This work is licensed under a Creative Commons Attribution 4.0 International License.

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 readible, or you suspect there are some problems, please let us know and we will correct that.

Yields of the Field Experiments 1987

Full Table of Content

87/R/B/3 Anti-feedants and Bydv - W. Barley

Rothamsted Research

Rothamsted Research (1988) *87/R/B/3 Anti-feedants and Bydv - W. Barley ;* Yields Of The Field Experiments 1987, pp 185 - 186 **- DOI: https://doi.org/10.23637/ERADOC-1-37**

This work is licensed under a Creative Commons Attribution 4.0 International License.

87/R/B/3

WINTER BARLEY

ANTI-FEEDANTS AND BYDV

Object: To study the effects of insecticides and insect anti-feedants and their interaction with control of autumn volunteers on the incidence of BYDV - Scout N.

Sponsors: D.C. Griffiths, R.T. Plumb.

Design: 3 blocks of 2 whole plots, split into 6 sub-plots.

Whole plot dimensions: 15.0 x 30.0.

Treatments: All combinations of:-

Whole plots

1. VOLNTEER	Control of volunteers prior to sowing:
KILLED	Control of all green plant matter
PRESENT	Volunteer germination and survival encouraged

Sub plots

2. SPRY INS	Sprays of insecticides and pheromone derivatives applied electrostatically in 10 l:
NONE	None
CYP	Cypermethrin at 25 g on 29 Oct, 1986
POLYG R1	Polygodial, racemic, one spray on 29 Oct
POLYG R2	Polygodial, racemic, two sprays, on 15 Oct and 29 Oct
POLYG R3	Polygodial, racemic, three sprays, on 3 Oct, 15 Oct and 29 Oct
POLYG N3	Polygodial, normal, three sprays, on 3 Oct, 15 Oct and 29 Oct

NOTE: VOLNTEER KILLED plots were sprayed with paraquat at 0.60 kg ion in 280 l on 9 Sept, 1986.

Basal applications: Manures: (0:18:36) at 690 kg. 'Nitram' at 460 kg. Weedkillers: Isoproturon at 2.5 kg with clopyralid at 0.07 kg, bromoxynil at 0.34 kg and mecoprop at 2.5 kg in 500 l. Fungicides: Carbendazim at 0.15 kg and prochloraz at 0.40 kg in 200 l. Propiconazole at 0.25 kg in 200 l. Desiccant: Diquat at 0.80 kg ion with a wetting agent ('Agral' at 0.20 l) in 200 l.

Seed: Igri, sown at 150 kg.

Cultivations, etc.:- PK applied, cultivated by rotary grubber: 7 Aug, 1986. Spring-tine cultivated: 11 Sept. Rotary harrowed, seed sown: 12 Sept. N applied: 20 Mar, 1987. Weedkillers applied: 15 Apr. Carbendazim and prochloraz applied: 29 Apr. Propiconazole applied: 27 May. Diquat with wetting agent applied: 31 July. Combine harvested: 7 Aug. Previous crops: W. barley 1985 and 1986.

https://doi.org/10.23637/ERADOC-1-37

This work is licensed under a Creative Commons Attribution 4.0 International License.

87/R/B/3

NOTES: (1) Aphid counts were made in early November 1986, late November and early April, 1987.
(2) VOLNTEER PRESENT plots were severely infested with blackgrass.

GRAIN TONNES/HECTARE

***** Tables of means *****

SPRY INS	NONE	CYP	POLYG R1	POLYG R2	POLYG R3	POLYG N3	Mean
VOLNTEER							
KILLED	6.96	7.35	7.14	7.24	7.27	7.38	7.22
PRESENT	4.75	4.19	4.71	2.43	5.10	4.25	4.24
Mean	5.85	5.77	5.92	4.83	6.19	5.81	5.73

*** Standard errors of differences of means ***

Table	SPRY INS	VOLNTEER* SPRY INS
s.e.d.	0.657	0.930

* Within the same level of VOLNTEER only

***** Stratum standard errors and coefficients of variation *****

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	20	1.139	19.9

GRAIN MEAN DM% 85.9

SUB PLOT AREA HARVESTED 0.00163

https://doi.org/10.23637/ERADOC-1-37