

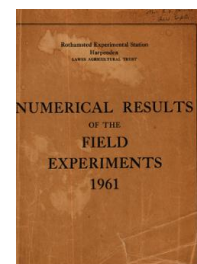
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1961

[Full Table of Content](#)



61/R/DE/3 Potatoes - Azotobacter Inoculation

Rothamsted Research

Rothamsted Research (1962) *61/R/DE/3 Potatoes - Azotobacter Inoculation* ; Yields Of The Field Experiments 1961, pp 130 - 130 - DOI: <https://doi.org/10.23637/ERADOC-1-182>

61/De/3

POTATOES

The effect of azotobacter inoculation - Whittlocks 1961.

Design: 4 × 4 Latin square.

Area of each plot: 0.0057 acres. Area harvested: 0.0014 acres.

Treatments. All combinations of:-

Nitrogen: None; 1.2 cwt N per acre applied as 'Nitro-Chalk' in furrows before planting.

Azotobacter inoculation: None - seed potatoes dressed with mineral nutrient solution as used for azotobacter culture medium; seed potatoes inoculated with azotobacter.

Basal manuring (per acre): 7 cwt compound fertiliser, 12% P₂O₅, 24% K₂O, broadcast on the flat before ridging.

Cultivations, etc.: Ground chalk applied at 24 cwt per acre: Sept 6, 1960. Ploughed: Apr 27, 1961. Rotary cultivated: May 8. Basal PK compound applied, ridged: May 9. 'Nitro-Chalk' applied: May 10. Potatoes planted: May 12. Earthed up: July 9. Sprayed with zineb at 2 lb in 40 gallons per acre: Aug 3. Sprayed with undiluted BOV at 15 gallons per acre: Sept 22. Harvested: Oct 4. Variety: King Edward. Previous crop: Barley.

Standard error per plot.

Total tubers: 1.325 tons per acre or 10.5% (6 d.f.)

Note. Counts were made of numbers of azotobacter on tubers and roots.

Summary of Results

N: cwt per acre

		None		1.2		Mean
		Unin- oculated	Inoculated	Unin- oculated	Inoculated	
<u>Total tubers: tons per acre</u>						
Mean	(±0.663)	10.00	9.38	15.94	15.24	12.64
Increase	(±0.937)		-0.62	+5.94	+5.24	