Unapproved genetically modified wheat from Monsanto found in Oregon field

By Steven Mufson, Published: May 30, 2013

Japan, the largest market for U.S. wheat exports, suspended imports from the United States and canceled a major purchase of white wheat on Thursday after the recent discovery of unapproved genetically modified wheat in an 80-acre field in Oregon.

How the altered crop made its way to the Oregon field remains a mystery. The strain was developed by Monsanto to make wheat resistant to the company’s own industry-leading weed killer. Monsanto tested the type of altered seed in more than a dozen states, including Oregon, between 1994 and 2005, but it was never approved for commercial use.
Yet the Agriculture Department reported that recent tests identified the strain after an Oregon farmer trying to clear a field sprayed Monsanto’s herbicide, Roundup, and found that the wheat could not be killed.

The report rattled U.S. wheat markets. In addition to Japan’s action, the European Union, which imports more than 1 million tons of U.S. wheat a year, said that it was following developments “to ensure E.U. zero-tolerance policy is implemented.” It asked Monsanto to help detection efforts in Europe.

The developments focused attention on St. Louis-based Monsanto, a $56 billion company with more than $13.5 billion in sales of seeds, services, weed killer and biotechnology to the agriculture industry. In the face of mounting protests, including a series of public demonstrations in multiple cities last weekend, the company has stood behind its other genetically modified products.

Many food safety advocates and environmental groups say that more testing needs to be done to ensure that genetically modified seeds don’t harm human health. In addition, they say, the genetic engineering of crops has encouraged the more widespread use of herbicides and led to the development of weeds more resistant to those herbicides.

The United States already relies heavily on genetically modified crops. Genetically engineered corn, cotton and soybeans have gone from 5 to 17 percent of the U.S. market in 1997 to between two-thirds and more than 90 percent in 2012. By some estimates, more than 70 percent of processed foods sold in the United States contain ingredients and oils from genetically engineered crops.

A 2008 Government Accountability Office report estimated the value of the global market for genetically engineered seeds was $6.9 billion. Though altered seeds are made by four other leading agricultural businesses, Monsanto relies most heavily on such products, experts said.

But Americans remain skeptical about some genetically modified foods, including current proposals to cultivate altered salmon. And big agriculture companies have avoided commercial development of genetically engineered wheat because about half of the U.S. wheat crop is exported, and governments in major markets such as the European Union, Japan and China are opposed to genetically modified wheat seed.

Monsanto said in a statement that it ended commercial development of the strain of wheat found in Oregon nine years ago. The company said that about 58 million acres of wheat is planted in the United States every year, and that while the Agriculture Department’s test results in Oregon “are unexpected, there is considerable reason to believe that the presence of the Roundup Ready [herbicide-resistant] trait in wheat, if determined to be valid, is very limited.”

But food safety groups drew the opposite conclusion. “This was not from a recent trial, which means it’s been sitting there in the environment,” said Andrew Kimbrell, executive director of the Center for Food Safety, a nonprofit group. “It’s highly doubtful that it’s just on one farm. If it’s out there, it’s out there.” The center’s science policy analyst, Bill Freese, added, “It’s been 12
years since this wheat was grown officially in Oregon. It doesn’t just disappear and magically appear 12 years later.”

Freese added that Monsanto has 15 new permits, issued in 2011, to test herbicide-resistant wheat in Hawaii and North Dakota, including an unusually large 300-acre field in North Dakota. Freese said the size of that field would make it difficult to prevent accidental spread.

Tom Helscher, a Monsanto spokesman, said the new field tests involve “different herbicide traits” than the genetically modified strain found in Oregon. He said they are “focused on preventing yield loss due to disease and other environmental stressors.” He said the company has a project in early development that would boost yields and provide crops with a “strong tolerance” to existing herbicides.

Helscher said that “we talk to people in the wheat industry and they say they need tools to help deal with problems they face, whether weed or insect control.” He added, “We wouldn’t expect to have a product for quite a number of years,” but that Monsanto thought the research was “worthwhile.”

In its statement, Monsanto said it would help the Agriculture Department “get to the bottom of the reported genetically modified wheat detection,” but it insisted that “there are no food, feed or environmental safety concerns associated with the presence of the Roundup Ready gene if it is found to be present in wheat.”

Part of the battle over genetically modified seed has been taking place in Washington.

Monsanto and other companies in the industry have been pressing members of Congress to vote against measures that would require disclosure for food made with genetically modified or engineered crops. Friends of the Earth, an environmental group, says that 64 countries have similar rules and that, this year, 37 bills have been introduced in 21 states proposing that genetically engineered foods be labeled in stores.

Monsanto is also urging lawmakers to vote for a rider in the Senate continuing resolution that would strip federal courts of the power to provide injunctive relief to environmental and food activists seeking to stop the spread of such crops.

Genetically modified crops have a history of provoking bans by trading partners. In 2006, the Agriculture Department announced that trace amounts of a regulated variety of genetically engineered rice had been commingled with supplies of conventional rice. That led several U.S. trading partners to refuse U.S. rice exports, causing losses for U.S. farmers and exporters.

The 2008 GAO report described six “unauthorized releases” of genetically engineered crops into the U.S. feed and food supplies over the previous eight years.
The spread of genetically modified crops

Since the introduction of genetically modified crops in 1996, their use has rapidly increased around the world. Of the 421 million acres globally, 172 million were in the United States.

Hundreds of protesters take to the streets in Los Angeles as part of a global series of marches against Monsanto and genetically modified foods. "March Against Monsanto" protesters wanted to call attention to what they say are the dangers posed by genetically modified food and the companies that produce it. Liz O. Baylen / Associated Press

Native American dancers protest against Monsanto in Los Angeles. ROBYN BECK / Agence France-Presse via Getty Images
Keri Reid of Emerald Isles, N.C., carries signs as she walks with more than 150 protesters through downtown Wilmington, N.C. as part of worldwide protests against Monsanto and genetically modified foods. Jeff Janowski / Associated Press

People hold signs during a demonstration against Monsanto and genetically modified organisms in front of the White House. Nicholas Kamm / Agence France-Presse via Getty Images
Protesters stand on the Meir in Antwerp, Belgium, during a protest against Monsanto. Thousands of people rallied in several European countries, notably in the Netherlands, France, Belgium, Austria and Germany, to protest the company and more generally against genetically modified organisms, pesticides and other chemical products.
Jonas Roosens / Agence France-Presse via Getty Images

Activists gather near the Eiffel Tower in Paris during a demonstration against GMOs and Monsanto. Fred Dufour / Agence France-Presse via Getty Images
South African activists protest against Monsanto and GMOs outside Monsanto's offices in Johannesburg. Kim Ludbrook / European Pressphoto Agency

A woman holds a poster during a protest against Monsanto and GMOs in New York. Monsanto, the world's largest seed company, is pushing on with plans to introduce a new type of herbicide-tolerant crop, setting up 20 field locations around the United States to test and market its soybean product. Eduardo Munoz / Reuters
A woman holds a banner during a protest against Monsanto and GMOs in New York. Eduardo Munoz / Reuters

Demonstrators shout slogans against Monsanto and GMOs during a march in New York. Eduardo Munoz / Reuters
Children hold banners during a protest against Monsanto and GMOs in New York. Eduardo Munoz / Reuters

Demonstrators wear costumes depicting tomatoes while they take part in a march against Monsanto and GMOs in New York. Eduardo Munoz / Reuters
A demonstrator shouts slogans against Monsanto and GMOs in New York. 
Eduardo Munoz / Reuters