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Yields of the Field Experiments 1955

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55/R/A/1 Broadbalk - Wheat

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55/A/1.1

WHEAT - BROADBALK 1955

The 112th year

For history, details of treatments etc. see "Results of the Field Experiments" 1939-47, Vol. I, Section A/1.

Commencing in autumn 1954 a scheme of chalking was introduced as follows:- the half of section V nearest the drain received a single application of 5 tons of calcium carbonate per acre as ground chalk for this year only. On all plots receiving either ammonium sulphate or castor meal an annual compensating dressing of ground chalk will be applied at the following rates: 100 lb of calcium carbonate for each 14 lb of N applied as ammonium sulphate; 50 lb of calcium carbonate for each 14 lb of N applied as castor meal. In autumn 1954 this compensating dressing was given at double rate; henceforward it will be given at single rate on the stubble.

No compensating dressing is given to the section under fallow or to plots 17 and 18 in their 'no nitrogen' years.

In 1955 Section I was harvested in two separate sub-sections IA and IB. Starting in 1956 IA (nearest the wilderness) will carry wheat without fallow; IB will continue in the following cycle.

Cultivations, etc.:

Cropped sections. Ground chalk applied to lower half of Section V: Sept 28-Oct 21, 1954. Dung applied, ploughed all plots: Oct 1. Ground chalk applied to ammonium sulphate and castor meal plots: Oct 20. Autumn fertilizers applied: Nov 5. Seed drilled at 3 bushels per acre: Dec 6. Spring fertilizers applied: May 16, 1955. Second dressing of nitrate of soda applied to plot 16: June 1. Harvested: Aug 19. Variety: Squareheads Master 13/4.

Fallow section. Ploughed: Oct 1, 1954, April 21 and July 25, 1955.

55/A/1.2

Summary of Results

Section Years after fallow	Grain (at 85% dry matter): cwt per acre						Mean
	IV	VA	VB	II	IA	IB	
	1	Unlimed 2	Limed 2	3	4	4	
2A	36.5	27.6	30.9	25.8	23.1	17.2	28.0
2B	36.7	31.7	25.3	21.3	18.8	25.7	27.6
3	19.7	11.1	10.4	11.2	9.5	10.7	13.1
5	20.9	8.0	9.9	12.7	16.5	11.4	13.9
6	28.2	12.9	13.1	16.4	15.1	14.5	18.2
7	31.5	19.4	17.5	19.5	18.8	20.5	22.4
8	33.3	29.4	26.1	23.8	22.2	26.0	27.5
9	25.3	19.3	17.0	18.9	8.9	15.6	19.1
10	17.1	10.6	19.1	15.0	15.2	17.0	15.8
11	23.1	19.9	20.6	17.0	19.4	17.6	19.7
12	26.9	16.9	19.7	20.9	18.7	19.3	21.3
13	28.3	19.0	15.0	20.9	19.0	20.3	21.5
14	25.7	20.7	12.9	18.9	18.9	18.2	20.0
15	24.0	12.6	9.5	16.2	17.8	14.5	16.7
16	29.1	27.4	21.2	25.3	25.2	24.0	25.8
17	18.0	11.2	10.0	10.1	6.7	5.7	11.4
18	29.0	16.0	16.4	22.6	21.1	22.6	22.4
19	23.5	15.6	11.7	14.5	14.8	15.4	16.7
20	-	-	-	17.4	15.7	18.1	17.3

Mean dry matter % as threshed: 84.8

55/A/1.3

Section Years after fallow	Straw (at 85% dry matter): cwt per acre						Mean
	IV	VA	VB	II	IA	IB	
	1	Unlimed 2	Limed 2	3	4	4	
2A	52.6	43.0	40.3	40.4	39.3	30.8	42.4
2B	52.1	45.8	43.8	45.5	40.5	41.8	46.1
3	24.7	15.2	17.8	17.9	22.4	18.9	19.7
5	34.6	13.4	14.8	25.5	40.7	21.4	25.3
6	44.1	18.5	21.3	27.2	34.5	26.9	30.1
7	49.2	33.9	30.4	34.8	31.9	32.3	37.2
8	55.0	44.8	42.5	41.7	39.1	38.6	45.0
9	41.0	26.5	27.0	28.0	27.2	29.7	31.2
10	25.2	19.7	28.4	21.0	22.9	22.7	23.3
11	34.3	32.2	28.6	26.2	32.2	25.7	29.8
12	40.8	29.2	26.9	30.2	36.0	28.6	32.5
13	47.8	31.6	26.9	33.0	31.8	34.0	35.9
14	40.9	28.0	22.8	27.3	31.8	26.8	30.5
15	43.9	19.7	17.9	26.9	33.8	30.4	30.1
16	46.0	40.5	35.8	37.0	39.1	35.6	39.6
17	27.8	13.3	16.2	13.7	14.6	11.3	17.3
18	43.8	28.4	32.3	36.3	39.8	35.1	36.7
19	36.8	27.4	26.6	22.7	26.8	24.3	28.0
20	-	-	-	23.7	28.4	29.9	26.9

Mean dry matter % as threshed: 85.2