

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/BE/1 Control of Rust - W. Beans

Rothamsted Research

Rothamsted Research (1987) *86/R/BE/1 Control of Rust - W. Beans* ; Yields Of The Field Experiments 1986, pp 234 - 235 - DOI: <https://doi.org/10.23637/ERADOC-1-36>

86/R/BE/1

WINTER BEANS

CONTROL OF RUST

Object: To study the effects of two fungicides applied at two times on the incidence of rust and on the yield of w. beans sown at two populations - Bones Close.

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

Design: 3 randomised blocks of 8 plots.

Whole plot dimensions: 6.0 x 10.0.

Treatments: All combinations of:-

- | | | |
|-------------|---|--------------------|
| 1. RUSTFUNG | Fungicides, maneb plus mancozeb, against rust: | |
| NONE | None (duplicated) | |
| EARLY | Applied 18 July, 1986 when first rust pustules seen | |
| LATER | Applied 1 Aug, two weeks after first rust pustules seen | |
| 2. POPULATN | Plant populations per hectare: | |
| | Seeds sown | Plants established |
| 120 | 120,000 | 73,000 |
| 360 | 360,000 | 211,000 |

NOTE: Maneb and mancozeb were each applied at 0.80 kg in 500 l.

Basal applications: Weedkillers: Simazine at 1.2 kg with propyzamide at 0.85 kg in 200 l. Insecticide: Deltamethrin at 0.0079 kg in 200 l on two occasions. Fungicides: Benomyl at 0.50 kg with chlorothalonil at 1.0 kg and a wetting agent ('Agral' at 0.075 l) in 200 l on two occasions. Desiccant: Diquat at 0.60 kg ion with a wetting agent ('Agral' at 0.075 l) in 500 l.

Seed: Banner, dressed with carbendazim and thiram.

Cultivations, etc.: - Heavy spring-tine cultivated once: 12 Sept, 1985 and twice more: 18 Sept. Seed broadcast: 17 Oct. Ploughed: 18 Oct. Weedkillers applied: 1 Nov. Insecticide applied: 1 May, 1986 and 19 May. Fungicides with wetting agent applied: 30 May, 16 June. Desiccant with wetting agent applied: 17 Sept. Combine harvested: 22 Sept. Previous crops: W. wheat 1984, s. barley 1985.

NOTE: Plant counts were made in June, disease assessments were made in July and August and components of yield were measured at maturity.

86/R/BE/1

GRAIN TONNES/HECTARE

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

POPULATN	120	360	MEAN
RUSTFUNG			
NONE	4.96	5.99	5.48
EARLY	4.84	5.95	5.39
LATER	4.64	5.93	5.29
MEAN	4.85	5.97	5.41

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

TABLE	RUSTFUNG	POPULATN	RUSTFUNG POPULATN	
SED	0.258		0.366	MIN REP
	0.224	0.183	0.317	MAX-MIN
			0.258	MAX REP

RUSTFUNG
 MAX-MIN NONE V ANY OF THE REMAINDER
 MIN REP ANY OF THE REMAINDER
 MAX REP NONE

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

STRATUM	DF	SE	CV%
BLOCK.WP	16	0.448	8.3
GRAIN MEAN DM%	84.8		
PLOT AREA HARVESTED	0.00320		