

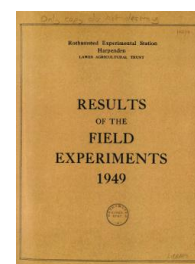
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Yields of the Field Experiments 1949

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49/CA/2 Wheat - Residual Organics

49/CA/2 Wheat - Residual Organics, Rothamsted Research (1950) Yields Of The Field Experiments 1949, pp 67 - 69

49/Ca/2.1

WHEAT

The residual effects of various dungs, of additional straw to dungs, of rotted bracken.

RP - Sawyers II 1949

System of replication: Three 5x5 lattice squares.

Area of each plot: 0.0225 acre.

Treatments: Applied in 1948 to potatoes.

Of the 25 plots in each replicate, 3 received no organic manures, and the remaining 22 were treated with the following organic manures, applied at two rates: rotted bracken (B) and ten dungs: from bullock boxes:- fresh, made with normal and heavy litter (W and X), and stored (12 months under cover) made with normal and heavy litter (R and S); from straw bale yards:- fresh, made with normal and heavy litter (Y and Z), stored (12 months in open) made with normal and heavy litter (A and K) and stored (12 months in open) low ration, and low ration plus sulphate of ammonia to straw (T and V).

Rates of application: The rotted bracken (B) and the fresh normal dung from boxes (W) at 8 and 16 tons per acre, dungs X, Y, Z, R, S, A and K at weights produced by the same quantity of feeding stuffs as 8 and 16 tons of fresh normal dung from boxes, and dungs T and V at the same rates as Z.

49/Ca/2.2

		Actual rates of application		Litter Straw (lb/head/day)
		Tons per acre		
		Level 1	Level 2	
Dungs	W	8.00	16.00	10.6
	X	6.90	13.81	20.3
	Y	8.74	17.49	10.4
	Z	8.21	16.42	20.9
	R	2.65	5.31	9.1
	S	2.74	5.49	18.3
	A	3.04	6.09	9.3
	K	3.66	7.33	17.3
	T and V	3.66	7.33	16.2

Basal Manuring: 2 cwt per acre sulphate of ammonia as top dressing.

Cultivations etc.: Ploughed: Oct 27. Harrowed, seed drilled and harrowed in: Oct 29. Harrowed: Apr 13. Rolled: Apr 14. Sulphate of ammonia applied: Apr 28. Harvested: July 29. Variety: Bersee. Previous crop: Potatoes.

Standard error per plot: Grain, 2.04 cwt per acre or 4.66% (24 d.f.)

Organic Manure	Grain: cwt per acre		Straw: cwt per acre		Mean
	Level of organic 1	Level of organic 2	Level of organic 1	Level of organic 2	
None		(± 1.18)	(± 0.83)		
Dung:					
Fresh (boxes) normal litter	W	43.4	47.3	53.8	49.5
Fresh (boxes) heavy litter	X	44.4	46.2	57.7	57.8
Fresh (yards) normal litter	Y	45.1	47.2	54.4	60.6
Fresh (yards) heavy litter	Z	42.8	45.4	53.7	57.6
Stored (boxes) normal litter	R	42.0	44.0	53.0	58.1
Stored (boxes) heavy litter	S	40.8	44.7	53.0	54.0
Stored (yards) normal litter	A	42.9	43.2	52.3	54.8
Stored (yards) heavy litter	K	40.7	45.0	51.7	52.5
Stored (yards) low feeding	T	43.1	43.4	54.7	52.9
As above with Sulphate of Ammonia	V	43.6	43.8	50.8	55.3
Rotted bracken	B	43.1	46.5	55.8	60.1
Mean	42.9	45.1	53.6	58.6	55.3

Standard error (1): ± 0.68

49/Ca/2.3