ROTHAMSTED RESEARCH

Yields of the Field Experiments 1962

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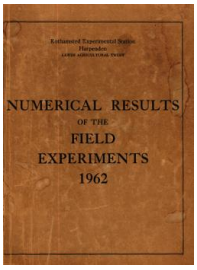

62/R/DA/4 Spring Wheat - Azotobacter Incoulation and N

Rothamsted Research

Rothamsted Research (1963) *62/R/DA/4 Spring Wheat - Azotobacter Incoulation and N ;* Yields Of The Field Experiments 1962, pp 128 - 128 **- DOI: https://doi.org/10.23637/ERADOC-1-164**

SPRING WHEAT

Effects of nitrogen and inoculation with Azotobacter - Fosters Corner 1962.

Design: 4 randomised blocks of 6 plots each.

Area of each plot: 0.0112 acres.

Treatments. All combinations of:-
Nitrogen: None; 0.2; 0.8 cwt N per acre applied as 'Nitro-Chalk'.
Azotobacter inoculation: None (sterile medium, no carbon source);
Azotobacter culture applied to seed.

Basal dressing: $2\frac{1}{2}$ cwt compound fertiliser (20% P_2O_5, 20% K_2O) per acre combine drilled.

Cultivations, etc.: Ploughed: Dec 16, 1961 - Jan 30, 1962. 'Nitro-Chalk' applied, seed drilled at $2\frac{3}{4}$ bushels per acre: Mar 17. Sprayed with MCPA/MBA at 4 pints in 40 gallons per acre: June 2. Combine harvested: Sept 13. Variety: Jufy I. Previous crops: Spring wheat 1960; sugar beet 1961.

Note: Crop samples were taken during the season for counts of Azotobacter. Measurements of the height of the crop were made in July.

Standard error per plot.
Grain (at 85% dry matter): 2.96 cwt per acre or 7.6% (15 d.f.)

Summary of Results

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

Inoculation	N cwt per acre None	0.2	0.8	Mean
		(±1.48)		(±0.85)
None	37.9	37.6	40.7	38.7
Azotobacter	39.3	39.3	40.2	39.6
Mean (±1.04)	38.6	38.4	40.4	39.1

Mean dry matter % as harvested: 72.4

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