

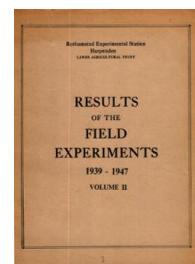
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1939-1947 Volume 2

[Full Table of Content](#)



U Kok-saghyz

Rothamsted Research

Rothamsted Research (1948) *U Kok-saghyz* ; Yields Of The Field Experiments 1939-1947 Volume 2, pp 181 - 182 - DOI: <https://doi.org/10.23637/ERADOC-1-186>

U/1

KOK - SAGHYZ

Hoosfield 1943

Effects of fertilizers and spacing. *Taraxacum kok-saghyz* is a dandelion found wild at an altitude of 7,000 feet in Kazakstan and cultivated in Russia as a source of latex. The rubber content of the roots is about 4% and 200 lb. per acre of rubber has been obtained in Russia.

Design; 12 randomized blocks of 4 plots each, certain interactions being confounded between blocks.

Area of each plot: For early harvesting, 0.00055 acre; for late harvesting, 0.00179 acre.

Treatments

Sulphate of ammonia: None, 0.6 cwt. N per acre (0.2 cwt. N in Autumn and 0.4 cwt. N in Spring).

Superphosphate: None, 0.6 cwt. P₂O₅ per acre

Muriate of potash: None, 1.0 cwt. K₂O per acre.

Spacings (applied to blocks): 18" between rows, 4" in row (i.e. between adjacent plants)

18" between rows, 8" in row.

12" between rows, 12" in row.

Crop Notes

Seed sown: Oct. 16. This sowing was not successful and the crop was resown on March 22. Harvested: Sept. 7 ('Early') and Nov. 8 ('Late'). Previous crop, Ryegrass.

Standard errors: between blocks, applicable to spacings:

Roots (early harvest) 1.56 cwt. per acre or 20.5%, 6 d.f.

Roots (late harvest) 1.64 cwt. per acre or 16.2%, 6 d.f.

applicable to artificials:

Roots (early harvest) 1.47 cwt. per acre or 19.4%, 18 d.f.

Roots (late harvest) 3.63 cwt. per acre or 35.9%, 18 d.f.

Plant number (early harvest) 9.51 thousands per acre or 19.9%, 18 d.f.

Plant number (late harvest) 7.27 thousands per acre or 16.1%, 18 d.f.

The seed used for the second sowing had been soaked and kept at 0°C for 14 days. This treatment increased the field germination (50% germination in 2 days compared with 5 days for untreated seed).

U/2

Kok-Saghyz

Differential Responses

	Mean	Sulph. amm.		Superphosphate		Mur. Pot.	
		Abs.	Pres.	Abs.	Pres.	Abs.	Pres.
Roots, early harvest, cwt. per acre. Mean, 7.6							
	±0.42			±0.59			
Sulphate of ammonia	0.0			0.0	0.0	-1.3	1.3
Superphosphate	0.1	0.1	0.1			-0.4	0.6
Muriate of Potash	0.9	-0.4	2.2	0.4	1.4		
Roots, late harvest, cwt. per acre. Mean, 10.1							
	±1.05			±1.48			
Sulphate of ammonia	0.5			-0.8	1.8	0.4	0.6
Superphosphate	-0.4	-1.7	0.9			-0.6	-0.2
Muriate of Potash	0.1	0.0	0.2	-0.1	0.3		
Plant number, early harvest, thousands per acre. Mean, 47.9							
	±2.75			±3.88			
Sulphate of ammonia	-4.2			-0.6	-7.8	-4.4	-4.0
Superphosphate	0.5	4.1	-3.1			-2.6	3.6
Muriate of Potash	4.6	4.4	4.8	1.5	7.7		
Plant number, late harvest, thousands per acre. Mean, 45.1							
	±2.10			±2.97			
Sulphate of ammonia	-8.2			-9.1	-7.3	-5.9	-10.5
Superphosphate	1.9	1.0	2.8			-0.6	4.4
Muriate of Potash	2.2	4.5	-0.1	-0.3	4.7		

Spacing	Roots, cwt. per acre		Plant no., thous. per acre	
	Early	Late	Early	Late
	±0.78	±0.82		
18" between rows, 4" in row	7.6	9.5	48.2	47.0
18" between rows, 8" in row	6.7	9.9	40.8	40.1
12" between rows, 12" in row	8.5	10.9	54.7	48.3

The first spacing involved a seed-rate per unit area double that of the other two spacings.