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## Yields of the Field Experiments 1964

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### 64/W/DF/1 Sugar Beet, Carrots, Redbeet - Fertilisers and Fym

#### Rothamsted Research

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64/Df/1.1

SUGAR BEET, CARROTS AND RED BEET

Fertilisers and FYM - Woburn Stackyard Series C, 1964.

Design: 3 randomised blocks of 5 plots each per crop.

Area of each plot:

Sugar beet: 0.0033  
Other crops: 0.0014

Area harvested:

0.0030  
0.0012

Treatments:

NKNa: 'Nitro-Chalk' at 154 lb N (sugar beet), 112 lb N (carrots),  
224 lb N (red beet), muriate of potash at 280 lb K and  
sodium chloride at 26 lb Na.

NKNaP1: As NKNa, plus triple superphosphate at 85 lb P.

NKNaP2: As NKNa, plus triple superphosphate at 170 lb P.

D: Dung at 15 tons.

DP1: Dung at 15 tons plus triple superphosphate at 85 lb P.

NOTES (1): The amounts of P in treatment P2 and of K and Na applied  
are equivalent to the amounts of these nutrients in the  
15 tons FYM.

(2): On one of the NKNaP2 plots of sugar beet the N was not  
applied. An estimated value was used in the analysis.

Basal dressing: 50 lb Mg as magnesium sulphate.

Cultivations, etc.: Ground chalk applied at 30 cwt: Mar 3, 1964.

Rotary cultivated: Mar 10. Ground chalk applied at 10 cwt:

Apr 10. Sprayed with DDT at 0.6 lb in 20 gals: May 19.

Sprayed twice with a mixture of menazon, DDT and gamma BHC at  
1.5 fluid oz in 40 gals all crops: June 8 and 28. Carrots  
and sugar beet only: July 28 and Aug 7.

Sugar beet: Fertilisers applied: Mar 23, 1964. Dug: Mar 23 -

Apr 2. Seed drilled at 18 lb: Apr 14. Singled:

May 21 - June 3. Lifted: Oct 26. Variety: Klein E.

Carrots: Fertilisers applied, plots dug: Apr 3, 1964. Seed

drilled at 7 lb: Apr 27. Singled: June 17 - 23. Lifted:

Sept 8. Variety: Autumn King.

Red beet: Fertilisers applied, plots dug: Apr 7, 1964. Seed

drilled at 30 lb: May 1. Singled: May 29 - June 16. Lifted:

Aug 12. Variety: Detroit Globe.

64/Df/1.2

Standard errors per plot.

Sugar beet, roots:	0.748 or 3.6% (7 d.f.)
total sugar:	1.81 or 2.2% (7 d.f.)
tops:	0.739 or 7.0% (7 d.f.)
Carrots, roots:	1.142 or 6.6% (8 d.f.)
tops:	0.385 or 7.3% (8 d.f.)
roots + tops:	1.498 or 6.6% (8 d.f.)
Red beet, roots:	0.536 or 3.8% (8 d.f.)
tops:	0.283 or 4.7% (8 d.f.)
roots + tops:	0.788 or 3.9% (8 d.f.)

SUMMARY OF RESULTS

NKNa	NKNaP1	NKNaP2	D	DP1	Mean
SUGAR BEET					
ROOTS					
(±0.432)					
19.24	20.93	22.01	20.63	21.19	20.80
SUGAR %					
19.4	19.4	19.6	19.6	19.4	19.5
TOTAL SUGAR					
(±1.05)					
74.7	81.4	86.3	80.8	82.2	81.1
TOPS					
(±0.427)					
11.01	12.15	11.71	9.08	8.67	10.52

64/Df/1.3					
NKNa	NKNaP1	NKNaP2	D	DP1	Mean
CARROTS					
ROOTS					
		(±0.660)			
14.82	16.39	18.67	17.25	19.23	17.27
TOPS					
		(±0.222)			
4.91	5.21	5.56	5.37	5.34	5.28
ROOTS + TOPS					
		(±0.865)			
19.72	21.60	24.23	22.62	24.57	22.55
RED BEET					
ROOTS					
		(±0.309)			
15.19	15.52	15.74	11.80	12.31	14.11
TOPS					
		(±0.163)			
6.62	6.76	6.52	5.03	4.98	5.98
ROOTS + TOPS					
		(±0.455)			
21.81	22.28	22.25	16.83	17.29	20.09