

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.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1981

[Full Table of Content](#)



81/R/AG/6 Agdell - W. Beans, W. Wheat

Rothamsted Research

Rothamsted Research (1982) *81/R/AG/6 Agdell - W. Beans, W. Wheat ; Yields Of The Field Experiments 1981*, pp 26 - 30 - DOI: <https://doi.org/10.23637/ERADOC-1-35>

81/R/PG/5

TOTAL OF 2 CUTS DRY MATTER TONNES/HECTARE

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

LIME	A	B	C	D	MEAN
MANURE					
N1	4.19	4.96	2.84	2.57	3.64
O(D)	4.62	5.25	4.43	3.60	4.48
O/PLOT3	3.78	4.89	2.50	2.97	3.54
P	4.97	5.76	4.34	4.14	4.80
N2P	5.14	5.76	5.17	5.04	5.28
N1MIN	8.69	8.52			8.61
MIN	8.11	8.46	5.01	3.84	6.36
PNAMG	4.45	4.51	4.60	4.45	4.51
N2MIN	8.50	8.73	6.40	5.94	7.39
N2PNAMG	5.31	5.22	5.03	4.29	4.96
N3MIN	8.07	7.19	7.32	6.41	7.25
N3MINSI	8.17	7.87	7.47	7.63	7.79
O/PLOT12	5.18	4.59	3.54	3.73	4.26
D/F	8.96	9.32	7.91	6.57	8.19
N2*MIN	7.08	7.99	8.23	7.84	7.78
MIN(N2*)	7.56	8.28	4.29	4.58	6.18
N1*MIN	7.88	7.83	7.11	6.37	7.30
N1*	5.07	5.53	6.17	3.90	5.17
N2KNAMGO			1.76	1.56	1.66
N2KNAMG2	4.70				4.70
N2KNAMG1	5.06	5.39			5.23
D0	8.03				8.03
D2	8.94				8.94
D1	7.96				7.96
D/N*PK0	7.51				7.51
D/N*PK2	8.39				8.39
D/N*PK1	7.84				7.84

TOTAL OF 2 CUTS MEAN DM% 26.2

81/R/AG/6

Sixteenth plots

5. P₂O₅ 64 K₂O 64

Rates of 1964 treatments (kg):

P₂O₅ to P-test K₂O to K-test
half plots half plots

0	0
500	315
1000	630
2000	1260

Thirty second plots

6.

On P-test half plots:

To RN CROP F/BEANS. Residues of P₂O₅ applied
1970-72 (total, kg) and fresh dressings in 1979
and 1981 (total, kg):

P₂O₅ 721

(0)0
(375)300

None

375 total in 1970-72, 150 in 1979, 150 in 1981

To RN CROP L/WHEAT. Residues of P₂O₅ applied
1970-72 (total, kg) and in 1980 (kg):

P₂O₅ 720

(0)0
(375)150

On K-test half plots:

To RN CROP F/BEANS. Residues of K₂O applied
1973-76 (total, kg) and fresh dressings in 1979
and 1981 (total, kg):

K₂O 761

(0)0
(870)600

None

870 total in 1973-76, 300 in 1979, 300 in 1981

To RN CROP L/WHEAT. Residues of K₂O applied
1973-76 (total, kg) and in 1980 (kg):

K₂O 760

(0)0
(870)300

NOTE: (1) Chalk was applied at 5.0 t on 6 Oct, 1980 to all plots of OLDRESO
NPKNAMGC and to two of the half plots of OLDRESO PKNAMG - those
with 1964RESO P on w. beans and K on w. wheat.

Standard applications:

W. wheat: Manures: 'Nitro-Chalk' at 580 kg. Weedkillers: Chlortoluron
at 5.6 l in 250 l. Mecoprop at 3.0 l and isoproturon at 2.1 kg in
250 l. Fungicides: Prochloraz at 0.4 l with maneb at 1.2 kg and
zineb at 0.13 kg in 250 l.

81/R/AG/6

W. beans: Weedkillers: Glyphosate at 1.5 kg in 900 l. Paraquat at 0.70 kg in 250 l. Trietazine at 1.2 kg with simazine at 0.17 kg in 250 l. Fungicide: Benomyl at 0.55 kg in 250 l applied twice, with the insecticide on the second occasion. Nematicide: Aldicarb at 4.0 kg, combine drilled. Insecticide: Pirimicarb at 0.14 kg.

Seed: W. wheat: Flanders, sown at 200 kg.
W. beans: Throws MS, sown at 180 kg.

Cultivations, etc.:-

W. wheat: Disc harrowed twice, seed sown: 8 Oct, 1980. Chlortoluron applied: 14 Oct. N applied: 10 Apr, 1981. Mecoprop and isoproturon applied: 21 Apr. Fungicides applied: 19 June. Combine harvested: 26 Aug.

W. beans: Glyphosate applied: 4 Sept, 1980. Paraquat applied: 26 Sept. Disc harrowed twice: 8 Oct. Seed sown: 1 Nov. Trietazine and simazine applied: 4 Nov. Fungicide applied: 27 Mar, 1981. Fungicide & insecticide applied: 12 June. Combine harvested: 1 Sept.

81/R/AG/6

BEANS P PLOTS

GRAIN TONNES/HECTARE

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

	OLDRES P205 721 P205 64	NONE (0)0	(375)300	PKNAMG (0)0	(375)300	NPKNAMGC (0)0	(375)300
PREVCROP ARABLE	0	2.18	2.72	3.14	2.15	2.36	1.55
	500	2.29	3.02	2.62	2.96	2.75	2.75
	1000	2.25	2.63	2.74	3.36	2.89	2.28
	2000	2.03	2.64	2.36	1.95	2.96	3.02
GRASS	0	2.04	2.72	1.95	2.35	2.49	2.69
	500	2.64	2.93	2.96	2.42	3.15	3.01
	1000	2.64	2.34	2.49	2.56	3.16	2.56
	2000	2.92	2.77	2.74	2.81	3.27	2.46

GRAIN MEAN DM% 85.7

BEANS K PLOTS

GRAIN TONNES/HECTARE

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

	OLDRES K20 761 K20 64	NONE (0)0	(870)600	PKNAMG (0)0	(870)600	NPKNAMGC (0)0	(870)600
PREVCROP ARABLE	0	1.80	2.19	3.17	2.41	2.28	2.56
	315	1.58	2.48	2.29	3.15	2.61	2.47
	630	2.42	3.03	3.22	2.48	2.76	2.29
	1260	2.42	2.18	2.62	3.48	3.02	2.29
GRASS	0	1.64	2.41	1.87	2.88	1.53	2.28
	315	1.96	2.71	2.08	2.55	1.67	2.62
	630	2.26	2.25	2.14	2.88	2.28	2.74
	1260	2.27	2.34	2.62	2.08	2.88	2.54

GRAIN MEAN DM% 85.6

PLOT AREA HARVESTED (OLDRES NONE) 0.00150

PLOT AREA HARVESTED (REMAINDER) 0.00134

81/R/AG/6

WHEAT P PLOTS

GRAIN TONNES/HECTARE

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

	OLDRES	NONE		PKNAMG		NPKNAMGC	
	P205 720	(0)0	(375)150	(0)0	(375)150	(0)0	(375)150
PREVCROP	P205 64						
ARABLE	0	6.52	7.11	5.75	6.46	4.57	3.66
	500	5.48	6.22	5.61	6.73	4.32	4.77
	1000	6.20	6.14	6.31	7.26	5.74	5.80
	2000	7.16	7.30	6.80	7.29	5.30	5.49
GRASS	0	4.67	7.06	4.76	6.93	1.64	4.14
	500	6.41	7.40	4.90	6.47	5.47	4.71
	1000	6.61	6.90	6.95	5.90	5.20	5.48
	2000	6.72	7.03	6.32	4.53	4.15	4.36

GRAIN MEAN DM% 84.6

SPRING WHEAT K PLOTS

GRAIN TONNES/HECTARE

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

	OLDRES	NONE		PKNAMG		NPKNAMGC	
	K20 760	(0)0	(870)300	(0)0	(870)300	(0)0	(870)300
PREVCROP	K20 64						
ARABLE	0	6.57	7.51	5.90	6.10	5.25	5.68
	315	5.37	5.51	5.84	6.25	5.03	5.63
	630	6.44	6.44	5.87	6.13	4.84	5.60
	1260	6.77	6.89	6.39	6.94	5.31	5.86
GRASS	0	4.99	6.58	3.65	5.32	2.48	4.50
	315	6.12	7.59	4.69	6.41	4.09	5.16
	630	5.64	7.09	4.93	5.61	4.38	5.70
	1260	6.94	7.50	5.32	5.74	4.32	4.93

GRAIN MEAN DM% 85.1

PLOT AREA HARVESTED (OLDRES NONE) 0.00128

PLOT AREA HARVESTED (REMAINDER) 0.00144