

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 1988

[Full Table of Content](#)



88/R/RA/3 Varieties, Pests and Diseases - W. Oilseed Rape

Rothamsted Research

Rothamsted Research (1989) *88/R/RA/3 Varieties, Pests and Diseases - W. Oilseed Rape* ; Yields Of The Field Experiments 1988, pp 220 - 222 - DOI: <https://doi.org/10.23637/ERADOC-1-43>

88/R/RA/3

WINTER OILSEED RAPE

VARIETIES, PESTS AND DISEASES

Object: To investigate the effects of full pest and disease control on a range of low glucosinolate varieties compared with Bienvenu - Black Horse II.

Sponsors: C.J. Rawlinson, I.H. Williams.

Design: 2 randomised blocks of 24 plots.

Whole plot dimensions: 3.0 x 15.0.

Treatments: All combinations of:-

1. **VARIETY** Varieties:

ARIANA	Ariana
BIENVENU	Bienvenu
COBRA	Cobra
NRPB 2	NRPB 0087-2
PBI 1	PBI 1
PBI 3	PBI 3

2. **INSECTCIDE** Insecticides:

NONE	None
FULL	Deltamethrin at 0.0062 kg in 200 l on 13 Nov, 1987. Azinphos methyl at 0.40 kg and demeton-S-methyl sulphone at 0.12 kg in 300 l on 18 Apr, 1988. Triazophos at 0.42 kg in 200 l on 16 June.

3. **FUNGICIDE** Fungicides:

NONE	None
FULL	Prochloraz at 0.50 kg in 200 l on 18 Nov, 1987 and 11 Apr, 1988. Iprodione at 0.50 kg in 200 l on 16 June.

Basal applications: Manures: 'Nitram' at 140 kg, later at 260 kg and a third time at 460 kg. Weedkiller: Metazachlor at 1.2 kg in 200 l. Desiccant: Diquat at 0.60 kg ion with a wetting agent ('Enhance' at 0.50 l) in 500 l.

Seed: Varieties, sown at 8.0 kg.

Cultivations, etc.:- Ploughed: 12 Aug, 1987. First N applied: 18 Aug. Discd: 9 Sept. Seed sown: 17 Sept. Weedkillers applied: 5 Oct. Second N applied: 1 Mar, 1988. Third N applied: 7 Apr. Desiccant with wetting agent applied: 27 July. Combine harvested: 1 Aug. Previous crops: W. wheat 1986, w. barley 1987.

NOTE: Disease assessments were made on eight occasions throughout the season and pest numbers were recorded in autumn, spring and summer. Glucosinolate contents, plant tissues and seed, were measured throughout the season.

88/R/RA/3

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

INSCTCDE	NONE	FULL	Mean
VARIETY			
ARIANA	3.59	3.50	3.54
BIENVENU	3.80	4.24	4.02
COBRA	3.44	3.97	3.70
NRPB 2	3.31	3.81	3.56
PBI 1	3.76	3.82	3.79
PBI 3	3.68	3.98	3.83
Mean	3.60	3.89	3.74

FUNGCIDE	NONE	FULL	Mean
VARIETY			
ARIANA	3.19	3.90	3.54
BIENVENU	3.76	4.29	4.02
COBRA	3.20	4.21	3.70
NRPB 2	3.11	4.01	3.56
PBI 1	3.17	4.41	3.79
PBI 3	3.10	4.56	3.83
Mean	3.26	4.23	3.74

FUNGCIDE	NONE	FULL	Mean
INSCTCDE			
NONE	3.05	4.15	3.60
FULL	3.47	4.31	3.89
Mean	3.26	4.23	3.74

	INSCTCDE	NONE	FULL	FULL	FULL
VARIETY FUNGCIDE		NONE	FULL	NONE	FULL
ARIANA		3.02	4.16	3.36	3.64
BIENVENU		3.72	3.88	3.79	4.70
COBRA		2.68	4.20	3.71	4.22
NRPB 2		2.83	3.79	3.40	4.22
PBI 1		3.13	4.40	3.22	4.42
PBI 3		2.89	4.47	3.31	4.65

88/R/RA/3

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

VARIETY	INSCTCDE	FUNGCIDE	VARIETY INSCTCDE
0.159	0.092	0.092	0.225
VARIETY FUNGCIDE	INSCTCDE FUNGCIDE	VARIETY INSCTCDE FUNGCIDE & EXTRA	
0.225	0.130	0.318	

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	24	0.318	8.5
GRAIN MEAN DM%	78.1		
PLOT AREA HARVESTED	0.00299		