

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/CS/212 Seasonal Effects of Take-all - S. Beans, W. Wheat

Rothamsted Research

Rothamsted Research (1987) *86/R/CS/212 Seasonal Effects of Take-all - S. Beans, W. Wheat* ; Yields Of The Field Experiments 1986, pp 107 - 108 - DOI: <https://doi.org/10.23637/ERADOC-1-36>

86/R/CS/212

SEASONAL EFFECTS OF TAKE-ALL

Object: To study the incidence of take-all (*Gaeumannomyces graminis*) in continuous w. wheat and in first, second and third w. wheats after a break - Great Harpenden I.

Sponsors: D. Hornby, R.J. Gutteridge.

The ninth year, s. beans, w. wheat.

For previous years see 78-85/R/CS/212.

Design: 3 randomised blocks of 8 plots.

Whole plot dimensions: 5.33 x 10.7.

Treatments:

PREVCROP Previous crops before w. wheat 1986:

	1979	1980	1981	1982	1983	1984	1985
CONT W	W	W	W	W	W	W	W
FIRST W	W	W	BE	W	W	BE	W (duplicated)
SECOND W	W	BE	W	W	BE	W	W
BEANS	BE	W	W	BE	W	W	BE

BE = s. beans, W = w. wheat

NOTE: Three additional crop sequences were in s. beans 1986, yields not taken.

Standard applications:

W. wheat: Manures: 'Nitram' at 430 kg. Weedkillers: Clopyralid at 0.07 kg, bromoxynil octanoate at 0.34 kg, mecoprop at 2.5 kg isoproturon at 2.1 kg in 200 l applied with the fungicides. Fungicides: Prochloraz at 0.40 kg and carbendazim at 0.15 kg.
S. beans: Desiccant: Diquat at 0.60 kg ion with a wetting agent ('Agral' at 0.075 l) in 200 l.

Seed: W. wheat: Avalon, sown at 190 kg.
S. beans: Minden, sown at 220 kg.

Cultivations, etc.:-

W. wheat: Ploughed: 8 Oct, 1985. Rotary harrowed, seed sown: 10 Oct. Weedkillers and fungicides applied: 30 Apr, 1986. N applied: 2 May. Combine harvested: 22 Aug.
S. beans: Ploughed: 8 Oct, 1985. Spring-tine cultivated twice: 28 Apr, 1986. Seed sown: 29 Apr. Desiccant with wetting agent applied: 12 Sept. Combine harvested: 22 Sept.

86/R/CS/212

NOTES: (1) Take-all was assessed in soil and in w. wheat roots.
(2) Because of a recording error the yield from one of SECOND W plot was lost. An estimated value was used in the analysis.

GRAIN TONNES/HECTARE

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

PREVCROP	CONT W	FIRST W	SECOND W	BEANS	MEAN
	7.40	7.50	7.25	7.73	7.48

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

TABLE	PREVCROP
-----	-----
SED	0.232 MIN REP
	0.201 MAX-MIN

	PREVCROP
MAX-MIN	FIRST W V ANY OF THE REMAINDER
MIN REP	ANY OF THE REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	8	0.284	3.8
GRAIN MEAN DM%	77.3		
PLOT AREA HARVESTED	0.00298		