

## Fertilizer-reducing genetically modified barley trials greenlit in the UK

[Defra](#) has approved field trials of genetically modified barley that scientists say could reduce the need for synthetic fertilisers.

The trial, run by researchers at the Crop Science Centre in Cambridge, will evaluate whether improved crop interaction with naturally occurring soil fungi can result in more sustainable food production.

The barley variety has been genetically modified to boost expression levels of the NSP2 gene.

This gene is naturally present in barley and boosting its expression enhances the crop's capacity to engage with mycorrhizal fungi.

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Professor Giles Oldroyd is leading the trial and said there was an urgent need to satisfy the demands of a growing population, while respecting limits on natural resources.

"We believe biotechnology can be a valuable tool for expanding the options available to farmers around the world," he said.

The trial will also test varieties of barley that have been gene-edited to suppress their interaction with arbuscular mycorrhizal fungi (AMF).

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Prof Oldroyd said: "The ultimate goal is to understand whether this same approach can be used to enhance the capacity of other food crops to interact with soil fungi in ways that boost productivity without the need for synthetic fertilisers."

[This is an excerpt. Read the original post here](#)