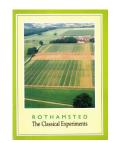
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readible, or you suspect there are some problems, please let us know and we will correct that.



## Rothamsted - the Classical Experiments



Full Table of Content

## **Hoosfield Spring Barley**

## **Rothamsted Research**

Rothamsted Research (1992) *Hoosfield Spring Barley*; Rothamsted - The Classical Experiments, pp 19 - 20 - **DOI:** https://doi.org/10.23637/ERADOC-1-189

TABLE 3

Hoosfield Wheat after fallow (mean yields of grain, t  $ha^{-1}$ )

	Hoosfield wheat Years of fallow		Broadbalk wheat Unmanured continuous	
	1	3		
1856-65	1.8	-	1.2	
1973-82	1.5	2.0	1.6	
1984-90	1.2	-	1.3	

## HOOSFIELD SPRING BARLEY

Spring barley has been grown continuously here since 1852. The experiment offers interesting contrasts to that on Broadbalk, being spring-sown, having been fallowed only four times to control weeds and testing not only nitrogen, minerals and FYM but also silicate of soda.

In 1968 a crop rotation of potatoes, beans and barley on small areas of some plots and a four-level N test on all plots were introduced. The effects of the two-year break on the yield of barley were small and the whole experiment has again grown continuous barley since 1979.

The design of the experiment is of a factorial nature with east-west strips (see plan) having the four combinations of:

- (1) 0 vs P with
- (2) 0 vs KMg

and north-south strips, which cross these, originally testing forms of nitrogen, all applied at the same rate of N:

(3) 0 vs sulphate of ammonia vs nitrate of soda vs rape cake (later castor meal) The nitrate of soda strip was divided for a test of 0 vs silicate of soda.

Additional plots at the south side test FYM, since the experiment started, and residues of FYM applied only during 1852-71.

TABLE 4

Hoosfield Spring Barley

Mean yield (7 years 1984-90) of Triumph spring barley grain t ha-1

	N0	N1	N2	N3
P KMg PKMg FYM	0.8 1.8 1.4 1.9 6.0	1.3 3.1 2.4 3.9 6.5	1.6 3.1 2.8 4.9 6.6	1.7 2.9 2.9 5.0 6.5
	(-)-	(S)-	(-)S	(S)S
N3- N3P N3KMg N3PKMg	2.0 2.9 2.6 5.5	2.8 3.8 3.8 5.5	2.5 4.1 2.9 5.5	2.4 4.2 3.3 5.4

19

