Can CRISPR gene editing revive promise of GMOs to provide hardier, more nutritious, better tasting crops?

Using CRISPR to add—or remove—a plant trait is faster, more precise, easier, and in most cases cheaper than either traditional breeding techniques or older genetic engineering methods.

Although scientists can use CRISPR to add genes from other species to a plant, many labs are working to exploit the vast diversity of genes that exists within a plant species. In fact, enhancing many of the most valued traits in agriculture doesn't require adding DNA from other species.

Gene-edited crops have the potential to revive some of the early promise that genetic engineering has not fulfilled, such as making plants that are higher yielding, drought tolerant, disease resistant, more nutritious, or just better tasting. In addition, CRISPR can efficiently improve not just row crops such as corn but also fruits and vegetables, ornamentals, and staple crops such as cassava.

Proponents hope consumers will embrace gene-edited crops in a way that they did not accept genetically engineered ones, especially because they needn't involve the introduction of genes from other species—a process that gave rise to the specter of Frankenfood.

But it's not clear how consumers will react or if gene editing will result in traits that consumers value. And the potential commercial uses of CRISPR may narrow if agriculture agencies in the U.S. and Europe decide to <u>regulate gene-edited crops</u> in the same way they do genetically engineered crops.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: CRISPR: A new toolbox for better crops