

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

Numerical Results of the Field Experiments 1970

[Full Table of Content](#)



70/S/RN/1 Rotation I 1970

Rothamsted Research

Rothamsted Research (1971) *70/S/RN/1 Rotation I 1970 ; Numerical Results Of The Field Experiments 1970*, pp 43 - 44 - DOI: <https://doi.org/10.23637/ERADOC-1-59>

SAXMUNDHAM

ROTATION I 1970

(70/S/RN/1)

For history, treatments, rotations and results etc. see 'Details' 1967, 'Results' 68/A/9 and 69/S/RN/1. Grass and lucerne 1970.

Area of each new plot: 0.0236. Area harvested: Lucerne: 0.0034.

The rotation cropping is now discontinued and all blocks are sown to leys.

Treatments:

Plots with new treatments from 1966 (large plots):

Each main plot is split into two. Lucerne is grown on the northern half and grass on the southern. Manuring is unchanged except for FYM* and nitrogen. Lucerne does not receive nitrogen to any plots. Grass receives basal nitrogen at 0.8 cwt N for each cut as 'Nitro-Chalk'.

Plots continuing old treatments (small plots):

Each plot is sown to grass. Classical manuring is maintained except for FYM*.

* FYM was applied at 24 tons in autumn 1969. No further FYM will be applied before ploughing up grass and lucerne.

NOTE: Grass established poorly and all plots were re-sown in autumn without further cultivations. All small plots received basal nitrogen at 0.3 cwt N as 'Nitro-Chalk' to aid establishment. No cuts were taken from the grass plots.

Cultivations, etc.:-

FYM applied: (1) After beans and barley: 22 Sept, 1969. (2) After wheat: 6 Oct. (3) After sugar beet: 29 Oct. Ploughed: (1) 22 Sept. (2) 7 Oct. (3) 31 Oct.

Grass: Bonemeal applied: 25 Mar, 1970. P and K applied to large and small plots, test N applied to small plots: 5 May. Seed drilled at 30 lb and basal N applied to large plots: 6 May. Sprayed with 2,4-D ester at 21 oz a.e. in 20 gals: 26 Aug. Basal N applied to small plots, all grass redrilled into the partially established sward: 8 Sept. Varieties: Timothy (S.352) and Meadow Fescue (S.215) in equal proportions by weight.

Lucerne: Bonemeal applied: 25 Mar, 1970. P and K applied: 5 May. Seed drilled at 50 lb: 6 May. Cut once: 26 Aug. Variety: Europe.

70/S/RH/1

SUMMARY OF RESULTS

LUCERNE. DRY MATTER: CWT

Treatment 1899-1965	Treatment from 1966	1st and only cut
D	DN1	25.3
B	B	10.7
N	N2P2	13.6
P	N1P1	10.6
K	N1P2K	10.3
-	N1P2	10.5
PK	N1P1K	13.7
NK	N2P2K	12.8
NP	N2P1	14.4
NPK	N2P1K	15.7
Mean		13.8

Mean D.M. %: 32.1