

Arkansas Bans Herbicide as Farmers Blame Neighbors for Crop Damage

States add restrictions and fines as hundreds of farms in Arkansas, Tennessee, Missouri and Mississippi report crops shriveled by dicamba

By Jacob Bunge

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Crop damage from a powerful herbicide is spreading across the southern U.S., spurring a flood of complaints to agricultural agencies and sowing division among farmers.

Hundreds of farms in Arkansas, Tennessee, Missouri and Mississippi have reported crops shriveled by dicamba. For farmers, lower crop yields due to herbicide damage could add to financial pressures after several years of low crop prices.

Long used to kill weeds, new formulations of the potent chemical are being widely deployed this year as more farmers plant soybean and cotton seeds engineered by [Monsanto](#) Co. [MON +0.45%](#) to withstand dicamba. The St. Louis company estimated in June that about 20 million acres of its new biotech soybeans had been sold to farmers this year, up from about 1 million sold in a limited release last year.

The U.S. agriculture industry is betting heavily on new combinations of biotech seeds and chemicals like dicamba to combat weeds that have grown resistant to glyphosate, the world's most widely used herbicide. Glyphosate use has proliferated over the last 20 years as Monsanto, [DuPont](#) Co. and [Syngenta](#) AG have rolled out seeds engineered to survive that spray. That has contributed to resistant weeds, which can choke out crops and damage farm equipment if left unchecked—further eroding already-slim profit margins for farmers.

DICAMBA-RELATED COMPLAINTS, BY STATE

- **Arkansas:** 596
- **Missouri:** 123
- **Tennessee:** 76

- **Mississippi: 60**

Sources: State agriculture departments

But affected farmers say that when neighbors spray dicamba onto the new biotech crops, some of the herbicide is drifting onto adjacent fields that aren't planted with resistant varieties, sometimes severely damaging them.

The U.S. Environmental Protection Agency is investigating dicamba-related crop damage across multiple states and is discussing the mounting complaints with pesticide manufacturers.

Some states are restricting how and when dicamba can be sprayed, ratcheting up fines for misuse and mandating online training courses for farmers. On Friday, Missouri Director of Agriculture Chris Chinn announced a temporary suspension of the use or sale of the herbicide in the state, following more than 120 complaints of drift damage. That same day, Arkansas lawmakers banned its use or sale for 120 days, beginning July 11.

"Everybody's concerned about it," said Brad Doyle, who raises soybeans and runs a small seed company near Weiner, Ark. The state has received nearly 600 complaints of dicamba-related crop damage this year, up from about 30 in 2016, when dicamba-resistant soybeans were introduced. Complaints have also surged in Tennessee and Mississippi.

Monsanto and German chemicals conglomerate [BASF SE](#), [BASFY 1.79%](#) which makes a version of the spray, criticized Arkansas for the ban, saying it deprives farmers of a critical weedkiller in the middle of growing season.

A BASF spokeswoman said Arkansas' ban "needlessly punishes growers who have successfully and lawfully used the product, while failing to provide an effective deterrent to growers who may be willing to ignore the ban." The state also boosted fines on "egregious" dicamba violations to \$25,000 from \$1,000.

A Monsanto spokeswoman said the ban was premature as the causes of reported crop injuries hadn't been fully investigated. The company doesn't sell its version of dicamba in Arkansas, because academics there are still reviewing it.

Developed decades ago, dicamba kills weeds by stimulating rapid growth that outstrips the plants' nutrient supply. The chemical is prone to spray drift, prompting chemical makers to recommend it be applied with special nozzles. Dicamba can also pose a threat if the pesticide evaporates and spreads in gas form. BASF and Monsanto have tried to minimize that risk in newer versions that bind the herbicide more tightly to plants.

Some farmers in Arkansas and Missouri have filed lawsuits against the two companies, arguing they bear some liability for dicamba-related crop damage. BASF and Monsanto are contesting the claims.

Crop scientists are researching the effects dicamba can have on unmodified soybean plants, such as reducing the number of beans produced per plant. But some of those efforts are being disrupted by the spray.

Chuck Wilson, director of the University of Arkansas Northeast Research and Extension Center, said nearly all of the facility's soybean research plots were damaged by dicamba in June. About 300 acres of crops were affected, including some planted to research dicamba drift damage.

“We basically had to start over and replant,” Mr. Wilson said, “and hope they don't get hit again.”

— *Jesse Newman contributed to this article.*