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## Yields of the Field Experiments 1994

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### 94/R/WS/1 Weed Sowing Date and Density - S. Wheat

#### Rothamsted Research

Rothamsted Research (1995) *94/R/WS/1 Weed Sowing Date and Density - S. Wheat* ; Yields Of The Field Experiments 1994, pp 103 - 104 - DOI: <https://doi.org/10.23637/ERADOC-1-49>

94/R/WS/1

SPRING WHEAT

WEED SOWING DATE AND DENSITY

**Object:** To measure the response of s. wheat to competition from white mustard (*Sinapsis alba*) sown on two different dates - Long Hoos I/II.

**Sponsor:** P.J.W. Lutman.

**Design:** 3 randomised blocks of (2 x 4) + 2 plots.

**Plot dimensions:** 3.0 x 10.0.

**Treatments:** All combinations of:-

1. **WEED SD** Time of sowing white mustard:

S1 Same day as drilling wheat  
S2 10 days after drilling wheat

2. **WEED DEN** Density of sown white mustard (plants per m<sup>2</sup>):

	S1	S2
D1	20	12
D2	56	19
D4	108	73
D8	215	90

plus 2 extra treatments

3. **EXTRA** No mustard sown, hand weeding:

DO Not hand weeded  
OS Hand weeded

**NOTE:** Target white mustard densities (plants per m<sup>2</sup>):

<b>WEED DEN</b>	D1	D2	D4	D8
<b>WEED SD S1:</b>	25	50	100	200
S2:	50	100	200	400

**Experimental Diary:**

05-Nov-93 : B : Ploughed.  
16-Mar-94 : B : Spring-tine cultivated.  
          : T : **WEED SD** S1: White mustard broadcast by hand.  
          : B : Rotary harrowed, Canon, dressed Rappor, drilled at 350 seeds per m<sup>2</sup>.  
28-Mar-94 : T : **WEED SD** S2: White mustard broadcast by hand, raked in.  
04-May-94 : B : 34.5% N at 348 kg.  
22-Aug-94 : B : Combine harvested.

**NOTE:** Leaf area and ground cover of wheat and mustard were estimated on five occasions in April and May. Dry weights of wheat and mustard were estimated in May, June and August.

94/R/WS/1

GRAIN TONNES/HECTARE

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

WEED DEN WEED SD	D1	D2	D8	D8	Mean
S1	4.29	2.16	0.96	0.22	1.91
S2	4.74	4.43	3.64	4.17	4.24
Mean	4.51	3.29	2.30	2.19	3.07
<b>EXTRA</b>					
D0	4.70				
OS	4.77				
Mean	4.73				

GRAND MEAN 3.41

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

WEED SD	WEED DEN	WEED SD WEED DEN & EXTRA
0.225	0.318	0.450

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	18	0.551	16.1

GRAIN MEAN DM% \*

PLOT AREA HARVESTED 0.00010