

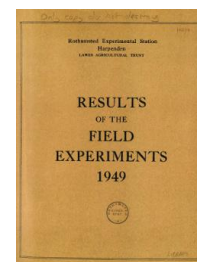
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# Yields of the Field Experiments 1949

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## 49/CB/1 Spring Sown Cereals

49/CB/1 *Spring Sown Cereals*, Rothamsted Research (1950) Yields Of The Field Experiments 1949, pp 73 - 74

49/Cb/1.1

### SPRING SOWN CEREAL EXPERIMENT

Comparison of barley, oats and two varieties of wheat, and of the effects on them of four levels of sulphate of ammonia, of superphosphate, and of muriate of potash.

RV - Fosters, 1949

System of replication: 4 randomized blocks of 4 plots each, each plot being split into 4, certain first order interactions of artificials being confounded with whole plots.

Area of each sub-plot: 0.0197 acre.

#### Treatments:

Whole plots: Crops:- Oats (S.84), wheat (Atle and Bersee), and barley (Plumage Archer).

Sub-plots: Sulphate of ammonia: None, 0.3, 0.6, 0.9, cwt N per acre.  
Superphosphate: None, 0.6 cwt. P<sub>2</sub>O<sub>5</sub> per acre.  
Muriate of potash: None, 0.6 cwt K<sub>2</sub>O per acre.

Basal Manuring: None.

Cultivations, etc.: Ploughed: during Dec. Springtime harrowed: Feb 23.  
Artificials applied: Mar 5. Harrowed, seed drilled and harrowed in: Mar 14. Ring rolled: Apr 19. "Agroxone" applied to kill off weeds: June 1. Harvested: Aug 9. Previous crop: Barley.

#### Standard errors: (grain):

per whole plot, 1.68 cwt per acre or 8.0% (6 d.f.)  
per sub-plot, 1.60 cwt per acre or 7.6% (24 d.f.).

	Grain: cwt per acre			Straw: cwt per acre			
	Oats	Wheat (Atlc)	Wheat (Bersce)	Oats	Wheat (Atlc)	Wheat (Bersce)	Barley
Mean	17.2	20.2 (±0.84)	23.2	30.2	31.0	29.0	30.6
Sulphate of ammonia			(a) and (b)				
None	14.0	18.5	20.4	24.0	25.8	23.8	24.4
0.3 cwt N per acre	17.8	21.5	24.6	29.9	32.1	30.0	30.1
0.6 cwt N per acre	17.8	21.3	23.0	31.4	33.1	29.7	33.6
0.9 cwt N per acre	19.1	19.7	24.6	35.6	32.8	32.3	34.1
Superphosphate			(±0.93)				
Absent	16.3	20.0	24.2	29.6	30.4	29.5	30.4
Present	18.0	20.4	22.1	30.9	31.5	28.4	30.7
Response	1.7	0.4	-2.1	1.3	1.1	-1.1	0.3
Muriate of Potash			(±0.93)*				
Absent	17.2	20.1	23.0	30.5	30.9	29.1	30.3
Present	17.1	20.4	23.3	30.0	31.1	28.8	30.8
Response	-0.1	0.3	0.3	-0.5	0.2	-0.3	0.5

Standard errors: (a) ±0.80 for vertical comparisons only  
 (b) ±1.09 for all other comparisons

\* Standard error for use in all comparisons other than vertical.