

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

Numerical Results of the Field Experiments 1970

[Full Table of Content](#)

International Agricultural Research
Institute
London Agricultural Station
Horticulture, Wellesbourne
Staffordshire
CV35 9EF
United Kingdom
Tel: +44 (0)1827 852411
Fax: +44 (0)1827 852412
Email: eradoc@rothamsted.ac.uk
Website: <http://www.rothamsted.ac.uk/eradoc>
© Rothamsted Research 2015

70/R/BE/9 Spring Beans Thizobium Strains and Lime

Rothamsted Research

Rothamsted Research (1971) *70/R/BE/9 Spring Beans Thizobium Strains and Lime* ; Numerical Results Of The Field Experiments 1970, pp 282 - 284 - **DOI:**

<https://doi.org/10.23637/ERADOC-1-59>

SPRING BEANS

(70/R/BE/9)

Rhizobium strains and lime, Sawyers I 1970.

Design: 3 randomised blocks of 6 plots, split into 3.

Area of each sub plot: 0.0011. Area harvested: 0.0006.

Treatments: All combinations of:-

Whole plots: 1. Seed inoculum (*Rhizobium leguminosarum*):-

None	(0)
Strain 1025	(1)
Strain 1034	(2)
Strain 1035	(3)
Strain 1036	(4)
Strain DP	(5)

Sub plots: 2. Ground chalk: 2 tons (I1) to obtain pH 5, 6 tons (I2) to obtain pH 6, 10 tons (I3) to obtain pH 7.

NOTE: pH of site was 4.5.

Basal applications: 360 lb (0:14:28) broadcast by hand. Insecticide: Demeton-s-methyl at 3.5 oz in 35 gals.

Cultivations, etc.: Ploughed: 31 Jan, 1970. Lime and basal PK applied: 11 Feb. Rotary cultivated, seed drilled at 200 lb: 17 Apr. Insecticide applied: 17 June. Harvested by hand: 14 Sept. Variety: Maris Bead. Previous crops: Fallow since 1959.

NOTE: Counts of *Rhizobium leguminosarum* in the soil were made in March.

Standard errors per plot. Grain, cwt:

Whole plot: 1.33 or 13.5% (10 d.f.)

Sub plot: 2.52 or 25.6% (24 d.f.)

70/R/BE/9

SUMMARY OF RESULTS

GRAIN: CWT

	0	1	2	3	4	5	Mean
			(1) and (2)				(±0.59)
L1	8.9	8.9	9.5	8.6	9.4	9.3	9.1
L2	10.9	9.9	11.1	10.9	8.3	10.4	10.3
L3	9.6	9.0	12.8	11.4	9.2	9.1	10.2
Mean (±0.77)	9.8	9.3	11.2	10.3	9.0	9.6	9.9

Mean D.M. %: 79.2

- (1) (±1.42) For use in horizontal and diagonal comparisons only.
 (2) (±1.45) For use in vertical and interaction comparisons only

SPRING BEANS

(70/R/BE/10)

Growth regulator 'PRB-8' (2-B-chloro-B-cyanoethyl-6-chloro-toluene)
Fosters O and E III 1970.

Design: 3 randomised blocks of 4 plots.

Area of each plot: 0.0022. Area harvested: 0.0005.

Treatments:- 'PRB-8':

None	(0)
0.45 oz a.i. in 56 gals	(1)
4.5 oz a.i. in 56 gals	(2)
45 oz a.i. in 56 gals	(3)

Basal applications: 360 lb (0:14:28) broadcast and rotary cultivated
in before sowing. Weedkiller: Simazine at 1 lb in 35 gals.
Insecticide: Demeton-s-methyl at 3.5 oz in 35 gals on 2 occasions.

Cultivations, etc.: Ploughed: 8 Oct - 3 Nov, 1969. Basal PK
applied: 16 Apr, 1970. Rotary cultivated, seed drilled at
200 lb: 18 Apr. Weedkiller applied: 24 Apr. Growth regulator
applied: 11 June. Insecticide applied: 17 June and 20 July.
Harvested by hand: 7 Sept. Variety: Tarvin. Previous crops:
Barley 1968 and 1969.

NOTE: Stem heights were measured.

Standard error per plot.

Grain, cwt: 2.10 or 12.4% (6 d.f.)

SUMMARY OF RESULTS

GRAIN: CWT

0	1	2	3	Mean
(±1.21)				
17.5	18.2	17.9	14.0	16.9

Mean D.M. %: 82.9