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# Yields of the Field Experiments 1961

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## 61/W/DA/3 Spring Wheat - Combine Drilling of N

### Rothamsted Research

Rothamsted Research (1962) *61/W/DA/3 Spring Wheat - Combine Drilling of N* ; Yields Of The Field Experiments 1961, pp 109 - 110 - DOI: <https://doi.org/10.23637/ERADOC-1-182>

61/Da/3.1

### SPRING WHEAT

Combine drilling of nitrogen - Woburn, Great Hill 1961.

Design: 4 randomised blocks of 7 plots each.

Area of each plot: 0.0148 acres. Area harvested: 0.0104 acres.

#### Treatments:

No nitrogen. 0.40 cwt N per acre ( $N_1$ ); 0.77 cwt N per acre ( $N_2$ )  
either broadcast as sulphate of ammonia or combine drilled as  
part of a compound fertiliser.

0.40 cwt N per acre as above plus 0.37 cwt N per acre as 'Nitro-  
Chalk' top dressing.

Compound fertilisers used:

$N_1$ : 8% N, 8%  $P_2O_5$ , 8%  $K_2O$ .

$N_2$ : 16% N, 9%  $P_2O_5$ , 9%  $K_2O$ .

Basal dressing per acre: 0.43 cwt  $P_2O_5$  and 0.43 cwt  $K_2O$  combine  
drilled:

(a) on the plots receiving drilled nitrogen, as compounds  
 $N_1$ ,  $N_2$ .

(b) on the no nitrogen and broadcast nitrogen plots, as  
compound 20%  $P_2O_5$ , 20%  $K_2O$ .

Cultivations, etc.: Ploughed Oct 17 - Dec 8, 1960. Seed combine  
drilled at  $2\frac{3}{4}$  bushels per acre, sulphate of ammonia applied:  
Mar 10, 1961. 'Nitro-Chalk' top dressings applied: Apr 21.  
Sprayed with TCB/MCPA at 4 pints in 40 gallons per acre: May 3.  
Combine harvested: Aug 29. Variety: Jufy I. Previous crop:  
Barley.

Note: The very low yields were in part due to a severe attack of  
Fusarium, which was worst on the plots receiving nitrogen.

Standard error per plot.

Grain (at 85% dry matter): 2.29 cwt per acre or 20.1% (18 d.f.)



61/Da/3.2

Summary of Results

Grain (at 85% dry matter): cwt per acre

N: cwt per acre

None	Broadcast			Drilled			Mean
	0.40	0.77	0.40 & 0.37 <sup>+</sup>	0.40	0.77	0.40 & 0.77 <sup>+</sup>	
9.4	12.8	12.2	11.2 (±1.14)	11.6	11.0	11.6	11.4

Mean dry matter % as harvested: 84.9

<sup>+</sup>Top dressing.