

Did anti-GMO groups plant 'rogue' GMO wheat in Canada to deliberately disrupt markets to manipulate public opinion?

In the summer of 2017, a contractor applied the popular weed-killer glyphosate (brand name Roundup®) to clear some weeds along an oil and gas service road. (Glyphosate is a very effective herbicide that controls hundreds of different weeds.) When wheat plants did not die after the contractor applied the herbicide, he contacted the authorities.

The Alberta government determined the wheat was an herbicide-tolerant variety that had been genetically engineered (GE) with molecular techniques. GE wheat had been field-tested (not in recent years, however), but no developer has ever applied for or received regulatory approval for cultivation or sale of a GE wheat variety in Canada or the United States.

Detailed investigation by the Canadian Food Inspection Agency (CFIA) uncovered some very strange facts. The GE wheat found in Alberta contained the same herbicide-tolerance (HT) *gene* (designated MON71200) that was field tested by the Monsanto Company (now Bayer) between 1998 and 2000, but those field trials were no closer than 180 miles from where the sample was found.

Most puzzling to the investigators, however, was that the genetics of the newly found wheat plant itself not only didn't match any of the approximately 450 registered varieties of wheat allowed to be grown in Canada, but it didn't match any wheat plant anywhere of which the Canadian authorities were aware.

roundup 777446353

Image Credit: Mike Mozart / Flickr

Could the newly discovered GE wheat have escaped from a field trial and survived for nearly two decades? The findings of the CFIA don't support that thesis.

The registered field trials with wheat containing the MON71200 gene were discontinued in 2000 as the company moved to newer, more effective HT genes. This means that the HT gene found in 2017 was either stored somewhere or propagated in the wild for 17 years before it was discovered on the roadside in Alberta. The official field trials were far away, so local escape of the GE wheat is not a realistic possibility. That's strike one for the inadvertent-contamination theory.

Alberta winters are very cold, and exposed wheat seed is unlikely to survive well and spread. Still, if it was propagating in the wild for all that time, there should be many instances of it showing up in Canadian wheat crops, but the CFIA examined more than 170,000 samples spanning several years and found exactly zero that contained the MON71200 gene.

Even if the herbicide tolerance gene did come from the original field trials, we are still left with the question, how did it naturally move into a new variety of wheat that does not exist in Canada? That's strike two for the inadvertent-contamination theory.

The Alberta farmer on whose land the GE wheat variety was found never took part in the original field trials and when tested, his farm — fields, equipment and buildings — was completely free of the herbicide-

tolerance gene.

Neither did this unknown wheat variety match the GE wheat used in U.S. field trials, so the “rogue” Canadian GE wheat could not possibly have escaped from any field trial in North America. Strike three for the inadvertent-contamination theory.

That brings us back to the basic question: *How did a few stalks of GE wheat whose origins are unknown end up on a service road in southern Alberta?*

A similar question presented itself in 2013 when an Oregon farmer discovered a clump of wheat (although wheat is planted in rows) that turned out to be a genetically engineered herbicide-tolerant variety. It too contained an herbicide-tolerant gene from a Monsanto field trial. But the Oregon farmer had never taken part in the U.S. field trials, which in any case had been discontinued in 2005, eight years before the discovery.

Like the recent Canadian experience, the unauthorized GE wheat was a different variety from that growing on the Oregon farm. Moreover, the glyphosate-resistant wheat in the Oregon farmer's field was *winter* wheat, which is distinct from the *white spring* wheat in the years-earlier field trials, and Monsanto's internal investigation found in any case that there was no “prior test site at the location where the material under investigation was reported to have been present.” Because the two varieties pollinate at different times, it is unlikely that the glyphosate-resistance trait was transferred by wind. That mystery was never solved.

Both investigations tested the machinery, wheat and farming practices and eliminated the farmers from having any involvement. In the Oregon case, the final verdict was that the seeds ended up in a fallow field by “accidental or *purposeful mixing* of seed.” [Emphasis added]

In both cases, the discovery of an unauthorized GE wheat caused significant trade disruptions. In the U.S. case, Monsanto ended up paying millions of dollars to compensate farmers for their losses during the trade disruption. As a result of the discovery of the mystery Canadian GE wheat, Japan and South Korea have instituted bans on importation of all Canadian wheat. It is not known how long the present trade disruption will block Canadian wheat exports and how much financial hardship Canadian farmers will suffer.

russian wheat333666777

Image not found or type unknown

Image Credit: Progressive Farmer

Super-sleuth Sherlock Holmes once observed, “When you have eliminated the impossible, whatever remains, however improbable, must be the truth.” And given that the evidence appears to rule out the mystery wheat having originated on either side of the border, we seem to be left with a verdict of intentional planting.

If that’s so, we must ask, *cui bono?* — who benefits from a disruption of Canadian wheat exports? An obvious candidate is Russia, the world’s largest wheat exporter and a major [international mischief-maker where genetic engineering of crops is concerned](#).

But there are others who buy Canadian wheat. The discovery of GE wheat in Alberta caused an immediate drop in the price of Canadian wheat, and China is one of its biggest purchasers. Chinese nationals have been caught and convicted of [stealing GE](#) germplasm in the past, and China definitely has the [technical expertise](#) to create a novel GE wheat variety.

Environmental NGOs with anti-GMO campaigns are also prime candidates, and Greenpeace has a history of illegal anti-GMO actions. In 1995, the organization announced that it had “intercepted a package containing rice seed genetically manipulated to produce a toxic insecticide, as it was being exported . . . [and] swapped the genetically manipulated seed with normal rice.” [I. Meister, “Uncontrolled Trade in Genetically Manipulated Products,” press release, April 7, 1995].

Continued investigation should determine the source of the mystery wheat variety and help shed some light on how it suddenly appeared on a roadside in the prairie of southern Alberta.

Canadian farmers need answers. Let’s hope the CFIA finds them, and that those responsible get their comeuppance.

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