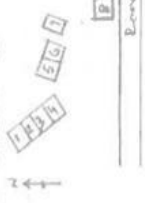
PLOT AREA

$2.4 \text{ m} \times 36 \text{ m} = 0.0864 \text{ ha}$

- Tanks will be pumped out to a main gun or a tanker
- Pumping & cleaning tanks to be done by Silvol & Jenson

- All other operations by Farm
- Basil or any at 5 kg to seedbed

The relationships between plots as shown above but as indicated by the North points:-



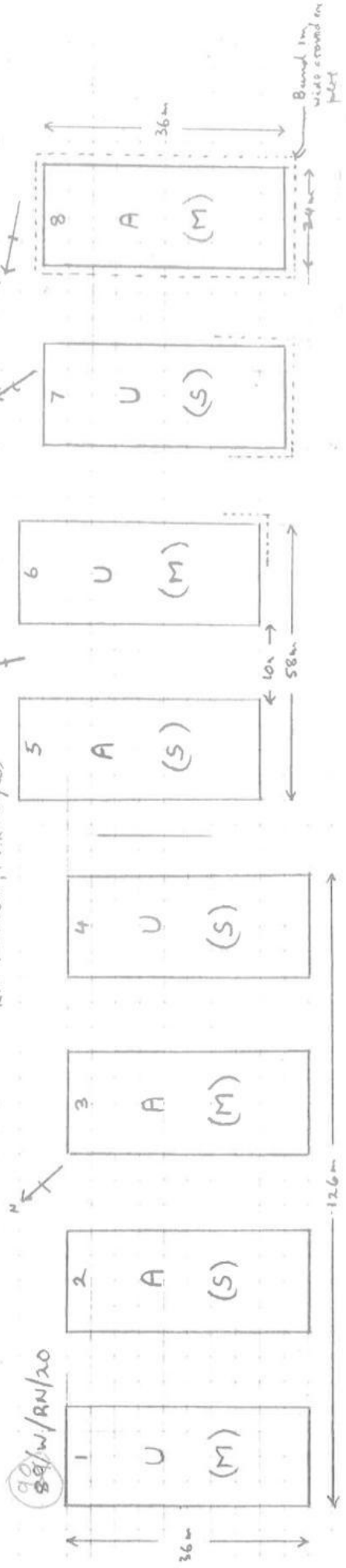
- Bunds are 10-30cm high, 1m wide, erected after planting, tractor-traversable, graded on the down-slope end 1:200 across the slope to collecting outlet emptying into a tank:-



206
90
1989

Exp Hill II/III

Woburn
Erosion Reference Experiment 3rd Year W. Wheat
Sponsors: R. Webster, R.P.C. Morgan,
R.J. Rickson, P.P.R. Styles



The relationships between plots is not as shown above but as indicated by the North points:-

DESIGN

2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.0864 \text{ ha}$

TREATMENTS

Direction of all cultivation and planting

A Across the plots

U Up & down plots

Cultivation practices

(M) Minimum tillage: 1989 potato haulm pulverized & retained
1990 wheat straw chopped & raked in to 10cm

(S) Standard practice: 1989 potato haulm removed
1990 wheat straw baled & removed

VARIETY

Marcia sown @

Kg/ha, Date:

BASAL MANURING

S.F.P.

Tanks will be pumped out to a main gun or a tanker
Pumping & cleaning tanks to be done by Silver & Sons

All other operations by Farm

Bunds are 10-30cm high, 1m wide, erected after sowing. Tractor-traversable, graded on the down slope to 1:200 across the slope to a collecting outlet emptying into a tank:-



200

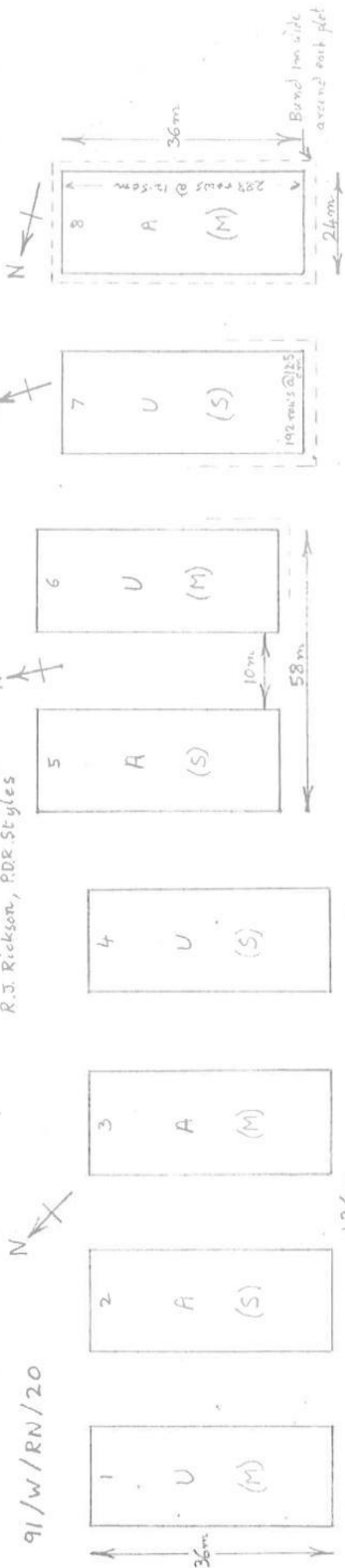
WOUBURN W. barley

EROSION REFERENCE EXPERIMENT
Sponsors J.A. Catt, RPCMorgan,
R.J. Rickson, PDR Styles

4th Year

GREAT HILL II/III 1991

91/W/RN/20



TREATMENTS

Direction of all cultivations and plowing

- A Across the plots
- U Up and down the plots.

Cultivation practices

- M) Minimum tillage: 1989 potato harrow, pulverizer & retained
- : 1990 wheat straw chopper, tined, 10cm
- : 1991 barley straw

Standard practice

- : 1989 plow, haulm removed
- : 1990 wheat straw baled & removed
- : 1991 barley straw

VARIETY

Magis

DESIGN

2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864ha$

Tanks will be pumped out to a rain gun or a tanker

Pumping & cleaning tanks to be done by Silcoe Sponsons

ALL other operations by Farm

22 SEP 1990

The relationship between plots is not as shown above but as indicated by the Northprints



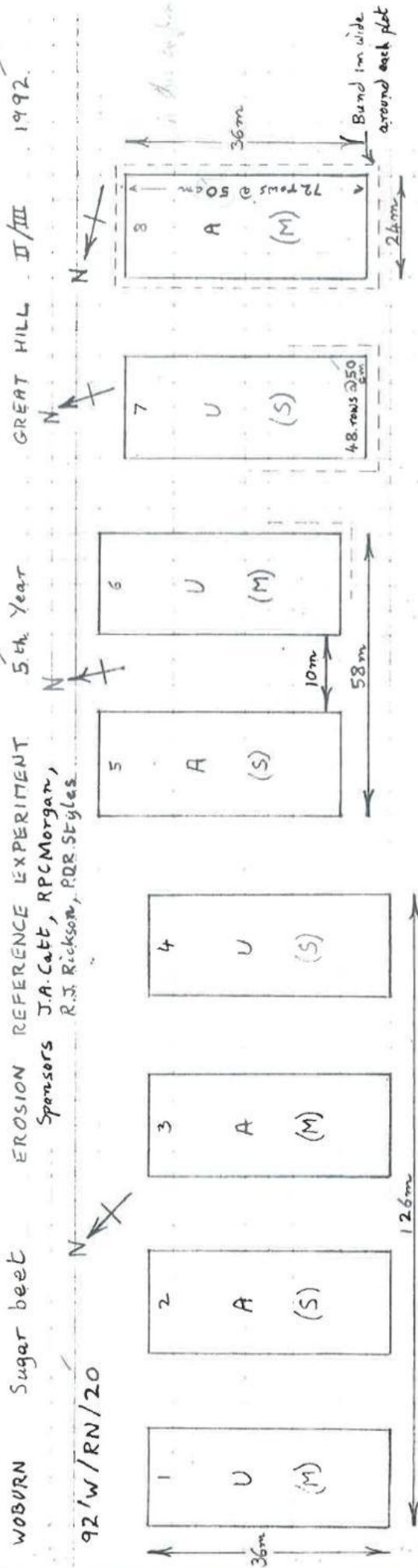
ROAD

COMPLETE & RETURN

TO F.I.E.S.

29 AUG

205



WOBURN Sugar beet
 92'W/RN/20
 EROSION REFERENCE EXPERIMENT
 Sponsors J.A. Catt, R.P.C. Morgan, R.J. Rickson, P.D.R. Styles
 5th Year
 GREAT HILL II/III
 1992

TREATMENTS
 Direction of all cultivations and planting
 A Across the plots
 U Up and down the plots.
 Cultivation practice
 M) Minimum tillage: 1989 potato haulm pulverized & retained
 : 1990 wheat straw chopped & retained to 10cm
 : 1991 barley straw
 : 1992 s. beet tops retained
 S) Standard practice: 1989 potato haulm removed
 : 1990 wheat straw baled & removed
 : 1991 barley straw
 : 1992 s. beet tops removed
 sown at 1:10 kg/ha on

DESIGN
 2 blocks of 2x2
PLOT AREA
 $24m \times 36m = 0.0864ha$
 || Tanks will be pumped out to a rain gun or a tanker.
 || Pumping & cleaning tanks to be done by Silise sponsors.
 || ALL other operations by Farm

ORDER OF OPERATIONS 1991/1992
 Mid-November (S) plots ploughed & pressed
 (M) plots uncultivated
 Mid-February (S) plots cultivated to seedbed
 (M) plots ploughed & cultivated to seedbed

VARIETY
 BASAL MANURING N in spring
 N P K 100/60/60

CHECKED: [Signature]
 DATE: 9.10.96

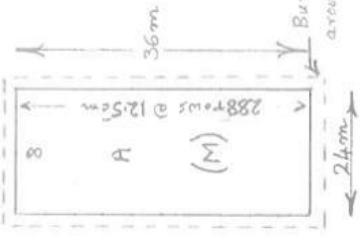
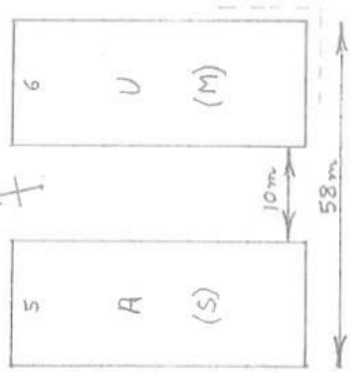
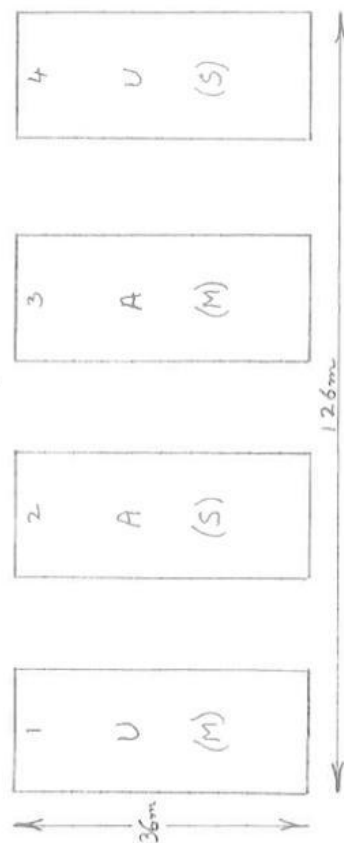
205

WOBURN W. wheat
93/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors J.A. Catt, R.P.C. Morgan,
R.J. Rickson, P.D.R. Styles

6th Year

GREAT HILL II/III 1993



TREATMENTS

Direction of all cultivations and planting
A Across the plots
U Up and down the plots.

Cultivation practice

- M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 wheat straw chopped & retained to 10cm
- : 1991 barley straw
- : 1992 subsoil: tops retained
- : 1993 wheat straw chopped & retained to 10cm
- S) Standard practice : 1989 potato haulm removed
- : 1990 wheat straw baled & removed
- : 1991 barley straw
- : 1992 subsoil: tops removed
- : 1993 wheat straw baled & removed

VARIETY: ~~M~~ sown at 1g/ha on
BASAL FERTILISER: NPK Na Mg at 5FP.

SORSSON 2 166 kg/ha

Inilled 26 JAN 1993

DESIGN

2 blocks of 2x2

PLOT AREA
24m x 36m = 0.0864ha

- || Tanks will be pumped out to a rain gun or a tanker
- || Pumping & cleaning tanks to be done by Silcock sponsors
- || ALL other operations by Farm

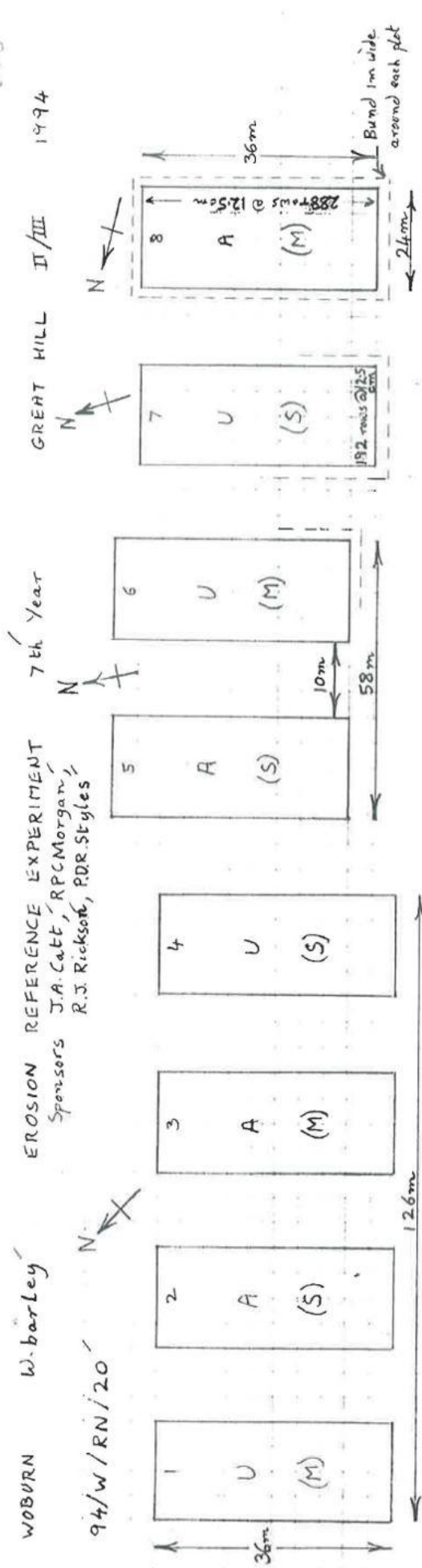
The relationship between plots is not as shown above but as indicated by the North points:-



ROAD

COMPLETE & RETURN

to F. E. S.



TREATMENTS
 Direction of all cultivations and planting
 A Across the plots
 U Up and down the plots.

Cultivation practice
 (M) Minimum tillage: 1989 potato haulm pulverized & retained
 : 1990 wheat straw chopped & tined to 10cm
 : 1991 barley straw
 : 1992 s-beet tops retained
 : 1993 & 4 .. straw chopped tined to 10cm
 (S) Standard practice : 1989 potato haulm removed
 : 1990 wheat straw baled & removed
 : 1991 barley straw
 : 1992 s-beet tops removed
 : 1993 & 4 straw baled & removed

VARIETY Puffin' sown at 1kg/ha on
BASEL MANURE N P K Na Mg at 5FP.

DESIGN
 2 blocks of 2x2

PLOT AREA
 $24m \times 36m = 0.0864ha$

Tanks will be pumped out
 to a rain gun or a tanker

Pumping & cleaning tanks to
 be done by Silsoe sponsors

All other operations by Farm

The relationship between plots is not as shown above but as indicated by the North points.



CHECKED ATB
 DATE 17 8 93

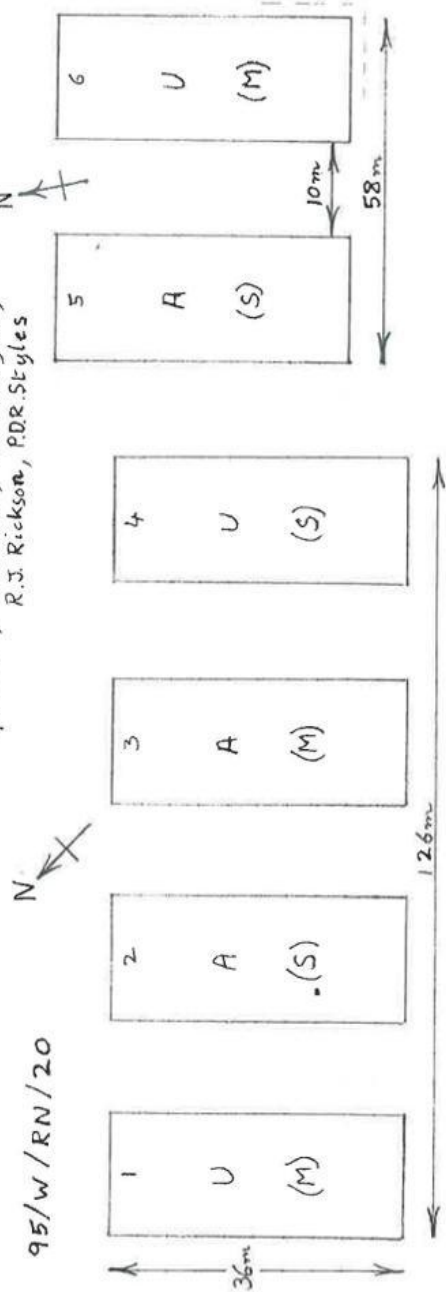
205

WOBURN Potatoes
95/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors; J.A. Catt, RPC Morgan,
R.J. Rickson, PDR. Styles

8th Year

GREAT HILL II/III 1995



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & retained to 10cm
- : 1992 5. beet tops retained
- : 1993 & 4 stray chopped & retained to 10cm
- : 1995. as 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5. beet tops removed
- : 1993 & 4 straw baled & removed
- : 1995 as 1989

VARIETY

Estima, 35-45 mm seed, planted at 22 cm spacing in 75 cm rows on 12th April 1995.

DESIGN

2 blocks of 2x2

PLOT AREA

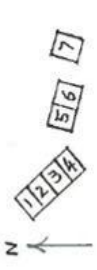
$24m \times 36m = 0.0864ha$

Tanks will be pumped out to a rain gun or a tanker

Pumping & cleaning tanks to be done by Farm

ALL other operations by Farm

The relationship between plots is not as shown above but as indicated by the North points:



ROAD

COMPLETE & RETURN

to F. E. S.

205

WOBURN W. wheat

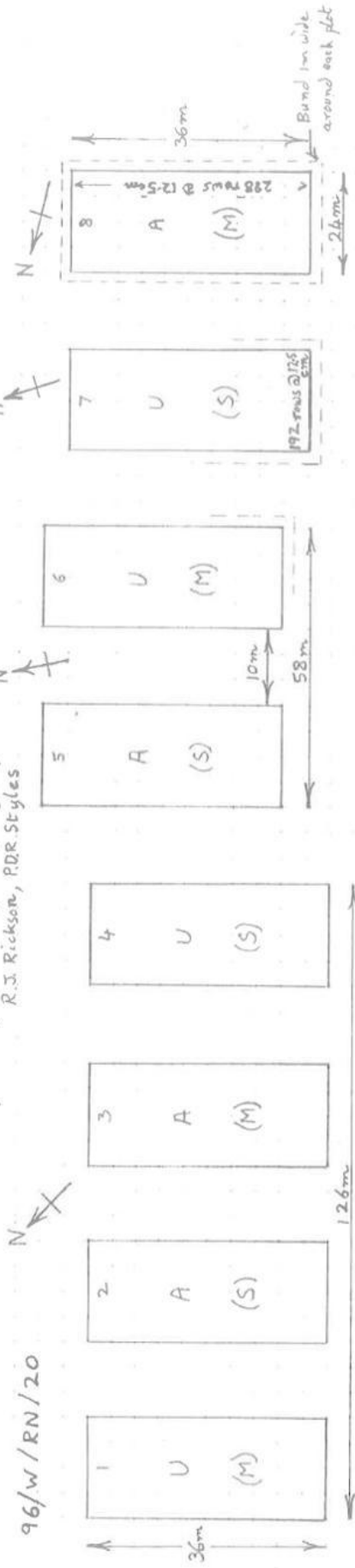
EROSION REFERENCE EXPERIMENT
Sponsors; J.A. Catt, R.P.C. Morgan,
R.J. Rickson, P.D.R. Styles

9th Year

GREAT HILL II/III

1996

96/W/RN/20



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & retained to 10cm
- : 1992 5: beet tops retained
- : 1993, 4 & 6 straw chopped & retained to 10cm
- : 1995, 00 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5: beet tops removed
- : 1993, 4 & 6 straw baled & removed
- : 1995 00 1989

VARIETY Hereward dressed Panactina @ 375 seeds/m² on 9 Oct 1995
DISEASE MANAGEMENT NPK as SF.P.

DESIGN

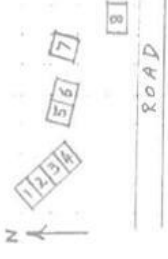
2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864ha$

- || Tanks will be pumped out to a rain gun or a tanker
- || Pumping & cleaning tanks to be done by Farm
- || All other operations by Farm

The relationship between plots is not as shown above but as indicated by the North points:-



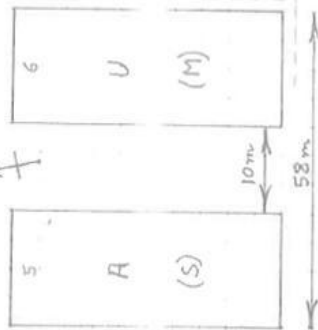
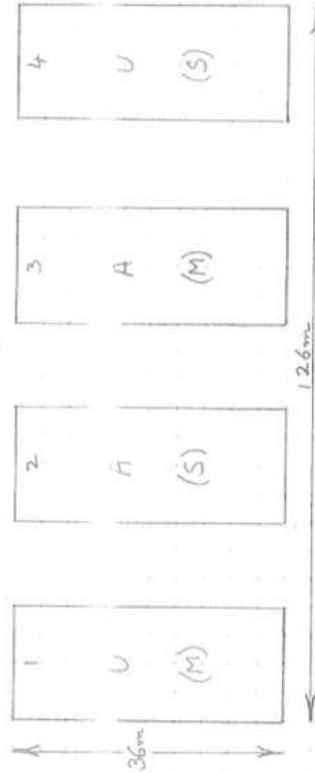
205

WOBURN W. Bartley
97/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors: J.A. Catt, R.C. Morgan,
R.J. Rickson, P.D.R. Styles

10th Year

GREAT HILL II/III 1997



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & tined to 10cm
- : 1992 5: beet tops retained
- : 1993, 4, 6, 7 straw chopped & tined to 10cm
- : 1995, as 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5: beet tops removed
- : 1993, 4, 6, 7 straw, baled & removed
- : 1995 as 1989

VARIETY

BASAL FERTILISER NPK as SF.P.

DESIGN

2 blocks of 2 x 2

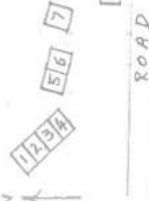
PLOT AREA

24m x 36m = 0.0864ha

Tanks will be pumped out to a rain gun or a tanker

Pumping & cleaning tanks to be done by Farm

All other operations by Farm

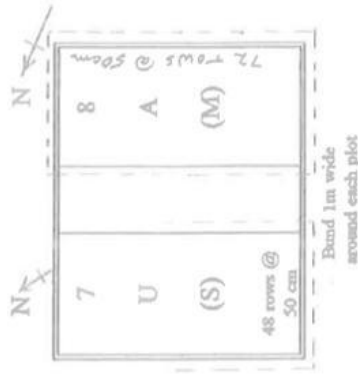
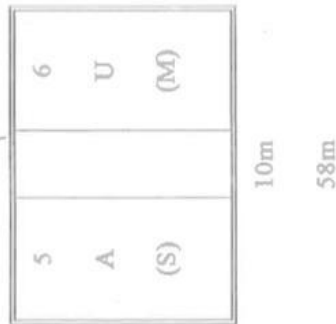
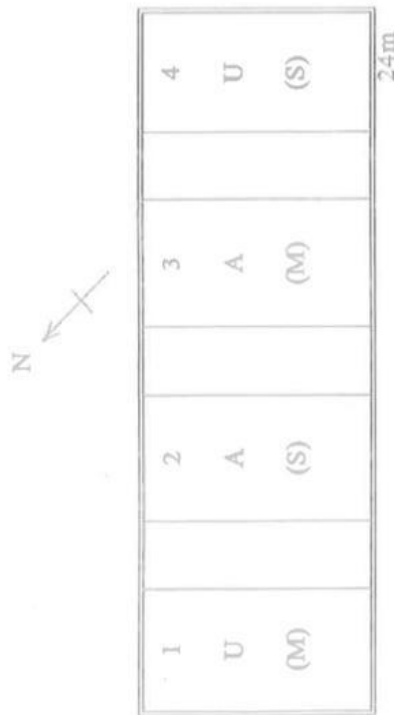


The relationship between plots is not as shown above but as indicated by the North points.

Fodder beet

11th year

Sponsors: A.M. Hunt



Treatments

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots

Cultivation practice

- (M) Minimum tillage : 1989 & 95 potato haulm pulverized and retained
- : 1990,1,3,4,6 & 7 straw chopped and tined to 10 cm
- : 1992 & 8 sugar beet tops retained
- (S) Standard practice : 1989 & 95 potato haulm removed
- : 1990,1,3,4,6 & 7 straw removed
- : 1992 & 8 sugar beet tops removed

Variety

Nestor dressed TMTD and Gaucho sown at 10 seeds/m² on 19 March 1998

Basal manuring
NPK and Na at sfp

Design
2 blocks of 2 x 2

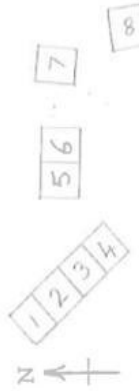
Plot area
24 m x 36 m = 0.0864 ha

// Tanks will be pumped out to a rain gun or a tanker

// Pumping and cleaning tanks to be done by Farm

// All operations by Farm

The relationship between plots is not as shown above but as indicated by the North points



Order of operations 1997/8

Mid-November : (S) plots ploughed and pressed
(M) plots uncultivated

Mid-February:
(S) plots cultivated to seedbed
(M) plots ploughed and cultivated to seedbed