

THE GROWING MARKET AND FARMER RESISTANCE TO GE WHEAT

One of humanity's most important staple foods, wheat, is being targeted by genetic engineers. In December 2002, Monsanto, the world's largest producer of genetically engineered (GE) crops, began steps to commercialize "Roundup Ready wheat." Monsanto is currently seeking regulatory approval for its controversial product, which could be available within the next two years and would become the first commercialized GE wheat in either the U.S. or Canada. If approved, the commercial introduction of GE wheat will have devastating economical and environmental consequences.

FARMER SKEPTICISM OF GE WHEAT

The introduction of GE wheat would bring little or no benefit to farmers. Industry and government promises of increased yields, decreased pesticide use and overall economic gains have not materialized in other GE crops, and are unlikely to do so for wheat. Instead, many farmers growing already commercialized Roundup Ready crops have faced yield losses, increased costs from problems with herbicide resistant weeds developing a tolerance for the prescribed herbicide and became increasingly dependent on toxic chemicals. Across the northern Great Plains and neighboring Canada, skepticism toward Monsanto's Roundup Ready wheat has solidified into a political movement. Some farmers are so worried they want their state governments to wrest authority from federal regulators and adopt formal moratoriums on the crop.

In March 2003, a consortium of U.S. wheat farmers and other agricultural and environmental groups filed a petition with the USDA to take immediate action to prevent economic, environmental and social damage resulting from the deregulation of Monsanto's genetically engineered Roundup Ready wheat.

MARKET REJECTION OF GE WHEAT

Major markets for U.S. and Canadian wheat exports have already expressed their rejection of GE wheat. According to the Canadian Wheat Board (CWB), customers representing two-thirds of Canada's wheat market do not want to purchase or receive GE wheat. In late May 2003, the CWB asked Monsanto to withdraw its application for regulatory approval to prevent "significant and predictable economic harm" to western Canadian farmers because foreign buyers opposed to GE foods would not buy it. The CWB is a farmer-controlled organization that markets wheat and barley grown by western Canadian producers. It is the largest single-seller of wheat and barley in the world, holding more than 20 percent of the market.

U.S. Wheat Associates (USWA), an association of wheat exporters, has identified strong opposition from its importers to GE wheat. USWA notes that 44 percent of all exported spring wheat goes to the European Union, Japan and Korea—all have stated repeatedly that they will not accept GE wheat. USWA has repeatedly warned U.S. farmers that sales will be lost if the wheat is released into the commercial market. The USDA itself has stated that "Development of genetically modified, herbicide tolerant wheat varieties promises significant benefits to spring wheat growers, but may also introduce some uncertainty in marketing."

A recent economic analysis by Iowa State University, released this May, found that there is a "high risk" that the U.S. wheat industry will lose 30 percent to 50 percent of its business with foreign markets for spring wheat if Monsanto releases its Roundup Ready wheat in the next few years. And, according to the study, the introduction of GE wheat will not only affect farmers and the seed industry, but through a ripple effect could harm rural communities, local governments, foreign food processors, retailers, and consumers.

Rejection of GE wheat is one reason why the Bush Administration launched a WTO challenge against the EU's moratorium on GE foods. Rather than respect the opposition to such products, the Administration is using the WTO to eliminate health and environmental regulations in Europe, denying the will of most Europeans.

The sentiments against GE wheat are strong and widely held. Antonio Costato, CEO of Italy's largest mill, Grand Molini, recently said that if Roundup Ready wheat is commercialized in the U.S., "the European milling industry will simply not buy one more kilo of any U.S. wheat at all." He added, "in a situation with ample and cheap alternative supplies and a general, strongly convinced public opinion against genetically modified organisms, we will have no alternative."

In France, a representative of the country's largest wheat miller stated that after GE wheat is introduced, France would stop buying spring wheat from the U.S. Belgium's Andre & Cie SA, which supplies American-grown wheat throughout Europe, told USWA that GE wheat could destroy the European market for American growers. According to USWA, South Korean officials say they will not accept any GE wheat. Representatives from other North American wheat buyers, including Egypt, Algeria, the Philippines, Indonesia, Malaysia, and Thailand have all indicated they will reject GE wheat.

ENVIRONMENTAL CONCERNS

GE wheat can result in the cross-contamination of non-GE wheat. There is the potential for contamination through pollen movement, outcrossing, trucking and handling. The changes required to create a 100 percent purity system are enormous. Even Monsanto has repeatedly acknowledged that it will be impossible to ensure 100 percent purity of non-GE wheat once Roundup Ready wheat is commercialized. But the greatest contamination is likely to arise in the grain handling system. Neither the Canadian nor U.S. system is set up to segregate GE from non-GE wheat, and experts believe that major and expensive changes would be needed to accommodate GE wheat segregation. Grain industry sources have recently said tests have revealed that traces of genetically modified grains are repeatedly creeping into U.S. wheat supplies, mainly through storage and transportation systems that handle a variety of grains.

Other environmental concerns include the increased use of toxic herbicides, threats to the gene flow to wild related species, non-GE wheat or unrelated organisms, secondary impacts on biodiversity as a result of altered management practices, and impacts on non-target organisms. Because wheat is grown on such a vast scale globally, any adverse impacts could be enormous. ❖