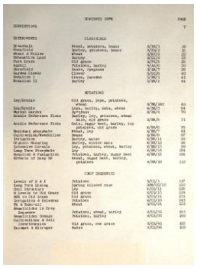
ROTHAMSTED RESEARCH

Yields of the Field Experiments 1976

Full Table of Content



Barley

Rothamsted Research

Rothamsted Research (1977) *Barley ;* Yields Of The Field Experiments 1976, pp 294 - 320 **- DOI: https://doi.org/10.23637/ERADOC-1-15**

76/R/B/1

WINTER BARLEY

FACTORS AFFECTING MILDEW CONTROL AND YIELD

Object: To study the effects and interactions of sowing date, seed rate, mildew control and timing of spring nitrogen on the incidence of mildew and yield of winter barley - Gt. Knott I.

Sponsors: A. Bainbridge, M.E. Finney, J.F. Jenkyn.

Design: Single replicate of 2 x 2 x 2 x 2 x 2 x 2.

Whole plot dimensions: 2.13 x 6.10.

Treatments: All combinations of:-

1. SOW DATE — Sowing Dates:

24 SEPT	24 September
6 NOV	6 November

2. SEEDRATE — Seed Rates (kg):

78	78
156	156

3. TRIDEMOR(1) — Tridemorph foliar spray to early growth:

NONE	None
SPRAYED	Sprayed (14 Nov to SOW DATE 24 SEPT, 25 Feb to SOW DATE 6 NOV)

4. TRIDEMOR(2) — Tridemorph foliar spray in April:

NONE	None
SPRAYED	Sprayed (9 Apr)

5. TRIDEMOR(3) — Tridemorph foliar spray in May:

NONE	None
SPRAYED	Sprayed (13 May)

6. N TIME — Time of applying nitrogen (at 75 kg):

MARCH	Early March (9 Mar)
APRIL	Late April (27 Apr)

NOTE: Tridemorph applied at 0.53 kg in 340 l.

Basal applications: Weedkillers: Mecoprop at 1.7 kg in 340 l.

Seed: Astrix.

Cultivations, etc.:- Ploughed: 16 Sept, 1975. Spring-tine cultivated twice: 16, 17 Sept. Rotary harrowed for early sowing: 22 Sept. Power harrowed for late sowing: 6 Nov. Weedkiller applied: 13 Nov. Combine harvested: 8 July, 1976. Previous crops: Winter wheat 1974, beans 1975.

NOTE: Seedling emergence counts were made. Leaf diseases were assessed on six occasions. Ear counts were made in early July.

https://doi.org/10.23637/ERADOC-1-15

76/R/B/1

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

SEEDRATE	78	156	MEAN
SOW DATE			
24 SEPT	7.78	8.02	7.90
6 NOV	4.41	4.44	4.42
MEAN	6.09	6.23	6.16

TRIDEMOR(1)	NONE	SPRAYED	MEAN
SOW DATE			
24 SEPT	7.66	8.14	7.90
6 NOV	4.27	4.57	4.42
MEAN	5.97	6.35	6.16

TRIDEMOR(1)	NONE	SPRAYED	MEAN
SEEDRATE			
78	5.90	6.28	6.09
156	6.03	6.43	6.23
MEAN	5.97	6.35	6.16

TRIDEMOR(2)	NONE	SPRAYED	MEAN
SOW DATE			
24 SEPT	7.66	8.14	7.90
6 NOV	4.25	4.60	4.42
MEAN	5.95	6.37	6.16

TRIDEMOR(2)	NONE	SPRAYED	MEAN
SEEDRATE			
78	5.98	6.20	6.09
156	5.93	6.54	6.23
MEAN	5.95	6.37	6.16

TRIDEMOR(2)	NONE	SPRAYED	MEAN
TRIDEMOR(1)			
NONE	5.78	6.15	5.97
SPRAYED	6.12	6.59	6.35
MEAN	5.95	6.37	6.16

TRIDEMOR(3)	NONE	SPRAYED	MEAN
SOW DATE			
24 SEPT	7.80	8.00	7.90
6 NOV	4.35	4.49	4.42
MEAN	6.08	6.24	6.16

TRIDEMOR(3)	NONE	SPRAYED	MEAN
SEEDRATE			
78	5.99	6.19	6.09
156	6.17	6.29	6.23
MEAN	6.08	6.24	6.16

https://doi.org/10.23637/ERADOC-1-15

76/R/B/1

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

TRIDEMOR(3) TRIDEMOR(1)	NONE	SPRAYED	MEAN
NONE	5.96	5.98	5.97
SPRAYED	6.20	6.51	6.35
MEAN	6.08	6.24	6.16

TRIDEMOR(3) TRIDEMOR(2)	NONE	SPRAYED	MEAN
NONE	5.78	6.13	5.95
SPRAYED	6.38	6.36	6.37
MEAN	6.08	6.24	6.16

N TIME SOW DATE	MARCH	APRIL	MEAN
24 SEPT	7.69	8.11	7.90
6 NOV	4.25	4.59	4.42
MEAN	5.97	6.35	6.16

N TIME SEEDRATE	MARCH	APRIL	MEAN
78	5.88	6.31	6.09
156	6.06	6.40	6.23
MEAN	5.97	6.35	6.16

N TIME TRIDEMOR(1)	MARCH	APRIL	MEAN
NONE	5.78	6.16	5.97
SPRAYED	6.16	6.54	6.35
MEAN	5.97	6.35	6.16

N TIME TRIDEMOR(2)	MARCH	APRIL	MEAN
NONE	5.84	6.07	5.95
SPRAYED	6.10	6.63	6.37
MEAN	5.97	6.35	6.16

N TIME TRIDEMOR(3)	MARCH	APRIL	MEAN
NONE	5.86	6.29	6.08
SPRAYED	6.08	6.41	6.24
MEAN	5.97	6.35	6.16

https://doi.org/10.23637/ERADOC-1-15

76/R/B/1

GRAIN TONNES/HECTARE

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	SOW DATE	SEEDRATE	TRIDEMOR(1)	TRIDEMOR(2)
SED	0.124	0.124	0.124	0.124

TABLE	TRIDEMOR(3)	N TIME	SOW DATE SEEDRATE	SOW DATE TRIDEMOR(1)
SED	0.124	0.124	0.175	0.175

TABLE	SEEDRATE TRIDEMOR(1)	SOW DATE TRIDEMOR(2)	SEEDRATE TRIDEMOR(2)	TRIDEMOR(1) TRIDEMOR(2)
SED	0.175	0.175	0.175	0.175

TABLE	SOW DATE TRIDEMOR(3)	SEEDRATE TRIDEMOR(3)	TRIDEMOR(1) TRIDEMOR(3)	TRIDEMOR(2) TRIDEMOR(3)
SED	0.175	0.175	0.175	0.175

TABLE	SOW DATE N TIME	SEEDRATE N TIME	TRIDEMOR(1) N TIME	TRIDEMOR(2) N TIME
SED	0.175	0.175	0.175	0.175

TABLE	TRIDEMOR(3) N TIME
SED	0.175

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	22	0.495	8.0

GRAIN MEAN DM% 89.0

PLOT AREA HARVESTED 0.00130

https://doi.org/10.23637/ERADOC-1-15

76/R/B/3 and 76/W/B/3

SPRING BARLEY

VARIETIES AND N

Object: To study the yields of some of the newer varieties of barley. Three nitrogen rates are included and on one variety the effects of mildew control are also studied - Rothamsted (R) Pastures and Woburn (W) Horsepool Lane Close E.

Sponsors: R. Moffitt, J.F. Jenkyn.

Design: 4 randomised blocks of 11 plots split into 3.

Whole plot dimensions: Pastures (R): 4.27 x 24.7.
Horsepool Lane Close (W): 4.27 x 20.1.

Treatments: All combinations of:-

Whole plots

1. VARIETY Varieties and mildew control:

JU H -	Julia, home-grown seed, no fungicide	
JU H E	Julia, home-grown seed, dressed ethirimol	
JU H T	Julia, home-grown seed, crop sprayed tridemorph (2 plots/block)	
JU M T	Julia, multiplication stock, crop sprayed tridemorph	
AM T	Aramir	crop sprayed tridemorph
AR T	Ark Royal	
GE T	Georgie	
LA T	Lofa Abed	
PO T	Porthos	
SU T	Sundance	

Sub plots

2. N Nitrogen fertiliser (kg N):

38	38
75	75
113	113

NOTES: (1) Pastures (R): Tridemorph applied at 0.53 kg in 450 l: 27 May.
(2) Horsepool Lane Close (W): Tridemorph applied at 0.53 kg in 280 l: 27 May.
(3) On Pastures (R) all sub plots of one plot of (JU H -) received tridemorph in error. Estimated values were used in the analysis.

Basal applications: Pastures (R): Manures: (0:20:20) at 310 kg, combine drilled. Weedkillers: Paraquat at 0.42 kg ion in 220 l. Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).
Horsepool Lane Close (W): Manures: (0:20:20) at 310 kg, combine drilled. Weedkiller: Ioxynil at 0.53 kg and mecoprop at 1.6 kg in 280 l. Ioxynil at 0.42 kg and mecoprop at 1.3 kg in 280 l.

NOTE: The second application of weedkiller on Horsepool Lane Close was applied with tridemorph where this was applied as a treatment, and separately to remaining plots.

Seed: Pastures (R): Varieties sown at 150 kg.
Horsepool Lane Close (W): Varieties sown at 160 kg.

https://doi.org/10.23637/ERADOC-1-15 *pp 6*

Cultivations, etc.:-
Pastures (R): Paraquat applied: 6 Nov, 1975. Ploughed: 24 Nov. Spring-tine cultivated twice: 2 Mar, 12 Mar, 1976. Seed sown: 22 Mar. N applied: 1 Apr. 'Banlene Plus' applied: 14 May. Combine harvested: 27 July. Previous crops: Potatoes 1974, winter wheat 1975.
Horsepool Lane Close (W): Deep-tine cultivated four times: 21 Sept, 22 Sept, 23 Oct, 18 Dec, 1975. Spring-tine cultivated: 27 Feb, 1976. Spring-tine cultivated with crumbler: 22 Mar. Seed sown: 24 Mar. N applied: 29 Mar. Weedkiller applied to all plots: 3 May. Tridemorph treatment applied with weedkiller: 27 May. Combine harvested: 29 July. Previous crops: Beans 1974, winter wheat 1975.

76/R/B/3 PASTURES (R)

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N	38	75	113	MEAN
VARIETY				
JU H -	4.58	4.55	4.45	4.53
JU H E	4.63	4.71	4.79	4.71
JU H T	4.65	4.95	5.15	4.92
JU M T	4.48	4.62	4.74	4.61
AM T	4.68	5.02	5.14	4.95
AR T	4.90	5.31	5.20	5.14
GE T	5.05	5.41	5.59	5.35
LA T	4.67	5.22	5.16	5.02
PO T	4.90	5.46	5.33	5.23
SU T	5.19	5.32	5.58	5.36
MEAN	4.76	5.05	5.12	4.98

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	VARIETY	N	VARIETY N	
SED	0.123		0.187	MIN REP
	0.107	0.052	0.162	MAX-MIN

EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:

VARIETY	0.172	MIN REP
	0.149	MAX-MIN
	0.121	MAX REP

	VARIETY
MAX REP	JU H T
MAX-MIN	JU H T V ANY OF REMAINDER
MIN REP	ANY OF REMAINDER

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	30	0.174	3.5
BLOCK.WP.SP	66	0.243	4.9

GRAIN MEAN DM% 87.1

SUB PLOT AREA HARVESTED 0.00163

https://doi.org/10.23637/ERADOC-1-15

76/W/B/3 HORSEPOOL LANE CLOSE E(W)

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N VARIETY	38	75	113	MEAN
JU H -	3.32	3.81	3.51	3.55
JU H E	3.43	3.55	3.35	3.44
JU H T	3.99	4.05	4.08	4.04
JU M T	3.72	3.57	3.76	3.68
AM T	2.59	3.19	2.65	2.81
AR T	4.01	3.80	3.47	3.76
GE T	3.49	4.00	4.27	3.92
LA T	3.30	3.67	3.55	3.51
PO T	3.75	3.88	4.18	3.94
SU T	3.77	3.82	3.58	3.72
MEAN	3.58	3.76	3.68	3.67

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	VARIETY	N	VARIETY N	
SED	0.353		0.415	MIN REP
	0.306	0.077	0.360	MAX-MIN

EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:

VARIETY	0.254	MIN REP
	0.220	MAX-MIN
	0.180	MAX REP

	VARIETY
MAX REP	JU H T
MAX-MIN	JU H T V ANY OF REMAINDER
MIN REP	ANY OF REMAINDER

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	31	0.500	13.6
BLOCK.WP.SP	64	0.353	9.6

GRAIN MEAN DM% 87.8

SUB PLOT AREA HARVESTED 0.00173

https://doi.org/10.23637/ERADOC-1-15

76/R/B/4

SPRING BARLEY

N AND FOLIAR DISEASES

Object: To study the effects of mildew and brown rust on response to a range of nitrogen rates applied at different times - Pastures.-

Sponsors: J.F. Jenkyn, M.E. Finney.

Design: Single replicate of 6 x 3 x 2 x 2.

Whole plot dimensions: 4.27 x 9.14.

Treatments: All combinations of:-

1. N RATE Amounts of nitrogen fertiliser (kg N):

25	25
50	50
70	70
90	90
110	110
135	135

2. N TIME Times of applying N:

SB	Seedbed (1 Apr, 1976)
TD	Top dressed (21 May)
SB/TD	Half to seedbed, half top dressed

3. MILDEW F Mildew fungicide:

NONE	None
TRIDEMOR	Tridemorph on 21 May and 7 June

4. RUST F Rust fungicide:

NONE	None
BENODANI	Benodanil on 17 June

NOTE: Fungicides were applied in 340 l:-
(a) Tridemorph at 0.53 kg
(b) Benodanil at 1.12 kg with 175 ml 'Citowett'

Basal applications: Manures: (0:20:20) at 310 kg, combine drilled. Weedkillers: Paraquat at 0.42 kg ion in 220 l in autumn. Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l) in spring.

Seed: Zephyr, sown at 160 kg.

Cultivations, etc.:- Autumn weedkiller applied: 6 Nov, 1975. Ploughed: 18-24 Nov. Spring-tine cultivated: 2, 12 Mar, 1976. Seed sown: 22 Mar. Spring weedkiller applied: 11 May. Combine harvested: 26 July. Previous crops: Potatoes 1974, wheat 1975.

NOTE: Seedling emergence counts were made. Leaf diseases were assessed on three occasions and ear counts made in early July.

https://doi.org/10.23637/ERADOC-1-15

76/R/B/4

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

MILDEW F / N TIME	NONE	TRIDEMOR	MEAN
SB	4.04	4.85	4.45
TD	3.93	4.47	4.20
SB/TD	4.11	4.81	4.46
MEAN	4.03	4.71	4.37

RUST F / N TIME	NONE	BENODANI	MEAN
SB	4.43	4.46	4.45
TD	4.21	4.19	4.20
SB/TD	4.41	4.51	4.46
MEAN	4.35	4.39	4.37

RUST F / MILDEW F	NONE	BENODANI	MEAN
NONE	3.99	4.06	4.03
TRIDEMOR	4.70	4.72	4.71
MEAN	4.35	4.39	4.37

N RATE / N TIME	25	50	70	90	110	135	MEAN
SB	3.85	4.38	4.25	4.64	4.79	4.77	4.45
TD	3.96	4.01	4.09	4.46	4.41	4.27	4.20
SB/TD	4.18	4.41	4.59	4.50	4.62	4.45	4.46
MEAN	4.00	4.26	4.31	4.53	4.61	4.50	4.37

N RATE / MILDEW F	25	50	70	90	110	135	MEAN
NONE	3.77	3.96	3.91	4.02	4.24	4.25	4.03
TRIDEMOR	4.22	4.56	4.71	5.05	4.97	4.75	4.71
MEAN	4.00	4.26	4.31	4.53	4.61	4.50	4.37

N RATE / RUST F	25	50	70	90	110	135	MEAN
NONE	3.90	4.29	4.25	4.59	4.56	4.50	4.35
BENODANI	4.10	4.23	4.37	4.48	4.65	4.50	4.39
MEAN	4.00	4.26	4.31	4.53	4.61	4.50	4.37

N RATE		25	50	70	90	110	135
N TIME	MILDEW F						
SB	NONE	3.65	3.96	4.06	4.04	4.31	4.22
	TRIDEMOR	4.06	4.79	4.44	5.23	5.27	5.31
TD	NONE	3.72	4.02	3.62	4.01	3.96	4.27
	TRIDEMOR	4.21	4.00	4.56	4.91	4.86	4.28
SB/TD	NONE	3.95	3.91	4.05	4.01	4.46	4.26
	TRIDEMOR	4.41	4.90	5.13	4.99	4.79	4.65

https://doi.org/10.23637/ERADOC-1-15 *pp 10*

76/R/B/4 GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N TIME	N RATE / RUST F	25	50	70	90	110	135
SB	NONE	3.82	4.28	4.11	4.54	4.78	5.04
	BENODANI	3.89	4.47	4.39	4.73	4.81	4.50
TD	NONE	3.77	4.18	3.99	4.63	4.55	4.12
	BENODANI	4.15	3.83	4.18	4.29	4.26	4.43
SB/TD	NONE	4.10	4.42	4.65	4.59	4.36	4.35
	BENODANI	4.26	4.39	4.53	4.41	4.88	4.56

MILDEW F	N RATE / RUST F	25	50	70	90	110	135
NONE	NONE	3.59	3.85	3.85	4.05	4.33	4.29
	BENODANI	3.96	4.07	3.98	3.99	4.15	4.20
TRIDEMOR	NONE	4.21	4.74	4.66	5.13	4.79	4.70
	BENODANI	4.24	4.39	4.76	4.96	5.15	4.79

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	N TIME	MILDEW F	RUST F	N RATE
SED	0.076	0.062	0.062	0.108

TABLE	N TIME MILDEW F	N TIME RUST F	MILDEW F RUST F	N TIME N RATE
SED	0.108	0.108	0.088	0.187

TABLE	MILDEW F N RATE	RUST F N RATE	N TIME MILDEW F RUST F	N TIME MILDEW F N RATE
SED	0.153	0.153	0.153	0.264

TABLE	N TIME RUST F N RATE	MILDEW F RUST F N RATE
SED	0.264	0.216

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	10	0.264	6.1

GRAIN MEAN DM% 88.2

PLOT AREA HARVESTED 0.00195

https://doi.org/10.23637/ERADOC-1-15

76/R/B/5

SPRING BARLEY

SOWING DATES AND PATHOGEN CONTROL

Object: To study the effects of aphid, virus and fungus control on pathogens and yield of barley sown on two dates - Gt. Harpenden II.

Sponsors: R.T. Plumb, J.F. Jenkyn.

Design: 3 blocks of 2 x 2 x 2 x 2, randomisation restricted.

Whole plot dimensions: 6.40 x 15.2.

Treatments: All combinations of:-

1. SOW DATE Dates of sowing:

4 MAR	4 March, 1976
13 APR	13 April

2. FUNGCIDE Fungicide:

NONE	None
E+T+B	Ethirimol seed dressing; tridemorph and benodanil sprays

3. APHICIDE(1) Aphicide to seedbed:

NONE	None
PHORATE	Phorate at 5 kg as granules

4. APHICIDE(2) Aphicide on 4 June:

NONE	None
MENAZON	Menazon ('Saphi-col' at 0.7 l in 450 l)

NOTES: (1) Fungicides applied:-
Tridemorph at 0.53 kg in 450 l on 27 May and with benodanil on 7 July . Benodanil at 1.12 kg with 175 ml 'Citowett' in 450 l.
(2) The second application of fungicides was applied to SOW DATE 13 APR only.

Basal applications: Manures: (20:14:14) at 310 kg, combine drilled. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).

Seed: Julia, sown at 160 kg.

Cultivations, etc.:- Heavy spring-tine cultivated twice: 4 Nov, 1975. Deep-tine cultivated twice: 13, 14 Nov. Heavy spring-tine cultivated: 1 Mar, 1976. Power harrowed for early sowing: 4 Mar. Power harrowed for late sowing: 13 Apr. Weedkiller applied: 10 May. Combine harvested: 23 July. Previous crops: Beans 1974, potatoes 1975.

NOTE: Emergence counts were made for both sowings. Mildew was assessed on two occasions, aphids on five and viruses once. Tiller counts were made on two occasions in July.

https://doi.org/10.23637/ERADOC-1-15

76/R/B/5

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

FUNGCIDE	NONE	E+T+B	MEAN
SOW DATE			
4 MAR	4.82	5.47	5.15
13 APR	3.06	3.55	3.30
MEAN	3.94	4.51	4.23

APHICIDE(1)	NONE	PHORATE	MEAN
SOW DATE			
4 MAR	4.87	5.42	5.15
13 APR	3.17	3.44	3.30
MEAN	4.02	4.43	4.23

APHICIDE(1)	NONE	PHORATE	MEAN
FUNGCIDE			
NONE	3.71	4.17	3.94
E+T+B	4.33	4.69	4.51
MEAN	4.02	4.43	4.23

APHICIDE(2)	NONE	MENAZON	MEAN
SOW DATE			
4 MAR	4.98	5.31	5.15
13 APR	3.06	3.55	3.30
MEAN	4.02	4.43	4.23

APHICIDE(2)	NONE	MENAZON	MEAN
FUNGCIDE			
NONE	3.70	4.18	3.94
E+T+B	4.34	4.68	4.51
MEAN	4.02	4.43	4.23

APHICIDE(2)	NONE	MENAZON	MEAN
APHICIDE(1)			
NONE	3.76	4.28	4.02
PHORATE	4.28	4.58	4.43
MEAN	4.02	4.43	4.23

FUNGCIDE	NONE		E+T+B	
APHICIDE(1)	NONE	PHORATE	NONE	PHORATE
SOW DATE				
4 MAR	4.55	5.09	5.19	5.75
13 APR	2.86	3.25	3.47	3.63

FUNGCIDE	NONE		E+T+B	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
SOW DATE				
4 MAR	4.61	5.03	5.35	5.59
13 APR	2.78	3.33	3.33	3.77

https://doi.org/10.23637/ERADOC-1-15

76/R/B/5

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
SOW DATE				
4 MAR	4.63	5.12	5.34	5.51
13 APR	2.90	3.44	3.22	3.66

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
FUNGCIDE				
NONE	3.44	3.98	3.96	4.39
E+T+B	4.09	4.58	4.60	4.78

APHICIDE(1)		NONE		PHORATE	
APHICIDE(2)		NONE	MENAZON	NONE	MENAZON
SOW DATE	FUNGCIDE				
4 MAR	NONE	4.31	4.80	4.92	5.27
	E+T+B	4.95	5.44	5.75	5.74
13 APR	NONE	2.57	3.15	2.99	3.51
	E+T+B	3.22	3.72	3.45	3.81

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	SOW DATE	FUNGCIDE	APHICIDE(1)	APHICIDE(2)
SED	0.075	0.075	0.075	0.075

TABLE	SOW DATE FUNGCIDE	SOW DATE APHICIDE(1)	FUNGCIDE APHICIDE(1)	SOW DATE APHICIDE(2)
SED	0.106	0.106	0.106	0.106

TABLE	FUNGCIDE APHICIDE(2)	APHICIDE(1) APHICIDE(2)	SOW DATE FUNGCIDE APHICIDE(1)	SOW DATE FUNGCIDE APHICIDE(2)
SED	0.106	0.106	0.150	0.150

TABLE	SOW DATE APHICIDE(1) APHICIDE(2)	FUNGCIDE APHICIDE(1) APHICIDE(2)	SOW DATE FUNGCIDE APHICIDE(1) APHICIDE(2)
SED	0.150	0.150	0.212

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	30	0.260	6.2

GRAIN MEAN DM% 85.0

PLOT AREA HARVESTED 0.00260

https://doi.org/10.23637/ERADOC-1-15

76/R/B/6

SPRING BARLEY

EFFECTS OF MILDEW SOURCES ON DISEASE CONTROL

Object: To study the effects of nearby sources of mildew on control by fungicides applied at a range of times - Drapers.

Sponsors: J.F. Jenkyn, A. Bainbridge.

Design: 3 randomised blocks of 3 plots split into 6.

Whole plot dimensions: 22.9 x 29.9.

Treatments: All combinations of:-

Whole plots

1. MILDSRCE Mildew source:

NONE	None (seed treated ethirimol, crop sprayed tridemorph, on 27 May, 1976, 7 June,
EARLY	Early (tridemorph only on 27 May, 7 June)
FULL	Full (no mildew control)

Sub plots

2. MILDCONT Times of applying mildew control:

ED	Ethirimol seed dressing
	Tridemorph spray on:
T S 1	18 May
T S 2	21 May
T S 3	27 May
T S 4	2 June
T S 5	7 June

NOTE: The whole plot treatments were applied to a strip of crop 6.5 m wide at the ends of all sub plots. There were no discards between sub plots (0.6 m fallow paths only). Whole plots and the sides of sets of six sub plots were separated by strips of crop 17 m wide, seed treated ethirimol, crop sprayed tridemorph at 0.53 kg in 450 l on 27 May.

Basal applications: Manures: Chalk at 7.5 t. (20:14:14) at 380 kg, combine drilled. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).

Seed: Julia, sown at 160 kg.

Cultivations, etc.:- Chalk applied: 16 Sept, 1975. Heavy spring-tine cultivated: 20 Oct. Ploughed: 12 Nov. Spring-tine cultivated: 9 Mar, 1976. Seed sown: 11 Mar. Weedkiller applied: 11 May. Combine harvested: 22 July. Previous crops: Potatoes 1974, barley 1975.

NOTES: (1) Seedling counts were made and mildew assessed on two occasions.
(2) Five plots in one block were affected by gravel bands, those with treatment combinations

MILDSCRCE	EARLY	EARLY	FULL	FULL	FULL
MILDCONT	T S 5	T S 4	E D	T S 3	T S 5

Estimated values were used in the analysis.

https://doi.org/10.23637/ERADOC-1-15 *pp 15*

76/R/B/6

GRAIN TONNES/HECTARE

SUB PLOTS

***** TABLES OF MEANS *****

MILDCONT MILDSRCE	E D	T S 1	T S 2	T S 3	T S 4	T S 5	MEAN
NONE	4.72	5.16	4.87	4.56	4.46	4.53	4.71
EARLY	3.66	3.94	3.75	3.94	3.62	3.77	3.78
FULL	4.11	4.66	4.66	4.50	4.13	4.24	4.38
MEAN	4.16	4.58	4.42	4.33	4.07	4.18	4.29

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	MILDSRCE	MILDCONT	MILDSRCE MILDCONT
SED	0.309	0.173	0.413
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:			
MILDSRCE			0.300

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	4	0.378	8.8
BLOCK.WP.SP	25	0.368	8.6

GRAIN MEAN DM% 85.8

SUB PLOT AREA HARVESTED 0.00163

WHOLE PLOTS

***** TABLES OF MEANS *****

MILDSRCE	NONE	EARLY	FULL	MEAN
	5.00	3.54	3.66	4.07

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	MILDSCRE
SED	0.398

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	4	0.487	12.0

GRAIN MEAN DM% 85.4

PLOT AREA HARVESTED 0.00624

https://doi.org/10.23637/ERADOC-1-15

76/R/B/7

SPRING BARLEY

MILDEW CONTROL IN SYSTEMATIC AND BALANCED DESIGNS

Object: To study the effects of tridemorph sprays, applied at different times, in systematic and balanced designs and to assess the magnitude of interference between plots - Little Hoos.

Sponsors: J.F. Jenkyn, A. Bainbridge, G.V. Dyke.

Designs: Systematic: 4 'blocks' of 7 plots.
Serially balanced: 9 'blocks' of 4 plots (+ 2 flanking plots).

Whole plot dimensions: 4.27 x 9.14.

Treatments:

TRIDEMOR	To systematic design: Times of applying tridemorph:
0	None
1	Once, on 18 May
2	Once, on 21 May
3	Once, on 27 May
4	Once, on 2 June
R	Repeated, 3 times 18 May, 27 May, 7 June

Plots arranged in linear sequence:

ROR1234 ROR4321 1234ROR 4321ROR

Serially blanced design:

Fungicide sprays as above but omitting levels 2 and 4. These were applied to 38 plots in one line on the field in an order such that each of the 36 possible sets of 3 adjacent treatments occurred exactly once (but omitting sets with the same treatment on 2 successive plots). The effects of treatments to neighbouring plots (lefthand neighbour - LHN, righthand neighbour - RHN) are estimated in the analysis.

In this experiment, 'left' was west, 'right' was east.

The analysis presented assumes a Fourier curve with 4 terms, 2 sine and 2 cosine to represent positional variation.

NOTE: Tridemorph applied at 0.53 kg in 340 l.

Basal applications: Manures: (20:14:14) at 310 kg, combine drilled. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).

Seed: Julia, sown at 160 kg.

Cultivations, etc.:- Heavy spring-tine cultivated: 4 Nov, 1975. Deep-tine cultivated twice: 13, 14 Nov. Heavy spring-tine cultivated: 1 Mar, 1976. Seed sown: 5 Mar. Weedkiller applied: 11 May. Combine harvested: 23 July. Previous crops: Beans 1974, potatoes 1975.

NOTE: Seedling emergence counts were made. Mildew was assessed on two occasions.

https://doi.org/10.23637/ERADOC-1-15 *pp 17*

76/R/B/7

SYSTEMATIC DESIGN

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

TRIDEMOR	0	1	2	3	4	R	MEAN
	4.61	5.22	5.17	5.10	5.03	5.09	5.05

GRAIN MEAN DM% 87.0

SERIALLY BALANCED DESIGN

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

GRAND MEAN 4.62

TRIDEMOR	0	1	3	R
	4.22	4.78	4.58	4.89

LHN TRIDEMOR	0	1	3	R
0		4.25	4.15	4.25
1	4.74		4.82	4.79
3	4.28	4.72		4.73
R	4.86	5.01	4.80	

RHN TRIDEMOR	0	1	3	R
0		4.20	4.26	4.20
1	4.48		4.77	5.10
3	4.40	4.72		4.61
R	4.67	5.00	4.99	

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	TRIDEMOR	TRIDEMOR LHN	TRIDEMOR RHN
SED	0.061	0.166	0.165

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	12	0.125	2.7

GRAIN MEAN DM% 86.7

PLOT AREA HARVESTED 0.00195

https://doi.org/10.23637/ERADOC-1-15

76/R/B/8

SPRING BARLEY

MIXED VARIETIES AND MILDEW

Object: To study the effects of mixing varieties on the incidence of mildew and the yield of spring barley - Whittlocks.

Sponsor: J.F. Jenkyn.

Design: 4 randomised blocks of 6 plots.

Whole plot dimensions: 8.53 x 11.0.

Treatments

VARIETY	Varieties:
HASSAN	Hassan
LOFAABED	Lofa Abed
MIDAS	Midas
WING	Wing
MIXED	Equal mixture of the above four varieties (2 plots/block)

NOTES: (1) All varieties were separated and surrounded by 18 m of variety Proctor, seed dressed ethirimol, sprayed tridemorph at 0.53 kg in 450 l on 27 May. Yields were taken from this crop, adjacent to treatment plots, for covariance analysis.

(2) There was also a systematic difference between the yields recorded from even and odd plots in the order of harvesting; an adjustment by covariance analysis has also been made for this in the yields presented. An explanation is being sought.

Basal applications: Manures: (20:14:14) at 380 kg combine drilled.
Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).

Seed: All varieties sown at 160 kg.

Cultivations, etc.:- Ploughed: 6 Nov, 1975. Spring-tine cultivated: 1 Mar, 1976. Seed sown: 10 Mar. Weedkiller applied: 7 May. Combine harvested: 28 July. Previous crops: Beans and oats 1974, wheat 1975.

NOTE: Seedling emergence counts were made. Mildew was assessed on three occasions and ear counts were made in July.

https://doi.org/10.23637/ERADOC-1-15 *pp 19*

76/R/B/8

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

VARIETY	HASSAN	LOFAABED	MIDAS	WING	MIXED	MEAN
	3.74	3.71	3.89	3.95	4.01	3.88

***** STANDARD ERRORS OF DIFFERENCES OF MEAN *****

TABLE	VARIETY	
SED	0.159	MIN REP
	0.137	MAX-MIN

	VARIETY
MAX-MIN	MIXED V ANY OF REMAINDER
MIN REP	ANY OF REMAINDER

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	14	0.193	5.0

MEAN DM% 87.0

PLOT AREA HARVESTED 0.00312

https://doi.org/10.23637/ERADOC-1-15 *pp 20*

76/B/B/9

SPRING BARLEY

INSECTICIDES AND BENEFICIAL INSECTS

Object: To study the effects of different rates of a selective and a non-selective aphicide on pests, beneficial insects and yield of barley.- Whittlocks.

Sponsor: J.H. Stevenson.

Design: 5 randomised blocks of 7 plots.

Whole plot dimensions: 18.7 x 18.3.

Treatments:

INS RATE	Insecticides and rates:-
NONE	None
DEM 1	Demeton-s-methyl (non-selective) at 25.7 g
DEM 3	Demeton-s-methyl (non-selective) at 77.1 g
DEM 9	Demeton-s-methyl (non-selective) at 231 g
PIR 1	Pirimicarb (selective) at 15.6 g
PIR 3	Pirimicarb (selective) at 46.7 g
PIR 9	Pirimicarb (selective) at 140 g

NOTE: Treatments were applied in 450 l on 25 June 1976.

Basal applications: Manures: (20:14:14) at 380 kg combine drilled. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l).

Seed: Julia, dressed ethirimol, sown at 160 kg.

Cultivations, etc.:- Ploughed: 6 Nov, 1975. Spring-tine cultivated: 1 Mar, 1976. Seed sown: 10 Mar. Weedkiller applied: 7 May. Combine harvested: 23 July. Previous crops: Beans and oats 1974, winter wheat 1975.

NOTE: Aphid counts were made on plants. Other insects were sampled by sweep nets, water traps and pitfall traps.

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

INS RATE	NONE	DEM 1	DEM 3	DEM 9	PIR 1	PIR 3	PIR 9	MEAN
	3.96	3.96	3.92	4.07	4.09	4.00	4.02	4.00

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	INS RATE
SED	0.118

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	24	0.186	4.7

GRAIN MEAN DM% 86.1 PLOT AREA HARVESTED 0.00195

https://doi.org/10.23637/ERADOC-1-15

76/R/B/10

SPRING BARLEY

COMPARISON OF SPRAYERS

Object: To study the performance of an electrostatic spraying system on distribution of spray material and on yield of barley - Pastures.

Sponsor: A.J. Arnold.

Design: 3 blocks of 9 plots (DATE 14 MAY on 1 block; DATE 27 MAY on 2 blocks).

Whole plot dimensions: 2.13 x 9.14.

Treatments: All combinations of:-

1. SPRAYER — Sprayer:

EC	Electrostatic sprayer with charged particles
EU	Electrostatic sprayer with uncharged particles

2. TRI RATE — Rate of applying tridemorph (in 38 l):

0.02	0.02 kg
0.04	0.04 kg
0.17	0.17 kg

3. DATE — Dates of spraying:

14 MAY	14 May
27 MAY	27 May

EXTRA — plus two extra treatments:

F	Standard farm sprayer applying 0.17 kg tridemorph in 340 l on 27 May (1 plot/block)
-	Untreated (2 plots/block on 2 blocks, 1 plot on 1 block)

Basal applications: Manures: (20:14:14) at 380 kg, combine drilled. Weedkillers: Paraquat at 0.42 kg ion in 220 l to barley stubble autumn 1975. Dicamba with mecoprop and MCPA ('Banlene Plus' at 5.6 l in 220 l), in spring.

Seed: Julia, sown at 160 kg.

Cultivations, etc.:- Autumn weedkiller applied: 6 Nov, 1975. Ploughed: 24 Nov. Spring-tine cultivated: 2 Mar, 1976. Seed sown: 12 Mar. Spring weedkiller applied: 11 May. Combine harvested: 27 July. Previous crops: Potatoes 1974, barley 1975.

NOTE: Mildew was assessed once. Observations were made on patterns of spray deposition.

https://doi.org/10.23637/ERADOC-1-15 *pp 22*

76/R/B/10

GRAIN TONNES/HECTARE

DATE 14 MAY

***** TABLES OF MEANS *****

SPRAYER TRI RATE	EC	EU	MEAN
0.02	4.51	4.77	4.64
0.04	5.06	4.69	4.87
0.17	5.51	5.03	5.27
MEAN	5.02	4.83	4.93

DATE 27 MAY AND EXTRA

***** TABLES OF MEANS *****

SPRAYER TRI RATE	EC	EU	MEAN
0.02	4.95	4.58	4.77
0.04	4.72	4.73	4.73
0.17	4.64	4.59	4.62
MEAN	4.77	4.64	4.70

EXTRA	F	-	MEAN
	4.77	4.58	4.65

GRAND MEAN 4.68

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	EXTRA	SPRAYER	TRI RATE	SPRAYER TRI RATE
SED	0.176	0.133	0.163	0.231

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	9	0.231	4.9

GRAIN MEAN DM% 87.2

PLOT AREA HARVESTED 0.00130

https://doi.org/10.23637/ERADOC-1-15

76/R/B/11

SPRING BARLEY

MILDEW TOLERANCE TO ETHIRIMOL

Object: To study the effects of a range of rates of ethirimol seed dressing on mildew tolerance and yield of barley - Long-Hoos VI/VII 3.

Sponsor: D.W. Hollomon.

Design: 3 randomised blocks of 4 plots.

Whole plot dimensions: 2.40 x 5.18.

Treatments:

ETHIRIMO	Ethirimol seed dressing (g/kg of seed):
0	None
1	0.92
2	4.80
3	17.9

NOTE: Surrounds sown to Proctor sprayed with tridemorph at 0.53 kg in 340 l on 14 May and 21 June.

Basal applications: Manures: (0:14:28) at 850 kg. 'Nitro-Chalk' at 450 kg.

Seed: Proctor, sown at 160 kg.

Cultivations, etc.:- PK applied: 9 Dec, 1975. Ploughed: 16-23 Dec. Spring-tine cultivated twice: 10 Mar, 1976. Seed sown, N applied: 11 Mar. Combine harvested: 26 July. Previous crops: Barley 1974, potatoes 1975.

NOTES: (1) Plots were inoculated with an ethirimol-sensitive strain of powdery mildew on two occasions.
(2) Mildew was assessed at four growth stages. The race composition and ethirimol tolerance of mildew on the plots was assessed.

GRAIN TONNES/HECTARE

*****TABLES OF MEANS *****

ETHIRIMO	0	1	2	3	MEAN
	2.92	3.49	3.39	3.67	3.37

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	ETHIRIMO
SED	0.407

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	6	0.498	14.8

GRAIN MEAN DM% 87.8

PLOT AREA HARVESTED 0.00050

https://doi.org/10.23637/ERADOC-1-15

76/S/B/1

SPRING BARLEY

VARIETIES, N AND FUNGICIDES

Object: To study the effects of rates, times and forms of nitrogen and of fungicides on the incidence of foliar diseases and yields of two varieties of barley - Saxmundham, Grove Plot.

Sponsors: F.V. Widdowson, J.F. Jenkyn, A. Penny.

Design: Single replicate of 32 plots split into 2.

Whole plot dimensions: 2.43 x 12.2.

Treatments: All combinations of:-

Whole plots

1. VARIETY Varieties:

JULIA	Julia
WING	Wing

2. S N Solid nitrogen fertiliser (kg N):

50	50
100	100

3. S N TIME Time of applying solid nitrogen fertiliser:

SEEDBED	Seedbed on 16 Mar
TOPDRESS	Top dressed on 18 May

4. L N Liquid nitrogen fertiliser (kg N):

0	None
50	50, half on 15 June, half on 8 July

5. MILD CON Mildew control:

NONE	None
ETH/TRID	Seed dressed eithirimol, crop sprayed tridemorph at 0.53 kg in 280 l on 18 May

Sub plots

6. RUST CON Rust control:

NONE	None
BENODANI	Crop sprayed benodanil at 1.12 kg in 280 l on 15 June, 8 July

NOTE: 'Nitro-Chalk' was used as solid fertiliser, 'Agsol N26' as liquid fertiliser in 75.

https://doi.org/10.23637/ERADOC-1-15 *pp 25*

Basal applications: Manures: (0:20:20) at 315 kg. Weedkillers: Dichlorprop plus MCPA ('Mephetol Plus' at 8.4 l in 340 l).

Seed: Varieties sown at 190 kg.

Cultivations, etc.:- PK applied: 29 Sept, 1975. Ploughed: 20 Oct. Seed sown: 15 Mar, 1976. Weedkillers applied: 18 May. Combine harvested: 19 July. Previous crops: Barley 1974 and 1975.

NOTE: Brown rust and mildew were assessed in early July.

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

S N	50	100	MEAN
VARIETY			
JULIA	3.40	3.31	3.35
WING	3.44	3.59	3.51
MEAN	3.42	3.45	3.43

S N TIME	SEEDBED	TOPDRESS	MEAN
VARIETY			
JULIA	3.51	3.19	3.35
WING	3.42	3.61	3.51
MEAN	3.46	3.40	3.43

S N TIME	SEEDBED	TOPDRESS	MEAN
S N			
50	3.34	3.49	3.42
100	3.59	3.31	3.45
MEAN	3.46	3.40	3.43

L N	0	50	MEAN
VARIETY			
JULIA	3.19	3.51	3.35
WING	3.40	3.63	3.51
MEAN	3.29	3.57	3.43

L N	0	50	MEAN
S N			
50	3.28	3.55	3.42
100	3.30	3.59	3.45
MEAN	3.29	3.57	3.43

L N	0	50	MEAN
S N TIME			
SEEDBED	3.14	3.78	3.46
TOPDRESS	3.44	3.36	3.40
MEAN	3.29	3.57	3.43

https://doi.org/10.23637/ERADOC-1-15 *pp 26*

76/S/B/1

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

MILD CON VARIETY	NONE	ETH/TRID	MEAN
JULIA	3.48	3.22	3.35
WING	3.55	3.48	3.51
MEAN	3.51	3.35	3.43

MILD CON S N	NONE	ETH/TRID	MEAN
50	3.43	3.40	3.42
100	3.60	3.30	3.45
MEAN	3.51	3.35	3.43

MILD CON S N TIME	NONE	ETH/TRID	MEAN
SEEDBED	3.55	3.38	3.46
TOPDRESS	3.48	3.33	3.40
MEAN	3.51	3.35	3.43

MILD CON L N	NONE	ETH/TRID	MEAN
0	3.44	3.14	3.29
50	3.59	3.56	3.57
MEAN	3.51	3.35	3.43

RUST CON VARIETY	NONE	BENODANI	MEAN
JULIA	3.33	3.37	3.35
WING	3.44	3.58	3.51
MEAN	3.39	3.48	3.43

RUST CON S N	NONE	BENODANI	MEAN
50	3.43	3.40	3.42
100	3.34	3.56	3.45
MEAN	3.39	3.48	3.43

RUST CON S N TIME	NONE	BENODANI	MEAN
SEEDBED	3.41	3.51	3.46
TOPDRESS	3.36	3.44	3.40
MEAN	3.39	3.48	3.43

RUST CON L N	NONE	BENODANI	MEAN
0	3.26	3.32	3.29
50	3.51	3.63	3.57
MEAN	3.39	3.48	3.43

https://doi.org/10.23637/ERADOC-1-15 *pp 27*

76/S/B/1

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

RUST CON / MILD CON	NONE	BENODANI	MEAN
NONE	3.37	3.65	3.51
ETH/TRID	3.40	3.30	3.35
MEAN	3.39	3.48	3.43

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	VARIETY	S N	S N TIME	L N
SED	0.126	0.126	0.126	0.126

TABLE	MILD CON	RUST CON	VARIETY S N	VARIETY S N TIME
SED	0.126	0.113	0.179	0.179

TABLE	S N S N TIME	VARIETY L N	S N L N	S N TIME L N
SED	0.179	0.179	0.179	0.179

TABLE	VARIETY MILD CON	S N MILD CON	S N TIME MILD CON	L N MILD CON
SED	0.179	0.179	0.179	0.179

TABLE	VARIETY RUST CON	S N RUST CON	S N TIME RUST CON	L N RUST CON
SED	0.170	0.170	0.170	0.170
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:				
VARIETY	0.160			
S N		0.160		
S N TIME			0.160	
L N				0.160

TABLE	MILD CON RUST CON
SED	0.170
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:	
MILD CON	0.160

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	6	0.357	10.4
WP.SP	16	0.454	13.2

GRAIN MEAN DM% 84.0

SUB PLOT AREA HARVESTED 0.00089

https://doi.org/10.23637/ERADOC-1-15 *pp 28*