

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 1980

[Full Table of Content](#)



### 80/R/BE/16 Spring Beans *Vicia* Cryptic Virus

#### Rothamsted Research

Rothamsted Research (1981) *80/R/BE/16 Spring Beans Vicia Cryptic Virus* ; Yields Of The Field Experiments 1980, pp 297 - 298 - DOI: <https://doi.org/10.23637/ERADOC-1-31>

80/R/BE/16

SPRING BEANS

VICIA CRYPTIC VIRUS

Object: To study the effects on growth and yield of field beans of the presence of virus-like particles (provisionally named vicia cryptic virus (VCV)) found in the sap of certain plants - Long Hoos III 1.

Sponsors: A.J. Cockbain, R.H. Kenten.

Design: 3 randomised blocks of 12 plots.

Whole plot dimensions: 1.52 x 2.44.

Treatments:

| LINE V | Line number and VCV infection: |
|--------|--------------------------------|
| 7 V    | Line 7, VCV particles present  |
| 14 V   | " 14, " " "                    |
| 20 V   | " 20, " " "                    |
| 39 V   | " 39, " " "                    |
| 47 V   | " 47, " " "                    |
| 56 V   | " 56, " " "                    |
| 13 0   | " 13, " " absent               |
| 15 0   | " 15, " " "                    |
| 17 0   | " 17, " " "                    |
| 38 0   | " 38, " " "                    |
| 14 1 0 | " 14 1, " " "                  |
| 20 1 0 | " 20 1, " " "                  |

NOTE: Seed was sown by hand in rows 51 cm apart seed spaced 30 cm apart in the row.

Basal applications: Weedkillers: Trietazine and simazine (as 'Rental SC' at 3.0 l) in 340 l. Aphicide: Permethrin at 0.15 kg in 340 l. Pirimicarb at 0.14 kg in 340 l.

Seed: Minden.

Cultivations, etc.:- Ploughed: 14 Nov, 1979. Spring-tine cultivated: 7 Apr, 1980. Power harrowed: 9 Apr. Seed sown: 10 Apr. Weedkillers applied: 15 Apr. Permethrin applied: 23 May. Pirimicarb applied: 11 July. Harvested by hand: 3 Oct. Previous crops: Potatoes 1978, s. barley 1979.

NOTE: Plant counts were made at emergence. Pest and disease incidence and growth parameters were assessed throughout the season.

80/R/BE/16

GRAIN TONNES/HECTARE

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

| LINE V |      |
|--------|------|
| 7 V    | 1.48 |
| 14 V   | 1.84 |
| 20 V   | 1.71 |
| 39 V   | 1.74 |
| 47 V   | 0.80 |
| 56 V   | 2.41 |
| 13 0   | 2.25 |
| 15 0   | 1.78 |
| 17 0   | 2.34 |
| 38 0   | 1.00 |
| 14 1 0 | 2.19 |
| 20 1 0 | 0.94 |
| MEAN   | 1.71 |

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

| TABLE | LINE V |
|-------|--------|
| ----- | -----  |
| SED   | 0.314  |

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

| STRATUM  | DF | SE    | CV%  |
|----------|----|-------|------|
| BLOCK.WP | 22 | 0.385 | 22.6 |

GRAIN MEAN DM% 89.0

PLOT AREA HARVESTED 0.00037