

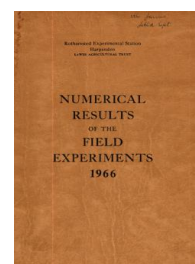
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1966

[Full Table of Content](#)



66/R/C/21 Rate of Action of P Fertilisers 1966-67 - Early Potatoes and Radishes

Rothamsted Research

Rothamsted Research (1967) *66/R/C/21 Rate of Action of P Fertilisers 1966-67 - Early Potatoes and Radishes* ; Yields Of The Field Experiments 1966, pp 197 - 199 - DOI:
<https://doi.org/10.23637/ERADOC-1-158>

66/C/21.1

EARLY POTATOES FOLLOWED BY RADISHES

(ER)

The rate of action of P fertilisers, Delharding, 1966, the first year.

Design: 3 replicates of 7 x 2 x 2 plus 2 plots per block without P, in 6 blocks of 16 plots.

Area of each plot:	Area harvested:
Potatoes: 0.0018	0.0009
Radishes: 0.0006	0.0003

Treatments to potatoes only: No P (0) (2 plots per block) and all combinations of:-

1. Phosphatic fertilisers:

Triple superphosphate	(S)
Potassium metaphosphate	(K)
Triple superphosphate plus potassium metaphosphate*	(SK)
Magnesium ammonium phosphate	(M)
Triple superphosphate plus magnesium ammonium phosphate*	(SM)
Potassium metaphosphate plus magnesium ammonium phosphate*	(KM)
Triple superphosphate plus potassium metaphosphate plus magnesium ammonium phosphate*	(SKM)

* Each material supplying half the P (one third in treatment SKM).

2. Levels of P: 24 lb (I1), 48 lb (I2) P.

3. Type of fertiliser: Powder, less than 1 mm. (P), granular 1-4 mm. (G).

All applied to potatoes with 'Nitro-Chalk', muriate of potash and kieserite in amounts adjusted to give a total of 100 lb N, 200 lb K and 50 lb Mg.

Basal applications: Ground chalk at 15 cwt. To radishes: 60 lb N and 50 lb K as (16:0:16). Weedkiller:- To potatoes: 1 lb linuron plus 0.75 lb ion paraquat in 50 gals. Insecticide:- To radishes: DDT at 5 oz in 40 gals.

Cultivations, etc.: Ploughed: Oct 25, 1965. Limed: Mar 2, 1966.

66/c/21.2

Potatoes: Fertilisers applied: Mar 28, 1966. Rotary cultivated, potatoes planted: Mar 30. Weedkiller applied: Apr 28. Harvested: July 11. Variety: Arran Pilot.
Radishes: Rotary cultivated, basal NK applied, seed drilled at 25 lb: July 14, 1966. Insecticide applied: July 25. Harvested: Sept 6. Variety: French Breakfast. Previous crops: Fallow 1964 and 1965.

NOTE: The soil was sampled in spring 1966 for P determination.

Standard error per plot.

Potatoes, Total tubers: 1.000 or 11.2% (59 d.f.)

Radishes, Fresh weight: 2.004 or 12.0% (60 d.f.)

66/C/21.3

SUMMARY OF RESULTS

	O	S	K	SK	M	SM	KM	SKM	Mean
POTATOES: TOTAL TUBERS									
Mean	5.62	10.09	9.34	9.96	8.25	10.28	9.01	9.08	8.95
	(± 0.289)			(± 0.408)					(± 0.134)
L1		8.85	8.85	8.84	7.98	9.63	7.83	8.05	8.58
L2		11.33	9.82	11.08	8.52	10.92	10.18	10.12	10.28
P		10.45	9.28	9.86	9.41	10.62	9.99	9.76	9.91
G		9.73	9.39	10.05	7.10	9.93	8.02	8.41	8.95
RADISHES: FRESH WT.									
Mean	6.86	17.50	19.76	17.83	18.29	17.89	17.55	17.35	16.63
	(± 0.578)			(± 0.818)					(± 0.268)
L1		15.91	18.08	16.17	15.31	16.07	16.20	16.61	16.34
L2		19.08	21.44	19.48	21.26	19.72	18.90	18.10	19.71
P		17.16	18.05	16.65	18.07	17.50	16.79	16.87	17.30
G		17.83	21.48	19.01	18.50	18.29	18.30	17.83	18.75