

Newsweek: CRISPR gene editing could 'save world from hunger' if anti-GMO opponents do not block it

In 2012, a new tool was invented that revolutionizes how scientists can examine—and manipulate—plant genetic processes. It's called CRISPR-Cas9, and unlike its predecessors in the world of genetic modification, it is highly specific, allowing scientists to zero in on a single gene and turn it on or off, remove it or exchange it for a different gene. Early signs suggest this tool will be an F-16 jet fighter compared with the Stone Age spear of grafting, the traditional, painstaking means of breeding a new plant hybrid. Biologists and geneticists are confident it can help them build a second Green Revolution—if we'll let them.

The process can easily modify plant DNA without changing the plant's essence—except to make it tastier, more nutritious, quicker to market, easier to ship, machine-pickable, less needy of water and/or able to flourish in a heat wave.

It's critical to note this has nothing to do with creating a new species. CRISPR-Cas9 is a tool that helps us adapt plants to new environments by fine-tuning their own genetic traits, using their own genes from plants they'd naturally breed with, such as their wild versions. As scientists see it, the technology respects a plant species for its evolutionary capacity to thrive over eons, while helping it evolve more quickly to adjust to today's environment. We are only putting our foot to the accelerator of natural plant processes.

Genetic work has not just found detractors but also aroused fierce partisans. Take Golden Rice, for example. It's basic rice, but modified to produce its own vitamin A, potentially saving up to 2.8 million children a year from blindness and a million of them from death. Yet it sits in labs, unused.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [GMO Scientists Could Save the World From Hunger, If We Let Them](#)