Montana are not affected," says one of them, Ryan McCormick of Kremlin, Montana, who is the current president of the Montana Grain Growers Association, an affiliate of NAWG. Although these organizations support GM developments, in terms of their application to wheat, growers generally prefer to "wait for the market to accept" such products and only after they "go through a regulatory assessment before being released," he says. "Eighty percent of Montana wheat is exported, and those markets are key to us."

Meanwhile, Ernest Barnes, a wheat farmer near Elkhart, Kansas, early in June filed a lawsuit against Monsanto in the US District Court in Kansas, claiming he "lost money and his livelihood is now at serious risk as a result of Monsanto's negligence or gross negligence," leading to the threat of foreign buyers cancelling their orders. Barnes seeks "a sum in excess of \$100,000" as well as costs. A few days later, activist Andrew Kimbrell of the Center for Food Safety in Washington, DC, joined with a group of wheat farmers in Washington state to file a class action lawsuit against Monsanto, seeking damages as well as "relief and forcing Monsanto [to] take measures to clean up the contamination and ensure it never happens again."

"You have to wonder how the contamination occurred and in only one field," says Doug Gurian-Sherman of the Union of Concerned Scientists in Washington, DC. Moreover, that farm did not partake in field trials involving GM wheat and is said not to be near fields that were used for such trials, which ended years ago. "It's really puzzling," he says. "The huge number of unanswered questions defies entropy."

However, Robert Fraley, chief technology officer at Monsanto, some wheat farmers and a few industry consultants say that sabotage or eco-terrorism might explain this mystery. "The fact pattern and the agronomic data that we know about planting, harvesting and volunteer management indicates the strong possibility that someone intentionally introduced wheat seed containing the glyphosate tolerance [trait]," Fraley says. "Our testing for the original RR wheat technology in Oregon ended 12 years ago, [and] the program for closing out [that] program was rigorous, documented and audited. Seed from the field research programs was destroyed or shipped to a USDA/ARS [Agricultural Research Service] Colorado facility or to Monsanto in St. Louis."

"I personally believe this was eco-terrorism, but not so much sinister as borne of passion and frustration," says one wheat farmer, noting his conclusion comes from a "gut feeling...predicated on my understanding of farming practices and how seed is grown and distributed." Other farmers "are being very careful not to speculate publicly," he says, adding, "Yes, it is possible this

was carelessness. But it looks like mischief to me. I doubt this will be definitively solved."

"Sabotage is possible, but it's unusual for it [the GM wheat] to be only in one place," says geneticist and wheat specialist Peggy G. Lemaux of the University of California, Berkeley. Another unexplained oddity is that the GM volunteer wheat was a winter wheat variety, whereas Monsanto's GM field-tests in Oregon were planted with a spring wheat variety. "That's weird," she says. "Where did it [the GM wheat] come from?"

"I don't buy the conspiracy theories," says Mallory-Smith of OSU. "I don't buy that someone held onto seeds since Monsanto shut down its RR wheat program. There were lots of field trials and plenty of opportunities for seeds to be mixed with batches meant for seed production. Conspiracy theories throw off reporters and make no more sense than any other scenarios."

Conspiracy theories notwithstanding, Lemaux sees this episode as a distraction from "much bigger problems" as well as a setback for serious efforts to improve wheat crops. "We've done things in wheat that would be extremely valuable in the face of climate change that can't be done with conventional breeding, and they also increase yields by about 10%," she says. "But because they involve GM, no one wants to deal with it. Our mind-set is in the wrong place."

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Around the world in a month

