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## Yields of the Field Experiments 1967

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### 67/R/RRA101/DG/1 Oilseed Rape - Row Spacing, Seed Rate and N

#### Rothamsted Research

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67/Dg/1.1

OILSEED RAPE

(RRa 101)

Row spacing, seed rates and N - Highfield IV, 1967.

Design: 5 randomised blocks of 4 plots, split for N.

Area of each sub plot: 0.0129. Area harvested: 0.0092.

Treatments: All combinations of:-

Whole plots: 1. Row spacing: 20 inches (W), 4 inches (N).  
2. Seed rate: 5 lb (L), 10 lb (H).

Sub plots: 3. N: 1.0 (N1), 1.4 (N2), 1.8 (N3) cwt as basal  
compound fertiliser plus 'Nitro-Chalk'.

Basal applications: 750 lb (15:15:15) broadcast by drill. Ground  
chalk at 2 tons (part area), 4 tons (remainder). Insecticide:  
Malathion at 18 oz in 30 gals.

Cultivations, etc.: Ploughed: Nov 4, 1966. Ground chalk applied:  
Jan 4, 1967. Basal NPK applied: Mar 28. Seed drilled: Mar 30.  
'Nitro-Chalk' applied: Mar 31. Insecticide applied: June 16.  
Combine harvested: Sept 6. Variety: Nilla. Previous crops:  
Barley 1965 and 1966.

NOTE: At harvest the crop was leaning down the length of the plots  
in a south-westerly direction. Alternate whole plots were cut  
by the combine working in opposite directions. On plots where  
the combine moved south-west (with the lie of the crop) yields  
were less than on plots cut the other way. The estimated  
difference of grain yield was 0.5 cwt per acre. The means  
presented have been adjusted accordingly. (The sub-plot compari-  
sons are not affected as all sub-plots in one whole plot were  
cut the same way). The comparison of seed rates is also not  
affected as, by a chance of the randomisation the plots of each  
level were harvested half in each direction.



67/Dg/1.2

Standard errors per plot.

Grain (at 90% dry matter). Whole plot: 1.37 or 6.6% (11 d.f.)  
 Sub plot: 3.80 or 18.1% (32 d.f.)

Yield of fixed oil: lb per acre.  
 Whole plot: 55.4 or 6.7% (11 d.f.)  
 Sub plot: 149.3 or 18.1% (32 d.f.)

SUMMARY OF RESULTS

GRAIN (AT 90% D.M.) CWT PER ACRE

	L	H	N1	N2	N3	Mean
	(±0.61)			(1) and (2)		(±0.43)
W	21.0	21.2	19.2	21.5	22.5	21.1
N	20.0	21.9	20.3	21.4	21.1	20.9
				(1) and (2)		(±0.43)
		L	19.5	21.0	20.9	20.5
		H	20.0	21.9	22.7	21.5
		Mean	19.7	21.4	21.8	21.0
		(±0.85)				

- (1) (±1.07) For use in vertical and diagonal comparisons
- (2) (±1.20) For use in horizontal and interaction comparisons

Mean D.M. %: 84.0

67/Dg/1.3

	L	H	N1	N2	N3	Mean
	% FIXED OIL					
W	38.8	39.5	39.4	39.2	38.9	39.1
N	38.9	39.2	40.5	38.5	38.3	39.1
		L	39.6	38.3	38.7	38.8
		H	40.3	39.4	38.5	39.4
		Mean	39.9	38.8	38.6	39.1

YIELD OF FIXED OIL: LB PER ACRE						
	(±24.8)			(1) and (2)		(±17.5)
W	819	841	762	848	881	830
N	781	866	826	831	815	824
		L	777	(1) and (2)	814	(±17.5)
		H	811	810	882	800
				869		854
		Mean	794	839	848	827
		(±33.4)				

- (1) (±42.3) For use in vertical and diagonal comparisons  
 (2) (±47.2) For use in horizontal and interaction comparisons