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64/R/AR/C/4 Methods of Application of Fertiliser 1963-64 - Wheat

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64/C/4.1

METHODS OF APPLICATION OF FERTILISER 1963 - 64

(AR/W)

Methods of application of fertiliser - Great Knott II 1964, the second year - winter wheat.

Design: 3 x 3 x 3 in 3 blocks of 9 plots each together with 3 additional plots per block.

Area of each plot: 0.0212. Area harvested: 0.0126.

Treatments:

3 x 3 x 3: All combinations of:-
To wheat 1964.

1. NPK: None (F0), 0.66 (F1), 1.32 (F2) cwt N as spring top dressings of 'Nitro-Chalk' each with superphosphate and muriate of potash applied in autumn in the seedbed in the proportion 13 N, 13 P₂O₅, 20 K₂O.

To potatoes 1963.

2. Levels of 13:13:20 to supply (cwt):

N	P ₂ O ₅	K ₂ O
0.66	0.66	1.02 (L1)
1.32	1.32	2.03 (L2)
2.00	2.00	3.07 (L3)

3. Methods of application: Broadcast (B), placed (P), broadcast and rotary cultivated in (BR).

Additional plots:

To wheat 1964. NPK: F0, F1, F2 as above to plots receiving no treatment in 1963.

Basal dressing: None.

Cultivations, etc.: Chisel ploughed: Oct 24, 1963. PK applied, seed drilled at 3 bushels: Oct 28. 'Nitro-Chalk' applied - 1st half dressing: Apr 1, 1964. Sprayed with mecoprop/2,4-D (Methoxone Extra at 7 pints in 40 gals): Apr 30. 'Nitro-Chalk' applied - 2nd half dressing: May 4. Combine harvested: Aug 27. Variety: Cappelle. Previous crop: Spring beans 1962.

- NOTES: (1) For previous year's results see 'Results' 63/C/5.
(2) Green-crop and grain and straw samples were taken for NPK and dry matter determination.

Standard error per plot.

Grain: 2.30 or 4.6% (18 d.f.)

64/C/4.2

SUMMARY OF RESULTS

GRAIN

	B	P	BR	L1	L2	L3	Mean
		(±1.33)			(±1.33)		(±0.77)
F0	42.2	44.9	47.9	39.5	45.2	50.3	45.0
F1	54.5	53.8	52.4	51.0	55.6	54.1	53.6
F2	53.2	56.4	53.5	54.5	55.2	53.4	54.4
					(±1.33)		
		B		48.3	51.0	50.7	50.0
		P		48.5	53.1	53.4	51.7
		BR		48.2	51.9	53.6	51.2
		Mean (±0.77)		48.3	52.0	52.6	50.5 (±0.44)

Plots untreated in 1963

	F0	F1	F2	Mean
	36.0	49.7 (±1.33)	54.8	46.8 (±0.77)

General mean: 49.6

Mean D.M. %: 86.3

64/C/4.3

STRAW

	B	P	ER	L1	L2	L3	Mean
F0	28.2	32.2	33.4	28.0	30.4	35.4	31.3
F1	37.0	39.6	34.9	35.7	39.1	36.7	37.2
F2	43.0	46.5	43.7	45.7	43.9	43.6	44.4
		B		32.8	36.7	38.7	36.1
		P		38.6	40.7	39.0	39.4
		ER		37.9	36.0	38.0	37.3
		Mean		36.5	37.8	38.6	37.3

Plots untreated in 1963

	F0	F1	F2	Mean
	22.6	31.6	41.1	31.8

General mean: 35.9

Mean D.M. %: 92.2