

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 1993

[Full Table of Content](#)



### 93/R/RAW/4 N, S and Glucosinolates - W. Oilseed Rape

#### Rothamsted Research

Rothamsted Research (1994) *93/R/RAW/4 N, S and Glucosinolates - W. Oilseed Rape* ; Yields Of The Field Experiments 1993, pp 128 - 130 - DOI: <https://doi.org/10.23637/ERADOC-1-48>

93/R/RAW/4

WINTER OILSEED RAPE

N, S AND GLUCOSINOLATES

**Object:** To study the separate and combined effects of rates of nitrogen and sulphur on the quality and yield of three varieties of w. oilseed rape - Bones Close.

**Sponsors:** J.Fieldsend, H. Hutchings.

**Design:** 4 randomised blocks of 3 x 3 x 3 plots.

**Whole plot dimensions:** 3.0 x 21.0.

**Treatments:** All combinations of:-

1. **VARIETY** Varieties:  
ARIANA Ariana  
FALCON Falcon  
TAPIDOR Tapidor
2. **N** Rates of nitrogen (kg N) in spring:  
0  
150  
250
3. **S** Rates of sulphur (kg S) in spring:  
0  
50  
100

**NOTE:** Sulphur was applied as gypsum (17.5% S).

**Experimental diary:**

- 27-Jul-92 : B : Shallow cultivated with Bomford Dynadrive.  
28-Jul-92 : B : Rolled.  
18-Aug-92 : B : Sting CT at 2.0 l in 200 l.  
20-Aug-92 : B : Ploughed, furrow pressed.  
29-Aug-92 : T : **VARIETY** ARIANA, FALCON, TAPIDOR: Rotary harrowed. All varieties, dressed Lindex-Plus FS, drilled at 120 seeds per square metre.  
                  : B : Rolled.  
22-Oct-92 : B : Benazalox at 0.75 l and Butisan S at 1.5 l in 200 l.  
22-Feb-93 : T : N 150, 250: 34.5% N at 145 kg.  
24-Feb-93 : T : S 50: Gypsum at 284 kg.  
                  : T : S 100: Gypsum at 568 kg.  
15-Mar-93 : T : N 150: 34.5% N at 290 kg.  
                  : T : N 250: 34.5% N at 580 kg.  
19-Jul-93 : B : Stefes Diquat at 3.0 l with Vassgro Spreader at 0.40 l in 400 l.  
26-Jul-93 : B : Combine harvested.

93/R/RAW/4

Previous crops: W. barley 1991 and 1992.

**NOTE:** Seed samples were analysed for glucosinolate content.

**GRAIN (AT 90% DM) TONNES/HECTARE**

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

	N	0	150	250	Mean
<b>VARIETY</b>					
ARIANA		3.10	3.23	3.09	3.14
FALCON		3.43	3.66	3.78	3.62
TAPIDOR		3.15	3.48	3.40	3.34
Mean		3.23	3.46	3.42	3.37
	S	0	50	100	Mean
<b>VARIETY</b>					
ARIANA		3.13	3.08	3.22	3.14
FALCON		3.52	3.67	3.68	3.62
TAPIDOR		3.24	3.43	3.37	3.34
Mean		3.30	3.39	3.42	3.37
	S	0	50	100	Mean
<b>N</b>					
0		3.21	3.23	3.24	3.23
150		3.36	3.52	3.49	3.46
250		3.31	3.43	3.53	3.42
Mean		3.30	3.39	3.42	3.37
	S	0	50	100	
<b>VARIETY</b>	<b>N</b>				
ARIANA	0	3.19	2.89	3.23	
	150	3.17	3.34	3.19	
	250	3.02	3.00	3.24	
FALCON	0	3.34	3.42	3.52	
	150	3.52	3.80	3.67	
	250	3.69	3.79	3.85	
TAPIDOR	0	3.11	3.37	2.97	
	150	3.39	3.43	3.62	
	250	3.23	3.48	3.50	

93/R/RAW/4

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

VARIETY	N	S	VARIETY
			N
0.065	0.065	0.065	0.113

VARIETY	N	VARIETY
S	S	N
		S
0.113	0.113	0.196

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	78	0.277	8.2

GRAIN MEAN DM% 87.1

PLOT AREA HARVESTED 0.00483