

Gene-editing primer: What's the difference between CRISPR crops and GMOs?

GMOs and gene-edited crops are products of genetic engineering, but one is a GMO and the other is not. Why is that the case?

The differences are in how they modify DNA.

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Transgenics or Genetically Modified Organisms (GMO) were introduced to the world in the 1990s. The acronym GMO refers to an organism that contains one of more 'foreign' pieces of DNA. This foreign DNA may be from another member of the same species or a different species.

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Gene editing (also known as genome editing or CRISPR) is the latest advance in genetic engineering. Gene editing via CRISPR is a technology that allows us to correct, delete, add or modify the DNA sequence of a gene. It is faster, quicker, and much more specific than GMOs.

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This presence of foreign DNA distinguishes the technologies. Gene-edited crops introduce no foreign DNA into the plant.

This gives gene editing an edge, at least when it comes to regulations... Since gene editing is a relatively new technology, countries are still developing a regulatory framework for it. However, based on the progress so far, it appears that regulatory hurdles for gene-edited products will be less challenging than for traditional GMOs.

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