

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 1988

[Full Table of Content](#)



### 88/R/SU/1 Early Varieties and Plant Health - Sunflowers

#### Rothamsted Research

Rothamsted Research (1989) *88/R/SU/1 Early Varieties and Plant Health - Sunflowers* ; Yields Of The Field Experiments 1988, pp 240 - 241 - DOI: <https://doi.org/10.23637/ERADOC-1-43>

88/R/SU/1

SUNFLOWERS

EARLY VARIETIES AND PLANT HEALTH

**Object:** To compare six varieties of sunflower with and without pest and pathogen control - Fosters Corner.

**Sponsors:** C.J. Rawlinson, V.J. Church, R.A. Gutteridge..

**Design:** 3 randomised blocks of 12 plots.

**Whole plot dimensions:** 2.5 x 8.0.

**Treatments:** All combinations of:-

1. **VARIETY** Varieties:

S10	S - 10
HA 701	HA 701
S34	S - 34
S47	S - 47
S54	S - 54
S69	S - 69

2. **PATHCONT** Pathogen control:

NONE	None
FULL	Full: Pirimicarb at 0.14 kg in 220 l on 23 June, 1988. Carbendazim at 0.25 kg with vinclozolin at 0.50 kg in 220 l on 7, 15, 26 July, 3 and 15 Aug.

**Basal applications:** Manures: (10:10:15+4.5 Mg) at 600 kg. Weedkillers: Glyphosate at 1.4 kg in 200 l. Trifluralin at 1.1 kg in 220 l. Linuron at 0.50 kg in 220 l. Desiccant: Diquat at 0.80 kg ion in 440 l to S10, at 0.60 kg ion in 220 l to other varieties .

**Seed:** Varieties, sown at 100,000 seeds per hectare.

**Cultivations, etc.:-** Glyphosate applied: 17 Nov, 1987. Ploughed: 8 Dec. Manures applied: 11 Mar, 1988. Trifluralin applied, spring-tine cultivated, rotary harrowed twice: 6 Apr. Seed sown, rolled: 7 Apr. Linuron applied: 11 Apr. Desiccant applied to all plots except S10: 5 Sept, to S10 plots: 29 Sept. Harvested by hand, threshed by stationary combine harvester, all plots except S10: 6 Sept, S10 plots: 30 Sept. Previous crops: S. oats 1986, w. wheat 1987.

**NOTES:** (1) Plots were covered by a bird-proof net from mid-April to maturity.  
(2) Crop height was measured at anthesis. Head diameters and neck thickness were measured at maturity. Botrytis was assessed on four occasions.

88/R/SU/1

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

\*\*\*\*\* Tables of means \*\*\*\*\*

PATHCONT VARIETY	NONE	FULL	Mean
S10	1.87	2.01	1.94
HA 701	2.88	2.76	2.82
S34	0.70	0.86	0.78
S47	1.74	1.78	1.76
S54	1.40	1.42	1.41
S69	1.35	1.41	1.38
Mean	1.66	1.71	1.68

\*\*\* Standard errors of differences of means \*\*\*

VARIETY	PATHCONT	VARIETY PATHCONT
0.078	0.045	0.110

\*\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*\*

Stratum	d.f.	s.e.	cv%
BLOCK.WP	22	0.135	8.0
GRAIN MEAN DM%	66.6		
PLOT AREA HARVESTED	0.00120		