

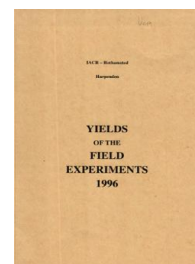
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Yields of the Field Experiments 1996

[Full Table of Content](#)



### 96/R/BW/1 Beta-acids, Aphids and Bydv - W. Barley

#### Rothamsted Research

Rothamsted Research (1997) *96/R/BW/1 Beta-acids, Aphids and Bydv - W. Barley* ; Yields Of The Field Experiments 1996, pp 117 - 118 - DOI: <https://doi.org/10.23637/ERADOC-1-51>

96/R/BW/1

WINTER BARLEY

BETA-ACIDS, APHIDS AND BYDV

**Object:** To investigate the effects of beta-acids from hops on the aphid colonization and BYDV infection on winter barley - Highfield V.

**Sponsors:** B.J. Pye, J.A. Pickett, R.T. Plumb.

**Design:** 4 randomised blocks of 4 plots split into 3 sub-plots, systematically arranged.

**Whole plot dimensions:** 9.0 x 10.0.

**Treatments:**

APHCONT	Aphid control and timing:
-	None
C	Cypermethrin in November
F	Formulated control applied on three occasions in autumn
BA	Beta-acids applied on three occasions in autumn

**NOTE:** Composition of beta-acids application was 10% beta-acids, 10% water, 80% ethanol and of formulation, 20% water, 80% ethanol.

**Experimental diary:**

24-Aug-95 : B : Ploughed and furrow pressed.  
25-Sep-95 : B : Spring-tine cultivated. Rotary harrowed, Gaelic, dressed Vitaflo Extra, drilled at 350 seeds per m<sup>2</sup>.  
18-Oct-95 : T : APHCONT BA: Beta-acids applied at 10.4 l.  
          : T : APHCONT F: Formulation applied at 10.4 l.  
01-Nov-95 : T : APHCONT BA: Beta-acids applied at 10.4 l.  
          : T : APHCONT F: Formulation applied at 10.4 l.  
14-Nov-95 : B : Panther at 2.0 l in 200 l.  
16-Nov-95 : T : APHCONT BA: Beta-acids applied at 10.4 l.  
          : T : APHCONT F: Formulation applied at 10.4 l.  
          : T : APHCONT C: Ambush C at 250 g in 10.4 l.  
07-Mar-96 : B : 34.5% N at 116 kg.  
09-Apr-96 : B : 34.5% N at 348 kg.  
27-Apr-96 : B : Starane 2 at 1.0 l with Punch C at 0.8 l in 200 l.  
10-Jun-96 : B : Punch C at 0.6 l in 320 l.  
02-Aug-96 : B : Combine harvested.

Previous crops: Set-aside 1994, w. rape 1995.

**NOTE:** Counts were made of virus infected plants in May and June.

96/R/BW/1

GRAIN TONNES/HECTARE

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

APHCONT

-	10.03
C	9.88
F	9.94
BA	9.67

Mean	9.88
------	------

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

APHCONT

0.172

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	9	0.243	2.5
BLOCK.WP.SP	32	0.288	2.9

GRAIN MEAN DM% 86.8

PLOT AREA HARVESTED 0.00230