

Highfield Ley-arable (R/RN/1) treatment codes summary

1949-1961	1962 ¹ -1990	1991-2008	2009-	Rotation type
G ²	Gn Gc	Gc	Gc	Permanent grass
R	Rn	Rc	Became R/CS/767 in 2009	Reseeded grass
	Rc			
	Rpn	Rpc	Became R/CS/767 in 2009	Reseeded grass
	Rpc			
Cg	Ln	Lc(Ln)	F	Ley-arable /Fallow
L	Lc	Lc(Lc)	Lc(Lc)	Ley-arable
Lu	Lu	Lc(Lu)	Al	Ley-arable /arable
A	A	A	Became R/CS/767 in 2009	Arable

¹ New rotations phased in between 1962 and 1967² at the end of the three year test cycles.

² In 1963 one pair of permanent grass plots was mistakenly ploughed and sown with wheat in 1964 before being returned to permanent grass in 1965. This is shown as [G], and was not divided for Gc v Gn treatments.

1949 - 1961

G	Permanent grass/clover from before the start of the experiment, left unchanged, grazed by sheep
R	Reseeded grass: reseeded at the start of experiment, grass/clover, left unchanged, grazed by sheep
Cg	Three year cut grass/clover ley followed by three arable test crops
L	Three year grazed grass/clover ley followed by three arable test crops
Lu	Three year lucerne ley cut for hay followed by three arable test crops
A	Three year arable treatment crops (hay, potatoes, barley, 1949-54, hay, potatoes, oats, 1955-60) followed by three arable test crops

1962- 1990

From 1968 onwards blocks 5-12 were turned over to continuous wheat to study soil-borne disease. The ley-arable experiment continued with blocks 1-4 only.

Gn	Permanent grass/clover (G) split into Gn and Gc in 1962. Grass with nitrogen, cut for silage.
Gc	Permanent grass/clover (G) split into Gc and Gn in 1962. Grass/clover, cut for silage
Rn	Reseeded grass (R) split into Rn and Rc in 1963. Grass with nitrogen, cut for silage (blocks 1 and 4)
Rc	Reseeded grass (R) split into Rn and Rc in 1963. Grass/clover, cut for silage (blocks 1 and 4)
Rpn	Reseeded grass ploughed in 1963, kept in arable rotation until 1973 when resown to grass plus nitrogen. Cut for silage(blocks 2 and 3)
Rpc	Reseeded grass ploughed in 1963, kept in arable rotation until 1973 when resown to grass/clover. Cut for silage (blocks 2 and 3)
Ln	Three year all-grass ley with nitrogen cut for silage, followed by three arable test crops
Lc	Three year grass/clover ley cut for silage, followed by three arable test crops
Lu	Three year lucerne ley cut for hay, followed by three arable test crops
A	Three year arable treatment crops (hay, sugar beet, oats), followed by three arable test crops

1991 - 2008

Gc	Permanent grass/clover from before the start of the experiment, cut for silage
Rc	Grass/clover reseeded at start of experiment, cut for silage (blocks 1 and 4)
Rpc	Grass/clover reseeded at start of experiment, ploughed in 1963, arable until 1973 when resown, cut for silage (blocks 2 and 3)
Lc(Ln)	Three year grass/clover ley cut for silage, followed by three arable test crops, previously Ln
Lc(Lc)	Three year grass/clover ley cut for silage, followed by three arable test crops
Lc(Lu)	Three year grass/clover ley cut for silage, followed by three arable test crops, previously Lu
A	Three arable treatment crops (wheat, fallow, oats), followed by three arable test crops

2009 -

Gc	Permanent grass/clover from before the start of the experiment, cut for silage
F	Permanent fallow (no crop) since autumn 2008. Previously Lc(Ln)
Lc(Lc)	Three year grass/clover ley cut for silage, followed by three arable test crops
Al	Three arable treatment crops (wheat, fallow, oats), followed by three arable test crops, previously Lc(Lu)
R/CS/767	Plots converted to Highfield Conversion Experiment, R/CS/767.
	For more information see https://www.era.rothamsted.ac.uk/experiment/rcs767

Highfield Ley-arable (R/RN/1) Test crop summary

Three years of Test crops grown after three years of Treatment crops in the arable and ley-arable rotations:

	1949-1967 ¹	1968-1974	1975-1982	1983 ² -2008	2009-
1st Test crop	W Wheat	Potatoes	Potatoes	W Wheat	W Wheat
2nd Test crop	Potatoes	W Wheat	W Wheat	W Wheat	W Wheat
3rd Test crop	S Barley	S Barley	W Wheat	W Wheat	W Wheat

¹ The original sequence, if started before 1968, was completed.

² From 1983 the test crops were all W Wheat (except W Barley 2003-2005).

No yields were taken after 1990

Data from Yield Books and Field Plans