

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 1981

[Full Table of Content](#)



81/R/BE/14 Precision Sowing - S. Beans

Rothamsted Research

Rothamsted Research (1982) *81/R/BE/14 Precision Sowing - S. Beans* ; Yields Of The Field Experiments 1981, pp 315 - 316 - DOI: <https://doi.org/10.23637/ERADOC-1-35>

81/R/BE/14

SPRING BEANS

PRECISION SOWING

Object: To study the effects of precision sowing and four seed rates on the yield of s. beans - Whittlocks.

Sponsors: J. McEwen, D.P. Yeoman.

Design: 3 blocks of 8 plots, randomisation restricted.

Whole plot dimensions: 2.84 x 8.23.

Treatments: All combinations of:-

1. DRILL Drills:

STANDARD	Standard farm drill sowing seed irregularly
PRECISN	Precision drill (Nodet Gougis) sowing seed evenly spaced

2. POPULATN	Plant populations (thousands per hectare):		
	Target population	Populations achieved	
		STANDARD	PRECISN
3	300	273	256
4	400	344	355
5	500	422	454
6	600	540	530

NOTE: Seed was sown in rows spaced 36 cm (14 inches) apart.

Basal applications: Manures: Chalk at 7.5 t. Weedkillers: Trietazine at 1.0 kg with simazine at 0.14 kg in 250 l. Fungicide: Benomyl at 0.56 kg in 250 l applied with the insecticide. Insecticide: Pirimicarb at 0.14 kg.

Seed: Minden.

Cultivations, etc.: Chalk applied: 2 Sept, 1980. Ploughed: 29 Dec. Spring-tine cultivated twice: 19 Feb, 1981, 7 Apr. Heavy spring-tine cultivated: 6 Apr. Seed sown: 7 Apr. Weedkillers applied: 9 Apr. Fungicide and insecticide applied: 18 June. Combine harvested: 9 Sept. Previous crops: W. wheat 1979, s. barley 1980.

NOTES: Sowing depths were measured. Establishment counts were made. Components of yield were measured at maturity. Incidence of Sitona larvae was assessed.

81/R/BE/14

GRAIN TONNES/HECTARE

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

POPULATN	3	4	5	6	MEAN
DRILL					
STANDARD	3.37	3.36	3.31	3.55	3.40
PRECISN	3.30	3.49	3.10	3.57	3.37
MEAN	3.33	3.43	3.21	3.56	3.38

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

TABLE	DRILL	POPULATN	DRILL POPULATN
SED	0.153	0.217	0.306

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

STRATUM	DF	SE	CV%
BLOCK.WP	14	0.375	11.1

GRAIN MEAN DM% 86.6

PLOT AREA HARVESTED 0.00176