

## CRISPR-pedia: Everything you need to know about gene-editing our way to a lower-carbon, more productive farming future

The world population is growing. At the same time, climate change is making it more difficult to grow many important food crops. So, researchers and farmers need to figure out how to adapt agriculture to changing, and sometimes increasingly harsh environmental conditions.

Researchers are actively working on this, and have discovered some DNA variants that increase crop resilience to extreme environments, including drought. They are using [CRISPR tools](#) to make these changes in important staple crops like corn, wheat, rice, and sugarcane. Some of these crops are currently being tested in the field, with more to come.

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People all over the world suffer from poor nutrition. Researchers can use CRISPR tools to create more nutritious plant varieties. For example, they can make some plants produce more vitamins, like so-called "golden bananas" that have a richer color due to their increased beta carotene. They can make some plants easier for humans and other animals to digest. They can even remove allergens and toxins; for example, researchers are working on removing allergenic proteins from peanuts and cyanide from cassava. If used for these ends, CRISPR tools could make more nutritious, safe foods available to more people.

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