

# AB 541 – The Food and Farm Protection Act • Assemblymember Jared Huffman

## Historical Context

### WHAT IS GENETIC ENGINEERING?

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Genetic engineering (GE) involves taking the genetic material from one organism and inserting it into the permanent genetic code of another. By moving genes from one species to another, GE produces organisms that do not occur in nature and cannot be developed through natural plant breeding techniques. GE technology is marketed as a way to improve crop yields and reduce pesticides, but to date these promises have proven false or short-lived at best. Conversely, the economic, health and environmental risks associated with the technology have generated profound concerns among farmers, biologists, food processors and retailers, and consumers.

Although GE crops currently comprise only about two percent of California's agricultural acreage, there are GE field trials of many of California's specialty crops throughout the state. In 2006, there were 1,294 federal GE field trial permits for 48 California crops including lettuce, strawberries, wine grapes, tomatoes, walnuts and others. An herbicide resistant GE rice variety has been deregulated at the federal level but not yet been produced commercially due to widespread consumer and farmer rejection.

### REGULATORY SHORTCOMINGS

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The federal government has failed to implement mandatory environmental or human safety testing requirements for any GE crops. Biotechnology companies are permitted to determine what, if any, safety studies are performed and how they are conducted. The locations of thousands of open-air field tests of experimental crops are unknown to farmers, Agriculture Commissioners and the California Department of Food and Agriculture (CDFA).

The National Academy of Science and the U.S. Department of Agriculture's Inspector General have raised concerns about the inadequacy of the oversight of these field trials. On February 5, 2007, a federal district judge ruled that the USDA/APHIS must halt approval of all new field trials until more rigorous environmental reviews are conducted, stating that the agency manifested "arbitrary and capricious agency action which is inconsistent with the terms used in APHIS's own regulations, and which violates NEPA [National Environmental Protection Act]."

The USDA "lacks basic information about the field test sites it approves and is responsible for monitoring, including where and how the crops are being grown, and what becomes of them at the end of the field test."  
— USDA Inspector General, 12/05

*The State of California has no policies regulating GE crops.* Beginning in 2004, several California counties and cities moved to fill the federal and state regulatory shortcomings by enacting local ordinances restricting GE crops, contending that local governments have the right to protect their economies, public health and ecosystems. In response, in the 2005/06 legislative session biotechnology and agribusiness interests sponsored a bill that would have pre-empted local authority over GE. While this attempt failed due to a groundswell of opposition from public interest organizations, citizens, and elected officials around the state, it dramatically underscored the need to enact effective state policies that address the widespread concerns over genetic engineering in agriculture.

### GENETIC CONTAMINATION CASE STUDY

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*The fact that genetic contamination is an unavoidable risk of GE crops is what underlies each of the protections included in AB 541.*

In August of 2006, the USDA announced that the U.S. food supply had been contaminated by an unapproved variety of GE rice ('Liberty Link 601') developed by Bayer CropScience. This rice was last grown in small field trials in 2001, yet five years later it was discovered across vast areas of the Southern U.S. in shipping bins, mills and fields. Though no one yet knows how this occurred, it seems to have originated with experimental GE field trials at Louisiana State University.

The long grain rice in question is not grown in California, but California's largest export market, Japan, immediately banned U.S. long grain rice and began testing all U.S. rice imports for contamination. The E.U. also imposed restrictions on U.S. rice imports, many retailers and mills in the E.U. rejected all U.S. rice, and the Philippines announced that it would discontinue buying any U.S. long grain rice. The price of long grain rice dropped \$150 million in the first week after the announcement, and Southern rice farmers do not know if they will ever recover their European markets. Over 40 farmers have sued Bayer for damages. Farmers, handlers and food processors in California and the South are bearing the burden of testing and cleanup.

Denying any culpability, Bayer variously blames the escape of its gene-altered variety of long-grain rice, LL601, on "unavoidable circumstances which could not have been prevented by anyone"; "an act of God"; and farmers' "own negligence, carelessness, and/or comparative fault."  
— Washington Post, 11/22/06

### AB 541 — THE FOOD AND FARM PROTECTION ACT

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AB 541 establishes California's only state laws related to GE in agriculture. It protects California farmers and the food supply in four ways: (1) Establishes the right of farmers and landowners to compensation for economic losses due to genetic contamination of their crops; (2) Protects farmers from liability if they unknowingly grow contaminated crops; (3) Establishes a GE crop registration process so that farmers can trace contamination to the GE manufacturer; (4) Protects the food supply by prohibiting the open-field cultivation of drug-producing food crops.

"Given a voice during the early development of this promising technology, NFPA would not have supported the use of food crops for the production of [pharm crops]. The risks and impact of contamination of the food supply is simply too great..."  
— National Food Processors Association (NFPA), representing the world's largest food processors, in a March 2003 statement to the USDA

### FOR MORE INFORMATION

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