Non-GMO breeding changes the makeup of crops more than genetic engineering

The composition of GM breeding stacks was more similar to the composition of iso-hybrids than was the composition of nonGM hybrids. NonGM breeding more strongly influenced crop composition than did transgenesis or stacking of GM events.

These findings call into question the value of uniquely requiring composition studies for GM crops, especially for breeding stacks composed of GM events previously found to be compositionally normal.

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After more than two decades of research, many published reports and hundreds of regulatory submissions, transgenesis has generally been found to have markedly less effect on crop composition compared with traditional breeding. Advances in molecular biology have shown that the types of mutations that are possible during transgene insertion are similar to those associated with the intentional or unintentional random mutagenesis that occurs during traditional breeding, but that GM techniques typically have a smaller impact due to fewer genetic changes.

While the potential for unintended compositional effects is now known to be markedly lower for GM crops compared with those developed using nonGM breeding techniques, government regulation and data requirements for GM crop composition have increased dramatically over the last 20 years, with a typical study now costing over one million US dollars

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>Stacking transgenic event DAS-Ø15Ø7-1 alters maize composition</u> less than traditional breeding

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