

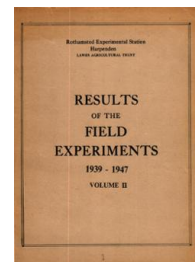
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S Lettuce

Rothamsted Research

Rothamsted Research (1948) *S Lettuce* ; Yields Of The Field Experiments 1939-1947 Volume 2, pp 171 - 176 - DOI: <https://doi.org/10.23637/ERADOC-1-186>

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LETTUCE

Woburn Butt Close 1942

Effects of intensity of weeding, of pulling and hoeing weeds, of basal nitrogen in inorganic or in organic form, and of top dressing. Notes on the development of the crop were made by the Physics Department.

Design; 4 randomized blocks of 8 plots each, certain high order interactions being confounded with block differences.

Area of each plot, 0.00287 acre.

Treatments

Weeding: Light, intensive.

Removal of weeds: Pulling, hoeing.

Nitrogen in seed bed: None, 0.6 cwt. N per acre

Form of nitrogen: Inorganic (nitrochalk), organic (hoof meal).

Top dressing: None, 0.2 cwt. N per acre (nitrochalk).

The difference between the light and intensively weeded plots was an extra weeding for the latter.

Basal Manuring: Superphosphate 0.5 cwt. P₂O₅ per acre, muriate of potash 0.5 cwt. K₂O per acre.

Crop Notes

Sown: May 20. Cut: Aug. 4 and 12. Variety: All the Year Round. Previous crop: Sugar beet.

Standard errors per Plot: Total weight: 29.4 cwt. per acre or 20.1%, 13 d.f.
Total number: 2.97 thousands per acre or 11.1%, 13 d.f.

Differential responses

Mean response	Weeding		Hoeing	Pulling	Seedbed nitrogen		Seedbed nitrogen		Top dressing
	Light	Intensive			Inor- ganic	Or- ganic	None	Inor- ganic	

Total weight, cwt. per acre: Mean 146.6

	±10.4				±14.7						
A	34.9	-	-	34.2	35.6	28.7	41.1	confounded	46.7	23.1	
B	14.9	14.2	15.6	-	-	-5.4	35.2	18.0 ^b	52.4 ^b	-7.4	37.2
C	13.8	7.6	20.0	-6.5	34.1	-	-	-	-	47.0	-19.4 ^b
D	22.0 ^a	confounded		4.8 ^b	39.2 ^b	-	-	-	-	39.6 ^b	4.4
E	-33.7	-21.9	-45.5	-56.0	-11.4	-0.5	-66.9	-49.3 ^b	-84.5 ^b	-	-

A = Intensive - light weeding

B = Pulling - hoeing

C = Nitrogen in seed-bed

D = Seedbed nitrogen organic v.inorganic

E = Top dressing nitrogen

Standard errors (a) 14.7 (b) 20.8

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Lettuce - Woburn 1942

Differential Responses

Mean response	Weeding		Hoeing	Pulling	Seed-bed nitrogen	Seedbed nitrogen		Top dressing
	Light	Intensive				Inorganic	Organic	

Plant number (thousands per acre): Mean 26.7

	±1.05			±1.48							
A	1.9	-	-	1.9	1.9	2.3	1.5	confounded		2.9	0.9
B	0.5	0.5	0.5	-	-	-1.3	2.3	1.7 ^d	2.9 ^d	-1.6	2.6
C	-0.6	-0.2	-1.0	-2.4 ^d	1.2 ^d	-	-	-	-	1.5 ^d	-2.7 ^d
D	2.1 ^c	confounded		1.5 ^d	2.7 ^d	-	-	-	-	2.2 ^d	2.0 ^d
E	-2.8	-1.8	-3.8	-4.9	-0.7	-0.7	-4.9	-4.8 ^d	-5.0 ^d	-	-

A = Intensive - light weeding

B = Pulling - hoeing

C = Nitrogen in seed-bed

D = Seedbed nitrogen organic v. inorganic

E = Top dressing nitrogen

Standard errors (c) 1.48 (d) 2.09

LETTUCE

Woburn Butt Close 1943

The effect of dung, of sulphate of ammonia and of method and intensity of weeding. Notes on the development of the crop were made by the Physics Dept.

Design; 2 randomized blocks of 8 plots each, the third order interaction being confounded with block differences.

Area of each plot: 0.00287 acre.

Treatments

Dung: None, 15 tons per acre.
 Sulphate of ammonia: None, 0.6 cwt. N per acre
 Weeding: Normal (on 3 days) or intensive (on 5 days).
 Method of weeding: Hoeing or pulling.

Crop Notes

Sown: Mar 29. Cut: June 21-29, July 5-14. Variety: All the Year Round.
 Previous crop: Potatoes.

Note: Some of the plants in the first cutting were attacked by Botrytis.

Standard errors per plot:

Total weight: 0.86 tons per acre or 7.6%, 9 d.f.
 Weight of first cutting: 1.01 tons per acre or 10.0%, 9 d.f.
 Plant number, first cutting: 3.30 thousands per acre or 8.4%, 9 d.f.

Differential Responses

	Mean	Cultivations		Weeding	
		Normal	Intensive	Hoeing	Pulling
Total weight: tons per acre.		Mean yield 11.28			
	±0.43			±0.61	
Dung	1.06				
Nitrogen	4.67				
Intensive -					
Normal Cultivation	2.02			1.48	2.56
Hoeing - Pulling	0.88	1.42	0.34		
Total weight cut before June 29th: tons per acre.		Mean yield 10.05			
	±0.50			±0.71	
Dung	1.33				
Nitrogen	5.59				
Intensive -					
Normal Cultivation	2.61			1.88	3.34
Hoeing - Pulling	1.09	1.82	0.36		

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Lettuce - Woburn 1943

Differential Responses

	Mean	Cultivations		Weeding		
		Normal	Intensive	Hoeing	Pulling	
Total number cut before June 29th: thousands per acre. Mean yield 39.4						
	±1.65			±2.33		
Dung	1.9					
Nitrogen	7.8					
Intensive -						
Normal Cultivation	5.0					
Hoeing - Pulling	2.6	4.1	1.1	3.5	6.5	

• Percentage number over 400 gms. Mean 9.5

Dung	3.2					
Nitrogen	15.0					
Intensive -						
Normal Cultivation	7.5					
Hoeing - Pulling	2.7	3.0	2.5	7.3	7.8	

LETTUCE

Woburn Butt Furlong 1944

Effects of cultivation under various manurial conditions (dung, hoof meal and sulphate of ammonia). Notes on the development of the crop were made by the Physics Department.

Design; 2 randomized blocks of 8 plots each, the 3rd order interaction being confounded with blocks.

Area of each plot, 0.00307 acre.

Treatments

Dung: None, 15 tons per acre (surface mulch)
 Nitrogen: Hoof meal or sulphate of ammonia, 0.6 cwt. N per acre.
 Method of removing weeds: Pulling or hoeing.
 Weeding: Continuous intensive May and June, or early intensive May only

Crop Notes

Sown: April 14. Cut: July 8 to Aug. 4. Variety All the Year Round.
 Previous crop: Sugar beet.

Standard errors per plot: Total Weight, 0.53 tons per acre or 6.3%, 9 d.f.
 Total number, 3.14 thousands per acre or 10.5%, 9 d.f.

	Differential Responses				
	Mean	Dung		Intensive Weeding	
		Absent	Present	Early	Continuous
Total weight.	Mean yield 11.79 tons per acre				
	±0.36			±0.52	
Response to dung	1.04	-	-	-0.59	2.66
Continuous - Early weeding	4.94	3.32	6.57	-	-
Hoof meal - Sulph. amm.	-0.84				
Pulling - Hoeing	-0.90				
Total number.	Mean yield 41.9 thousands per acre				
	±2.2			±3.2	
Response to dung	1.8	-	-	-2.1	5.7
Continuous - Early weeding	11.3	7.4	15.3	-	-
Hoof meal - Sulph. amm.	-0.8				
Pulling - Hoeing	-2.1				
Percentage total weight.	Class I Lettuce. Mean 21.5				
	-0.1	-	-	-4.5	4.3
Continuous - early weeding	10.3	5.9	14.7	-	-
Hoof meal - Sulph. amm.	-7.3				
Pulling - Hoeing	-4.7				

Class I lettuces weigh over $\frac{3}{4}$ lb. each.

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Lettuce - Woburn 1944

	Differential Responses			Intensive Weeding	
	Mean	Dung Absent	Dung Present	Early	Continuous
Percentage total weight cut before July 19. Mean 92.3					
Response to dung	3.1	-	-	2.1	4.1
Continuous - Early weeding	-8.6	-9.6	-7.6	-	-
Hoof Meal - Sulph. amm.	-0.8				
Pulling - Hoeing	5.5				