

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



Yields of the Field Experiments 2011

[Full Table of Content](#)



Results of the
Classical and other
Long-term Experiments

2011

R/BK/1 Broadbalk

Rothamsted Research

Rothamsted Research (2012) *R/BK/1 Broadbalk ; Yields Of The Field Experiments 2011*, pp 6 - 16 -
DOI: <https://doi.org/10.23637/ERADOC-1-221>

11/R/BK/1

BROADBALK

Object: To study the effects of organic manures and inorganic fertilisers on continuous w. wheat and wheat in rotation. From 1968 two three-year rotations were included: potatoes, beans, w. wheat and fallow, w. wheat, w. wheat. In 1979 the first rotation was changed to fallow, potatoes, w. wheat. In 1980 the second rotation reverted to continuous w. wheat. Since 1985 part of the second rotation was added to the first to extend the rotation to fallow, potatoes, w. wheat, w. wheat, w. wheat. In 1996 the fallow was replaced by w. oats and potatoes replaced by maize in 1997.

The 168th year, w. wheat, w. oats and forage maize.

For previous years see 'Details' 1967 and 1973, Station Report for 1966, pp. 229-231; Station Report for 1968, Part 2; Station Report for 1982, Part 2, pp 5-44 and Yield Books for 74-10/R/BK/1.

Areas harvested^a:

	Section	
Wheat:	0	0.00320
	1	0.00589
	2,4,6 and 7	0.00487
	8,9	0.00512
Oats:	3	0.00487
Maize:	5	0.00162

^aHarvest areas in the 2007-2010 yield books were incorrectly assigned, but yields were correct.

Treatments:

In 2001 a number of the treatments were changed. The treatments are now:-

Whole plots

PLOT	Fertilizers and organic manures	
	Treatments	From 2001
01 (FYM)N4	01	N4
21FYMN3	2.1	FYM N2 ⁽¹⁾
22FYM	2.2	FYM
03Nil	03	None
05(P)KMg	05	(P) K Mg
06N1 (P) KMg	06	N1 (P) K Mg
07N2(P)KMg	07	N2 (P) K Mg
08N3(P)KMg	08	N3 (P) K Mg
09N4(P)KMg	09	N4 (P) K Mg
10N4	10	N4
11N4PMg	11	N4 P Mg
12N1+3+1(P)K2Mg2	12	N1+3+1 (P) K2 Mg2 ⁽²⁾
13N4PK	13	N4 P K
14N4PK*(Mg*)	14	N4 P K* (Mg*)
15N5(P)KMg	15	N5 (P) K Mg
16N6(P)KMg	16	N6 (P) K Mg
17N1+4+1PKMg	17	N1+4+1 P K Mg
18N1+2+1PKMg	18	N1+2+1 P K Mg
19N1+1+1KMg	19	N1+1+1 K Mg
20N4KMg	20	N4 K Mg

11/R/BK/1

- (1) FYM N3 since 2005
- (2) N1+3+1 (P) KMg since 2006

W. oats; Nitrogen and farmyard manure were not applied.

N1, N2, N3, N4, N5, N6: 48, 96, 144, 192, 240, 288 kg N as 33.5% N; to be applied at the same time as the second dressings in the split nitrogen plots for wheat and to the seedbed for forage maize.

Split N to wheat

N1+1+1, 1+2+1 etc: Rates as above. Timings: first two weeks of March, GS31 or mid-April (whichever comes first) and GS37/mid-May.

Split N to forage maize

N2+1, 2+2, 2+3, 2+4: Rates as above. Timings: to the seedbed and post-emergence.

P: 35 kg P as triple superphosphate

(P): (none), to be reviewed in 2010/11.

K: 90 kg K as potassium sulphate.

K2: 180 kg K as potassium sulphate (plus 450 kg K autumn 2000 only)

K*: 90 kg K as potassium chloride

Mg: 12 kg Mg as kieserite.

Mg2: 24 kg Mg as kieserite (plus 60kg Mg, autumn 2000 only).

(Mg*): (none), to be reviewed in 2010/11

FYM: Farmyard manure at 35 t

Previous treatment:-

Whole plots

PLOT

	Plot	Fertilizers and organic manures:-		
		Treatments until 1967	Treatments from 1968	Treatments from 1985 – 2000
01DN4PK	01	-	D N2 P K	D N4 P K
21DN2	21	D	D N2	D N2
22D	22	D	D	D
030	03	None	None	None
05F	05	P K Na Mg	P K (Na) Mg	PK Mg
06N1F	06	N1 P K Na Mg	N1 P K (Na) Mg	N1 P K Mg
07N2F	07	N2 P K Na Mg	N2 P K (Na) Mg	N2 P K Mg
08N3F	08	N3 P K Na Mg	N3 P K (Na) Mg	N3 P K Mg
09N4F	09	N*1 P K Na Mg	N4 P K (Na) Mg	N4 P K Mg
10N2	10	N2	N2	N2
11N2P	11	N2 P	N2 P	N2 P
12N2PNA	12	N2 P Na	N2 P Na	N2 P Na
13N2PK	13	N2 P K	N2 P K	N2 P K
14N2PKMG	14	N2 P Mg	N2 P K Mg	N2 P K Mg
15N5F	15	N2 P K Na Mg	N3 P K (Na) Mg	N5 P K Mg
16N6F	16	N*2 P K Na Mg	N2 P K (Na) Mg	N6 P K Mg
17N1+3FH	17	N2 (A)	N2 ½[P K (Na) Mg]	N1+3 ½[P K Mg] (A)+
18N0+3FH	18	P K Na Mg (A)	N2 ½[P K (Na) Mg]	N0+3 ½[P K Mg] (A)+
19(C)	19	C	C	(C) (since 1989)
20N2KMG	20	N2 K Na Mg	N2 K (Na) Mg	N2 K Mg

(A) Alternating each year

+ This change since 1980. Treatments shown are those to w.wheat; autumn N alternates. Maize received N3 ½[PK Mg] on both plots 17 and 18. These treatments shown incorrectly in 1999-2002 Yield books.

W. oats; Nitrogen and dung were not applied.

N1, N2, N3, N4, N5, N6: 48, 96, 144, 192, 240, 288 kg N as sulphate of ammonia until 1967, except N* which was nitrate of soda. All as 'Nitro-Chalk' in spring from 1968 to 1985, as 34.5% N since 1986.
 N0+3; N1+3: None in autumn + 144 kg N in spring; 48 kg N in autumn + 144 kg N in spring.
 P: 35 kg P as triple superphosphate in 1974 and since 1988, single superphosphate in other years
 K: 90 kg K as sulphate of potash
 Na: 55 kg Na as sulphate of soda
 (Na): 16 kg Na as sulphate of soda until 1973
 Mg: 30kg Mg annually to Plot 14 (applied at 26 kg 1990 to 2000), 35 kg Mg every third year to other plots since 1974 (applied at 30 kg in 1991, 1994, 1997 and 2000 and at 15 kg on half rate treatments). All as kieserite since 1974, previously as sulphate of magnesia annually.
 D: Farmyard manure at 35 t
 (C): Castor meal to supply 96 kg N until 1988, none since
 F: Full rate P K (Na) Mg as above
 H: Half rate of above.

Strips of sub-plots: Until 1967 wheat alone was grown on the experiment, with some bare fallowing. From 1968, the experiment was divided into 10 sections with the following cropping:-

SECTION	1	9	0*	8+	6**	5	3	7	4	2
Section										
Year										
1968	W	W	W	W	F	W	W	P	W	BE
1969	W	W	W	W	F	W	W	BE	P	W
1970	W	W	W	W	W	F	W	W	BE	P
1971	W	W	W	W	F	W	W	P	W	BE
1972	W	W	W	F	W	F	W	BE	P	W
1973	W	W	W	W	W	W	F	W	BE	P
1974	W	W	W	W	F	W	W	P	W	BE
1975	W	W	W	W	W	F	W	BE	P	W
1976	W	W	W	W	W	W	F	W	BE	P
1977	W	W	W	W	F	W	W	P	W	BE
1978	W	W	W	W	W	F	W	BE	P	W
1979	W	W	W	W	W	W	F	W	P	F
1980	W	W	W	W	W	W	W	F	W	P
1981	W	W	W	F	W	W	W	P	F	W
1982	W	W	W	W	W	W	W	W	P	F
1983	W	W	W	W	W	W	W	F	W	P
1984	W	W	W	W	W	W	W	P	F	W
1985	W	W	W	W	W	F	W	W	P	W
1986	W	W	W	W	W	P	F	W	W	W
1987	W	W	W	W	W	W	P	W	W	F
1988	W	W	W	F	W	W	W	F	W	P
1989	W	W	W	W	W	W	W	P	F	W

Section Year	1	9	0*	8+	6**	5	3	7	4	2
1990	W	W	W	W	W	F	W	W	P	W
1991	W	W	W	W	W	P	F	W	W	W
1992	W	W	W	W	W	W	P	W	W	F
1993	W	W	W	W	W	W	W	F	W	P
1994	W	W	W	F	W	W	W	P	F	W
1995	W	W	W	W	W	F	W	W	P	W
1996	W	W	W	W	W	P	O	W	W	W
1997	W	W	W	W	W	W	M	W	W	O
1998	W	W	W	W	W	W	W	O	W	M
1999	W	W	W	W	W	W	W	M	O	W
2000	W	W	W	W	W	O	W	W	M	W
2001	W	W	W	F	W	M	O	W	W	W
2002	W	W	W	W	W	W	M	W	W	O
2003	W	W	F	W	W	W	W	O	W	M
2004	W	W	F	W	W	W	W	M	O	W
2005	W	W	W	W	W	O	W	W	M	W
2006	W	W	W	W	W	M	O	W	W	W
2007	W	W	W	W	W	W	M	W	W	O
2008	W	W	W	F	W	W	W	O	W	M
2009	W	W	W	W	W	W	W	M	O	W
2010	W	W	W	W	W	O	W	W	M	W
2011	W	W	W	W	W	M	O	W	W	W

W = w. wheat, O = w. oats (spring oats 2001), P = potatoes, BE = s. beans, F = fallow, M = forage maize

* Straw incorporated since autumn 1986. ** No sprays except weedkillers since 1985.

+ No weedkillers.

NOTES:

- (1) For a fuller record of treatments see 'Details' etc.
- (2) From autumn 1975 to autumn 1986, chalk was applied at 2.9t each autumn to all plots in sets of Sections on a three-year cycle. Year 1: Sections 1, 2, 3. Year 2: Sections 6, 7, 8, 9. Year 3: Sections 0, 4, 5. From autumn 1988 until autumn 1992 a five-year cycle was used. Year 1: Sections 1, 3. Year 2: Sections 2, 8. Year 3: Sections 7, 9. Year 4: Sections 4, 6. Year 5: Sections 0, 5 (omitted). No chalk was applied after autumn 1991 until autumn 2007 when differential amounts were applied to selected plots (see "Results 2008").
- (3) In 2003 and 2004 section 0 was used for an experiment (CS/595) investigating different herbicides to control *Equisetum arvense*.

11/R/BK/1

Experimental Diary:

All Sections

			Rate	Unit
01-Sep-10	p	Weedazol-TL, Not on section 8 or maize section (Water volume = 296 lt / ha)	20	l/ha
07-Oct-10	f	Triple Super Phosphate, Strips 11,13,14,17,18	171	kg/ha
07-Oct-10	f	Muriate of Potash, On strip 14	181	kg/ha
08-Oct-10	a	Applied FYM, All sections apart from section 3 (W. oats) of Strips 2.2 and 2.1	35	t/ha
10-Oct-10	a	Ploughed		
13-Oct-10	a	Cultipressed		
14-Oct-10	a	Cultipressed		
01-Nov-10	p	Sprayed Regatta, Water volume = 200 lt / ha (Sections 0,1,2,4,6,7,9 only)	0.6	l/ha
10-Nov-10	p	Karan Slug pellets, Not section 5 (Maize section)	3	kg/ha
12-Nov-10	a	Erect rabbit fence		
23-Nov-10	p	Karan Slug pellets	2.5	kg/ha
16-Dec-10	a	Cut Hedges, started		
17-Dec-10	a	Cut Hedges		
05-Apr-11	f	Applied Sulphate of Potash, strips 5,6,7,8,9,12,13,15,16,17,18,19 and 20 (treatment)	217	kg/ha
06-Apr-11	f	Applied Kieserite, strips 5,6,7,8,9,11,12,15,16,17,18,19 and 20 only (treatment)	80	kg/ha
06-May-11	a	Removed rabbit fence		
10-May-11	a	Cut paths		
12-May-11	a	Flexi Tined, fallows		
16-May-11	a	Cut paths		
19-May-11	a	Rotovated down paths		
23-May-11	a	Cut paths		
24-May-11	a	Cut paths		
08-Jun-11	a	Cut paths		
09-Jun-11	a	Cut paths		
10-Jun-11	a	Rotovated fallows		
27-Jun-11	a	Cut paths		
28-Jul-11	p	Sprayed Statis 360 + Mixture B, Water volume = 200 lt/ha (sections 0,1,9,2,3,4,,6,7 only)	3+3	l/ha
29-Jul-11	a	Cut Paths		
12-Aug-11	a	Combined O+Es, Opened up trials with comercial combine ready for yields to be taken		
12-Aug-11	a	Baled O+Es, Baled area discard area cut to open out trials		
30-Aug-11	a	Rolled to crush field horse tail stems (<i>equisetum arvense</i>) to aid chemical penetration when sprayed with roundup.		
08-Sep-11	a	Topped, to tidy stubble before primary cultivation		

Cropped Sections

Winter Wheat				Rate	Unit
19/10/2010	a	Drilled Hereward trt Redigo Deter, 350 seeds / metre sq (Started and rained off)		159	kg/ha
20-Oct-10	a	Drilled Hereward trt Redigo Deter, 350 seeds / metre sq		159	kg/ha
15-Mar-11	f	Applied Nitram Fertiliser - 48 kg/ha N. Applied to strips 12,17,18, 19.		139	kg/ha
8-Mar-11	p	Sprayed Cherokee - Water volume = 118 l/ha. Applied to sections 0,1,9,2,4,7,8.		1.25	l/ha
13-Apr-11	f	Applied Nitram - wheat only. Strips 6 and 18		139	kg/ha
13-Apr-11	f	Applied Nitram - Wheat only. Strips 7 and 19		278	kg/ha
13-Apr-11	f	Applied Nitram - Wheat only. Strips 8 and 12; N3 to strip 2.1.		417	kg/ha
13-Apr-11	f	Applied Nitram - Wheat only. Strips 9, 10, 11, 13, 14, 17 and 20; N4 to Strip 1.		556	kg/ha
13-Apr-11	f	Applied Nitram - Wheat only. Strip 15.		696	kg/ha
13-Apr-11	f	Applied Nitram - Wheat only. Strip 16.		835	kg/ha
04-May-11	f	Sprayed Ally Max - Sections 0, 1, 2, 3, 4, 6, 7 and 9, 200 l/ha water and Starane 2 - Sections 0, 1, 2, 3, 4, 6, 7 and 9, 200 l/ha water	42 0.75	g/ha l/ha	
06-May-11	p	Sprayed Bravo 500 - Sections 0, 1, 2, 4, 7, 8 and 9, Tracker - Sections 0, 1, 2, 4, 7, 8 and 9,	1.0 1.0	l/ha l/ha	
	p	Agriguard Chlormequat 720 - Sections 0, 1, 2, 4, 7, 8 and 9	2.25	l/ha	
	p	Justice - Sections 0, 1, 2, 4, 7, 8 and 9, all above in 200 l/ha water	0.25	l/ha	
12-May-11	f	Applied Nitram, Sections 12, 17, 18 and 19	139	kg/ha	
19-May-11	p	Sprayed Opus, sections 0, 1, 2, 4, 7, 8 and 9. 200 l/ha	0.8	l/ha	
	p	Comet 200, sections 0, 1, 2, 4, 7, 8 and 9. 200 l/ha	0.6	l/ha	
	p	and Bravo 500 - Sections 0, 1, 2, 4, 7, 8 and 9. 200 l/ha	1.0	l/ha	
15-Aug-11	a	Combined for yields			
15-Aug-11	a	Straw weights			
16-Aug-11	a	Combined - O+Es			
16-Aug-11	a	Baled - Remaining straw baled and removed			
17-Aug-11	a	removed bales			
15-Sep-11	a	Topped - Headlands and section 8			

Winter Oats

19-Oct-10	a	Drilled Gerald trt Beret Gold, 350 seeds / metre sq	122	kg/ha
23-Nov-10	p	Sprayed Lexus Class + Hallmark with zeon technology, Section 3 (W. oats only). Water volume = 200 l / ha	60 + 50	g/ha ml/ha
12-May-11	p	Sprayed Amistar and Agriguard, Section 3 only. 200 l/ha water	0.5 &1.75	l/ha
10-Aug-11	a	Combined for yields, Oats only		
10-Aug-11	a	Straw weights, Oats section only		

11/R/BK/1

Forage Maize			Rate	Unit
07-Apr-11	p	Sprayed Statis 360, 200 lt/ha water. Maize section only	3	l/ha
14-Apr-11	a	Flexi Tined, Section 5. Maize		
26-Apr-11	a	Drilled Hudson tr. Mesurol, Maize plots	10.2	seed/m ²
26-Apr-11	a	Rolled, Maize plots		
26-Apr-11	a	Power harrow (Roadtare) Maize plots.		
03-May-11	f	Applied Nitram, Plot 065 only	139	kg/ha
03-May-11	f	Applied Nitram, Plots 075, 125, 175, 185 and 195.	278	kg/ha
03-May-11	f	Applied Nitram, Plots 2.15 and 085	417	kg/ha
03-May-11	f	Applied Nitram, Plots 015, 095, 105, 115, 135 and 145	556	kg/ha
03-May-11	f	Applied Nitram, Plot 155	696	kg/ha
03-May-11	f	Applied Nitram, Plot 165	835	kg/ha
24-Jun-11	p	Sprayed Calisto + Samson Extra, water volume = 200 lt/ha (Sprayed Maize, section 5, only)	1.0 + 0.5	l/ha
28-Jun-11	f	Applied Nitram, Plot 195	139	kg/ha
28-Jun-11	f	Applied Nitram, Plot 185	278	kg/ha
28-Jun-11	f	Applied Nitram, Plot 125	417	kg/ha
28-Jun-11	f	Applied Nitram, Plot 175	556	kg/ha
23-Sep-11	a	Cut Maize for yields and discards		
30-Sep-11	a	Topped Maize		

Wilderness

21-Oct-10 a Topped, grass area of the wilderness only

NOTE: Samples of wheat and oat grain and straw and forage maize were taken for chemical analysis. Unground wheat grain and straw from Section 1 and maize samples from Section 5 were archived. The entry for 12 May in the wheat section on page 11 was originally entered in error under the maize section. It was corrected on Dec 3rd 2018 by A Macdonald.

11/R/BK/1

WHEAT

GRAIN TONNES/HECTARE

***** Tables of means *****

SECTION PLOT	4/W1	7/W2	2/W3	6/W34	0/W7	1/W45	9/W53	8/W3	Mean
01(FYM)N4	8.90	8.84	7.68	7.24	*	*	*	*	8.16
21FYMN3	9.78	9.71	8.92	8.32	6.80	7.37	6.73	3.57	7.65
22FYM	5.96	5.58	5.71	5.52	5.09	5.89	5.36	4.05	5.39
03Nil	1.87	1.23	1.37	1.44	1.32	1.11	0.99	1.58	1.36
05(P)KMg	1.81	1.81	1.53	1.81	1.60	1.80	1.45	3.18	1.87
06N1(P)KMg	3.50	2.90	3.25	2.70	2.59	2.62	2.67	2.75	2.87
07N2(P)KMg	5.36	4.03	4.29	3.99	3.63	4.43	3.57	2.98	4.03
08N3(P)KMg	6.76	5.31	5.33	4.93	3.81	4.11	4.29	3.56	4.76
09N4(P)KMg	7.19	5.66	6.60	5.74	5.42	4.83	4.93	4.28	5.58
10N4	5.31	4.15	4.30	2.03	1.47	1.70	0.93	1.37	2.66
11N4PMg	5.21	5.69	5.88	5.15	4.89	4.33	4.80	4.12	5.01
12N1+3+1(P)KMg	7.63	6.54	6.89	6.74	6.06	5.43	6.02	5.12	6.30
13N4PK	6.82	5.65	5.92	5.48	4.75	4.62	4.90	3.95	5.26
14N4PK*(Mg*)	6.84	5.56	6.22	6.14	5.56	5.33	5.39	3.33	5.55
15N5(P)KMg	8.03	6.56	5.52	5.99	5.49	5.15	5.42	1.92	5.51
16N6(P)KMg	8.30	6.66	6.52	7.78	5.85	5.30	6.23	2.73	6.17
17N1+4+1PKMg	8.48	7.63	6.89	7.92	5.43	5.38	5.81	2.96	6.31
18N1+2+1PKMg	7.50	6.17	6.25	4.46	5.17	4.72	4.98	3.83	5.41
19N1+1+1KMg	6.00	5.27	4.48	2.35	3.84	3.96	2.92	2.60	3.93
20N4KMg	*	*	*	*	1.56	0.78	*	*	1.17
Mean	6.38	5.52	5.45	5.05	4.23	4.15	4.30	3.22	4.80

GRAIN MEAN DM% 84.0

11/R/BK/1

STRAW TONNES/HECTARE

***** Tables of means *****

SECTION PLOT	4/W1	7/W2	2/W3	6/W34	0/W7	1/W45	9/W53	8/W3	Mean
01(FYM)N4	3.15	*	*	*	*	*	*	*	3.15
21FYMN3	4.16	*	*	*	*	3.10	*	3.82	3.69
22FYM	2.39	*	*	*	*	2.22	*	3.79	2.80
03Nil	0.55	*	*	*	*	0.27	*	0.32	0.38
05(P)KMg	0.46	*	*	*	*	0.57	*	2.00	1.01
06N1(P)KMg	1.48	*	*	*	*	1.03	*	1.75	1.42
07N2(P)KMg	1.96	*	*	*	*	1.72	*	1.92	1.87
08N3(P)KMg	2.21	*	*	*	*	1.19	*	2.82	2.07
09N4(P)KMg	2.28	*	*	*	*	1.74	*	4.29	2.77
10N4	1.42	*	*	*	*	0.73	*	1.02	1.06
11N4PMg	1.40	*	*	*	*	1.54	*	3.20	2.05
12N1+3+1(P)KMg	2.31	*	*	*	*	2.17	*	4.69	3.06
13N4PK	2.22	*	*	*	*	1.80	*	3.53	2.52
14N4PK*(Mg*)	2.36	*	*	*	*	2.04	*	3.44	2.61
15N5(P)KMg	3.22	*	*	*	*	2.08	*	4.44	3.25
16N6(P)KMg	3.60	*	*	*	*	2.27	*	3.74	3.20
17N1+4+1PKMg	3.76	*	*	*	*	2.14	*	6.09	4.00
18N1+2+1PKMg	2.49	*	*	*	*	1.94	*	4.02	2.82
19N1+1+1KMg	2.34	*	*	*	*	1.93	*	3.11	2.46
20N4KMg	*	*	*	*	*	0.25	*	*	0.25
Mean	2.30	*	*	*	*	1.62	*	3.22	2.37

STRAW MEAN DM% 77.1

11/R/BK/1

W. OATS
TONNES/HECTARE

***** Tables of means *****

PLOT	GRAIN	STRAW
01(FYM)[N4]	7.02	2.75
21[FYMN2]	8.32	2.90
22[FYM]	7.24	2.29
03Nil	1.82	0.45
05 (P) KMg	2.00	0.61
06[N1](P)KMg	2.40	0.62
07[N2](P)KMg	3.05	1.02
08[N3](P)KMg	3.86	0.95
09[N4](P)KMg	3.89	1.15
10[N4]	4.61	1.70
11[N4]PMg	6.69	2.11
12[N1+3+1](P)KMg	4.74	1.32
13[N4]PK	4.41	1.42
14[N4]PK*(Mg*)	5.40	1.80
15[N5](P)KMg	6.80	2.76
16[N6](P)KMg	8.12	3.31
17[N1+4+1]PKMg	6.85	2.40
18[N1+2+1]PKMg	3.71	1.12
19[N1+1+1]KMg	3.55	1.04
MEAN DM%	88.2	75.2

FORAGE MAIZE
WHOLE CROP (100% DM) TONNES/HECTARE

***** Tables of means *****

PLOT	WHOLE CROP
01(FYM)N4	10.11
21FYMN3	10.80
22FYM	13.95
03Nil	1.74
05(P)KMg	3.33
06N1(P)KMg	5.89
07N2(P)KMg	9.22
08N3(P)KMg	6.15
09N4(P)KMg	6.80
10N4	1.28
11N4PMg	4.52
12N2+3(P)KMg	8.54
13N4PK	8.40
14N4PK*(Mg*)	8.18
15N5(P)KMg	6.56
16N6(P)KMg	5.06
17N2+4PKMg	6.06
18N2+2PKMg	6.86
19N2+1KMg	2.99
MEAN DM%	18.8

SECTION 8: CLEAN GRAIN, TONNES/HA, AFTER
REMOVING WEED SEEDS.

YEAR	2004	2005	2006	2007	2009
SECTION	8/W3	8/W4	8/W5	8/W6	8/W1
PLOT					
01 (FYM)N4	-	-	-	-	-
2.1 FYMN2		4.32	2.21	1.45	2.87
2.2 FYM		3.23	2.73	1.65	3.23
03 Nil	0.50	0.69	0.72	0.97	2.13
05 (P)KMg	0.76	1.32	1.01	0.98	3.94
06 N1(P)KMg	1.24	1.75	0.95	1.03	2.76
07 N2(P)KMg	1.67	2.08	1.28	0.82	3.70
08 N3(P)KMg	1.24	2.53	2.12	0.95	5.15
09 N4(P)KMg	1.93	3.09	2.61	1.75	5.74
10 N4	0.65	1.43	0.73	0.36	2.38
11 N4PMg	1.39	2.52	1.03	1.29	2.41
12 N1+3+1(P)K2Mg ^b	0.86	3.36	1.03	1.72	3.66
13 N4PK	1.54	3.39	2.45	0.99	5.37
14 N4PK*(Mg*)	1.52	^a 3.63	1.57	0.74	5.60
15 N5(P)KMg	1.01	2.70	1.28	0.76	5.51
16 N6(P)KMg	1.43	3.47	1.18	1.18	5.23
17 N1+4+1PKMg		3.52	0.43	1.62	2.52
18 N1+2+1PKMg		3.27	1.06	1.59	3.39
19 N1+1+1KMg		2.21	0.97	1.35	2.64
20 N4KMg	*	*	*	*	*

Note: Section 8 fallow in 2008

^aValue estimated from mean % clean grain on plots 9-16.

^bN1+3+1(P)KMg since 2006