

SNACK AND FACT:

October 2, 2017/ 1300 Longworth House Office Building / Washington D.C.

GMO Crops in Animal Nutrition



JOHN VICINI received a Ph.D. from the University of Illinois in 1986. Since then, he has worked at the Monsanto Company where he has conducted numerous studies assessing the safety of Monsanto's products, including bovine somatotropin (bST) and genetically modified crops. He is currently Food Safety Scientific Affairs Lead at Monsanto Company. Throughout his scientific career, Dr. Vicini has worked with teams that have developed products for improving productivity of farms to enhance animal and human nutrition. Dr. Vicini regularly communicates about GMO and biotechnology topics on the GMOAnswers.com website.

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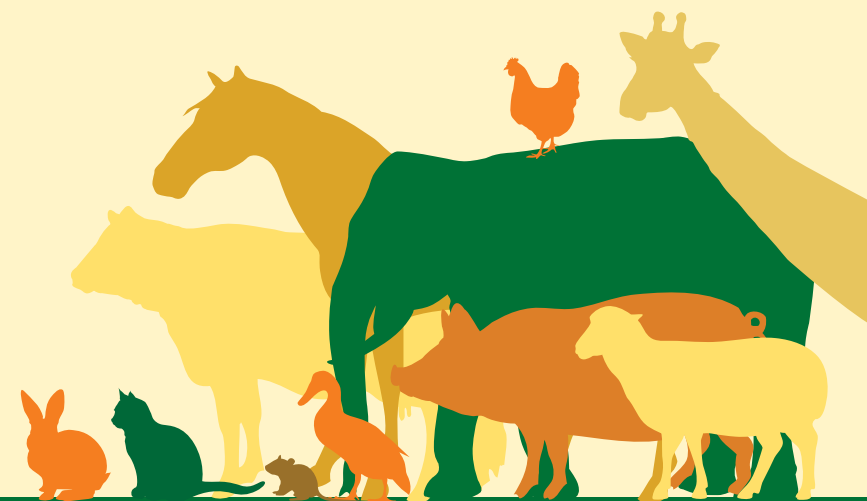


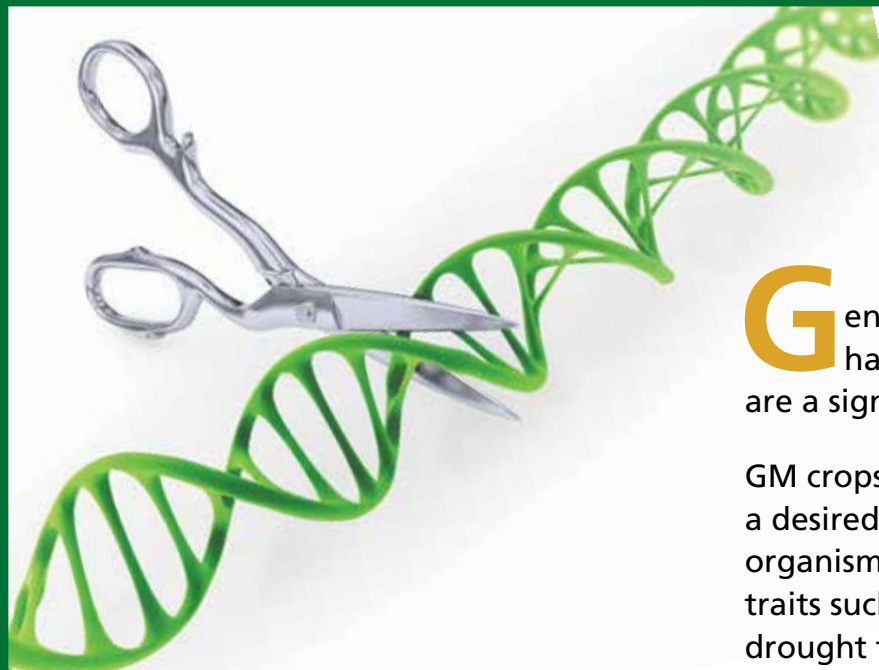
KEVIN FOLTA is Professor and Chairman of the Horticultural Sciences Department at the University of Florida. He received a Ph.D. in Molecular Biology from the University of Illinois at Chicago in 1998 and joined the faculty at the University of Florida in 2002. Dr. Folta's research focuses on the genomics of small fruits, as well as the effects of lighting on plant traits such as flavor, nutrition and shelf life. Dr. Folta is active in the area of science communication outreach. He maintains the weekly podcast, *Talking Biotech*, which can be found at: www.talkingbiotechpodcast.com

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ASAS Mission

The American Society of Animal Science fosters the discovery, sharing and application of scientific knowledge concerning the care and responsible use of animals to enhance animal and human health and well-being.





Source: © adobestock.com

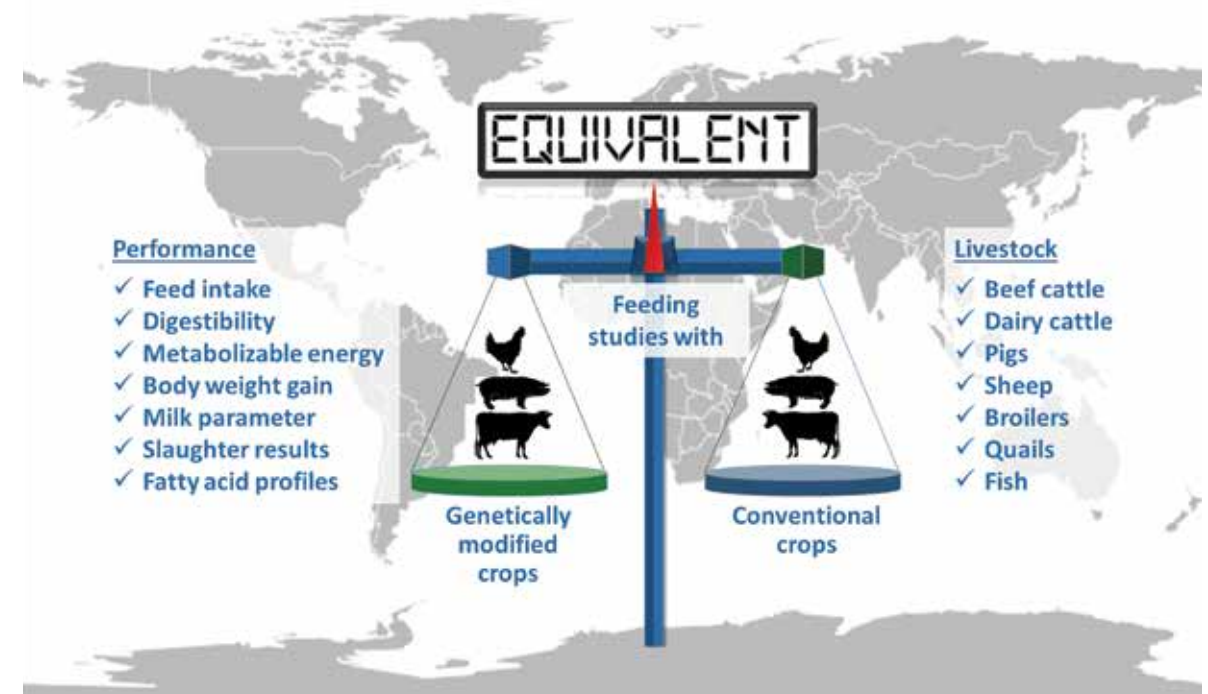
Genetically modified (GM or GMO) crops have been widely adopted by growers and are a significant source of livestock feed in the U.S.

GM crops are crops that have at least one gene for a desired trait derived from a different plant or organism. Genetic modifications result in desirable traits such as herbicide tolerance, insect resistance, drought tolerance, and disease resistance.

Soybeans developed to be resistant to glyphosate (active ingredient in Roundup® herbicide) were the first GM row crop (commercialized in 1996). Since then, GM varieties of many other row crops have been commercialized. Currently, there are eight GM crops commercialized in the U.S. (corn, soybean, cotton, canola, alfalfa, sugar beets, papaya, and some squash varieties). With the exception of papaya and squash, these are all significant crops for animal feeds.



Source: <https://wiki.geneseo.edu>



Summary of results from studies feeding first-generation genetically modified crops to livestock. No differences have been shown between GM crops and conventional crops for nutritive values, animal performance and yields, or the composition and quality of animal-source foods.

Source: April 2017 *Animal Frontiers*

Most GM crops commercialized for animal feed have input traits that do not change their composition or the nutritional value for animals. In addition, feeding GM crops does not result in detection of transgenic DNA or their translated proteins in meat, milk, or eggs.

The global population continues to expand and is poised to reach 9 to 10 billion by the year 2050. Feeding GM crops to livestock will continue to play an integral role in food security and our country's ability to meet a growing global demand for animal-source protein.



"Genomics Garden," U.S. Department of Energy Joint Genome Institute.

Source: 2009 Lawrence Berkeley National Laboratory; Roy Kaltschmidt, photographer

12:00 – 12:10 PM
Introduction and Goals
 Dr. Penny Riggs
 Texas A&M University & ASAS
 Public Policy Committee Chair

12:10 – 12:25 PM
GMO Crops and Sustainability of Animal Agriculture
 Dr. John Vicini
 Monsanto

12:25 – 12:50 PM
Filling in the Gaps: Using Technology to Improve Sustainability of Animal Agriculture
 Dr. Kevin Folta
 University of Florida

12:50 – 1:00 PM
Discussion
 Dr. Casey Bradley
 ASAS Public Policy Committee