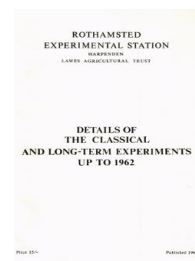


Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Details of the Classical and Long-term Experiments Up to 1962



[Full Table of Content](#)

Two- Course Rotation- Rothamsted

Rothamsted Research

Rothamsted Research (1966) *Two- Course Rotation- Rothamsted* ; Details Of The Classical And Long-Term Experiments Up To 1962, pp 38 - 38 - DOI: <https://doi.org/10.23637/ERADOC-1-191>

**TWO-COURSE ROTATION EXPERIMENT,
EFFECT OF AGRICULTURAL SALT,
LONG HOOS VII, 1942-1950**

The crop rotation was sugar beet, barley. There were 96 plots arranged in randomised blocks of 12. The blocks were grouped in two series one in each crop each year. Treatments were first applied to sugar beet, in 1942 (Series I) and 1943 (Series II).

The treatments were all combinations of the following factors:-

Salt to sugar beet: 0, 2½, 5, 7½ cwt. agricultural salt per acre

Muriate of potash to sugar beet: none, the equivalent of half the single dressing of salt, the equivalent of the single dressing of salt (i.e. 0, 1, 2 cwt. K₂O per acre approximately)

Time of application of salt: in seedbed at sowing time, before ploughing in winter (1942 and 1943; after ploughing, one month before sowing)

Salt to barley: none, at half rates applied to sugar beet.

Basal dressings, applied at sowing

Barley: 0.3 cwt. N per acre as sulphate of ammonia

Sugar beet: 0.8 cwt. N per acre as sulphate of ammonia

0.6 cwt. P₂O₅ per acre as superphosphate.

For a summary of the results to 1949 see Rep. Rothamst. exp. Sta. for 1949, 101-104.

Table 22

Two-Course Rotation.

Sugar beet, Total Sugar: cwt. per acre. Means over 8 years 1942-49.

Salt to sugar beet cwt per acre	Muriate of potash: cwt per acre			Mean
	None	2	4	
None	40.9	43.7	45.9	43.5
2½	50.0	47.8	49.0	48.9
5	50.0	50.2	49.5	49.9
7½	48.0	49.4	50.0	49.1
Mean	47.2	47.8	48.6	47.9

Table 23

Two-Course Rotation Experiment,

Barley, grain: cwt per acre. Means over 8 years 1943-1950.

Salt to barley : cwt per acre	Muriate of potash: cwt per acre			Mean
	None	2	4	
None	27.7	28.4	27.4	27.8
1.25	28.3	28.7	28.3	28.4
2.50	27.5	27.8	27.3	27.5
3.75	27.0	28.7	28.2	27.9
Mean	27.6	28.4	27.8	27.9