LITIGATION AND REGULATORY CHALLENGES TO INNOVATION IN BIOTECH CROPS

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This article will discuss the pending litigation over biotech crops, some of which raise novel issues of nuisance and negligence, and evolving regulatory issues, particularly for new plant breeding methods that edit DNA.

I. REGULATORY BACKGROUND

In the U.S., the 1986 Coordinated Framework for the Regulation of Biotechnology ("Coordinated Framework") focuses on regulating the process of recombinant DNA ("rDNA") plant and animal breeding.[1] Internationally, a similar focus on rDNA exists in the Cartagena Protocol on Biosafety ("Biosafety Protocol"), which regulates the release and use of "living modified organisms," also known as genetically modified organisms ("GMOs").[2] As part of the implementation of this law, nations that are parties to the Biosafety Protocol enact legisla-

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1. *See* Coordinated Framework for Regulation of Biotechnology, 51 Fed. Reg. 23302 (June 26, 1986).

2. Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Jan. 29, 2000, 2226 U.N.T.S. 208.

tion, such as the European Traceability Directive, that impose zero-tolerance for the import of any GMO that lacks regulatory approval.[3] More nations are imposing regulatory approval requirements as the Biosafety Protocol is implemented. Any biotech crop that could be exported may also require approval in many of these overseas markets.

Some nation states, like Canada, regulate all "novel foods,"[4] including those created using non-rDNA methods, such as herbicide-resistant crop created using older[5] or newer[6] forms of mutagenesis. Europe is considering casting its regulatory net on the newer forms of mutagenesis plant breeding,[7] and other nations may follow its lead.

For innovators in agricultural biotechnology, these approval requirements for overseas markets can create a barrier to their entry. For example, the new biotech potato that the USDA approved for J.R. Simplot Company, known as the Innate™ potato,[8] may require "major market approval" to avoid causing another costly recall of potato chips in Japan, where regulatory approval and genetically-modified ("GM") food labeling could complicate the marketing of any foods containing a biotech potato.[9] Simplot's Innate™ potatoes are "cisgenic," meaning that the genes used to transform are from the same species—wild and com-

3. Council Regulation 1830/2003, 2003 O.J. (L268/24) 18.10; Council Regulation 178/2002, art. 18, 2002 O.J. (L 31) 1.2.

4. Seeds Regulations, C.R.C., c. 1400 (Can.); Thomas Moran et al., *A Cause of Action for Regulatory Negligence? The Regulatory Framework for Genetically Modified Crops in Canada and the Potential for Regulator Liability*, 6 1-2 U. OTTAWA L. & TECH. J. 1, 6 (2009).

5. *See Clearfield® Delivers Effective, Season-long Weed Control*, BASF, http://www.agro.basf.com/agr/AP-Internet/en/content/solutions/herbicides/clearfield/index?mid=1 (last visited Oct. 9, 2015) (chemical mutagenesis can create herbicide-resistant crops).

6. *See* Didier Breyer et al., Commentary, *Genetic Modification Through Oligonucleotide-Mediated Mutagenesis. A GMO Regulatory Challenge?*, 8 ENVTL. BIOSAFETY RES. 57 (2009), *available at* http://www.cibus.com/pdfs/EU_Belgium_report_ebr0910_100709.pdf (cisgenesis and oligonucleotide-mediated mutagenesis are examples of these new gene editing techniques).

7. *See* Maria Lusser & Emilio Rodriguez Cerezo, *Comparative Regulatory Approaches for New Plant Breeding Techniques*, JRC SCI. & TECHNICAL REP. 2012, at 13.

8. *APHIS Announces Deregulation of J.R. Simplot Company's Potato Genetically Engineered for Low Acrylamide Potential and Reduced Black Spot Bruise*, ANIMAL & PLANT HEALTH INSPECTION SERV., USDA (Nov. 24. 2014), http://www.aphis.usda.gov/wps/portal/aphis/newsroom/news/sa_federal_register_posts/sa_by_date/sa_2014/sa_11/ct_ge_potatoes/!ut/p/a0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOK9_D2MDJ0MjDzdXUyMDTzdPA2cAtz8jT1dTPULsh0VAbiDHEw!/.

9. *See P&G to Recall Pringles in Japan*, BBC NEWS (July 17, 2001, 12:52), http:news.bbc.co.uk/2/hi/business/1443154.stm.

mercial potatoes.[10] Simplot plans to get regulatory approval for Innate™ potatoes in "Japan, Mexico, and Canada as a 'safety blanket,' but has no intention of exporting [the potatoes] for at least two years."[11]

Some of the new crops being produced will use plant breeding methods that silence genes or edit DNA to produce new traits worthy of agricultural production.[12] Regulatory bodies around the world are evaluating whether or not to regulate these crops and how to best regulate them.[13] Canada has a standard that would call such crops "novel" enough to merit regulation, while U.S. agencies are less certain about how or why regulation may be required.[14] Overseas, Japan, Europe, and other nations are assembling experts and evaluating whether to regulate new plant breeding methods.[15] To the extent that these biotech crops are regulated for export to these markets, exporting the crops may also trigger litigation risks if the producers have not obtained approval.

As will be discussed below, biotech crops have provided billions of dollars of economic benefit to producers and the economy in general[16], but some biotech crops have become the subject of billion-dollar litigation settlements.[17]

II. LITIGATION OVER BIOTECH CROPS

Twenty years after their first commercial introduction, biotech crops have

10. *See* Rebecca Randall, *Avoiding "Foreign Genes" Trap: Tale of Two Potatoes Highlights New Era of GE Crops*, GENETIC LITERACY PROJECT (Jan. 6, 2015), http://www.geneticliteracyproject.org/2015/01/06/avoiding-foreign-genes-trap-tale-of-two-potatoes-highlights-new-era-of-ge-crops/.

11. John O'Connell, *USDA Deregulates Biotech Potato*, CAPITAL PRESS (Nov. 7, 2014, 1:29 PM), http://www.capitalpress.com/Nation_World/Nation/20141107/usda-deregulates-biotech-potato.

12. *See* Donald Sutherland, *Organic Mutagenic/Cell Fusion Hybrid Seeds are Genetically Engineered*, FOOD SAFETY NEWS (May 15, 2014), http://www.foodsafetynews.com/2014/05/draft-a-gmo-conundrum-organic-mutageniccell-fusion-hybrid-seeds-are-genetically-engineered/#.VO9CtaPnaUk.

13. *See* Moran, *supra* note 4.

14. *Compare id.*, *with* THE LAW LIBRARY OF CONGRESS, RESTRICTIONS ON GENETICALLY MODIFIED ORGANISMS: UNITED STATES, http://www.loc.gov/law/help/restrictions-on-gmos/usa.php#_ftn.1 (last updated June 9, 2015).

15. Lusser & Rodríguez Cerezo, *supra* note 7, at 14.

16. *ISAAA Brief 46-2013: Executive Summary, Global Status of Commercialized Biotech/GM Crops: 2013*, INT'L. SERV. FOR THE ACQUISITION OF AGRI-BIOTECH APPLICATIONS, http://www.isaaa.org/resources/publications/briefs/46/executivesummary/ (last visited Oct. 9, 2015) [hereinafter *ISAAA Brief 46-2013*].

17. Tom Polansek, *Syngenta Drops Lawsuit Against Bunge over Biotech Viptera Corn*, REUTERS (Dec. 17, 2014, 12:08 PM), http://www.reuters.com/article/2014/12/17/syngenta-ag-bunge-lawsuit-idUSL1N0U101I20141217 [hereinafter *Syngenta Drops Lawsuit*].

proven their worth by providing growers with billions of dollars of economic benefit, improving the environment in some respects, and assisting some nations in maintaining sound economies.[18]

In response to the research and development of biotech crops, various lawsuits have been pursued over the years by activists who oppose biotech crops.[19] Nearly all of these lawsuits have involved claims that the biotech producer failed to obtain the appropriate regulatory approvals.[20] Although anti-biotech activists have claimed biotech crops cause adverse health effects and environmental devastation,[21] the "harm" arising from the use of agricultural biotechnology has been solely economic to date.[22] While not seeking to be inclusive of all of the litigation involving biotech crops, this section profiles the types of lawsuits that have been pursued and explores their doctrinal boundaries.

The year 2014 saw a historic turning point in biotech crop litigation, as Syngenta was sued in federal and state courts across the farm belt over its sale of the Agrisure Viptera ("Viptera" or "MIR162") corn trait prior to obtaining importation and cultivation approval from the Ministry of Agriculture in the People's Republic of China ("China").[23] While defending against these lawsuits, Syngenta was also pursuing its own lawsuit against the grain trade related to Chinese regulatory approval delays in 2011, which it recently dismissed.[24] The issue of whether Syngenta has to obtain "major market approval" in various nations will be teed up for litigation in U.S. federal courts in coming years.[25]

With pending lawsuits in the U.S. seeking to establish whether a crop approved in the U.S. can be a nuisance or the basis of a negligence action (such as

18. *See ISAAA Brief 46-2013*, *supra* note 16.

19. *See, e.g.*, Organic Seed Growers & Trade Ass'n v. Monsanto Co., 718 F.3d 1350, 1353 (Fed. Cir. 2013).

20. *See* Syngenta Seeds, Inc. v. Bunge N. Am., Inc., 906 F. Supp. 2d 827, 830 (N.D. Iowa 2012).

21. *10 Reasons to Avoid GMOs*, INST. FOR RESPONSIBLE TECH., http://www.responsibletechnology.org/10-Reasons-to-Avoid-GMOs (last visited Oct. 9, 2015).

22. *See* Peter L. Resnik et al., *Food Fights: Genetically Modified Food and the Law*, A.B.A., Summer 2007, at 1, *available at* http://www.mwe.com/info/pubs/the_brief_summer07.pdf.

23. Tom Meersman, *Syngenta's GMO Product Dispute Widens as Farmers File Class-Action Lawsuits*, STARTRIBUNE (Oct. 11, 2014, 5:01 PM), http://www.startribune.com/business/278846261.html; *see, e.g.*, *In re* Syngenta AG MIR 162 Corn Litig., 2015 U.S. Dist. LEXIS 124087, at *182 (D. Kan. Sept. 11, 2015).

24. *See Bunge N. Am., Inc.*, 906 F. Supp. 2d at 829.

25. *See, e.g.*, Complaint and Demand for Jury Trial, Trans Coastal Supply Co., Inc. v. Syngenta AG, No. 14-2221 (C.D. Ill. Sept. 12, 2014).

failing to meet a duty of care to protect major markets overseas), there is a significant turning point ahead. For the first time in the history of litigation over biotech crops, a claim for nuisance or negligence will be made against a crop that has full approval for marketing in the United States.[26] Given the history of similar litigation involving StarLink™ ("StarLink") corn[27] and LibertyLink ("LL") rice[28], the pending Syngenta litigation[29] could expand the boundaries of common law claims for nuisance and negligence, which courts have traditionally adapted to address novel challenges and economic harms occurring in society.[30]

A. Syngenta Litigation Regarding Major Market Approval in Federal and State Courts

Syngenta has made itself the target for litigation and initiated its own case to defend its assumed right to sell biotech corn before having major market approval, in this instance, from China.[31] Syngenta initiated the litigation by suing a grain trader in 2011;[32] and then three grain traders sued Syngenta in 2014.[33] The litigation expanded in 2015 to include growers in 22 states who filed class actions alleging damages[34] in excess of $1 billion.[35] While MIR162 has been ap-

26. Syngenta Seeds, Inc. v. Bunge N. Am., Inc., 762 F.3d 795, 796-98 (8th Cir. 2014).

27. *In re* StarLink Corn Prods. Liab. Litig. v. Aventis Crop Sci. USA Holding, Inc., 212 F. Supp. 2d 828, 833-34 (N.D. Ill. 2002).

28. *In re* Genetically Modified Rice Litig., 666 F. Supp. 2d 1004, 1014-15 (E.D. Mo. 2009).

29. Complaint and Demand for Jury Trial, *supra* note 25.

30. *In re StarLink Corn Products Liab. Litig*., 212 F. Supp. 2d at 833 (To state a public nuisance claim, "plaintiffs must allege 'an unreasonable interference with a right common to the general public.'" A public right includes public health, safety, comfort, and convenience. "Contamination of food supply implicates health, safety, comfort, and convenience . . . ."); RESTATEMENT (SECOND) OF TORTS § 821B (1965).

31. *See* Syngenta Seeds, Inc. v. Bunge N. Am., Inc., 906 F. Supp. 2d 827, 830 (N.D. Iowa 2012); Ted Wheeler & Lacey Louwagie, *GM Corn Ruined Sales to China, Classes Claim*, COURTHOUSE NEWS SERV. (Oct. 6, 2014, 10:34 A.M.), http://www.courhousenews.com/014/10/06/72147.htm.

32. Wheeler & Louwagie, *supra* note 31.

33. *See* Complaint and Demand for Jury Trial, *supra* note 25 at 1; Gary Baise, *Corn Wars: A Legal Battle Over GMO Traits*, FARM FUTURES (Sept. 29, 2014), http://farmfutures.com/blogs-corn-wars-legal-battle-gmo-traits-8984; Shruti Date Singh, *ADM Sues Syngenta After Corn Shipments to China Rejected*, BLOOMBERG (Nov. 19, 2014, 3:03 PM), http://www.bloomberg.com/news/articles/2014-11-19/adm-sues-syngenta-after-corn-shipments-to-china-rejected.

34. *In re* Syngenta AG MIR 162 Corn Litig., 2015 U.S. Dist. LEXIS 124087, at *182 (D. Kan. Sept. 11, 2015).

35. David Pitt, *Farmers File More than 360 Corn Lawsuits Against Syngenta*, DES MOINES REGISTER (Feb. 6, 2015 11:19 AM),

proved by China as of December 2013, another trait, Duracade 5307, still awaited approval by China as of May 1, 2014, raising a risk for further disruption of U.S. corn exports in the upcoming harvest season.[36]

The litigation involving the Agrisure Viptera trait began in 2011 when Syngenta filed a suit against Bunge North America, Inc. ("Bunge") to challenge Bunge's decision not to accept any corn containing the Viptera trait.[37] As a member of the North American Export Grain Association ("NAEGA"), Bunge's decision was based, at least in part, on the trade group's long-standing policy that technology providers ought to obtain approval from all major export markets for a biotech trait prior to commercializing the seed.[38] The grain export industry, including Bunge, notified Syngenta that China is considered to be a major export market.[39]

On Bunge's motion for judgment on the pleadings and for summary judgment, the district court in *Syngenta Seeds, Inc. v. Bunge North America, Inc.* dismissed Syngenta's claims under the United States Warehouse Act, 7 U.S.C. §§ 241-256, and its third-party beneficiary claims.[40] The court also granted Bunge summary judgment on Syngenta's claim under the Lanham Act, 15 U.S.C. § 1125.[41] On appeal, however, the United States Court of Appeals for the Eighth Circuit vacated the district court's grant of summary judgment on Syngenta's Lanham Act claim and remanded the claim for further proceedings.[42] In December 2014, Syngenta dismissed the case without requiring Bunge to pay anything.[43]

At the same time that Syngenta's appeal was pending in the Eighth Circuit, Cargill, Incorporated ("Cargill") filed a suit against Syngenta in Louisiana state

http://www.desmoinesregister.com/story/money/agriculture/2015/02/06/corn-lawsuits-syngenta/22982143/.

36. *Legal Obligations and Potential Market Impacts Associated with Biotech-Enhanced Seeds Producing Grain Not Approved for Import into U.S. Export Markets*, NAT'L. GRAIN & FEED ASS'N (May 1, 2014), http://www.cenfarmcoop.com/images/E0016301/ngfanonapprovedhybrids.pdf.

37. Syngenta Seeds, Inc. v. Bunge N. Am., Inc., 906 F. Supp. 2d 827, 829 (N.D. Iowa 2012).

38. N. AM. EXP. GRAIN ASS'N, NAEGA STATEMENT ON CROP BIOTECHNOLOGY (2004), http://www.naega.org/images/biotech.pdf.

39. *Bunge Responds to Syngenta Suit*, BUNGE (Aug. 23, 2011), https://www.bungenorthamerica.com/news/28-bunge-responds-to-syngenta-suit.

40. *Bunge N. Am., Inc.*, 906 F. Supp. 2d at 831-32.

41. *Id.* at 839.

42. Syngenta Seeds, Inc. v. Bunge N. Am., Inc., 762 F.3d 795, 801 (8th Cir. 2014).

43. *Syngenta Drops Lawsuit*, *supra* note 17.

court.[44] Cargill challenged the Swiss seed maker's decision to sell Viptera corn seeds prior to obtaining approval in China in light of China's rejection of U.S. corn shipments beginning in late 2013.[45] Cargill's complaint alleges that "Syngenta's continued release, promotion, and sale of Viptera has resulted in the contamination of the Cargill Plaintiff's corn" which amounted to negligence and knowing, reckless, or willful misconduct.[46] While Cargill has alleged that Syngenta's "contamination" of the corn supply with MIR162 cost the U.S. grain company $90 million, an economist for the National Grain and Feed Association ("NGFA") has estimated a total of $1 billion to $2.9 billion in losses to U.S. corn, distillers dried grains with solubles ("DDGS"), and soybean exports.[47]

Although Syngenta applied for food and feed as well as cultivation approval from China in 2010, Cargill alleges that the delay in receiving approval from China was caused by Syngenta's decision to also seek planting approval for seed.[48] To expedite the approval process, other companies have only sought food and feed approval[49], not planting approval, in China and the European Union ("EU"). In response, Syngenta has asserted that it had withdrawn its planting approval request and that none of Cargill's claims have merit.[50] Moreover, since the Viptera trait was approved for cultivation in the U.S. in 2010, Syngenta asserts that it commercialized the trait in full compliance with regulatory and legal requirements.[51]

Following Cargill's example, Archer Daniels Midland Company ("ADM") filed another lawsuit against Syngenta in Louisiana state court in November of 2014.[52] ADM's claims against Syngenta include negligence, violations of Loui-

44. Petition for Damages at 1, Cargill, Inc. v. Syngenta Seeds, Inc., (40th Jud. Dist., La. Sept. 12, 2014) (No. 2:14-cv-02388-LMA-DEK).

45. *Id.* at 2-3.

46. *Id.* at 17-20.

47. *Id.* at 2-3; Jacob Bunge, *Cargill Sues Syngenta Over Sale of GMO Seeds Unapproved in China*, WALL ST. J., Sept. 12, 2014, http://www.wsj.com/articles/cargill-sues-syngenta-says-gmo-seed-sales-hurt-u-s-corn-exports-to-china-1410542784.

48. Petition for Damages, *supra* note 44, at 15-17.

49. *See* JIKUN HUANG & JUN YANG, CHINA'S AGRICULTURAL BIOTECHNOLOGY REGULATIONS – EXPORT AND IMPORT CONSIDERATIONS, INT'L FOOD & AGRIC. TRADE POLICY COUNCIL (2011) *available at* http://www.agritrade.org/Publications/documents/LLPChina.pdf.

50. *See Syngenta Responds to Cargill Lawsuit*, SYNGENTA (Sept. 12, 2014), http://www.syngenta.com/global/corporate/en/news-center/news-releases/Pages/140912.aspx.

51. *Syngenta Receives Chinese Import Approval for Agrisure Viptera Corn Trait*, SYNGENTA (Dec. 22, 2014), http://www.syngenta.com/global/corporate/en/news-center/news-releases/Pages/141222.aspx; *see Syngenta Responds to Cargill Lawsuit*, *supra* note 50.

52. Petition for Damages, Archer Daniels Midland Co. v. Syngenta Corp., No. 79-219 (29th Jud. Dist., La. Nov. 19, 2014).

siana's Unfair Trade Practices and Consumer Protection Act, and conversion.[53]

In the federal courts, two other grain traders, Trans Coastal Supply[54] and Stracener Farming Co., filed similar lawsuits against Syngenta in September 2014.[55] In the following months, multiple grower class actions were filed against Syngenta in federal courts in Iowa, Illinois, Missouri, Nebraska, and Kansas related to the impact of the trade disruption on corn prices.[56] The grower class actions all allege that China's ban on U.S. corn exports due to traces of MIR162 corn resulted from Syngenta's negligent decision to sell MIR162 to a small number of U.S. corn farmers without adequately protecting the export corn supply (e.g., by identifying U.S. feeding operations to purchase the corn).[57] Because China had become the third-largest export market for U.S. corn in recent years,[58] the growers alleged that U.S. farmers incurred significant damages due to drops in corn prices resulting from the loss of China as an export market.[59] Syngenta knew that it lacked approval from Chinese authorities, but allegedly misled farmers, grain elevators, grain exporters, and the general public into believing that regulatory approval of MIR162 corn from China was imminent and that the lack of Chinese approval would not impact corn market prices.[60] All of the federal court cases were consolidated and assigned to Judge John W. Lungstrum in the U.S. District Court for the District of Kansas for coordinated or consolidated pretrial proceedings under a Transfer Order issued by the U.S. District Panel on Multidistrict Litigation issued on December 11, 2014.[61] The court cited three

53. *Id.* at 17-18.

54. Complaint and Demand for Jury Trial, *supra* note 25; *see also* Tom Polansek, *Syngenta Faces Second Lawsuit over GMO Corn Rejected by China*, REUTERS (Sept. 16, 2014, 8:04 PM EDT), http://www.reuters.com/article/2014/09/17/us-syngenta-seed-trans-coastal-idUSKBN0HB2OQ20140917.

55. Complaint, Stracener Farming Co. v. Syngenta AG, No. 4:14-cv-00558-BSM (E.D. Ark. Sept. 18, 2014).

56. Complaint, Five Star Farms v. Syngenta AG, No. 14-cv-02571-JWL-JPO (D. Kan. Dec. 18, 2014); Complaint, Coulthard Farms, LLC v. Syngenta Seeds, Inc., No. 1:14-cv-00032-SMR-HCA (S.D. Iowa Nov. 21, 2014); Complaint, Wilson Farm Inc. v. Syngenta AG, No. 4:14-cv-01908 (E.D. Mo. Nov. 11, 2014); Complaint, Briggs v. Syngenta Seeds, Inc., No. 3:14-CV-01072-DRH-DGW (S.D. Ill. Oct. 31, 2014); Complaint, Volnek Farms, Inc. v. Syngenta Corp., No. 8:14-cv-305 (D. Neb. Oct. 3, 2014) .

57. *See, e.g.*, Demand for Jury Trial at 3, W. Edgar Wilman 2000 Trust v. Syngenta Corp., No. 43-CV-14-514 (Ark. Cir. Ct. Oct. 23, 2014).

58. RONALD ROSS WATSON & VICTOR R. PREEDY, GENETICALLY MODIFIED ORGANISMS IN FOOD 22 (2015).

59. *See, e.g.*, Demand for Jury Trial, *supra* note 57, at 3.

60. *In re* Syngenta AG MIR162 Corn Litig., No. 2591, 2014 WL 7006999 (J.P.M.L. Dec. 11, 2014).

61. *In re* Syngenta AG MIR 162 Corn Litig., 2015 U.S. Dist. LEXIS 124087 (D. Kan.

past MDL orders involving StarLink corn, Liberty Link rice and Roundup Ready wheat.[62] Because Cargill and ADM filed their claims in state court, they are not subject to the Transfer Order consolidating the federal cases in the District of Kansas.[63]

Although China ultimately approved Syngenta's MIR162 trait for import in December 2014,[64] these cases nevertheless will test the boundaries of nuisance and negligence law in protecting export markets, as the grain trade has long demanded stewardship for regulatory compliance (known as "major market approval" in industry parlance).

B. Monsanto's Wheat Woes

In comparison to Syngenta, Monsanto Company ("Monsanto") has managed to avoid a significant amount of negligence litigation over major market approval. This is due to Monsanto's strong stewardship commitment, which has led Monsanto to obtain approval in more overseas markets than any other company for its flagship product: the Roundup Ready™ Soybean.[65]

However, Monsanto has not been entirely immune to litigation.[66] The company has been subject to lawsuits related to unapproved events that allegedly escaped from field trials.[67] In fact, Monsanto recently agreed to pay a relatively small settlement to soft white wheat producers who sued Monsanto because of the presence of unapproved biotech wheat that allegedly escaped from field trials over a decade ago.[68] In late 2013, a small stand of Monsanto's Roundup Ready™ biotech wheat was discovered on a farm in Oregon.[69] The USDA Ani-

Sept. 11, 2015).

62. *See In re Syngenta AG MIR162 Corn Litig*., 2014 WL 7006999, at *1.

63. *See id.*

64. Alison Rice, *[Update] China Approves MIR162 Corn for Import*, AGWEB, http://www.agweb.com/article/update-China-approves-mir-162-corn-for-import-alison-rice/ (last visited Oct. 9, 2015).

65. *Event Name: GTS 40-3-2 (40-3-2)*, INT'L SERV. FOR THE ACQUISITION OF AGRI-BIOTECH APPLICATIONS, http://www.isaaa.org/gmapprovaldatabase/event/default.asp?EventID=174 (last visited Oct. 9, 2015).

66. *See, e.g.*, *In re* Monsanto Co. Genetically-Engineered Wheat Litig., 978 F. Supp. 2d 1373, 1373-74 (J.P.M.L. 2013).

67. *See, e.g.*, *id.*

68. Press Release, Monsanto, Monsanto Company and Wheat Farmers Reach Settlement Agreement (Nov. 12, 2014), http://news.monsanto.com/press-release/research-and-development/monsanto-company-and-wheat-farmers-reach-settlement-agreement.

69. Eric Mortenson, *Genetically Modified Wheat: Oregon Growers Shocked at Discovery, Seek to Reassure Export Markets*, THE OREGONIAN, June 4, 2013, *available at*

mal and Plant Health Inspection Service ("APHIS") investigated the situation and concluded that the presence of the biotech wheat was a truly isolated incident; APHIS found no evidence of biotech wheat in commerce.[70] Subsequently, soft white wheat farmers in Idaho, Oregon, and Washington filed suits against Monsanto alleging that Monsanto failed to properly isolate its genetically-modified soft white wheat to prevent contamination of the conventional soft white wheat supply, which temporarily disrupted exports of soft white wheat.[71] In November, 2014, Monsanto entered into a settlement, without admitting liability, under which it agreed to pay $2.4 million to settle the claims arising out of the isolated discovery of its genetically-modified wheat.[72]

Around the same time that APHIS released its report in late 2014, APHIS learned that another biotech wheat was growing illegally at a research facility in Montana where USDA-authorized field trials had taken place from 2000 to 2003 (before Monsanto abandoned its efforts to commercialize wheat due to the lack of support from the food industry for use of the wheat).[73] Genetic testing showed that the biotech wheat present at the Montana research facility was significantly different from the genetically-engineered wheat found growing at the Oregon farm the previous year.[74] Additionally, the genetic trait detected in the wheat in Montana and Oregon did not present a food safety issue; FDA completed a food safety consultation for the biotech wheat in 2004 and identified no food safety concerns.[75]

To date, "APHIS has not deregulated any biotech wheat varieties . . . thus,

http://www.oregonlive.com/business/index.ssf/2013/06/genetically_modified_wheat_ore.html ; *see also* Andrew Pollack, *Modified Wheat is Discovered in Oregon*, N.Y. TIMES, May 29, 2013, *available at* http://www.nytimes.com/2013/05/30/business/energy-environment/genetically-engineered-wheat-found-in-oregon-field.html?_r=0 (Monsanto's experimental wheat was resistant to the herbicide glyphosate (Roundup™)).

70. Press Release, USDA, Animal and Plant Inspection Serv., USDA Announces Close and Findings of Investigation into the Detection of Genetically Engineered Wheat in Oregon in 2013 (Sept. 26, 2014), http://www.aphis.usda.gov/newsroom/2014/09/pdf/ge_wheat.pdf.

71. *See* Mateusz Perkowski, *Monsanto to Pay $2.4 Million to Wheat Farmers, Groups*, CAPITAL PRESS (Nov. 12, 2014, 12:43 PM), http://www.capitalpress.com/Nation_World/Nation/20141112/monsanto-to-pay-24-million-to-wheat-farmers-groups.

72. Elizabeth Barber, *Monsanto Reaches $2.4M Settlement with U.S. Wheat Farmers*, TIME, Nov. 13, 2014, *available at* http://time.com/3582953/monsanto-wheat-farming-genetically-modified-settlement/.

73. Gina-Marie Cheeseman, *Illegal GMO Wheat Found Growing in Montana*, NATURALLY SAVVY (Sept. 30, 2014), http://naturallysavvy.com/live/illegal-gmo-wheat-found-growing-in-montana.

74. *Id.*

75. Press Release, USDA, *supra* note 70.

there are no [biotech] wheat varieties for sale or in commercial production in the United States."[76] However, the leading wheat grower associations in the U.S. have endorsed biotech wheat, given lagging yields.[77]

C. Inadvertent Reproduction of Patented Seed

In a peculiar case, various organic seed growers and their trade association filed a lawsuit to stop Monsanto from taking legal action against growers whose crops may unintentionally contain Roundup Ready.[78] The district court in *Organic Seed Growers & Trade Ass'n v. Monsanto Co.* found that the plaintiffs had not demonstrated that there was an actual controversy involving Monsanto's patents because Monsanto had told the court it did not plan to go after errant pollen as a basis for litigation against the plaintiffs or any other growers.[79] Unless growers spray their crops with glyphosate to select for those genes, they are unlikely to find themselves under Monsanto's scrutiny.[80] This was illustrated by a Canadian canola grower named Percy Schmeiser nearly a decade ago when the Supreme Court of Canada ruled that Schmeiser violated Monsanto Canada Inc.'s patent by spraying and then sowing patented canola.[81]

D. Bayer's Billion Dollar LibertyLink Rice Settlement

The fiscal year 2014 saw Bayer CropScience ("Bayer") continue to try to resolve the entirety of the lawsuits filed over commingling of its unapproved LL rice events.[82] After LL rice commingled with the conventional rice supply in the late 1990s, USDA found the rice growing all over the farm belt in 2006, which subsequently triggered food recalls in Europe and caused U.S. rice prices to plunge fourteen percent in 2007.[83]

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76. *Id.*

77. Sean Pratt, *Breeder Annoyed GM Given Credit for Yield Hikes*, THE W. PRODUCER (Nov. 13, 2014), http://www.producer.com/2014/11/breeder-annoyed-gm-given-credit-for-yield-hikes/.

78. Organic Seed Growers & Trade Ass'n v. Monsanto Co., 718 F.3d 1350, 1352 (Fed. Cir. 2013).

79. *Id.*

80. *Id.* at 1354.

81. Kirk Makin, *Monsanto Wins Key Biotech Ruling*, THE GLOBE & MAIL (May 21, 2004 11:57 AM EDT), http://www.theglobeandmail.com/news/national/monsanto-wins-key-biotech-ruling/article1137212/.

82. BAYER AG, ANNUAL REPORT 2013 309 (Jörg Schäfer, ed., 2014) [hereinafter ANNUAL REPORT 2013].

83. *See, e.g.*, A. Bryan Endres & Nicholas R. Johnson, *750 Million Settlement in GM Rice Contamination*, U. OF ILL. AT URBANA CHAMPAIGN (July 8, 2011), http://farmdocdaily.illinois.edu/2011/07/750-million-settlement-in-gm-r.html; Lisa Shumaker,

As of January 15, 2015, the cost of these rice settlements for Bayer has exceeded 750 million dollars.[84] Based on Bayer's financial news to its shareholders in its 2012 annual report, Bayer's settlement of $750 million to growers is nearly paid out, and Bayer has paid processors at least one large settlement of $168 million.[85] The total cost of Bayer's liability for the LL rice commingling, however, remains to be determined. In this 2012 annual report, the parent of Bayer CropScience, Bayer AG, stated that Bayer was aware of approximately 80 lawsuits with around 1,200 plaintiffs still pending in U.S. federal and state courts as of February 12, 2013.[86] Bayer hopes that most of these cases will be dismissed upon completion of the settlement with rice growers, but that will not resolve all of the claims. Bayer still faces pending actions brought by growers representing six percent of U.S. rice acreage and sixteen processors, as well as the biotech seed company BASF.[87] In the 2013 report, Bayer's total litigation expense (including other liabilities) was $1.298 billion, with 2013's liability falling to $276 million.[88] No separate number was stated for this 2013 figure, but it probably includes some recent LL rice settlements.[89]

In addition to the grower claims, BASF sued Bayer to recover damages from the contamination of its Clearfield 131 rice variety with LL Rice.[90] In reply, Bayer filed a counterclaim against BASF, alleging that BASF was negligent in its handling of Clearfield 131 and that its "comparative fault" should limit the damages recovered.[91] Bayer also wanted BASF to pay for a portion of the total settlement amount that Bayer has paid throughout this litigation.[92] Cumulatively, all of these pending cases may cause the total damages paid to exceed the $1.3 billion estimate provided by activists in 2008.[93]

U.S. GMO Rice Caused $1.2 Bln in Damages—Greenpeace, REUTERS (Nov. 5, 2007, 11:54 PM), http://reuters.com/article/2007/11/06/idUSIndia-30351820071106.

84. Kira Lerner, *Riceland Says Fed. Courts Can't Touch Bayer MDL Settlement*, LAW 306 (Oct. 3, 2014 3:38 PM ET), http://www.law360.com/articles/584012/riceland-says-fed-courts-can-t-touch-bayer-mdl-settlement.

85. *See, e.g.*, Endres & Johnson, *supra* note 83; BAYER, STOCKHOLDERS' NEWSLETTER (2012), http://www.stockholders-newsletter-q2-2012.bayer.com/en/bayer-stockholders-newsletter-2q-2012.pdfx.

86. BAYER AG, BAYER ANNUAL REPORT 2012 276 (Jörg Schäfer, ed., 2013) [hereinafter ANNUAL REPORT 2012].

87. ANNUAL REPORT 2013, *supra* note 82, at 324; *see* ANNUAL REPORT 2012, *supra* note 86.

88. ANNUAL REPORT 2013, *supra* note 82, at 271.

89. *See id.* at 276.

90. *Id.*

91. *Id.* at 274.

92. *Id.* at 276.

93. Andrew Harris & Margaret Cronin Fisk, *Bayers Faces 1,200 Rice Contamination*

As the total settlement amount for the rice settlements passes $1 billion, Bayer's costs exceed the reported settlement costs in the 2000 to 2002 StarLink genetically-modified corn commingling debacle, which paved the way, in terms of legal precedents, for the LL rice commingling lawsuits.[94] Additionally, Bayer's acquisition of the assets of Aventis CropScience ("Aventis") caused Bayer to be assessed punitive damages as a "successor;" thus, making the same mistakes twice.[95] The StarLink case featured a similar settlement between Bayer's corporate predecessor, Aventis CropScience USA/StarLink Logistics, Inc., and thousands of corn farmers adversely affected by the commingling of StarLink corn with commodity corn for months at food and export channels.[96]

By comparison, the billion-dollar-plus settlements in the LL rice commingling case are surprisingly large. U.S. rice exports to the EU were relatively small (approximately 3000 metric tons in 2006) compared to U.S. corn approximately (54,000 metric tons in 2006) or wheat exports (approximately 25,000 metric tons in 2006).[97] Based on the jury verdicts awarding such inflated compensatory damages, it is clear that the growers' economic impact experts provided a creative analysis of the economic harm during their testimony.

E. Aventis and the StarLink Corn Recall

The first "mass tort" involving a "physical injury" to corn and loss of markets caused by agricultural biotechnology involved multiple class actions and individual claims by growers and consumers filed against Aventis.[98] Although Aventis obtained approval for animal feed and biofuel production, Aventis sold StarLink corn without obtaining food approval.[99] In the fall of 2000, Friends of the Earth, an activist group armed with genetic tests, first discovered StarLink corn in taco shells.[100] StarLink corn was reportedly found in Japan and South

Suits, GMWATCH (Oct. 16, 2008), http://www.gmwatch.org/index.php/news/archive/2008/565-bayer-faces-1200-rice-contamination-suits.

94. ANNUAL REPORT 2013, *supra* note 82, at 276.

95. *Id.*

96. *In re* StarLink Corn Prods. Liab. Litig. v. Aventis Crop Sci. USA Holding, Inc., 212 F. Supp. 2d 828 (N.D. Ill. 2002).

97. *Custom Query*, USDA, FOREIGN AGRIC. SERV., http://apps.fas.usda.gov/psdonline/psdquery.aspx (Commodity as rice, corn, or wheat, Data Type as Export, Country as United States, Year as 2006).

98. *In re Starlink Corn Prods. Liab. Litig.*, 212 F. Supp. 2d at 833.

99. Melinda Folmer & Leslie Earnest, *Taco Bell's Shells in First Bioengineered-Food Recall*, L.A. TIMES, Sept. 23, 2000, *available at* http://articles.latimes.com/2000/sep/23/news/mn-25352.

100. *Id.*

Korea in October 2000.[101] By 2001, the supply chain for corn in the U.S. was in chaos, with no separation between StarLink and the U.S. corn supply.[102] In January, 2001, Aventis launched a testing and buyback program – the StarLink Enhanced Stewardship ("SES") program – in seventeen states at an estimated cost of between $100 million and $1 billion.[103] Because StarLink lowered the price of U.S. corn by seven percent, a massive class action was filed on behalf of growers because of the negative economic impact on corn prices, alleging nuisance, negligence, and other legal claims.[104] The growers sought compensatory damages, as well as an injunction for the "public nuisance" which they claimed was caused in the chain of commodity commerce by the FDA-mandated recall of StarLink corn.[105]

On July 11, 2002, a federal district court judge in the Northern District of Illinois denied a motion to dismiss the "novel" claims brought by the growers injured by StarLink corn.[106] Shortly thereafter, the massive class action settled for up to $110 million, with notice sent to the thousands of growers who lost money due to depressed corn prices.[107]

F. GMOs are not "Natural"

In response to the increased use of genetically-modified crops, activists have focused on publicizing genetically-modified content in food products and boycotting major food companies. General Mills was the target of one such "outing" campaign due to the presence of genetically-modified content in Cheerios.[108]

101. Mark Magnier, *Report of StarLink Corn in Japan Heats up Debate*, L.A. TIMES, Oct. 26, 2000, *available at* http://articles.latimes.com/2000/oct/26/business/fi-42182.

102. *See* William Lin et al., *Starlink™: Where No CRY9C Corn Should Have Gone Before*, CHOICE, Winter 2000-2001 at 31, 32.

103. D.L. Uchtmann, *StarLink™ – Case Study of Agricultural Biotechnology Regulation*, 7 DRAKE J. AGRIC. L. 159, 193 (2002); Sarah Lueck et al., *Corn Recall Cost Could Reach Hundreds of Millions Even as Some Firms Benefit*, WALL ST. J., Nov. 3, 2000.

104. *See* Uchtmann, *supra* note 103, at 196.

105. *In re* StarLink Corn Prods. Liab. Litig. v. Aventis Crop Sci. USA Holding, Inc., 212 F. Supp. 2d 828, 833, 839 (N.D. Ill. 2002).

106. *Id.* at 852.

107. Paul Elias, *Biotech Firms will Pay $110 Million to Settle StarLink Corn Lawsuit*, THE TOPEKA CAPITAL-JOURNAL (Feb. 7, 2003), *available at* http://cjonline.com/stories/020703/usw_biotech.shtml#.VWVZA6Mo6UK.

108. Cheerios is America's favorite brand of breakfast cereals, with approximately 6.4 million people in the U.S. eating Honey Nut Cheerios. Cheeriosis an iconic brand that is one of the most trusted cereals for parents with new babies, being the first solid food that many infants in the U.S. consume. *See U.S. Consumers to Say 'Cheerio' to GMOs*, GMEDUCATION.ORG (Jan. 18, 2013), http://www.gmeducation.org/latest-news/p204099-us-consumers-to-saycheerioto-gmos.html.

Notably, the campaign was launched after General Mills' CEO, Ken Powell, gave a speech in opposition to state laws on genetically-modified labeling.[109] At an annual shareholder meeting in September, 2013, Mr. Powell stated that "GMOs are safe and poised to feed the world."[110] Activists who oppose GMOs claimed that General Mills misleadingly promoted Cheerios as made with 100% "natural whole grain oats" when some of the other ingredients in Cheerios, such as modified corn starch, beet sugar, and vitamin E from soybeans, were probably from biotech sources.[111]

General Mills cited the consensus of scientific studies to demonstrate the safety of its biotech inputs,[112] while activists cited the discredited animal study on genetically-modified corn by Gilles-Eric Séralini, to claim that there is a growing body of scientific research showing toxic effects.[113]

General Mills is by no means the only company that has been hauled into court over its use of the phrase "all natural" on a product containing genetically-modified content. For instance, in *Randolph v. J.M. Smucker Co.*, plaintiff objected to the label "All Natural"[114] on Crisco cooking oils because the cooking oils contained ingredients made from biotech crops.[115] The court held that the state law action for false labeling was not valid because no action had been taken

109. Elizabeth O'Connell, *Update from General Mills' Shareholder Meeting: A Long Way to Go*, GREEN AM. BLOG (Sept. 24, 2013), http://blog.greenamerica.org/2013/09/24/update-from-general-mills-shareholder-meeting-a-long-way-to-go/.

110. *Id.*

111. *Say Cheerio to Honey Nut GMOs!*, GMOINSIDE.ORG, http://action.greenamerica.org/p/dia/action/public/?action_KEY=9239 (last visited Oct.19, 2015).

112. *On GMOs*, GEN. MILLS, http://www.generalmills.com/News/Issues/on-biotechnology (last visited Oct. 19, 2015) (links to studies and GMO approval by various organizations and administrations).

113. *See* Press Release, Green Am., Green America: General Mills – Maker of Cheerios – Flunks Corporate Leadership Test on Handling of Genetically Modified Organisms in Food (Oct. 16, 2013), http://www.greenamerica.org/about/newsroom/releases/2013-10-16-General-Mills-Cheerios-Genetically-Modified-Organisms-in-Food.cfm; *Relevant Research*, GMO SERALINI, http://www.gmoseralini.org/research-papers/.

114. Food Labeling: Declaration of Ingredients; Common or Usual Name for Nonstandardized Foods; Diluted Juice Beverages; Technical Amendments, 58 Fed. Reg. 44059, 44061 (Aug. 18, 1993) (to be codified at 21 C.F.R. pts. 101-02) (FDA has stated that the term "natural" on food labeling means "nothing artificial or synthetic (including all color additives regardless of source) has been included in, or has been added to, a food that would not normally be expected to be in the food.").

115. Randolph v. J.M. Smucker Co., 303 F.R.D. 679, 683 (S.D. Fla. 2014).

by FDA.[116] Prior to *Randolph*, federal courts stayed litigation involving claims that food companies deceived consumers by labeling products with genetically modified ingredients as "natural."[117] The courts referred questions to FDA about whether a "natural" designation can be used on products containing genetically modified ingredients, and in January 2014, FDA responded by declining to define the term "natural."[118] FDA asserted that defining the term "natural" would require revoking, amending, or adding the current policy, as well as involving other federal agencies such as the USDA.[119] Moreover, the FDA asserted that it is currently focusing its limited resources on issuing nutrition labeling regulations and implementing the Food Safety Modernization Act.[120]

G. The National Environmental Policy Act

In the early 1980s, anti-biotech activists used the National Environmental Policy Act ("NEPA") to challenge federal approval of the first genetically modified organism to seek approval, when the "ice-minus" bacteria was proposed for release, only to have a court enjoin approval pending environmental impact review.[121] Over two decades later, a federal district court in California used NEPA to upset the alfalfa-cart on its way to market by enjoining cultivation of genetically engineered alfalfa on the grounds that USDA must conduct a more thorough environmental impact statement ("EIS") that addresses interrelated economic and environmental impacts on non-biotech varieties.[122]

The biotech crop approval process falls under the jurisdiction of USDA's Biotechnology Regulatory Services ("BRS"), which assesses the environmental impacts of biotech crops.[123] If BRS finds no significant impact after review of

116. *See id.* at 694-95.

117. *See* Barnes v. Campbell Soup Co., No. C12 – 05185 JSW, 2013 WL 5530017, at *1, *9 (N.D. Cal. July 25, 2013); Cox v. Gruma Corp., No. 12-CV-6502 YGR, 2013 WL 3828800, at *1, *2 (N.D. Cal. July 11, 2013); *In re* Gen. Mills, Inc. Kix Cereal Litig., No. 12-249(KM), 2013 WL 5943972, at *1 (D.N.J. Nov. 1, 2013).

118. Letter from Leslie Kux, Assistant Comm'r for Policy, FDA, to the Honorable Yvonne Gonzalez Rogers, Jeffrey S. White, and Kevin McNulty (Jan. 6, 2014), *available at* http://www.hpm.com/pdf/blog/FDA%20Lrt%201-2014%20re%20Natural.pdf.

119. *Id.*

120. *See* Michael Taylor, *The Future is Now for the Food Safety Modernization Act*, FOOD SAFETY NEWS (Mar. 17, 2015), http://www.foodsafetynews.com/2015/03/the-future-is-now-for-the-food-safety-modernization-act/#.vsapk6Mo6UK.

121. Found. on Econ. Trends v. Heckler, 587 F. Supp. 753, 755-56, 769 (D.D.C. 1984), *aff'd in part & vacated in part*, 756 F.2d 143, 160 (D.C. Cir. 1985).

122. *See* Geertson Seed Farms v. Johanns, 2007 U.S. Dist. LEXIS 14533, at *38 (N.D. Cal. 2007) (order granting preliminary injunction).

123. *Biotechnology Regulatory Servs.*, ANIMAL & PLANT HEALTH INSPECTION SERV.,

public comments under NEPA, BRS grants the deregulation petition, clearing the way for the developer to commercialize the biotech crop.[124] The EPA has roles in crops that resist herbicides (to approve herbicide uses and warnings) or pests covered under the The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).[125]

The use of litigation to challenge USDA's field trial policies for biotech crops has led to recent district court decisions finding fault with USDA issuing a "finding of no significant impact" ("FONSI") under NEPA for biotech crops without conducting a full EIS.[126] In the first decision involving plant-made pharmaceutical biotech crops, the court critiqued USDA's environmental assessment ("EA") and ordered it to disclose the locations of field trials, despite objections that eco-terrorists lay in wait to destroy all such crops.[127]

In the second case, the court determined that the field trials of Roundup Ready™ bentgrass were handled in an "arbitrary and capricious"[128] manner that did not adequately assess impacts to nearby related plant species. Therefore, USDA's FONSI was deemed "arbitrary and capricious."[129] The court also held that the plaintiffs had suffered the requisite "injury in fact" required for standing to pursue their claim.[130] This led to an order of environmental remediation to eliminate the straying bentgrass from the surrounding environment.[131]

In yet another recent NEPA case, summary judgment was granted to defendants in a challenge to the deregulation of biotech alfalfa.[132] The court found that neither biotech contamination of conventional alfalfa nor increased herbicide use constituted a "plant pest" under the Plant Protection Act ("PPA"), 7 U.S.C. §§ 7701-7786.[133] A similar case had been to the U.S. Supreme Court, which affirmed a 2007 district court decision vacating USDA approval but reversed the

USDA, http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/biotechnology (last visited Oct. 19, 2015) (Follow "Program overview" hyperlink, Follow "Functions" hyperlink).

124. *See* Thomas Redick & A. Bryan Endres, *Litigating the Economic Impacts of Biotech Crops*., NATURAL RES. & ENV'T, Spring 2008, at 25, *available at* http://www.jstor.org/stable/40924948?seq=1#page_scan_tab_contents.

125. 7 U.S.C. §§ 136-136y (1996).

126. *See* Ctr. for Food Safety v. Johanns, 451 F. Supp. 2d 1165, 1178 (D. Haw. 2006).

127. *See id.* at 1182.

128. Int'l Ctr. For Tech. Assessment v. Johanns, 473 F. Supp. 2d 9, 29 (D.D.C. 2007).

129. *Id.*

130. *See id.* at 14-23.

131. *See id.* at 29-31.

132. Ctr. For Food Safety v. Vilsack, 844 F. Supp. 2d 1006, 1024-25 (N.D. Cal. 2012).

133. *Id.* at 1018.

order of a nationwide injunction against any planting of this alfalfa.[134]

More recently, however, USDA won a round in a suit in the U.S. District Court for the Southern District of Florida involving biotech eucalyptus trees.[135] In *Center for Biological Diversity v. APHIS*, environmental groups challenged the EA and FONSI issued by USDA prior to approving field trial permits to plant freeze resistant eucalyptus trees.[136] The court granted USDA's summary judgment motion in October 2011.[137]

H. Coexistence Litigation in Australia – Marsh v. Baxter

One of the only cases involving a legal dispute between neighboring farmers over the migration of GM crops was recently litigated before the Supreme Court of Western Australia (a trial court).[138] In *Marsh v. Baxter*, the court refused two organic farmers' request for an injunction against a neighboring farmer growing biotech herbicide-resistant canola within 0.8 miles of the borders of their organic farm.[139] The plaintiffs, Mr. and Mrs. Marsh, were decertified by an organic certification body that had an official "zero tolerance" policy for any trace of biotech crops.[140] The defendant, Mr. Baxter, harvested the conventional (biotech) canola on his neighboring farm by "swathing," which caused canola seed to blow onto the plaintiffs' farm.[141] Although the Marshes had never grown canola and there was no evidence of GM canola seeds growing on their farm, the certifier nevertheless denied certification for 70 percent of their farmland based on the perceived risk of "scattered GM canola spilling seeds over the soil" of the Marshes' farm.[142] As noted by the court, however, there was no risk of transferring genetic material due to the absence of a compatible species.[143]

The court ruled that the Marshes had offered no empirical or agronomic

134. Monsanto Co. v. Geertson Seed Farms, 561 U.S. 139, 166 (2010).

135. Sarah Gonzales, *APHIS Wins in Biotech Case Over Eucalyptus Tree Trials*, AGRIPULSE (Oct. 7, 2011), http://agri-pulse.com/Trees_BIO_case_10072011.asp.

136. Ctr. for Biological Diversity v. Animal & Plant Health Inspection Serv., No. 10-14175-CIV, 2011 WL 4737405, at *1 (S.D. Fla. Oct. 6, 2011).

137. *Id.* at *6.

138. *See* Marsh v. Baxter [2014] WASC 187 (CIV 1561 of 2012) (Unreported, Feb. 2014) at 5 (Austl.).

139. *Id.* at 5.

140. *Id.* at 4.

141. *Id.* at 2. Swathing refers to a method of harvesting that involves cutting the plants before they are matured and stacking the plants in the field to dry before the final phase of harvest.

142. *Id.* at 3.

143. *Id.*

justification for the distance that they wanted imposed on their neighbor, given that Baxter had assured the court that he would leave a buffer of approximately 300 meters between his canola and the Marshes' farm.[144] After remarking that this was the first case in the world wherein an organic farmer sued a transgenic farmer over coexistence legal principles, the Supreme Court held that it was the organic certifier, not Baxter, who was responsible for the Marshes' economic harm due to the unreasonably low tolerance.[145] Baxter, the biotech grower, was not found liable to his neighbor.[146]

This case is up on appeal and stirring controversy among commentators, at least some of whom disagree with the court decision, which sided with the biotech grower.[147]

I. Litigation Involving Ordinances Banning or Restricting Biotech Crops in States with Biotech Crop Opponents

In the State of Hawaii, counties on the Islands of Kauai, Hawai'i, and Maui have moved toward restricting biotech crops.[148] Industry has responded to these efforts by suing to establish their right to sell seed to any grower who wants to buy the seed and grow biotech crops.[149]

In one suit, Syngenta Seeds, Inc., Syngenta Hawaii, LLC, Pioneer Hi-Bred International, Inc., Agrigenetics, Inc., and BASF Plant Sciences LPs sued the County of Kaua'i in the U.S. District Court for the District of Hawaii to overturn Kauai County Ordinance 960.[150] That law required: (1) mandatory disclosure of the use of restricted use pesticides and the possession of GMOs by commercial agricultural entities; (2) buffer zones between neighboring property and crops to

144. *Id.* at 6.

145. *See id.* at 5.

146. *Id.*

147. *See* Maurice Thompson & Renee Amundsen, *Genetically Modified Crops - No Claims for Pure Economic Loss*, CYLDE & CO (July 1, 2014), http://www.clydeco.com/insight/updates/view/genetically-modified-crops-no-claims-for-pure-economic-loss.

148. Maureen Nandini Mitra, *In Unexpected Move, Big Island Mayor Approves Bill Restricting GMO Crops*, EARTH ISLAND J. (Dec. 6, 2013), http://www.earthisland.org/journal/index.php/elist/eListRead/in_unexpected_move_big_island_mayor_approves_bill_restricting_gmo_crops/.

149. *See* Andrew Pollack, *Limits Approved for Genetically Modified Crops in Kauai, Hawaii*, N.Y. TIMES, Oct. 16, 2013, *available at* http://www.nytimes.com/2013/10/17/business/limits-approved-for-genetically-modified-crops-in-kauai-hawaii.html.

150. Syngenta Seeds, Inc. v. Cnty. of Kauai, No. 14-00014 BMK, 2014 WL 4216022 (D. Haw. 2014).

which restricted use pesticides are applied; and (3) that Kaua'i County prepare an Environmental and Public Health Impact Study to address the impact of the use of restricted use pesticides and GMOs.[151] Granting summary judgment in favor of the plaintiffs in August, 2014, the district court held that the ordinance was preempted by state law and was therefore invalid.[152] A month later, the County of Kaua'i filed an appeal challenging the district court's decision in the Ninth Circuit.[153]

Similarly, multiple industry and growers associations challenged an ordinance restricting open air cultivation, propagation, development, and testing of genetically modified crops on the Big Island of Hawai'i.[154] Citing its decision in *Syngenta Seeds, Inc. v. County of Kauai*, the U.S. District Court for the District of Hawaii held that Hawaii County Ordinance 13-121 was invalid because it was preempted by state law and partly preempted by the federal Plant Protection Act, 7 U.S.C. §§ 7701 et seq.[155]

In yet another suit filed in the District of Hawaii, Monsanto and Dow Chemical sued the County of Maui on November 13, 2014 to challenge a Maui County ordinance banning new planting and testing of genetically engineered crops.[156]

As the use of biotech crops continues to expand, opponents will inevitably continue to push for state or local bans or limitations on the use or development of biotech crops as well as state genetically-modified food labeling requirements. Any state or local government that experiments with such legislation, however, will inevitably be challenged in federal court.

II. CONCLUSION

Companies creating biotech crops face a range of litigation challenges that can await the marketing of their crop – NEPA, nuisance, negligence, "natural" and so on. While virtually all companies creating these crops know about the regulatory bodies they must apply too, there is a less certain process for avoiding liability. Sensible companies engage their chain of commerce in a dialogue to

151. *Id.* at *1.

152. *Id.* at *15.

153. Syngenta Seeds, Inc. v. Cnty. of Kauai (9th Cir. Sept. 24, 2014) (No. 14-16833).

154. Hawai'I Floriculture & Nursery Assoc. v. Cnty. of Hawaii, No. 14-00267 BMK, 2014 WL 6685817 at *1 (D. Haw. Nov. 26, 2014) (order granting motion for summary judgment).

155. *Id.* at *11.

156. *See* Complaint, Robert Ito Farm, Inc. v. Cnty. of Maui (D. Haw. Nov. 17, 2014) (No. 1:14-cv-00511-SOM-BML).

determine whether concerns of customers could lead to liability lawsuits.

With the boundaries of common law being tested in the cases filed against Syngenta, future decisions from the court in Kansas City (and any appeals) could determine whether biotech seed companies owe growers and the grain trade a legal duty to refrain from marketing their biotech crop until all "major market approvals" are obtained. The question of what is "natural" may be defined by the federal government in time, but the courts will be asked to decide whether a "GMO" can be called natural in the meantime. With so much uncertainty regarding the boundaries of liability for biotech crops, companies in this arena are well-advised to seek counsel and reach out to their customers and end users.