



## ‘GREEN’ Grain Project collaborative supply-chain research

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**The Scotch Whisky Association**  
**United Kingdom**  
**2005 > 2010**  
**#ResourceEfficiency**  
**#SustainableAgriculture**



### Objective

Find the best wheat varieties for Scotch whisky production while reducing energy use and emission of Nitrogen.

### Description

The project studied the genetics, physiology and agronomy of wheat to produce a new wheat type with a high energy grain suited to both distilling and livestock feeding with low Nitrogen fertilizer requirements.

### Partners

Scotch Whisky Research Institute  
UK Government  
Scottish crop research institute  
ADAS  
FOSS  
Wessex grain  
Syngenta

## Results

### Key learnings:

1. It is possible to use currently available wheat varieties, with no need for novel developments, to produce a variety needing 40% less Nitrogen application.
2. A reduction in fertiliser use limits the potential for run-off into water courses and high nitrate levels in groundwater. This would result in a reduction in greenhouse gas emissions of 33%. This represents the large amounts of energy required to make and transport fertilisers which make a significant contribution to the carbon footprint of the wheat supply chain.
3. The benefits would be financial as well as environmental, with improved alcohol yields and lower input costs.

## Website

<http://www.scotch-whisky.org.uk/news-publications/publications/documents/case-study-green-grain>

## Downloads

## Photo gallery



## Documents

[green\\_case\\_study.pdf](#) (pdf - 0.12 Mo)