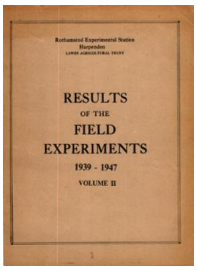
ROTHAMSTED RESEARCH

Yields of the Field Experiments 1939-1947 Volume 2



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Q Carrots - Including Carrot Series

Rothamsted Research

Rothamsted Research (1948) *Q Carrots - Including Carrot Series ;* Yields Of The Field Experiments 1939-1947 Volume 2, pp 163 - 165 **- DOI: https://doi.org/10.23637/ERADOC-1-186**

CARROTS

Woburn Lansome 1939 (6th year)

The effects of sulphate of ammonia, poultry manure, soot, rape dust and dung.

Design; 4 randomized blocks of 12 plots each.

Area of each plot; 0.00588 acre.

Treatments

None: Sulphate of ammonia at 0.4 and 0.8 cwt. N per acre (half in seed bed and half as top dressing) Poultry manure, soot and rape dust all at 0.8 cwt. N per acre: dung ploughed-in at 0.8 and 1.6 cwt. N per acre every second year including 1939, and every second year excluding 1939, and at 0.8 cwt. N per acre every year.

Basal manuring; superphosphate and muriate of potash applied to give a total of 1.0 cwt. P_2O_5 and 1.0 cwt. K_2O, per acre, including the P_2O_5 and K_2O in the organic fertilizer.

Crop Notes

Sown: May 22. Harvested: Oct. 27 and Nov. 11. Variety, Cooper's Early Market. Previous crop, kale (see 1938 Station Report, p.164).

Standard error per plot: 2.41 tons per acre or 20.5%, (34 d.f.)

Mean Yields: tons per acre

None	Sulphate of ammonia		Poultry Manure	Soot	Rape dust	
	0.4	0.8	0.8	0.8	0.8	cwt. N per acre
±0.852			±1.20			
10.56	11.04	11.88	13.83	12.92	13.03	

	Dung					
1938	0.8	1.6	0.8	0	0 cwt. N	Mean of
1939	0	0	0.8	0.8	1.6per acre	all plots
			±1.20			
	10.19	11.35	11.74	11.36	12.45	11.74

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Q/2

CARROTS

Woburn - Lansome 1941

Woburn - Butt Close 1942

Effects of sulphate of ammonia, superphosphate, muriate of potash and agricultural salt. These two experiments form part of a country wide series of 25 similar experiments.

Design; 4 randomized blocks of 8 plots each, the third order interaction being confounded with block differences.

Area of each plot, 0.00875 acre.

Treatments

Sulphate of ammonia:	1941, None, 0.4 cwt. N per acre.
	1942, None, 0.3 cwt. N per acre.
Superphosphate:	1941, None, 0.8 cwt. P_2O_5 per acre.
	1942, None, 0.6 cwt. P_2O_5 per acre.
Muriate of potash:	1941, None, 1.0 cwt. K_2O per acre.
	1942, None, 0.9 cwt. K_2O per acre.
Agricultural salt:	1941 and 1942: None, 3.0 cwt. per acre.

Crop Notes

	Seed sown	Harvested	Variety	Previous crop
1941	June 23	Oct. 21, 31, Nov. 4,12*	Cooper's Early Market	Oats
1942	April 14	Aug. 27, Sept. 3, Oct. 20 - Nov. 12	Cooper's Intermediate	Sugar beet

*On each day a strip was taken through all plots.

Standard errors per plot:

1941 Total roots: 0.655 tons per acre or 12.6%, 12 d.f.
1942 1sts: 5.39 tons per acre or 23.5%, 14 d.f.
2nds: 0.590 tons per acre or 52.5%, 14 d.f.

Note: 2nds consisted mostly of splits together with the smalls.

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1941 Differential responses; tons per acre

	Mean	Sulph. amm. Abs.	Sulph. amm. Pres.	Super Abs.	Super Pres.	Mur. Pot. Abs.	Mur. Pot. Pres.	Salt Abs.	Salt Pres.
				Total Roots. Mean yield: 5.21 tons per acre					
	±0.231					±0.327			
Sulph. amm.	2.11	-	-	2.42	1.80	2.32	1.90	1.92	2.30
Super	0.11	0.42	-0.20	-	-	0.25	-0.03	0.57	-0.35
Mur. pot.	-0.22	-0.01	-0.43	-0.08	-0.36	-	-	-0.40	-0.04
Salt	0.38	0.19	0.57	0.84	-0.08	0.20	0.56	-	-
				1942					
				1sts: Mean yield, 22.92 tons per acre					
	±1.91					±2.70			
Sulph. amm.	0.52	-	-	-1.20	2.24	4.17	-3.13	-0.35	1.39
Super.	0.11	-1.61	1.83	-	-	-2.40	2.62	2.30	-2.08
Mur. pot.	1.51	5.16	-2.14	-1.00	4.02	-	- -	1.29	1.73
Salt	4.22	3.35	5.09	6.41	2.03	4.00	4.44	-	-
				2nds: Mean yield, 1.12 tons per acre					
	±0.209					±0.296			
Sulph. amm.	0.14	-	-	0.05	0.23	0.18	0.10	-0.13	0.41
Super.	-0.12	-0.21	-0.03	-	-	-0.11	-0.13	0.22	-0.46
Mur. pot.	-0.03	0.01	-0.07	-0.02	-0.04	-	-	-0.10	0.04
Salt	0.42	0.15	0.69	0.76	0.08	0.35	0.49	-	-

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