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Yields of the Field Experiments 1977

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77/R/AG/6 Agdell - Ryegrass, Ryegrass/CLOVER

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77/R/AG/6

AGDELL

Object: To study, by crop yields and soil analyses, the residual values of phosphate and potash applied in the period 1848-1951 and further dressings since 1964.

The eighth year of revised scheme, ryegrass and ryegrass/clover.

For previous years see 'Details' 1967 and 1973, and 74-76/R/AG/6.

Treatments: All combinations of:-

Whole plots

1. OLDRESD Fertilisers and organic manures applied to roots every fourth year, in the period 1848-1948:

NONE	None
PKNAMG	P K Na Mg
NPKNAMGC	N P K Na Mg C

N: 48 kg N as sulphate of ammonia
P: 41 kg P as superphosphate
K: 224 kg K as sulphate of potash
Na: 16 kg Na as sulphate of soda
Mg: 11 kg Mg as sulphate of magnesia
C: Castor meal at 2240 kg supplying about 112 kg N

NOTE: Yields taken only from OLDRESD NONE.

2. (RN)CROP (77) Rotation 1848-1951 and crop 1977:

(F) G/C	With fallow: Roots (turnips or swedes), barley, fallow, wheat 1848-1951. Grass/clover 1977.
(L) G	With legume: Roots, barley, legume (clover or beans), wheat 1848-1951. Grass 1977.

Half plots

3. 1964RESID Residues of 1964 treatments:

P
K

Quarter plots

4. PREVCROP Previous cropping 1958-69 on P-test half plots, 1958-70 on K-test half plots:

ARABLE	Arable or fallow
GRASS	Grass

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Sixteenth plots

5. P205 64 K20 64 Rates of 1964 treatments (kg):

	P205 to P-test half plots	K20 to K-test half plots
0	0	
500	315	
1000	630	
2000	1260	

Sixty fourth plots

6. On P-test half plots:

P205 70-2 Residues of P205 applied 1970-72 (total, kg):

0
375

On K-test half plots:

K20 73-6 Residues of K20 applied 1973-76 (total, kg):

0
870

NOTE: Strips of sixty fourth plots on P-test half plots tested 63 and 94 kg N in 1976. Yields in 1977 were to be taken only from strips given 94 kg N. Strips of sixty fourth plots on K-test half plots were cropped with potatoes and barley in 1976. Yields in 1977 were to be taken only from strips cropped with potatoes. Because growth was sparse no yield cuts were taken. The experiment was topped in December.

Sub plot dimensions: Plots 1, 2, 3 and 4 - 6.04 x 3.02. Plots 5, 6 - 5.43 x 3.02.

Standard applications: Manures: Grass plots only: N at 100 kg as 'Nitro-Chalk'.
Weedkillers: MCPB (Tropotox at 7.0 l in 340 l).

Seed: Grass plots: S.23, sown at 22 kg. Grass/clover plots: S.23 at 22 kg,
Blanca at 2 kg, mixture sown at 24 kg.

Cultivations, etc.: - Ploughed: 7 Dec, 1976. Spring-tine cultivated: 7 Apr, 1977.
N applied: 27 Apr. Power harrowed: 19 May. Seed sown, harrowed: 20 May.
Weedkiller applied: 27 July. Topped: 1 Dec.