CRISPR crops face regulatory and public acceptance obstacles

[Editor's note: Armin Scheben is a PhD student and David Edwards is a professor at the School of Biological Sciences and Institute of Agriculture at the University of Western Australia.]

The global population is expected to rise from 7.3 billion to 9.7 billion by 2050. At the same time, climate change poses increasing risks to crop production through droughts and pests. Improved crops are thus urgently needed to meet growing demand for food and address changing climatic conditions. Genomeediting technologies such as the CRISPR ... system show promise for helping to address these challenges, if the precision of genome editing is improved and the technology is approved and accepted by regulators, producers, and consumers.

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[P]ublic acceptance of genome-edited crops is also required for their development to avoid the backlash that occurred previously with GMO crops. Smallholder farmers may also be unable to adopt new crop varieties because of lack of access to credit and market for seeds. Clarification on the regulation of genome-edited crops is urgently needed to support their development, and open public debate is required to give the public confidence in the safety and benefits of these crops. Coordinated efforts to help provide improved varieties to smallholder farmers and accelerate their adoption are also crucial to increase food security, particularly in developing countries.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Genome editors take on crops (behind pay wall)

For more background on the Genetic Literacy Project, read GLP on Wikipedia