

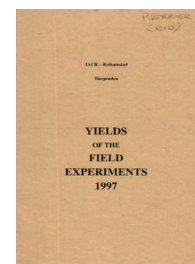
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1997

[Full Table of Content](#)



97/R/WW/6 Herbicide Resistant Black-grass - W. Wheat

Rothamsted Research

Rothamsted Research (1998) *97/R/WW/6 Herbicide Resistant Black-grass - W. Wheat* ; Yields Of The Field Experiments 1997, pp 114 - 116 - DOI: <https://doi.org/10.23637/ERADOC-1-53>

97/R/WW/6

WINTER WHEAT

HERBICIDE RESISTANT BLACK-GRASS

Object: To evaluate the efficacy of different herbicides on a herbicide-resistant black-grass (*Alopecurus myosuroides*) population and to determine any changes in the degree of resistance in the progeny of surviving plants - Claycroft.

Sponsor: S.R. Moss.

Design: 2 blocks of 15 plots duplicated.

Whole plot dimensions: 3.0 x 12.0.

Treatments:

HERBICIDE	Herbicide type, rate of active ingredient and timing (black-grass growth stage):
A	Isoproturon 500 at 2.5 kg post emergence
B	Isoproturon 500 at 1.5 kg post emergence
C	Tri-allate at 2.25 kg pre-emergence and isoproturon at 1.5 kg at two leaf stage
D	Trifluralin at 0.96 kg pre-emergence and isoproturon at 1.5 kg at two leaf stage
E	Trifluralin at 0.96 kg at two leaf stage and isoproturon at 1.5 kg at two leaf stage
F	Pendimethalin at 1.32 kg at two leaf stage and isoproturon at 1.5 kg at two leaf stage
G	Trifluralin at 0.96 kg at one leaf stage and isoproturon at 1.5 kg at two leaf stage
H	Clodinafop-propargyl at 0.5 kg with trifluralin at 1.2 kg at two leaf stage
J	Fenoxaprop-P-ethyl at 0.069 kg at two leaf stage
K	Clodinafop-propargyl at 0.03 kg with adjuvant at two leaf stage
L	JV485 pre-emergence
M	Agent X at two leaf stage
N	JV485 pre-emergence and Agent X at two leaf stage
O	None
P	None

NOTE: Herbicides JV485 and Agent X are under commercial development, composition undisclosed

Experimental diary:

- 15-Sep-96 : B : Roundup at 1.5 l with Vassgro Non-ionic at 300 ml in 200 l.
- 23-Sep-96 : B : Harrowed.
- 25-Sep-96 : B : Ploughed and furrow pressed.
- 30-Sep-96 : B : Harrowed.
- 17-Oct-96 : B : Rotary harrowed, Mercia, dressed Sibutol, drilled at 380 seeds per m².

97/R/WW/6

Experimental diary:

17-Oct-96 : B : Scythe LC at 2.0 l with Vassgro Non-ionic at 100 ml in
200 l.
22-Oct-96 : T : **HERBCIDE** C: Avadex BW Granular at 22.5 kg.
: T : **HERBCIDE** L, N: JV485 at 0.35 l in 220 l.
: T : **HERBCIDE** D: MTM Trifluralin at 2.0 l in 220 l.
23-Oct-96 : B : Draza at 5.5 kg.
08-Nov-96 : T : **HERBCIDE** G: MTM Trifluralin at 2.0 l in 220 l.
03-Mar-97 : T : **HERBCIDE** J: Cheetah Super at 1.25 l in 220 l.
: T : **HERBCIDE** H: Hawk at 2.5 l with Actipron at 1.0 l in
220 l.
: T : **HERBCIDE** B, C, D, E, F, G: MSS Iprofile at 3.0 l in
220 l.
: T : **HERBCIDE** A: MSS Iprofile at 5.0 l in 220 l.
: T : **HERBCIDE** M, N: Agent X at 20 g in 220 l.
: T : **HERBCIDE** F: Stomp 400 SC at 3.3 l in 220 l.
: T : **HERBCIDE** K: Topik at 0.125 l with Actipron at 1.0 l in
220 l.
11-Apr-97 : B : 34.5% N at 568 kg.
04-Jun-97 : B : Folicur at 0.5 l with Mallard 750 EC at 0.3 l and Pointer
at 0.5 l in 300 l.
14-Aug-97 : B : Combine harvested.

Previous crops: W. wheat 1995 and 1996.

NOTE: Black-grass plant populations were assessed in December 1996 and heads were counted in June 1997.

96/R/WW/6

GRAIN TONNES/HECTARE

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

HERBICIDE

A	5.53
B	5.13
C	6.41
D	6.26
E	5.67
F	5.26
G	5.99
H	6.50
J	4.99
K	6.43
L	6.66
M	5.67
N	6.17
NIL	4.27
Mean	5.68

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

HERBICIDE

0.264	min.rep
0.229	max-min

HERBICIDE

min.rep Any of the remainder
max-min NIL v any of the remainder

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	45	0.374	6.6
GRAIN MEAN DM%	86.2		
PLOT AREA HARVESTED	0.00230		