

TORTS AND PESTICIDE DRIFT: AMENDING RIGHT-TO-FARM ACTS IN THE WAKE OF WIDESPREAD DICAMBA DRIFT

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I. INTRODUCTION

When crops die in a field prior to harvest, a farmer loses a portion of his salary for that year. When the cause of the crop loss is natural, farmers can usually seek compensation through crop insurance and government commodity support programs. When the crops were lost as a result of pesticide drift, these forms of compensation are not usually available to farmers.¹ In order to make up for their losses, farmers can seek damages through judicial redress. For many decades, various state and federal laws have combined to complicate and at times prevent farmers adversely affected by pesticide drift from recovering their losses via these judicial means. The recent adoption of post-emergent dicamba applications on cropland brought about wide-scale pesticide drift that magnified this shortcoming in the country's pesticide regulatory scheme.

This paper is divided into three parts to fully illustrate this issue and provide a policy proposal that addresses all aspects of the situation. Part I is subdivided into three sections, with the first section providing an overview of modern agriculture in the US. This overview is followed by a brief summary of recent soybean losses experienced due to dicamba drift as well as a scientific definition of pesticide drift. Part I concludes with an outline of the pesticide regulatory scheme in the US. In Part II, torts currently available to farmers who experience losses due to pesticide drift are discussed with

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¹ Tiffany Lashmet, *Potential Spray Drift Damage: What Steps to Take?*, 2017, United States Department of Agriculture National Agricultural Library, <https://nationalaglawcenter.org/wp-content/uploads/assets/articles/dowell-steps-for-drift-damage.pdf> (last visited Dec. 7, 2020).

an emphasis in the shortcomings of each tort under current state and federal laws. In Part III, a policy proposal is advanced to recommend the amending of state right-to-farm acts in order to allow nuisance suits under the specific circumstances presented by pesticide drift suits.

A. MODERN AGRICULTURE IN THE US

Modern crop production can be divided into three distinct categories: genetically modified (GM) crops, organic crops, and non-GM/non-organic crops (hereunto referred to as ‘conventional crops’). Before discussing each production technique’s economic, environmental, and legal aspects, it is important to establish basic definitions for each term. Genetically modified organisms (GMOs) are defined by the World Health Organization as organisms (in this case, crop seeds) that have undergone alterations to their DNA.² These alterations are most commonly performed with the intent to either make the plant resistant to a specific herbicide or to make the plant itself resistant to insects. GM crops have gained significant popularity among US farmers primarily due to the biotechnology’s advertised higher profitability relative to conventional seeds.³ Interestingly, debates among agricultural economists have not produced a definitive explanation as to why GM crops are more

² World Health Organization, *Frequently Asked Questions on Genetically Modified Foods* (May 2014), https://www.who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en/ (last visited Dec. 7, 2020).

³ Barrows, Geoffrey, Steven Sexton, and David Zilberman, *Agricultural Biotechnology: The Promise and Prospects of Genetically Modified Crops*, 28 *J. of Econ. Perspectives* 99 (2014).

profitable.⁴ Generally, the aspects of GM production that favor increases in profitability involve increased yields, decreased use of pesticides, increased amount of arable cropland, and the potential for double-cropping (farming practice where an early harvest and a late harvest are produced in the same season).⁵

Per the United States Department of Agriculture (USDA), organic is a “labeling term that indicates the food or other agricultural produce has been produced through approved methods.”⁶ The issuance of these labels is governed by the National Organic Program (NOP), a regulatory program within the USDA Agricultural Marketing Service.⁷ For a farm to be able to produce certified organic crops, it must first go through a five step certification process in which it develops an Organic System Plan (OSP) that outlines its intended organic practices.⁸ For organic crop farming, the OSP will generally be composed of the farm’s transition from synthetic fertilizers and pesticides to their natural counterparts as well as plans for crop rotation, fertility, and management of pests and diseases.⁹ Though the

⁴ Matim Qaim & Wilhelm Klümper, *A Meta-Analysis of the Impacts of Genetically Modified Crops*, 9 PLOS ONE, (2014).

⁵ Barrows, *supra* note 3.

⁶ 7 C.F.R. §205.2.

⁷ *Id.*

⁸ United States Department of Agriculture, Agricultural Marketing Service, *Becoming a Certified Operation*, <https://www.ams.usda.gov/services/organic-certification/becoming-certified> (last visited Dec. 7, 2020).

⁹ United States Department of Agriculture, Agricultural Marketing Service, *A Guide*

organic certification process does not impose significant direct costs through overly burdensome fees, farmland switching to organic cannot produce certified organic products until after a three year transition period in which no prohibited substance was used on said land. In other words, farmers applying for organic status spend three years practicing NOP standards before they obtain organic certification and its associated market price premium, which poses a significant indirect cost resulting from lost profits during these years. Once a portion of farmland is certified organic, it is still subject to audits of the implementation of its OSP, including tests for synthetic pesticide residue on crops. If an organic crop is discovered to have a pesticide residue level greater than 5%, the field in which the crop was grown is subject to the revocation of its organic status even if the farmer in question was not responsible for the synthetic pesticide's appearance on said crops.¹⁰ Given the additional governmental procedures required for organic farms, their products possess a price premium in the marketplace that is absorbed by food safety-conscious consumers who are leery of GM products and dissatisfied with conventional production methods.¹¹

for Conventional Farmers Transitioning to Organic Certification,
<https://www.ams.usda.gov/sites/default/files/media/10%20Guide%20to%20Transitional%20Farming%20FINAL%20RGK%20V2.pdf> (last visited Dec. 7, 2020).

¹⁰ National Organic Program, *Periodic Residue Testing*, 2018, Certified Agent Training,

<https://www.ams.usda.gov/sites/default/files/media/TrainingPeriodicResidueTesting.pdf> (last visited Dec. 7, 2020).

¹¹ Athanasios Krystallis & George M. Chryssochoidis, *Consumer's Willingness to Pay for Organic Food: Factors That Affect It and Variation per Organic Product Type*, 107 *British Food Journal* 320 (2005).

Conventional crop production is essentially the most basic type of crop production that has been practiced throughout agricultural history. Conventional crops are grown from seeds that have not undergone any DNA alterations except for those induced over many generations of natural selection by farmers selecting seeds to be sown. With respect to fertilizer and pesticide inputs, conventional farmers are able to use their own expertise and discretion without any need for compliance with government-established standards. Conventional farming might appear to have a dubious value within the agricultural industry due to GM crops providing the most efficient yields and organic farming satisfying the demand of food safety-minded consumers. This observation is misguided for several reasons. Conventional farming is the majority supplier of many crops with no GM varieties such as carrots.¹² Conventional crops are also used for exports to Europe due to the EU's labeling requirements for products with GM ingredients.¹³ While the number of categories could be expanded to more accurately denote every scientific innovation and marketing scheme ever used by the agricultural industry, these three categories provide sufficient background information to facilitate a

¹² United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS), Quick Stats, <https://quickstats.nass.usda.gov/results/CE3B23D5-A9EB-3035-BCB2-AC978D14548A> (last visited Dec. 7, 2020).

¹³ Council Regulation (EC) 1830/2003, of the European Parliament and of the Council of 22 September 2003 Concerning the Traceability and Labeling of Genetically Modified Organisms and the Traceability of Food and Feed Products Produced from Genetically Modified Organisms and Amending Directive 2001/18/EC, (L 268) 24, 28.

legal analysis of pesticide drift.

In a developed economy with a wide variety of consumer interests, all three farming techniques have secured their positions in the marketplace, albeit at varying production levels. In 2016, the nine¹⁴ GM crops being commercially farmed took up approximately 180 million acres of US farmland.¹⁵ In contrast, the amount of organic cropland in the US in 2016 was listed at just over 2.7 million acres.¹⁶ Based on the definition given here for conventional crops, the acreage for conventional cropland can be calculated by subtracting GM acres and organic acres from total US cropland.¹⁷ This calculation shows that conventional cropland accounts for 70 million acres.

B. PESTICIDE DRIFT

Though the popularity of each production technique varies with each crop, the upcoming legal analysis would be greatly supplemented

¹⁴ While there has since been a tenth GM crop added to US commercial production, this paper uses 2016 figures in order to make comparisons with the most recent available organic crop production data.

¹⁵ International Service for the Acquisition of Agri-biotech Applications (ISAAA), Pocket K No. 16: Biotech Crop Highlights in 2017, 2018, Pocket K, <https://www.isaaa.org/resources/publications/pocketk/16/> (last visited Dec. 7, 2020).

¹⁶ United States Department of Agriculture's (USDA) National Agricultural Statistic Service (NASS) & USDA Risk Management Agency, Certified Organic Survey 2016 Summary, 2017, https://downloads.usda.library.cornell.edu/usda-esmis/files/zg64tk92g/70795b52w/4m90dz33q/OrganicProduction-09-20-2017_correction.pdf (last visited Dec. 7, 2020).

¹⁷ Statista, Total US cropland area from 2012 to 2018 (in million acres), 2019, <https://www.statista.com/statistics/201762/projection-for-total-us-cropland-area-from-2010/> (last visited Dec. 7, 2020).

with a breakdown of soybean farming due to the recent drift issues with herbicide-resistant soybeans. According to USDA National Agricultural Statistics Service (NASS) data, total domestic soybean yield in 2016 was 4.30 billion bushels.¹⁸ Of these 4.30 billion bushels of soybeans, 4.04 billion bushels of soybeans (approximately 94% of total US production) were grown using genetically modified seeds.¹⁹ Per USDA NASS' Certified Organic Survey, organic production accounted for slightly over 4.6 million bushels of soybeans (approximately 0.1% of total US production) during 2016.²⁰ While they did not include a figure in either data set for total conventionally-farmed soybeans, the GM and organic bushels can be subtracted from the total bushels to show that conventional production techniques were responsible for yielding over 253 million bushels of soybeans (approximately 6% of total US production).

The above breakdown of soybean production techniques is intended to display the magnitude of an issue being caused by certain

¹⁸ Jeff Lemmons, National Statistics for Soybeans, 2018, https://www.nass.usda.gov/Statistics_by_Subject/result.php?682C946A-BFAA-3ACD-B2F4-6E0652574A9D§or=CROPS&group=FIELD%20CROPS&comm=SOYBEANS (last visited Dec. 7, 2020).

¹⁹ Jeff Lemmons, National Statistics for Soybeans, 2018, https://www.nass.usda.gov/Statistics_by_Subject/result.php?9DAA2728-BD6F-368A-AD12-4F295EE6598B§or=CROPS&group=FIELD%20CROPS&comm=SOYBEANS (last visited Dec. 7, 2020).

²⁰ *See supra* n.16.

GM soybean varieties today that affects neighboring farms: pesticide drift.²¹ Pesticide drift can be defined as the airborne movement of pesticides from the applicator's target site to any unintended area.²² The term 'pesticide' refers to a substance or mixture of substances used to eliminate some pest, whether insect, plant, fungus, etc.²³ Pesticide can be used to collectively describe herbicides (designed to kill unwanted plants), insecticides (designed to kill insects), fungicides (designed to kill fungi), and rodenticides (designed to kill rodents) among other types of pesticides.²⁴ The drifting of pesticide poses significant issues for farmers of any crop variety that is not resistant to the specific pesticide that is drifting, meaning that downwind fields with organic crops, conventional crops, and even GM crops that are not resistant to the particular pesticide can experience losses. Pesticides can drift either as particles when spray droplets move during application (called 'particle drift') or as vapors when the pesticide evaporates after application and subsequently condenses on non-target sites (called 'vapor drift'). Though pesticide drift is not unique to GM crops, the overwhelming majority of farmland being devoted to GM production techniques combined with the specific pesticide resistant

²¹ Bob Hartzler, *Factors influencing dicamba volatility*, 2017, Iowa State University Integrated Crop Management, <https://crops.extension.iastate.edu/blog/bob-hartzler/factors-influencing-dicamba-volatility> (last visited Dec. 7, 2020).

²² Oregon State University & US Environmental Protection Agency (EPA), *Pesticide Drift*, 2017, National Pesticide Information Center, <http://npic.orst.edu/reg/drift.html> (last visited Dec. 7, 2020).

²³ 7 U.S.C. § 136(u).

²⁴ Environmental Protection Agency, *Federal Insecticide, Fungicide and Rodenticide Act Compliance Monitoring*, 2017, <https://www.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-compliance-monitoring> (last visited Dec. 7, 2020).

traits in these crops entails GM farmers being the defendants in many modern drift suits.²⁵

GM soybeans are frequently mentioned when discussing pesticide drift because their most common counterpart herbicide, dicamba, has volatility issues that renders it prone to vapor drift.²⁶ Given the extensive use of GM soybeans across the US, dicamba-related drift has resulted in severe damages across the country for many farmers.²⁷ During 2017, a compilation of data from State Departments of Agriculture and university weed scientists indicated that approximately 3.6 million acres of soybeans were affected by off-site movement of dicamba at some point during the year.^{28,29} In

²⁵ Statista, *Genetically Modified Crops – Statistics & Facts*, <https://www.statista.com/topics/2062/genetically-modified-crops/> (last visited Dec. 7, 2020).

²⁶ Hartzler, *supra* note 21.

²⁷ Kevin Bradley, *A Final Report on Dicamba-injured Soybean Acres*, 2017, University of Missouri Integrated Pest & Crop Management, https://ipm.missouri.edu/IPC/M/2017/10/final_report_dicamba_injured_soybean/ (last visited Dec. 7, 2020).

²⁸ Environmental Protection Agency, EPA-HQ-OPP-2016-0187-0968, Registration Decision for the Continuation of Uses of Dicamba on Dicamba Tolerant Cotton and Soybean (2018).

²⁹ While there is also a dicamba-resistant cotton variety, cotton is primarily grown in the southern United States whereas soybeans are grown throughout the midwestern states. Reports of dicamba drift complaints were far more correlated with soybean-dominant states as opposed to cotton-dominant states. *See* United States Department of Agriculture, Average of Data Items (Average -> 2017 – Annual), <https://quickstats.nass.usda.gov/data/maps/0C9E2C05-32F5-380A-A073->

addition to the crop damages that farmers experience, farmers who are certified USDA Organic risk losing their certification and thus, the associated price premium, if the pesticide's residue exceeds the 5% tolerance level.³⁰

C. PESTICIDE REGULATION

The Environmental Protection Agency (EPA) acting under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates pesticides in cooperation with assistance from state and local governments.³¹ Among other duties, the EPA is responsible for pesticide registration and product labeling. With respect to pesticide registration, the EPA evaluates both human health and environmental risks of pesticides.³² Per FIFRA Section 2(q)(1)(F), a pesticide whose accompanying label “does not contain directions for use which are necessary for effecting the purpose for which the product is intended and...are adequate to protect health and the environment” is misbranded.³³ Due to this provision, EPA's registration of a pesticide is dependent, among other factors, on the pesticide having a label that sufficiently instructs the applicator how to

[585050AD6E25](#) (last visited Dec. 7, 2020); United States Department of Agriculture, Average of Data Items (Average -> 2017 – Annual), <https://quickstats.nass.usda.gov/data/maps/A73E1B42-B979-3F7B-99DC-A59C463C1B80> (last visited Dec. 7, 2020); Bradley, *supra* note 27.

³⁰ National Organic Program, *supra* note 10.

³¹ 7 U.S.C. § 136u.

³² Environmental Protection Agency, *About Pesticide Registration*, 2017, <https://www.epa.gov/pesticide-registration/about-pesticide-registration> (last visited Dec. 7, 2020).

³³ 7 U.S.C. § 136(q).

effectively apply the pesticide to the target site while minimizing harmful issues such as drift.³⁴

Though states have broad regulatory power under FIFRA, they cannot enact any requirements for labeling or packaging in addition to or different from those established by the EPA in their review of a pesticide.³⁵ Prior to the ruling in *Bates v. Dow Agrosciences LLC* (2005), most state regulations were very conservative in their limitations on pesticide use.³⁶ State legislatures were hesitant to implement regulations that might violate the ‘inducement test.’ The inducement test measured whether or not an event (e.g., state regulation, state-level court ruling, etc.) could induce a pesticide manufacturer to change its label or packaging. Despite its frequent use in case law on pesticide regulation, the Supreme Court in *Bates* rejected the use of the inducement test on state actions concerning pesticide regulation on the grounds that it was overly broad.

As a result of the duties assigned to the EPA under FIFRA, dicamba’s volatility issues that render it susceptible to drift could have either been a cause for rejection of dicamba³⁷ during the registration

³⁴ 40 C.F.R. § 158.130.

³⁵ 7 U.S.C. § 136(v)(b).

³⁶ *Bates v. Dow Agrosciences L.L.C.*, 544 U.S. 431 (2005).

³⁷ While dicamba has been around for quite some time (Id at 21), dicamba is referred to here to mean its formulations as FeXapan herbicide Plus VaporGrip Technology, M1768 Herbicide (Extendimax with VaporGrip Technology), and Engenia Herbicide (Id at 28). Registration for these formulations of dicamba were approved in 2016.

process or minimized via specific instructions on the label that effectively counteract dicamba's volatility. The EPA chose the latter of the two options but has repeatedly placed increasingly tighter label restrictions on dicamba due to its post-registration, drift-related damages that have occurred during multiple years' growing seasons.³⁸

In response to these unresolved drift issues, many states have enacted additional restrictions on dicamba application to supplement the EPA-regulated label.^{39,40,41,42} Arkansas received 963 complaints of dicamba drift in 2017.⁴³ The majority of these complaints were received from May to June, during which most soybean fields have undergone emergence but are still not yet ready for harvest.⁴⁴ In an unprecedented extension of state regulatory capabilities under FIFRA,

³⁸ Environmental Protection Agency, *supra* note 28.

³⁹ Arkansas State Plant Board, Agency Regulation No. 209.02.

⁴⁰ North Dakota Department of Agriculture, *North Dakota-Specific Protocols Announced for Dicamba*, <https://www.nd.gov/ndda/news/north-dakota-specific-protocols-announced-dicamba> (last visited Dec. 7, 2020).

⁴¹ Missouri Department of Agriculture, *Dicamba Facts*, 2018, <https://agriculture.mo.gov/plants/pesticides/dicamba-facts.php> (last visited Dec. 7, 2020).

⁴² Allen Sommerfeld, *MDA Announces State-Specific Restrictions on Use of Dicamba Herbicide for 2019*, 2018, Minnesota Department of Agriculture, <https://www.mda.state.mn.us/mda-announces-state-specific-restrictions-use-dicamba-herbicide-2019> (last visited Dec. 7, 2020).

⁴³ Arkansas Department of Agriculture, *Report of the 2017 State of Arkansas Dicamba Task Force Meetings*, 2017, Winthrop Rockefeller Institute, <http://rockefellerinstitute.org/uploads/dicamba-report-092017.pdf> (last visited Dec. 7, 2020).

⁴⁴ Ashlock et al., *Arkansas Soybean Production Handbook – MP197*, <https://www.uaex.edu/publications/MP-197.aspx> (last visited Dec. 7, 2020). (Refer to Chapter 7, by listed authors, which has not yet been updated in print version).

the Arkansas Department of Agriculture implemented a cutoff date of April 15th for dicamba applications.⁴⁵ Facing similar amounts of complaints within their respective constituencies, North Dakota,⁴⁶ Missouri,⁴⁷ and Minnesota⁴⁸ implemented similar cutoff dates for dicamba applications. These regulations were implemented in time for the 2018 growing season and most states appear to have successfully reduced (but not eliminated) the damages resulting from dicamba drift.⁴⁹ But despite this combined regulatory approach, drift damage still persists.⁵⁰ Given the issue's continued existence, there are still farmers left with damaged fields who will likely seek compensation as a result of their losses.

It is important to note that the EPA stated that there is a “lack of scientific consensus regarding the cause of these reported incidents.”⁵¹ In fact, the EPA received “input from state agencies, farm bureaus, associations, industry, farmers, and non-governmental organizations...that causes could include poor adherence to the label

⁴⁵ Arkansas State Plant Board, *supra* note 39.

⁴⁶ North Dakota Department of Agriculture, *supra* note 40.

⁴⁷ Missouri Department of Agriculture, *supra* note 41.

⁴⁸ Sommerfeld, *supra* note 42.

⁴⁹ Kevin Bradley, *July 15 Dicamba injury update. Different Year, same questions*, 2018, University of Missouri Integrated Pest & Crop Management, <https://ipm.missouri.edu/IPC/M/2018/7/July-15-Dicamba-injury-update-different-year-same-questions/> (last visited Dec. 7, 2020).

⁵⁰ *Id.*

⁵¹ Environmental Protection Agency, *supra* note 28.

(e.g., not following the label or use of an older, more volatile formulation), physical drift, tank contamination, temperature inversions, and/or volatility.”⁵² As will be shown in the legal analysis, the possibility of these causes being the source of the damages introduces negligence as a tort theory that could be used by affected farmers.

Ultimately, the handling of dicamba drift by the EPA, each states’ agricultural agency, and both the federal and state court systems is reflective of the government’s overall treatment of agriculture throughout US history. Farmers and their neighbors dealt with pesticide drift long before dicamba was the bipolarizing topic that it is today. Additionally, the transition in much of the country’s land from farmland to other uses combined with the mass industrialization of the remaining farms provoked all states to pass some form of the aforementioned right-to-farm laws that shield farmers from varying levels of general nuisance liability.⁵³ These laws present yet another complication factor to pesticide drift cases, which may analyze whether the farmer’s application was negligent, which could include if said farmer should have expected the weather conditions the application, and whether the drift was particle or vapor drift.⁵⁴ Most states also require that the injured farmer in pesticide drift cases report the issue within a specified amount of time.⁵⁵ Given that these cases

⁵² *Id.*

⁵³ Terrence J. Centner, Governments and Unconstitutional Takings: When do Right-to-Farm Laws Go Too Far? 33 B.C. Envtl. Aff. L. Rev. 87 (2006), <http://lawdigitalcommons.bc.edu/ealr/vol33/iss1/3> (last visited Dec. 7, 2020).

⁵⁴ Theodore A. Feitshans, *An Analysis of State Pesticide Drift Laws*, 20 San Joaquin Agric. L. Rev. 269 (2010).

⁵⁵ *Id.*

typically remain within state-level court systems, the country's management of pesticide drift is a compilation of individual state approaches instead of a uniform national approach. Despite all of these complicating factors, each legislature, agency, and court throughout the US desire for the most efficient agricultural economy with equitable treatment toward GM, organic, and conventional farmers. The following legal analysis demonstrates how this intent manifests itself in legislation, regulation, and case law across the nation.

II. POTENTIAL TORTS FOR AFFECTED FARMERS

In light of the numerous legal issues that could be discussed with respect to pesticide drift, this study will be restricted to the torts that farmers affected by pesticide drift have used in court as means to be awarded damages for their losses. Typically, the affected farmer files suit against the farmer whose pesticide applications are believed to be the source of the drift, though pesticide companies have been included in certain lawsuits. While there is some case law where federal courts interpreted state tort provisions, the vast majority of cases involving pesticide drift were filed in state court systems. This paper is not intended to be a comprehensive overview of state or federal cases but instead an overview of cases that display varying outcomes for each tort theory.

As noted in prior academic publications, cases concerning

pesticide drift can be divided into two categories based on the torts brought by the plaintiffs.⁵⁶ The first category of cases encompasses plaintiff-farmers who sued the defendant-farmers whose pesticide applications allegedly drifted off-site to the detriment of the plaintiff's farm. These suits, which allege the common law torts of trespass, nuisance, negligence and strict liability, will be collectively called 'Common Law Cases.' Generally, a Common Law Case will involve an individual farmer harmed by drift alleging most if not all of these torts against another, individual farmer for a relatively low amount of damages in a state court. This legal strategy will appeal to farmers who wish to simply recover drift-related losses and avoid a lengthy, costly battle in court. Additionally, these suits could establish the foundation for private settlements that bypass the court system entirely. One disadvantage of these suits is the high frequency of low damage amounts that may deter attorneys from taking on Common Law Cases.

In the pursuit of higher damage amounts, plaintiffs' lawyers generally prefer what will be referred to here as 'Manufacturer Cases.' As indicated by the name, plaintiff-farmers in Manufacturer Cases will allege torts that include conspiracy, failure to warn, design defect, and breach of warranties against pesticide companies like Bayer and Dow.⁵⁷ Due to the deep pockets of these companies, Manufacturer Cases will often involve multiple farmers suffering from pesticide drift as the class action plaintiffs.⁵⁸ Despite the inclusion of certain state

⁵⁶ Alexandra B. Klass, *Bees, Trees, Preemption, and Nuisance: A New Path to Resolving Pesticide Land Use Disputes*, 32 *Ecology L.Q.* 763 (2005).

⁵⁷ *Bader Farms, Inc. v. Monsanto, Co.*, 2018 WL 1784394 (2018).

⁵⁸ See, e.g., *Bates v. Dow Agrosciences L.L.C.*, 544 U.S. 431 (2005).

law claims, most Manufacturer Cases will occur under federal court jurisdiction due to diversity jurisdiction of the manufacturer and the plaintiffs.⁵⁹ Manufacturer Cases often provide federal court insight on the appropriate regulatory framework of pesticides under FIFRA which can become unclear as states assume more power.⁶⁰

In addition to the barriers offered by each type of suit, the standard of evidence for pesticide drift cases can cripple a farmer's ability to recover drift-related damages.⁶¹ In order for the action to even have a chance at being successful, the farmer will have to complete a series of actions that enables their legal counsel to convey every detail of the incident during the trial. First, the affected farmer must determine that pesticides have drifted onto his property. This step is usually accomplished by the affected farmer requesting crop experts to analyze the relevant fields, though there are rare examples of the pesticide drift itself being witnessed first-hand.⁶² The farmer will have to request this data collection immediately after becoming suspicious of drift given that the plant's natural processes can

⁵⁹ Klass, *supra* note 56.

⁶⁰ See, e.g., *Bates v. Dow Agrosciences L.L.C.*, *supra* note 36.

⁶¹ Terrence J. Centner, Damages from Pesticide Spray Drift under Trespass Law, 41 Ecology L. Currents 1 (2014), <https://elq.typepad.com/currents/2014/03/seq-chapter-h-r-1-damages-from-pesticide-spray-drift-under-trespass-law-terrence-j-centner-introduction.html> (last visited Dec. 7, 2020).

⁶² *MacAlpine v. Hopper*, No. 10CV220, *9-10 (Colo. Dist. Ct., Delta Cnty., July 5, 2012).

eliminate the necessary evidence rapidly.⁶³ In addition to the scientific reasons for urgency, many states also have notification requirements for the farmer to inform the state agricultural agency of damage suffered after pesticide application.⁶⁴ Unfortunately, the effects of drift can result from other causes (e.g., plant disease, insects, etc.) meaning that a farmer might be spending time and money trying to implicate a neighbor for drift when in reality the farmer should have been addressing the actual issue affecting his crops.⁶⁵

As this data is being collected from his field, the affected farmer should arrange for all of the neighboring farmers to send their spray records to the individuals analyzing the damaged crops.⁶⁶ Applicators of restricted use pesticides are required to maintain records of applications under FIFRA.⁶⁷ These spray records will be viewed with respect to recorded weather conditions during and after the applications to check for compliance with each pesticide's label. The affected farmer's crop scientists might be able to prove which farmer applied the pesticides that ultimately drifted but a jury or summary judgment might find that farmer's compliance with the EPA-approved label to be a compelling defense against the injured farmer.

⁶³ Centner, *supra* note 61.

⁶⁴ Feitshans, *supra* note 54.

⁶⁵ Rich Zollinger, Documentation for Suspected Herbicide Drift Damage, 2017, North Dakota State University, <https://www.ag.ndsu.edu/publications/crops/documentation-for-suspected-herbicide-drift-damage> (last visited Dec. 7, 2020).

⁶⁶ This collection of records is part of the damage notification process required by state agricultural agencies. While it would be used in a formal court case, this process is not a part of discovery.

⁶⁷ 7 C.F.R. § 110.3.

In such an instance where the applicator has abided by the EPA-approved label, a plaintiff may opt to pursue a Manufacturer Case on the basis that the pesticide's manufacturer failed to provide proper application instructions as required under FIFRA.⁶⁸

Assuming the affected farmer's crop experts have compiled sufficient data to confirm the existence of drift-related damage, know the source of the drifting pesticide, and have reason to believe the pesticide application was not consistent with the EPA's label, the farmer now needs to justify his financial loss resulting from the drift.⁶⁹ This step should also be carried out thoroughly, as visual estimates of yield loss are considered unreliable.⁷⁰ Instead, the affected farmer should obtain aerial photographs that display the extent and pattern of the damage relative to the surrounding fields. This evidence will have to confirm that the damage suffered by the farmer is substantial, which may be a requirement depending on the tort and state.

While some farmers affected by pesticide drift have taken the Manufacturer Case route in the past, the rest of this paper will be focused on Common Law Cases due to their relevance to the concluding policy recommendation. Among other reasons, this decision was made due to the uncertainty of who is at fault in so many pesticide drift cases between the applicators and pesticide companies,

⁶⁸ See, e.g., *Bader Farms, Inc. v. Monsanto, Co.*, *supra* note 57.

⁶⁹ Centner, *supra* note 61.

⁷⁰ Zollinger, *supra* note 65.

including those related to the recent dicamba incidents.⁷¹ By proposing a policy that focuses on Common Law Cases, there will be a higher incentive to investigate whether an individual farmer was negligent in his pesticide application and thus a higher incentive for farmers to strictly abide by the pesticide's label. As will be demonstrated in the conclusion, this policy will place a greater burden on farmers to make wise decisions as to which seed and pesticide systems that they choose to implement. Ideally, the policy will also eliminate the practice of pesticide manufacturers releasing a new GM seed before the corresponding pesticide is approved, which has resulted in crop damage before.⁷² By placing such a duty on farmers who apply pesticides, this proposed policy will incentivize farmers being more cautious in their applications which will in turn cause said farmers to demand pesticides that guarantee minimal volatility. Thus, a policy promoting Common Law Cases in instances of pesticide drift is superior to one that promotes Manufacturer Cases due to the domino effect that the former would have in the marketplace decision-making from the individual farmer all the way to the largest pesticide companies.

A. TRESPASS

Trespass involves the invasion of a landowner's interest in exclusive possession of their land.⁷³ An individual's unauthorized entry onto another's property can still be classified as a trespass even if the trespasser did not physically step onto the property but instead

⁷¹ Environmental Protection Agency, *supra* note 28.

⁷² See, e.g., *Bates v. Dow Agrosiences L.L.C.*, *supra* note 36.

⁷³ *Babb v. Lee County Landfill SC, LLC*, 405 S.C. 129, 747 S.E.2d 468 (S.C. 2013).

caused the entry of an object onto the property. Traditionally, courts encountered trespass arguments in cases with tangible invasions of property (e.g., person wrongfully entering property, person wrongfully parking vehicle on property).⁷⁴ Courts have established that injury to the landowner would not be a requirement to prove a trespass claim, though it would be required to for landowner to recover actual damages.⁷⁵ As scientific advances conveyed the nature of microscopic particles, trespass arguments involving intangible invasions began to arise in courts.⁷⁶ In addition to drifting pesticides, intangible invasions can include odors, particulate matter, smoke, vibration, and other issues that are insufficient to constitute a trespass per the dimensional test.⁷⁷ The dimensional test is the traditional common law rule which requires an invasion of land through a physical, tangible object to constitute a trespass.

In the pursuit of allowing parties to seek judicial redress, many state courts have allowed intangible invasions to be considered trespasses.⁷⁸ As noted in *Borland v. Sanders Lead Co., Inc.* (1979), this recognition by the courts could imply that “every property in the State would have a cause of action against any neighboring industry which emitted particulate matter into the atmosphere, or even a

⁷⁴ See Restatement (Second) of Torts § 217.

⁷⁵ *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1 (Tex. 2008).

⁷⁶ *Babb v. Lee County Landfill SC, LLC*, *supra* note 73.

⁷⁷ *Centner*, *supra* note 61.

⁷⁸ *Johnson v. Paynesville Farmers Union Coop. Oil Co.*, 817 N.W.2d 693 (Minn. 2012).

passing motorist, whose exhaust emissions come to rest upon another's property."⁷⁹ To avoid this possibility, these courts generally attach the requirement of "substantial damages" to a trespass action arising from the intangible invasion.^{80,81}

Other courts have declined to allow trespass suits based on intangible invasions and instead recommend remedies under nuisance.⁸² These courts justify their decision on the basis of protecting the sanctity of a property owner's right to exclude and maintaining important distinctions between trespass and nuisance.⁸³ In *Adams v. Cleveland-Cliffs Iron Co.* (1999), the Court of Appeals of Michigan stated that "the requirement that real and substantial damages be proved, and balanced against the usefulness of the offending activity, is appropriate where the issue is interference with one's use or enjoyment of one's land...the law should not require a property owner to justify exercising the right to exclude."⁸⁴ The Supreme Court of Minnesota agreed with this line of reasoning in *Johnson v. Paynesville Farmers Union Cooperative Oil* (2012).⁸⁵ Here, the court stated that "if a defendant's emission of a particulate matter causes enough damage...the emission will also likely be an unreasonable interference with plaintiff's use and enjoyment of his land, and therefore constitute a nuisance."⁸⁶ In *Babb v. Lee County*

⁷⁹ *Borland v. Sanders Lead Co.*, 369 So. 2d 523. (Ala. 1979).

⁸⁰ *Id.*

⁸¹ *Bradley v. Am. Smelting & Ref. Co.*, 709 P.2d 782 (Wash. 1985).

⁸² *See supra* note 73.

⁸³ *Adams v. Cleveland-Cliffs Iron Co.*, 602 N.W.2d 215 (Mich. Ct. App. 1999).

⁸⁴ *Id.*

⁸⁵ *Johnson v. Paynesville Farmers Union Coop. Oil Co.*, *supra* note 78.

⁸⁶ *Id.*

Landfill SC LLC (2013), the Supreme Court of South Carolina indicated their support for the precedent established by the Court of Appeals of Michigan in *Adams*.⁸⁷

Therefore, the probability of success for a trespass claim arising from pesticide drift is dependent largely on whether or not the plaintiff-farmer operates in a state whose courts recognize intangible invasions as legitimate trespasses. Even in states that do make this recognition, other tort options are still available.⁸⁸ In *Bradley v. American Smelting* (Wash., 1985) where intangible invasions were ruled as trespasses, the Supreme Court of Washington stated that “the line between trespass and nuisance has become wavering and uncertain.”⁸⁹ Both *Bradley*⁹⁰ and *Borland*⁹¹ discussed the importance of trespass actions having a longer statute of limitations than nuisance actions; however, this aspect is irrelevant to pesticide drift cases given drift damage notifications requirements in many states.⁹² In these states where farmers who incur damage from another farmer’s pesticide application are required to notify their state agricultural department, failure to provide a notification can be interpreted in courts as evidence that no drift-related damage occurred.⁹³ Once a

⁸⁷ *Adams v. Cleveland-Cliffs Iron Co.*, *supra* note 83.

⁸⁸ *Bradley v. Am. Smelting & Ref. Co.*, *supra* note 81.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Borland v. Sanders Lead Co.*, *supra* note 79.

⁹² Feitshans, *supra* note 54.

⁹³ *Id.*

trespass suit does proceed, the plaintiff can receive monetary damages for their losses in crop yield as well as an injunction against the defendant's pesticide applications.⁹⁴ The use of injunctions as a remedy for trespass is notable in this context as injunctions are written at the discretion of the court with the intent to protect a landowner's right to exclude.⁹⁵ Depending on how the injunction is written, the defendant could face severe consequences as to the nature of their own farming operation (e.g., an injunction against the application of dicamba would likely entail the defendant switching to a different crop). Given that herbicides can drift over a mile under certain conditions, there is scientific support for potentially devastating injunctions against an applicator whose pesticides have drifted.⁹⁶

B. NUISANCE

Many courts refused to allow trespass claims arising from intangible invasions because allowing them "blurs the line between trespass and nuisance."⁹⁷ Courts that set this precedent protected property owners' right to exclusive possession by maintaining that the legitimacy of a trespass claim is unaffected by whether the interference was reasonable or caused damages. In doing so, these courts indicated that private intentional nuisance is a much more suitable option for farmers affected by pesticide drift. Even the courts that allowed intangible invasions to be considered as viable trespasses did not rule out nuisance as a viable claim for the same cause of action. In *Bradley v. American Smelting* (1985), the Washington Supreme Court

⁹⁴ *Johnson v. Paynesville Farmers Union Coop. Oil Co.*, *supra* note 78.

⁹⁵ *MacAlpine v. Hopper*, *supra* note 62.

⁹⁶ *Zollinger*, *supra* note 65.

⁹⁷ *Johnson v. Paynesville Farmers Union Coop. Oil Co.*, *supra* note 78.

indicated that “the same conduct on the part of a defendant may and often does result in the actionable invasion of both of these interests [interest in exclusive possession of land and interest in use of and enjoyment of land].”⁹⁸ By definition, a private intentional nuisance occurs when one’s use and enjoyment of their land is substantially and unreasonably interfered with.⁹⁹ Therefore, traditional nuisance doctrine already has the substantial damages requirement that so many plaintiffs had tried to merge into trespass law with intangible invasions.

The facts of pesticide drift cases seem to align more with nuisance doctrine’s requirements than with trespass doctrine.¹⁰⁰ Among other aspects, the Restatement (Second) of Torts considers the utility of the conduct that caused the interference and the gravity of the resulting harm.¹⁰¹ *Hall v. Phillips* (1989) involved atrazine (inexpensive herbicide that remains toxic for years after application) drift from a cornfield onto an adjacent soybean field. In this case, the affected farmer brought a nuisance suit against the farmer applying atrazine.¹⁰² The Supreme Court of Nebraska indicated that courts in such nuisance cases “must determine whether the gravity of harm outweighs the utility of the defendant’s conduct or whether the defendant’s conduct causes serious harm, but payment of

⁹⁸ See *supra* note 81.

⁹⁹ See Restatement (Second) of Torts § 822.

¹⁰⁰ Klass, *supra* note 56.

¹⁰¹ See Restatement (Second) of Torts § 826.

¹⁰² *Hall v. Phillips*, 436 N.W.2d 139 (Neb. 1989).

compensatory damages would render the defendant's continued conduct unfeasible."¹⁰³ With respect to the defendant paying damages to the plaintiff, the Supreme Court of Nebraska stated that "an invasion or interference which is substantial may result in equitable liability for a private nuisance and consequent damages, regardless of the reasonableness of the interference."¹⁰⁴

By allowing monetary damages in most situations instead of injunctions (which are still possible under nuisance)¹⁰⁵, nuisance would seem to be the most likely of all the tort options to succeed for farmers affected by spray drift.¹⁰⁶ Given the massive adoption of GM crops and their high dependence on pesticides, it would be difficult for any farmer to convince a judge to enjoin another farmer who had obeyed the EPA-established pesticide label from further pesticide applications. A farmer would face a much easier legal path if he only requested damages equivalent to the profits that he lost as a result of pesticide drift. Unfortunately for such farmers, *Hall v. Phillips* (1989) is one of the few pesticide drift cases that even attempts to use nuisance doctrine to recoup drift-related damages.¹⁰⁷

The lack of case law concerning nuisance actions resulting from pesticide drift can be attributed to the anti-nuisance protections granted to the entire agricultural industry in every state's right-to-farm

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Fifth Avenue Presbyterian Church v. The City of New York*, 293 F.3d 570 (E.D.N.Y. 2009).

¹⁰⁶ *Hall v. Phillips*, *supra* note 102.

¹⁰⁷ *Klass*, *supra* note 56.

act.¹⁰⁸ Though each state’s right-to-farm act is different, the basic concept of any right-to-farm act is that a property owner’s agricultural activities should not be considered a nuisance as the locality changes. Before the introduction of right-to-farm acts, extension of urban sprawl into historically agricultural areas had resulted in many nuisance suits against farmers. These suits alleged that noises, odors, among other effects from the farm were creating an unreasonable interference with the quiet enjoyment of their adjacent properties. These cases were often brought by property owners that were new to the area and unaware of such conditions that are considered normal in rural parts of the country. In passing a right-to-farm law, a state limited the grounds on which a plaintiff could file suit against an agricultural operation.

As mentioned, each state’s right-to-farm act varied to some extent from counterpart laws in other states.¹⁰⁹ These variations can lead to certain limitations being placed on farmers who bring nuisance claims seeking damages from pesticide drift. Among other aspects, farmers filing nuisance suits should be aware of which approach their states’ legislature incorporated into their respective right-to-farm act. Generally, each state adopted either a “coming to the nuisance” approach or a statute of limitations approach. Though the right-to-farm acts that comprise each category are different in their own right, the two categories give courts different criteria for the determination of

¹⁰⁸ Feitshans, *supra* note 53.

¹⁰⁹ *Id.*

a nuisance arising from agricultural operations. The most common approach is the coming to the nuisance approach, under which farmers are generally protected from nuisance claims that arise from changes in the surrounding locality that occur after the farm's commencement of operations. Conversely, the statute of limitations approach generally bars neighboring property owners of an agricultural operation from filing nuisance claims after a stated time period from the commencement of the agricultural operation in question.

The distinction between these two approaches is best examined by comparing two states that have adopted opposing approaches in their right-to-farm acts. The Georgia Right to Farm Law protects agricultural facilities, agricultural operations, and agricultural support facilities from nuisance claims that arise "as a result of changed conditions in or around the locality of such facility or operation if the facility or operation has been in operation for one year or more."¹¹⁰ Georgia's approach can be classified as coming to the nuisance due to its requirement for changed conditions outside of the agricultural property. Georgia provides anti-nuisance protections for farmers who expand their operations or adopt new technology by allowing the farm's original start date to be retained. As interpreted by the Supreme Court of Georgia in *Herrin v. Opatut* (1981), the Georgia law does not allow farmers to change the type of production (e.g., from crop farming to livestock) and retain the original start date (i.e., commencement date of new operation type is new start date for farm). In *Herrin*, the defendant-farmer lost a nuisance suit that arose when he transitioned newly purchased pastureland to a large chicken egg

¹¹⁰ O.C.G.A. § 41-1-7.

farm.¹¹¹ The Supreme Court of Georgia determined that the farmer was unable to use the Georgia Right to Farm Act as a defense because the nuisance was “not a case where plaintiffs’ nonagricultural uses of their land have encroached upon defendants’ existing egg farm.”¹¹² Thus, the egg farmer was unable to obtain anti-nuisance protections under the Georgia Right to Farm Act because the nuisance occurred due to changes on the farm and not around it. Notably, the Supreme Court of Georgia went even further to state that “it is not significant that the egg farm remained in operation for one year prior to the institution of this lawsuit.”¹¹³

This indication by the Supreme Court of Georgia that the statute of limitations would not have protected the farmer in *Herrin v. Opatut* shows the distinction between the coming to the nuisance approach and the statute of limitations approach.¹¹⁴ In states that follow the statute of limitations approach, the only relevant factor is whether the farm’s operation has preceded the statute of limitations.¹¹⁵ Therefore, courts in states that have adopted the statute of limitations approach in their right-to-farm acts will not consider the land use of properties surrounding the farm nor their respective commencement dates. The statute of limitations approach is perhaps best illustrated in Mississippi’s right-to-farm act. The Mississippi law states that “proof

¹¹¹ *Herrin v. Opatut*, 248 Ga. 140, 281 S.E.2d 575 (1981).

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ Feitshans, *supra* note 53.

that the agricultural operation, including forestry activity, has existed for one year or more is an absolute defense to the nuisance action, if the operation is in compliance with all applicable state and federal permits.”¹¹⁶ If a hypothetical case with the exact same circumstances from *Herrin* occurred in Mississippi, the nuisance suit would have failed due to the filing date exceeding the one-year statute of limitations, which serves as an ‘absolute defense.’

Regardless of whether a state adopts the coming to the nuisance or the statute of limitations as the approach of their right-to-farm act, both approaches base their anti-nuisance protections heavily on the agricultural operation’s commencement date. How states define a farm’s commencement date is vital to the amount of anti-nuisance protections that farms receive in that state.¹¹⁷ State definitions for commencement dates of farms (or agricultural operations, agricultural facilities, etc.) vary based on three criteria: expansions, changes in technology, and changes in production type. A farm will establish a new commencement date by undertaking one of these aspects, unless their state’s right-to-farm act allows the specific change to occur without such an effect. A new commencement date often means that a farmer is left for a certain period of time without the right-to-farm protections that they previously held. Referring back to *Herrin v. Opatut* (1981)¹¹⁸, the defendant’s egg farm was deemed a nuisance because its transition from pastureland to an egg farm represented a change in production type, which is not covered under the Georgia

¹¹⁶ Miss. Code. Ann. § 95-3-29.

¹¹⁷ Feitshans, *supra* note 53.

¹¹⁸ *See supra* note 111.

Right to Farm Law.¹¹⁹ The Georgia Right to Farm Law does extend anti-nuisance protections to farms that have expanded their operations or updated their technology, which would likely protect transitions to dicamba-resistant crops. When states include provisions that protect technological upgrades on farms from nuisance suits, GM farms that cause drift damage on adjacent farms are much more likely to obtain their state's right-to-farm protections. States that exclude technological improvements from their anti-nuisance protections might leave GM farmers that converted to GM farming after decades of conventional farming (before the rise in popularity of GM farming) without these right-to-farm protections.

Right-to-farm laws such as Mississippi's that offer such unrestricted anti-nuisance liability to farmers can be problematic defenses due to Fifth Amendment concerns. During the litigation of *Moon v. North Idaho Farmers Association* (2002), House Bill 391 was signed into Idaho law as a supplement to the state's right-to-farm provisions in order to shield farmers that practiced burning their fields post-harvest from liability.¹²⁰ Though the Supreme Court of Idaho would later reverse and remand the district court's decision, the act was originally found to be an unconstitutional regulatory taking on those individuals whose allergies were adversely affected by the burning fields.¹²¹ Idaho is one of six states to face constitutional

¹¹⁹ O.C.G.A. § 41-1-7.

¹²⁰ Idaho Code Ann. § 22-4801.

¹²¹ *Moon v. N. Idaho Farmers Ass'n*, 96 P.3d 637 (Idaho 2004).

challenges to its right-to-farm law.¹²² The only state to hold that their right-to-farm law could be deemed unconstitutional under any circumstances is Iowa. Over several court cases, the Supreme Court of Iowa has established a three-part test that requires a plaintiff in a nuisance claim to demonstrate that Iowa's right-to-farm law 1) did not provide them with a benefit that their neighbors received, 2) caused them to sustain a significant hardship, and 3) their residency's existence prior to the neighboring operation along with considerable investment in their property prior to said operation.¹²³ The few Iowa plaintiffs that have succeeded in proving the merits of their nuisance cases with respect to this test represent the only individuals in the country who have prevailed against expansive right-to-farm acts.

Some states have declined to adopt such heavily statute-dependent right-to-farm laws and have instead opted for methods of judicial redress that consider a defendant-farmer's agricultural management practices on a case-by-case basis.¹²⁴ For example, Washington's right-to-farm act states that agricultural activities "if consistent with good agricultural and forestry practices...are presumed to be reasonable and shall not be found to constitute a nuisance unless the activity or practice has a substantial adverse effect on public health and safety."¹²⁵ In *LDI v. Gill* (1998), the US District Court for the Western District of Washington rejected the defendant's affirmative defense using the state's right-to-farm law.¹²⁶ There, the defendant

¹²² *Honomichl v. Valley View Swine, LLC*, 914 N.W.2d 223 (2018 Iowa).

¹²³ *Id.*

¹²⁴ Feitshans, *supra* note 53.

¹²⁵ Wash. Rev. Code §§ 7.48.305.

¹²⁶ *Gill v. LDI*, 19 F. Supp. 2d 1188, (W.D. Wash. 1998).

was barred from this defense because of the plaintiff's residency had preceded the defendant's residency. More relevant to the scope of pesticide drift, the court went further in stating that "in any case, LDI cannot benefit from the statute because it has not engaged in 'good forestry practices' as demonstrated by the fact that it violated several water quality laws."¹²⁷ If a state with a right-to-farm law that incorporates the qualifying management practices standard chooses to define 'good' practices with respect to other agricultural laws, defendants in dicamba drift cases would likely receive the statute's anti-nuisance provisions. Given that dicamba is susceptible to drift even if farmers apply it strictly according to EPA-approved labels, plaintiffs would struggle to find other statutes that defendants violated in their applications.¹²⁸

Ultimately, the success of a nuisance suit arising from a farmer's pesticide drift depends on the state and individual facts of each case.¹²⁹ Excluding the issues associated with right-to-farm acts, nuisance presents perhaps the most equitable solution to all parties involved in a pesticide drift case. The cost-benefit analysis of nuisance suits established in the Restatement (Second) of Torts should enable courts to recognize society's dependence on GM crops but also realize the harmful effects of drifting pesticides on neighboring

¹²⁷ *Id.*

¹²⁸ See, e.g., *Bates v. Dow Agrosiences L.L.C.*, *supra* note 36.

¹²⁹ Feitshans, *supra* note 53.

farms.¹³⁰ Ideally, courts would begin to set precedents where the GM farmer would simply pay damages equivalent to the losses suffered by their neighbors. This outcome would avoid mass injunctions against farmers who rely on GM crops' corresponding pesticides but also ensure that their neighbors do not suffer unjust economic damages as a result. One might even hope that, given many farmers' known distaste for dealing with lawyers, farmers might even seek to settle these issues outside of court thereby making the system more efficient. Unfortunately, many states preclude this outcome from occurring due to their right-to-farm acts.¹³¹ Many of these right-to-farm acts include an express purpose to protect agriculture, which only adds insult to injury when farmers experience irreparable losses due to the operations of neighboring farms.¹³² While many plaintiffs have argued against the constitutionality of stricter right-to-farm acts, these theories have experienced little success thus far across state court systems.¹³³ Therefore, nuisance presents an ideal solution to farmers in certain states and a mirage of a solution to farmers in other states.

C. NEGLIGENCE

The four elements required to establish a negligence suit are duty, breach of duty, injury, and proximate causation.¹³⁴ The regulatory framework of pesticide regulation under FIFRA establishes the guidelines for farmers to abide by when applying pesticides, which

¹³⁰ See Restatement (Second) of Torts § 826.

¹³¹ Feitshans, *supra* note 53.

¹³² O.C.G.A. § 41-1-7.

¹³³ See, e.g., *Honomichl v. Valley View Swine, LLC*, *supra* note 122.

¹³⁴ See Restatement (Second) of Torts § 282.

in turn establishes their duty of care for applications.¹³⁵ Under FIFRA, the manufacturer submits the label that will accompany the pesticide once in the marketplace pending EPA approval. The EPA will approve the pesticide if application adhering to its label does not cause “unreasonable adverse effects on the environment.”¹³⁶ Though FIFRA allows for state and local regulations on the use and sale of pesticides, packaging and labeling requirements are expressly preempted in the statute.¹³⁷ The Supreme Court in *Bates v. Dow Agrosciences, LLC* (2005) illustrated the intent behind these preemptions by asking readers of their opinion to “imagine 50 different labeling regimes prescribing the color, font, size, and wording of warnings – that would create significant inefficiencies for manufacturers.”¹³⁸ At minimum, farmers who apply pesticides owe a duty of care that conforms to the EPA-approved label.

In *Bates*, the Supreme Court also confirmed “the State’s broad authority to regulate the sale and use of pesticides.”¹³⁹ This authority of the states was questioned unsuccessfully by Dow in the suit on the grounds that certain state actions could ‘induce’ pesticide manufacturers to change their labels. Specifically, Dow contended that state common-law suits would prompt pesticide manufacturers to change their labels in order to avoid further litigation on the same

¹³⁵ 7 U.S.C. § 136j.

¹³⁶ 7 U.S.C. § 136a(a).

¹³⁷ 7 U.S.C. § 136(v)(b).

¹³⁸ *See supra* note 36.

¹³⁹ *Id.*

cause of action. The same line of reasoning led to the inclusion of the preemption of labeling and packaging requirements in FIFRA to prevent manufacturing inefficiencies. Despite this same logical basis, the Supreme Court rejected this argument from Dow citing that “it is highly unlikely that Congress endeavored to draw line between the type of indirect pressure caused by a State’s power to impose sales and use restrictions and the even more attenuated pressure exerted by common-law suits.”¹⁴⁰ Following the successful retention of their regulatory powers, states introduced even stricter pesticide regulations such as Arkansas’ cutoff date for dicamba applications.¹⁴¹ Though *Bates* is the quintessential Manufacturer Case, it is expounded upon here to show the legitimacy of state regulations that individual farmers in addition to pesticide manufacturers must follow.¹⁴² Thus, state regulations form the second component of the duty of care that pesticide applicators must observe in order to avoid negligence suits.

Unfortunately, episodes such as the 2017 soybean growing season that witnessed so many dicamba drift complaints often entail pesticide applications that fully adhered to both the EPA-approved label and the state regulations.¹⁴³ Farmers who suffer losses due to pesticide drift where the applicator satisfied the duty of care will likely be unable to use negligence as a tort remedy.¹⁴⁴ Both state and federal courts have allowed a defendant-applicator’s satisfaction of the pesticide’s label and related state requirements to serve as protections

¹⁴⁰ *Id.*

¹⁴¹ Arkansas State Plant Board, *supra* note 39.

¹⁴² *Bates v. Dow Agrosciences L.L.C.*, *supra* note 36.

¹⁴³ Bradley, *supra* note 27.

¹⁴⁴ Centner, *supra*, note 61.

against negligence claims.^{145,146} Furthermore, in agriculturally-predominant areas where many individual property owners apply pesticides, farmers suffering from drift may struggle to prove proximate causation with respect to the specific farmer whose application resulted in the drift.¹⁴⁷ Even when a farmer affected by pesticide drift determines whose negligent application led to his damages, the suffering farmer should be prepared to show that the drift occurred because of the negligent aspects of the application.¹⁴⁸

Negligence is fundamentally distinguished from other tort options in Common Law Cases by its requirement for a breach of the duty of care.¹⁴⁹ Though negligence is almost never an option when the applicator does follow all appropriate guidelines, pesticide applicators are not always in full conformance with their required guidelines. Unlike older drift cases where evidence included whether neighbors ‘felt’ the drifting pesticides enter their property, the requirement of spray records under FIFRA combined with easily accessible past weather data ensures a more objective determination of the applicator’s satisfaction of a duty of care.¹⁵⁰ In cases where the applicator did not follow appropriate spraying practices, it is important

¹⁴⁵ *Mangrum v. Pigue*, 198 S.W.3d 496 (Ark. 2004).

¹⁴⁶ *Oregon Environmental Council v. Kunzman*, 714 F.2d 901 (9th Cir. 1983).

¹⁴⁷ *Bennett v. Larsen Co.*, 114 Wis. 2d 265, 338 N.W.2d 510, (Wisc. Ct. App. 1983).

¹⁴⁸ *Dalzell v. Country View Family Farms, LLC*, 517 Fed. Appx. 518 (7th Cir. 2013).

¹⁴⁹ See, e.g., *Johnson v. Paynesville Farmers Union Coop. Oil Co.*, *supra* note 78; *Mangrum v. Pigue*, *supra* note 145.

¹⁵⁰ *Mangrum v. Pigue*, *supra* note 145.

to remember that a state's right-to-farm act will usually not protect farmers from nuisance actions.^{151,152} Therefore, negligence remains a viable tort remedy when the applicator did not follow appropriate guidelines, and it may be brought in conjunction with a nuisance action.

D. STRICT LIABILITY

In Common Law Cases, strict liability will serve as a tort remedy for farmers suffering from pesticide drift in jurisdictions where courts recognize pesticide applications as an ultrahazardous activity. Per the Restatement (Second) of Torts, the factors that courts consider when determining whether an activity is an ultrahazardous activity are (1) existence of a high degree of risk of some harm to the person, land, or chattels of others, (2) likelihood that the harm that results from it will be great, (3) inability to eliminate the risk by the exercise of reasonable care, (4) extent to which the activity is not a matter of common usage, (5) inappropriateness of the activity to the place where it is carried on, and (6) extent to which its value to the community is outweighed by its dangerous attributes.¹⁵³ Strict liability will not be an available remedy for most farmers suffering damages from pesticide drift as very few courts recognize the application of pesticides as an ultrahazardous activity, though courts arrive at this conclusion through different interpretations of the Restatement of Torts.¹⁵⁴

¹⁵¹ O.C.G.A. § 41-1-7.

¹⁵² Tex. Agric. Code Ann. § 251.004.

¹⁵³ See Restatement (Second) of Torts § 520.

¹⁵⁴ See *supra* note 145.

In *Mangrum v. Pigue* (2004), the Supreme Court of Arkansas upheld a trial court decision that stated that application of Roundup Ultra was not an ultrahazardous activity.¹⁵⁵ The Supreme Court of Arkansas based their decision to uphold on the grounds that the herbicide was commonly used in the farming community, available for sale to the general public, and can be controlled by the use of ordinary care. In *Dow Chemical Co. v. Ebling* (2000), the Indiana Court of Appeals rejected the ultrahazardous activity designation for pesticide applications on the basis that the risks can be eliminated through the use of ordinary care, the appropriateness of pesticide applications in the area, and the value of pesticides application to the community outweighing its dangerous attributes.¹⁵⁶ Notably, the Indiana Court of Appeals relied heavily on the EPA's registration of a pesticide which involved a cost-benefit analysis that ultimately showed that the pesticide posed no unreasonable risk of harm to man or environment if applied according to its label. In *Bennett v. Larsen Co.* (1984), the Wisconsin Supreme Court held that pesticide application is not an ultrahazardous activity as it is "a necessary and beneficial activity to ensure the production of adequate and healthy food and that its value to the people of this state outweighs the potential for harm."¹⁵⁷

At the time of the ruling in 1977, there was a hope held by some legal commentators that *Langan v. Valicopters, Inc.* would

¹⁵⁵ *Id.*

¹⁵⁶ *Dow Chem. Co. v. Ebling*, 753 N.E.2d 633 (Ind. 2001).

¹⁵⁷ *Bennett v. Larsen Co.*, 348 N.W.2d 540 (Wisc. 1984).

establish a precedent across the nation for the application of pesticides to be considered an ultrahazardous activity.¹⁵⁸ In *Langan*, the Supreme Court of Washington applied strict liability to pesticide applications on the grounds that “it is impossible to eliminate drift with present knowledge and equipment.”¹⁵⁹ The court also emphasized that pesticide applications are inappropriate when neighboring land uses involve organic farming. As noted by the court in *Langan*, only three other jurisdictions had applied strict liability to pesticide applications.¹⁶⁰ Despite the hope held by some for *Langan* to become a major precedent, strict liability is still not widely available as a tort remedy for pesticide drift.¹⁶¹

A farmer-plaintiff’s prospects for successfully persuading a judge to apply strict liability in a drift damage suit are significantly worsened if dicamba is the suspected pesticide. The pesticide applications in *Langan* as well as two of the three preceding cases that utilized strict liability were aerial applications.¹⁶² Generally, particle drift is the byproduct of aerial pesticide applications.¹⁶³ Aerial application of dicamba is prohibited by the label’s instructions on the herbicide.¹⁶⁴ Dicamba drift occurs as a result of issues with the

¹⁵⁸ Robert F. Blomquist, *Applying Pesticides: Toward Reconceptualizing Liability to Neighbors for Crop, Livestock and Personal Damages from Agricultural Chemical Drift*, 48 Okla. L. Rev. 393 (1995).

¹⁵⁹ *Langan v. Valicopters, Inc.*, 567 P.2d 218 (1977).

¹⁶⁰ See *Young v. Darter*, 363 P.2d 829 (Okla. 1961); *Loe Et Ux v. Lenhard*, 362 P.2d 312 (1961); and *Gotreaux v. Gary*, 232 La. 373, 94 So. 2d 293 (La. 1971).

¹⁶¹ Centner, *supra* note 61.

¹⁶² *Langan v. Valicopters, Inc.*, 567 P.2d 218 (1977).

¹⁶³ Oregon State University, *supra* note 22.

¹⁶⁴ Bayer Group, XtendiMax With VaporGrip Technology product labeling, 2018,

herbicide's volatility, meaning that dicamba drift is an example of vapor drift that occurs at some point after the application is finished.¹⁶⁵ While the distinction between vapor and particle drift might seem purely scientific and lacking legal implications, states like Mississippi exclude vapor drift from their definition of pesticide drift as listed in their respective administrative codes.¹⁶⁶ Additionally, the simple fact that dicamba did not have to travel downward from a moving aircraft as in *Langan* before reaching its target site might sway a judge against applying strict liability for dicamba specifically. Due to these differences between traditional pesticide applications and dicamba applications, strict liability principles still appear to lack any momentum in the courtroom as a useful tort remedy for drift-related damages.

III. RECOMMENDATION TO AMEND STATE RIGHT-TO-FARM ACTS

Before discussing the policy proposal, it is important to emphasize why nuisance is the optimal tort for incidents of pesticide drift. Fundamentally, the off-site movement of pesticides is a bad thing because it poses an unreasonable and substantial interference

http://www.xtendimaxapplicationrequirements.com/Documents/2_35008S2-40%20XtendiMax%20VaporGrip%20Tech%20DFU%20Label.pdf (last visited Dec. 7, 2020).

¹⁶⁵ Hartzler, *supra* note 21.

¹⁶⁶ Feitshans, *supra* note 54.

with a neighboring farmer, which is a textbook example of a nuisance.¹⁶⁷ Practically, nuisance doctrine would also enable the most efficient outcomes to occur due to its preference for monetary damages over injunctions.¹⁶⁸ With the inclusion of monetary damages, courts would be able to award the plaintiff-farmer the amount of his losses while not being forced to always enjoin the defendant-farmer from further pesticide applications. This outcome resolves the financial injury experienced by the plaintiff-farmer while allowing the defendant-farmer to decide whether or not the value of the pesticide applications is worth the potential future legal fees in case of another drift incident. Furthermore, under a nuisance-based system, both sides would assumedly realize that the payment of monetary damages is inevitable if the evidence is sufficient and be able to negotiate a settlement early in the proceedings in order to avoid a lengthy dispute. With respect to torts used in Manufacturer Cases, nuisance also proves to be superior because the potential for monetary damages to be awarded from drifting pesticides incentivizes farmers to demand pesticides with lower volatilities from pesticide companies.

In terms of regulatory schemes, nuisance doctrine under state judicial system also fits appropriately under both states' right-to-farm acts and FIFRA. As outlined explicitly in the text of many states' right-to-farm acts, the purpose of said legislation is to protect agricultural land and the products that come from it.¹⁶⁹ It is wholly counteractive for a right-to-farm act to preclude a farmer from the best legal remedy for his crop losses. To some extent, allowing nuisance

¹⁶⁷ See Restatement (Second) of Torts § 822.

¹⁶⁸ *Hall v. Phillips*, *supra* note 102.

¹⁶⁹ See Tex. Agr. Code Ann. § 251.001; O.C.G.A. § 41-1-7.

actions between farmers would also alleviate pressure faced by right-to-farm acts due to concerns over their potential unconstitutionality.¹⁷⁰ The decision in *Bates* also reaffirmed that the regulatory scheme established under FIFRA is designed to incorporate common-law suits such as the nuisance actions that are currently unavailable.¹⁷¹ Therefore, state legislatures have no reason to be concerned over the possible preemption of an amendment to their right-to-farm act that enables nuisance actions between individual farmers.

The proposed amendment is straightforward both in terms of text and its practicality. In every right-to-farm act, there is a provided definition for an agricultural operation in order to delineate what qualifies an entity for the anti-nuisance protections. Legislatures should simply add a provision to their respective right-to-farm acts that, in cases where both the plaintiff and defendant qualify as agricultural operations, the anti-nuisance protections provided in said law are no longer applicable to activities that inflict significant financial damage onto either party's own agricultural activities. Given this amendment, farms are still protected from non-agricultural entities that come to the nuisance. Furthermore, this provision's requirement for the defendant-farmer's activity to cause significant damage to the plaintiff-farmer's own agricultural activities also prevents a farmer from suing on grounds such as loss of property value due to odors emitted from a cattle farm. Instead, a plaintiff-farmer only obtains the

¹⁷⁰ Centner, *supra* note 53.

¹⁷¹ *Bates v. Dow Agrosciences L.L.C.*, *supra* note 36.

amended exclusion to right-to-farm acts if the defendant-farmer's activity has a direct negative effect on the plaintiff's farming operation.

An amendment to right-to-farm acts that allows nuisance actions between qualified agricultural operations arising from financial losses occurring at one farm due to the activities of another provides the most equitable solution for all involved entities. This amendment enables nuisance doctrine to be implemented as it was designed to while still aligning with the explicit purpose of right-to-farm acts and not providing a preemptable interference with FIFRA. In practice, this amendment would remove the inefficiency that has plagued farmers attempting to seek judicial redress over losses in crop yield for decades while not placing an overwhelming burden on farmers who apply pesticides that have volatility issues. This amendment also creates reasonable pressure on pesticide manufacturers to resolve volatility issues with their products prior to releasing them into the market. Under the proposed amendment, widespread occurrences of pesticide drift such as the recent episodes of dicamba drift would become both less likely to occur and much easier to manage in the aftermath should it occur at any magnitude.