

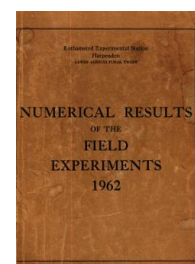
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Yields of the Field Experiments 1962

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62/R/C/3 Grass Species Testing N and K - Barley (Test Crop)

Rothamsted Research

Rothamsted Research (1963) *62/R/C/3 Grass Species Testing N and K - Barley (Test Crop)* ; Yields Of The Field Experiments 1962, pp 104 - 106 - DOI: <https://doi.org/10.23637/ERADOC-1-164>

62/C/3.1

BARLEY

Residues of grass species and nitrogen - Harwoods Piece 1962, the 5th year.

Design: $4 \times 3 \times 4$ in 4 blocks of 12 plots each, with certain high order interactions confounded with block differences.

Area of each plot: 0.0087 acres. Area harvested: 0.0077 acres.

Treatments. All combinations of:-

Grass species sown in spring 1958:

S37 Cocksfoot at 30 lb per acre

S215 Meadow Fescue at 30 lb per acre

S24 Perennial Ryegrass at 25 lb per acre

Timothy "Scotia" at 20 lb per acre

(C)
(M)
(R)
(T)

Nitrogen (applied 1958-1960): None; 0.3; 0.6 cwt N per acre as 'Nitro-Chalk', applied for each cut.

Nitrogen applied to barley 1962: None; 0.3; 0.6; 0.9 cwt N per acre as 'Nitro-Chalk'.

Note: The 1962 treatments were so arranged as to render negligible the effects of the 1961 K treatments, which are therefore ignored.

Basal dressing: 2 cwt compound fertiliser (14% P_2O_5 , 28% K_2O) per acre combine drilled.

Cultivations, etc.: Sprayed with dalapon at 8 lb in 40 gallons per acre: Sept 7, 1961 and again at 4 lb in 40 gallons per acre: Sept 27. Ploughed: Nov 8. Seed drilled at $2\frac{1}{2}$ bushels per acre: Feb 23, 1962. 'Nitro-Chalk' applied: Mar 20. Sprayed with MCPA/TBA at 4 pints in 40 gallons per acre: May 14. Combine harvested: Aug 29. Variety: Proctor.

Note: For details of the previous years' results see 'Results of the Field Experiments' 58/Cg/3, 59/Cg/3, 60/Ci/2 and 61/C/3.

Standard error per plot.

Grain (at 85% dry matter): 2.21 cwt per acre or 6.1% (15 d.f.)

62/C/3.2

Summary of Results

Species of grass, 1958 - 60

	C	M	R	T	Mean
<u>Grain (at 85% dry matter): cwt per acre</u>					
N: cwt per acre 1958 - 60*	(±1.10)				(±0.55)
None	34.7	38.5	35.3	34.9	35.8
0.3	35.2	35.8	38.1	34.9	36.0
0.6	38.2	37.3	36.0	37.9	37.4
N: cwt per acre 1962	(±1.28)				(±0.64)
None	28.4	29.3	27.9	27.8	28.3
0.3	34.5	35.9	33.9	34.6	34.7
0.6	39.4	41.2	40.5	38.6	39.9
0.9	41.9	42.4	43.6	42.6	42.6
Mean (±0.64)	36.0	37.2	36.5	35.9	36.4
	N: cwt per acre 1958 - 60*				
	None	0.3	0.6		
N: cwt per acre 1962	(±1.10)				
None	28.0	28.6	28.4		
0.3	34.0	33.5	36.6		
0.6	38.9	39.4	41.5		
0.9	42.5	42.4	43.0		

Mean dry matter % as harvested: 83.3

Grass species

C = S37 Cocksfoot at 30 lb per acre
M = S215 Meadow Fescue at 30 lb per acre
R = S24 Perennial Ryegrass at 25 lb per acre
T = Timothy "Scotia" at 20 lb per acre

*For each cut of grass

62/C/3.3

Species of grass, 1958 - 60

	C	M	R	T	Mean
<u>Straw (at 85% dry matter): cwt per acre</u>					
N: cwt per acre 1958 - 60*					
None	28.5	30.9	27.9	26.7	28.5
0.3	27.7	29.6	28.8	29.0	28.8
0.6	30.6	30.7	28.1	30.3	29.9
N: cwt per acre 1962					
None	19.2	19.6	16.2	17.4	18.1
0.3	26.5	28.5	25.2	27.0	26.8
0.6	33.0	36.2	32.6	32.8	33.6
0.9	37.2	37.4	39.0	37.5	37.8
Mean	29.0	30.4	28.3	28.7	29.1

N: cwt per acre 1958 - 60*

	None	0.3	0.6
N: cwt per acre 1962			
None	17.9	18.2	18.0
0.3	25.0	26.2	29.2
0.6	33.6	32.3	34.9
0.9	37.5	38.3	37.5

Mean dry matter % as harvested: 85.9

Grass species

- C = S37 Cocksfoot at 30 lb per acre
- M = S215 Meadow Fescue at 30 lb per acre
- R = S24 Perennial Ryegrass at 25 lb per acre
- T = Timothy "Scotia" at 20 lb per acre

*For each cut of grass