

**TEXAS HIGH PLAINS GRAPE GROWERS v. BAYER-MONSANTO, BASF
In-Depth FAQ**

Q: What precipitated this lawsuit?

A: The Texas High Plains grape growers have suffered hundreds of millions of dollars in damage and economic loss because Bayer-Monsanto and BASF developed and sold a defective dicamba-based seed system to cotton farmers knowing dicamba would turn into a gas and drift, causing major damage to non-dicamba-resistant crops such as grapes.

Q: Who are the plaintiffs?

A: They are 57 High Plains vineyards, most of which are family owned, that range in size from 15 acres to more than 1,000 acres. Collectively they own 3 million plants on 3,000 acres, accounting for the majority of grapevines in the High Plains. This region is the source of 85% of the grapes used by the \$13.1-billion Texas wine industry, which ranks fifth in the nation.

Q: Why the High Plains?

A: The High Plains, which makes up a large part of the Texas Panhandle, offers the ideal elevation and arid conditions necessary to grow good wine grapes. For the same reasons, the area is also home to the world's largest cotton patch – some 3 million acres, which surround the vineyards.

Q: How prevalent is the dicamba-resistant seed system on the High Plains.

A: Very. An estimated 65% of all High Plains cotton farmers, or roughly 2 million acres, use the Bayer-Monsanto and BASF dicamba-resistant seed system.

Q: In heavily farmed areas, isn't spray drift from neighboring farms just a fact of life?

A: This is different. This is not spray droplets traveling from the edge of one field to the edge of a neighboring field dozens of feet away. Because dicamba easily converts to a gas, particularly under hot and dry conditions, it travels many miles away for up to seven days. Millions of pounds of the herbicide enter the region's atmosphere during the summer growing season, resulting in pervasive "drift" to non-resistant crops such as grapes. Everything from family gardens to ornamental trees in the region have also shown signs of dicamba exposure.

Q: How extensive was the damage to the High Plains grape growers?

A: There are dicamba symptoms in every vineyard across all 3,000 acres.

Q: How much money do these grape growers have at stake?

A: Vineyards are 25-year investments that require significant up-front costs of \$20,000 or more an acre. This doesn't include the costs of labor and equipment. After years of growth, mature vines can produce wine-worthy grapes yielding 3 to 6 tons per acre, selling for more than \$2,500 per ton.

Q: How did the grape growers know something was wrong?

A: Prior to the release of the Bayer-Monsanto and BASF seed system, you could not find a vine with dicamba damage on the High Plains. Once the product was released in 2015-2016, and particularly in recent years as use of the seed system has intensified, the signs of dicamba damage has become pervasive. On nearly every vine, leaves are curling at the ends, or "cupping" – telltale signs of the herbicide. As leaves deform, the plant's canopy shrinks, imperiling the overall health of the plant.

Q: Is dicamba new?

A: No. The herbicide was approved for farm use in 1962. It was typically used for corn crops and during non-growing seasons when temperatures are low. The Bayer-Monsanto and BASF system features seed that has been genetically engineered to make plants resistant to dicamba. This invites growers to spray large volumes of dicamba over the top of their dicamba-resistant crops without any risk of harm their own crop. But Specialty crops, such as grapes, that are not dicamba-resistant have no defense to the herbicide, something Bayer-Monsanto knew in advance of marketing its system.

Q: Which crops are most vulnerable to dicamba?

A: Broad-leaf plants that are at extreme risk include grapes, lima beans, southern peas, snap beans, soybeans, sweet potatoes and tobacco.

Q: Why is dicamba so deadly to grape vines?

A: Once it penetrates a plant, dicamba travels to growth points and the roots. It acts as a stimulant, speeding up cell production to the point the plant can't produce enough food to live. This essentially grows the plant to death.

Q: What led to dicamba's current popularity?

A: Two things. First, Bayer-Monsanto needed a seed system that could address the problem of glyphosate (Roundup) resistant weeds – a problem caused by Bayer-Monsanto's over-marketing and resulting over-use of Roundup. And Roundup had also become a huge financial liability and public relations nightmare. Juries began awarding huge sums to farmers and others claiming Roundup caused cancer. Bayer finally agreed to a \$2 billion settlement that has now been rejected as inadequately addressing the scope of future harm. Looking for an alternative, Monsanto made a seed system based on dicamba as its new go-to product.

Q: How did Bayer-Monsanto and BASF market its dicamba-based seed system?

A: Starting in 2015-2016, the companies introduced a line of genetically modified seeds for cotton and soybeans that would be resistant to dicamba's effects. As use of the product increased, many farmers who had avoided purchasing the dicamba-resistant seed gave in to planting dicamba-resistant cotton or soybeans just to protect themselves from the drift problem. Over the past few years, this strategy has made Bayer-Monsanto and BASF billions of dollars in profits.

Q: Why do some people consider this resistant-seed strategy a problem?

A: Two reasons. The strategy all but forces many non-GMO farmers to buy Bayer-Monsanto's new – and more expensive – line of GMO seeds. A 2018 investigative report in *The New Republic* described the company's seed-and-chemical strategy as “a kind of protection racket, initiated by Monsanto: Pay to use dicamba-resistant soybeans, or you may lose your crop and your livelihood.”

Internal company documents recently made public through litigation also show Bayer-Monsanto knew as early as 2009 that any dicamba-based herbicide would drift off-target and damage or kill other vulnerable crops. But the company covered this up by restricting independent research, even as it factored millions of payouts from dicamba-related legal damages as a cost of doing business.

Secondly, for many crops such as grapes, GMO seeds simply do not exist. And even if they did, many farmers shun GMO seeds for several reasons, including public demand for non-GMO food.

Q: What have been the real-life consequences of Bayer-Monsanto and BASF's strategy?

A: It has created a deep rift in the agricultural community, pitting farmer against farmer and leading to the 2016 shooting death of an Arkansas farm owner. In the Texas High Plains, a grape grower's life was threatened after complaining about a cotton grower's use of the product. Widespread dicamba use has generated thousands of complaints to state agriculture boards and scores of civil lawsuits. Dicamba has also killed a large number of trees in state parks, nature preserves and rural areas.

In agricultural terms, this ecological disaster has damaged or denuded huge swaths of farmland, primarily in the Midwest and South. A 2017 estimate for soybeans alone set the toll at 3.6 million acres on 2,708 farms nationwide stretching across 25 states – 4% of the nation's crop.

Q: Have any states banned over-the-top use of dicamba?

A: Yes. Arkansas and Missouri.

Q: What does the U.S. Environmental Protection Agency say?

A: The EPA granted Monsanto, Dupont and BASF conditional permission in 2016 to sell dicamba herbicide for over-the-top use for two years. When the agency granted a second two-year registration, environmental and family farm groups sued to stop it.

In June 2020, the U.S. Ninth Court of Appeals issued a civil court ruling temporarily banning the sale of the herbicides for over-the-top use on resistant seed because the EPA “substantially understated risks that it acknowledged and failed entirely to acknowledge other risks,” including an

unwillingness to acknowledge that “record evidence showed that dicamba had caused substantial and undisputed damage.”

This finding was supported by a May 2021 report issued by the EPA’s Office of Inspector General, which concluded that during the second registration process, senior officials intervened on Monsanto’s behalf by removing damaging data from scientific documents and omitting staff concerns, thereby “substantially understating some risks and failing to acknowledge others entirely.”

In October 2020, the EPA added additional conditions and re-registered the chemicals for over-the-top use on resistant seed. Among the conditions: Monsanto and others provide an additive to limit dicamba drift. New litigation has already commenced challenging the re-registration.

Q: How is that working?

A: Experts say it is too soon to say. Indications are no. Regardless of what additives are used, dicamba will volatilize and move off-site. There is no such thing as “no volatility” dicamba.

Q: Can non-dicamba-resistant crops can be grown near dicamba-resistant crops?

A: A large number of agricultural experts agree the two cannot co-exist: “Dicamba-resistant crops cannot be grown in the same place as dicamba-sensitive crops.”

Q: You mentioned legal actions against Bayer-Monsanto and BASF. How successful have they been?

A: In February 2020, a Missouri jury awarded \$265 million in damages to the owner of Bader Farms, a peach orchard, for dicamba-related damage. The award was subsequently reduced to \$75 million but was a strong enough indication of jury sentiment that the companies agreed a few months later to a \$300 million settlement with other farmers over crop damage elsewhere by their dicamba-resistant seed system.

Q: Why did the grape growers have to file a lawsuit? Couldn’t they qualify under this settlement?

A: They were not included in the settlement, which was primarily geared towards soybean growers.

Q: The extreme cold in February of this year harmed many crops. Couldn’t that be the reason for damage to Texas vineyards?

A: No. Our documentation proves the damage began years before. Evidence includes test results and expert testimony that clearly show dicamba drift was the problem. Science also suggests that plants repeatedly exposed to dicamba are weakened and less able to withstand freezes.