

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 1965

[Full Table of Content](#)



65/R/C/28 Rate of Action of P Fertilisers - Early Potatoes and Radishes

Rothamsted Research

Rothamsted Research (1966) *65/R/C/28 Rate of Action of P Fertilisers - Early Potatoes and Radishes* ; Yields Of The Field Experiments 1965, pp 221 - 222 - DOI:

<https://doi.org/10.23637/ERADOC-1-159>

65/C/28.1

EARLY POTATOES FOLLOWED BY RADISHES

The rate of action of P fertilisers, Sawyers II 1965, the first year.

Design: 4 replicates of 7 x 2 x 2 plus 2 plots per block without P, 8 blocks of 16 plots.

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

Treatments: 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 (L1), 48 lb (L2) P.

3. Type of fertiliser: Powder, less than 1 mm. (P), granular 2-5 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).

Cultivations, etc.: Ploughed: Jan 11, 1964. Limed: Mar 3, 1965.

Potatoes: Fertilisers applied: Apr 5, 1965. Fertilisers rotary cultivated in, potatoes planted on the flat: Apr 6. Harvested: July 13. Variety: Arran Pilot.

Radishes: Basal NK applied and rotary cultivated in, seed drilled at 15 lb: July 19, 1965. Harvested: Sept 10. Variety: French Breakfast.

Previous crops: Spring wheat 1963 and 1964.

NOTE: The soil was sampled in December 1964 for P determination.

65/c/28.2

Standard errors per plot.

Potatoes, Total tubers: 1.134 or 12.2% (90 d.f.)

Radishes, Fresh weight: 1.511 or 13.2% (90 d.f.)

SUMMARY OF RESULTS

	O	S	K	SK	M	SM	KM	SKM	Mean
POTATOES: TOTAL TUBERS									
Mean	6.02	11.26	9.44	10.93	8.09	9.65	8.87	9.91	9.27*
L1		10.07	8.50	9.80	7.51	8.38	8.12	9.06	8.78
L2		12.46	10.37	12.06	8.67	10.92	9.61	10.77	10.69
P		10.38	10.62	11.38	9.97	9.96	9.78	10.38	10.35
G		12.15	8.26	10.48	6.21	9.35	7.95	9.45	9.12

RADISHES: FRESH WT: TONS PER ACRE

Mean	5.43	12.05	12.28	12.07	12.46	11.93	12.75	12.62	11.45*
L1		10.65	11.44	10.69	11.20	10.75	11.35	12.18	11.18
L2		13.46	13.11	13.45	13.73	13.10	14.15	13.07	13.44
P		11.80	11.27	11.37	12.46	11.41	11.64	12.87	11.83
G		12.30	13.28	12.77	12.47	12.44	13.85	12.38	12.78

* General mean