

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 1986

[Full Table of Content](#)



86/R/SU/2 Row Spacing and Seed Rates - Sunflowers

Rothamsted Research

Rothamsted Research (1987) *86/R/SU/2 Row Spacing and Seed Rates - Sunflowers* ; Yields Of The Field Experiments 1986, pp 289 - 290 - DOI: <https://doi.org/10.23637/ERADOC-1-36>

86/R/SU/2

SUNFLOWERS

ROW SPACING AND SEED RATES

Object: To study the effects of three row spacings and three seed rates on growth and yield of sunflowers - Long Hoos V 1.

Sponsor: C.J. Rawlinson.

Design: 4 randomised blocks of 9 plots.

Whole plot dimensions: Wide and narrow rows: 2.54 x 5.94.
Medium rows: 2.67 x 5.94.

Treatments: All combinations of:-

1. ROW SPAC Spacing between rows:

NARROW	25.4 cm (10 inches)
MEDIUM	38.1 cm (15 inches)
WIDE	50.8 cm (20 inches)

2. POPULATN Plant populations per hectare:

	Seeds sown	Plants established
80	80,000	69,000
120	120,000	89,000
160	160,000	118,000

NOTE: The crop was netted against bird damage from the end of July until harvest.

Basal applications: Manures: Chalk at 2.9 t. 'Nitro-Chalk' at 290 kg.
Weedkiller: Trifluralin at 1.1 kg in 220 l. Bird repellent: 'Hoppit' at 3.0 l in 220 l.

Seed: Frankasol.

Cultivations, etc.: - Chalk applied: 30 Sept, 1985. Zig-zag harrowed: 15 Oct. Ploughed: 30 Oct. Spring-tine cultivated, N applied: 2 May, 1986. Weedkiller applied, spring-tine cultivated: 3 May. Seed sown: 4 May. Bird repellent applied: 4 Nov. Combine harvested: 5 Nov. Previous crops: S. beet 1984, s. barley 1985.

NOTE: Pest counts were made during the season.

86/R/SU/2

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

***** TABLES OF MEANS *****

POPULATN ROW SPAC	80	120	160	MEAN
NARROW	1.63	1.75	1.44	1.61
MEDIUM	1.56	1.42	1.15	1.38
WIDE	1.51	1.61	1.30	1.47
MEAN	1.57	1.59	1.29	1.49

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	ROW SPAC	POPULATN	ROW SPAC POPULATN
-----	-----	-----	-----
SED	0.093	0.093	0.161

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	24	0.227	15.3

GRAIN MEAN DM% 71.3

PLOT AREA HARVESTED NARROW & WIDE 0.00091
MEDIUM 0.00068