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Yields of the Field Experiments 1953

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53/CE/1 Potatoes - Dung N P K - Rothamsted

Rothamsted Research

Rothamsted Research (1954) *53/CE/1 Potatoes - Dung N P K - Rothamsted* ; Yields Of The Field Experiments 1953, pp 92 - 92 - DOI: <https://doi.org/10.23637/ERADOC-1-173>

POTATOES

Dung, N, P and K - West Barnfield I 1953.

System of replication: 4 randomized blocks of 8 plots each, the interaction DNPk being confounded with block differences.

Area of each plot: 0.0210 acre. Area harvested: 0.0140 acre.

Treatments: All combinations of:-

- Dung: None; 10 tons per acre.
- N: None; 0.6 cwt per acre applied as sulphate of ammonia.
- P₂O₅: None; 0.6 cwt per acre applied as superphosphate.
- K₂O: None; 1.0 cwt per acre applied as muriate of potash.

Basal dressing: None.

Cultivations, etc.: Ploughed: Sept 18, 1952. Dung applied and ploughed in: Feb 26, 1953. Ridged and fertilizers applied in ridges: Apr 10. Potatoes planted: Apr 11. Earthed up: June 25. Sprayed with copper fungicide: Aug 5. Sprayed with 20% sulphuric acid: Sept 25. Lifted: Oct 2. Variety: Majestic. Previous crop: Wheat.

Standard error per plot:

Total tubers: 1.44 tons per acre or 12.6% (18 d.f.)

Summary of Results

Responses to Treatments

Response to	Mean	Dung: tons per acre		N		P ₂ O ₅ cwt per acre		K ₂ O	
		0.0	10	0.0	0.6	0.0	0.6	0.0	1.0

Total tubers: Mean yield 11.45 tons per acre
(±0.510) (±0.721)

Dung	+3.70	-	-	+3.72	+3.68	+2.68	+4.72	+4.65	+2.75
N	+1.67	+1.69	+1.65	-	-	+1.78	+1.56	+1.51	+1.83
P ₂ O ₅	-0.05	-1.07	+0.97	+0.06	-0.16	-	-	-1.25	+1.15
K ₂ O	+2.12	+3.07	+1.17	+1.96	+2.28	+0.92	+3.32	-	-

Percentage ware (1½" riddle): Mean 87.6

Dung	+4.8	-	-	+4.5	+5.1	+2.8	+6.8	+7.7	+1.9
N	0.0	-0.3	+0.3	-	-	+0.8	-0.8	+1.2	-1.2
P ₂ O ₅	-2.3	-4.3	-0.3	-1.5	-3.1	-	-	-4.9	+0.3
K ₂ O	+4.1	+7.0	+1.2	+5.3	+2.9	+1.5	+6.7	-	-