Legal Liability and Agricultural Biotechnology: Ten Questions

Drew L. Kershen, J.D., LL.M.
Earl Sneed Centennial Professor of Law
College of Law
University of Oklahoma
dkershen@ou.edu

Public discourse about agricultural biotechnology often includes issues such as civil legal liability — a lawsuit by one person (called a plaintiff) against another person (called a defendant) seeking monetary damages and other legal remedies for harms that the plaintiff allegedly suffered due to conduct by the defendant. Considerable confusion and misinformation exists about this subject in regard to biotechnology, so here are some frequently asked questions followed by my analysis.

Question 1: How many lawsuits have been filed by farmer versus farmer related to transgenic crops?

Answer: To the best of the author’s knowledge, there has not been a single lawsuit by farmer versus farmer related to transgenic crops — not anywhere in the world — as of April 2009. Of course, there have been disputes between neighboring farmers about transgenic crops but none of these disputes has led to a civil legal liability lawsuit.

Question 2: What explanations might be given for this lack of litigation between farmers about transgenic crops in light of the fact that so much controversy exists?

Answer: In answering this question, it is important to remember that conflicts between neighboring farmers about their various agricultural activities are nothing new. Neighboring farmers have had conflicts about water, escaping livestock, noxious weeds, volunteer plants, pesticide drift, blowing dirt, odors, escaping fires, etc., for as long as neighbors have been neighbors. Conflicts about transgenic crops are, therefore, not fundamentally different in kind than sources of disputes that existed in the past.

While farmers have filed lawsuits against neighboring farmers with respect to some of the sources of conflicts listed in the prior paragraph (especially escaping livestock), farmers have also had other ways of agreeably handling potential sources of conflict without resorting to litigation. Farmers know that they must coexist. Hence, farmers look for agronomic techniques of coexistence such as distances between crops, timing of planting crops, barrier rows, removal of volunteers from fields and roadsides, and other agronomic techniques. Coexistence works for transgenic crops just as it does for other crops.
Farmers know that all the seeds in a field are not genetically identical and thus that crops are not 100-percent pure. Farmers and processors thus generally set tolerances or thresholds for low levels of the inadvertent presence of various substances. Tolerances or thresholds can apply to transgenic crops, too. Farmers generally want to be neighborly, meaning that farmers want themselves and their fellow farmers to be able to choose to farm as the individual farmer sees best for a particular farm. Farmers thus try to get along and to communicate with one another about potential conflicts. Farmers try to get along and communicate about transgenic crops too.

These three explanations — coexistence, thresholds, and neighborliness — likely provide the answer to Question #2.

**Question 3: What about legal liability to organic farming and about contracts that call for “GMO free” production?**

**Answer:** To the best of the author’s knowledge, as of April 2009, not a single organic farmer has lost certification for his or her farm or its organic products due to the low-level presence of transgenic material on the farm or in the product. The reason for this is simple — unintentional, low-level presence of transgenic material does not constitute a violation of an organic producer’s organic production plan.

In comments accompanying the National Organic Program Final Rules (2000), the USDA wrote:

> “When we are considering drift issues, it is particularly important to remember that organic standards are process based. Certifying agents attest to the ability of organic operations to follow a set of production standards and practices that meet the requirements of the Act and the regulations. This regulation prohibits the use of excluded methods in organic operations. The presence of detectable residue of a product of excluded methods alone does not necessarily constitute a violation of this regulation. As long as an organic operation has not used excluded methods and takes reasonable steps to avoid contact with the products of excluded methods as detailed in their approved organic system plan, the unintentional presence of the products of excluded method should not affect the status of an organic product or operation” NOP Final Rule, [http://www.ams.usda.gov/nop/NOP/standards/FullText.pdf](http://www.ams.usda.gov/nop/NOP/standards/FullText.pdf) at p. 34.

With regard to contracts that call for “GMO free” production, farmers who voluntarily sign contracts containing a “GMO free” clause must make a decision as to whether they can meet that production specification and whether the premium paid for that specification is sufficient to cover the farmer’s additional costs in producing a “GMO free” product. In the United States and Canada, the legal rule is that the person who voluntarily signs a contract to meet certain specifications is the person who has the legal obligation to bear the costs to satisfy that contract specification. This legal rule that the person seeking to gain a premium bears the costs and the contractual risks of the contract specification is a widespread legal rule, though it is now being modified in some European countries in light of the controversies about transgenic crops.
Question 4: What are the common law claims for legal liability that might be asserted in a lawsuit involving agricultural biotechnology?

Answer: In a lawsuit, a plaintiff makes (alleges) a claim against a defendant. Plaintiffs have four common law claims that are the most likely claims to arise in litigation involving agricultural biotechnology.

• Negligence. Negligence exists when a defendant fails to act as a reasonable person would have acted in the factual situation and the defendant’s unreasonable conduct causes harms to the person or property of the plaintiff. Negligence is a fault-based cause of action because the plaintiff must prove that the defendant was at fault for failing to act like a reasonable person — an objective standard of fault as opposed to a subjective standard of fault. In all their farming activities and commercial activities, not just related to biotechnology, farmers and companies are expected to act like reasonable persons. Failure to so act exposes the farmer or company to legal liability for damages suffered by a plaintiff as a result of proven harms.

• Trespass. Trespass involves the direct physical entry upon the property of plaintiff without permission by defendant or by things (animals, equipment, substances, or particles) under defendant’s control. Trespass exists against defendant from the act of direct entry, regardless of fault on the part of the defendant. Plaintiff is entitled to nominal damages for the act of trespass itself. However, if the plaintiff desires to gain an injunction or monetary (more than nominal) damages, the plaintiff must prove a specific harm or specific injury from the act of trespass.

• Nuisance. Private nuisance involves the unreasonable interference by defendant’s conduct with the plaintiff’s possessory use and enjoyment of her own land with emphasis more on the plaintiff’s possessory use and enjoyment than on the defendant’s conduct. Nuisance is a cause of action in which courts attempt to accommodate both plaintiff and defendant and to achieve a neighborly coexistence.

Public nuisance exists when a defendant engages in conduct that unreasonably interferes with a recognized public right. Ordinarily a public official (such as an attorney general) is the proper person to bring a legal action against a defendant to stop a public nuisance.

Anticipatory nuisance is a legal claim whereby plaintiffs seek to have a court issue an injunction to stop a defendant’s proposed conduct prior to the conduct occurring. Plaintiffs must prove that the defendant’s proposed conduct would be an unreasonable interference under a private nuisance or a public nuisance that is so severe that action should be taken before, not after, the proposed conduct occurs.

• Strict Liability. Strict liability exists when a defendant brings or does something on his land that is “abnormally dangerous,” “ultra-hazardous,” or “not natural” and, as a consequence, causes harm to the person or property of plaintiff. Strict liability exists regardless of fault on the part of the defendant. No court in the United States or Canada has ruled that a transgenic crop fully approved for commercial release by appropriate regulatory authorities is “abnormally dangerous,” “ultra-hazardous,” or “not natural.”
**Question 5: Have there been legal liability lawsuits about agricultural biotechnology that involved litigants other than farmer versus farmer?**

**Answer:** Yes, the author is aware of nine lawsuits, seeking to impose civil legal liability, against agricultural biotechnology companies. Four lawsuits in particular have received the most notoriety and are worth describing briefly.

1. *In re StarLink Corn Products Liability Litigation*, 212 F. Supp. 2d 828 (N.D. Ill. 2002). In the *StarLink* litigation, farmers and others sued Aventis CropScience USA because a transgenic corn (StarLink), that had not been approved by regulatory agencies for food use, became commingled with food corn and was used in food products. As an unapproved food ingredient, StarLink corn legally made the corn and food an “adulterated” product. U.S. food recalls ensued and other nations began to test and to reject shipments of U.S. corn. The trial court held that farmers who had suffered physical commingling of their personally-owned corn with StarLink corn had viable claims under common law theories for damages. Aventis ultimately settled these farmer and other claims for substantial sums of money.

2. *In re LL601 Rice litigation* (2007). In pending litigation in several jurisdictions, particularly Arkansas, rice growers are seeking compensation from Bayer CropScience for the economic impact of biotech rice that lacked approval at the time that the LL601 rice commingled with seed rice. After a fourteen-month investigation, the United States Department of Agriculture announced in October 2007 that it could not determine how the release from the approved field trial test site(s) had occurred or how the genetic trait had entered into the foundation seed used by farmers. Despite subsequent approval in the United States of the LL601 rice, the biotech rice also lacked approval in overseas markets and disrupted exports to various countries.

As this litigation is in the early stages of proceedings, the courts have not yet issued, as of April 2009, any substantive ruling about the civil legal liability issues in this case.

3. *Sample v. Monsanto*, 283 F. Supp. 2d 1088 (E.D. Mo. 2003). Sample, as a representative of a class of plaintiffs, brought various common law claims against Monsanto Company for economic losses from indirect impacts in export markets of U.S.-origin corn and soybeans. Plaintiffs alleged that the corn and soybeans were not fully approved in Europe, resulting in market rejection. Plaintiffs admitted that the corn and soybeans were fully approved for commercial release within the United States and other important export markets.

The trial court ruled that the plaintiff failed to allege and document facts that fit the “physical injury” standard set forth in the *StarLink* litigation. As a result, the trial court dismissed the lawsuit without directly ruling on the issue as to whether a crop fully approved for domestic commercialization could give rise to viable legal claims related solely to export market rejections.

Plaintiffs brought a class action lawsuit against several agricultural biotechnology companies for the alleged loss of the European market for organic canola and for loss of the opportunity to grow organic canola. Plaintiffs did not allege any harm to human or animal health because the transgenic canola, the focus of the litigation, had been fully approved for commercial release by Canadian regulatory authorities.

In a lengthy opinion running to more than 100 printed pages, the trial court explored the various common law claims for the imposition of legal liability. The trial judge rejected all common law claims as lacking factual and legal support. Moreover, the trial judge stated that even if the common law claims were well-grounded in fact and law, the trial judge would still have dismissed the common law claims because the plaintiffs sought recovery solely for “pure economic loss.” The trial court also rejected two of the three environmental claims presented by plaintiffs. These environmental claims raised issues of administrative (regulatory) liability and not the imposition of civil legal liability for damages.

**Question 6: What are the types of damages that a plaintiff may recover in an agricultural biotechnology lawsuit?**

**Answer:** In a lawsuit, plaintiffs allege claims about harms suffered and seek recovery of damages caused by those harms proven. Damages compensate for the actual physical loss or injury that the plaintiff proves occurred due to the defendant’s conduct in light of the plaintiff’s legal claims. Damages are recoverable for physical loss or injury to person or property proven by the plaintiff.

As a general rule, however, plaintiffs are not entitled to damages for lost opportunities unrelated to physical loss or injury. Examples are if plaintiff seeks damages because the plaintiff lost access to an export market, or plaintiff has a crop rejected by a market based on consumer concerns or preferences, or plaintiff no longer has a market to grow a particular crop. Claims of the types just enumerated are called “pure economic loss.” Courts in the United States and Canada, except in limited circumstances, do not allow plaintiffs to recover for “pure economic loss.”

In the cases described briefly in Question #4, the *StarLink* litigation involved actual physical loss because the unapproved transgenic corn became commingled with food corn, making the food corn an “adulterated” product. Plaintiffs recovered damages for this actual physical loss.

By contrast, in the *Hoffman & Beaudoin* litigation, the plaintiffs sought damages for the loss of export markets and for the loss in having organic canola as a viable alternative crop on their farms. The trial court rejected these claims as claims for “pure economic loss.” The trial court ruled that Canadian law does not grant damages for “pure economic loss” because the liability is too indeterminate in amount, too indeterminate in length of time, and too indeterminate with regard to the class of situations for which a claim might be made.
In the *Sample* litigation, the trial court indicated, without directly ruling on the issue, that the “pure economic loss” rule would likely prevent recovery by plaintiffs based solely on market rejection in export markets of transgenic corn and soybeans fully approved for commercial release in the United States.

The *LLRice 601* litigation raises issues of “pure economic loss.” As this litigation is in its early stages, the courts have not yet ruled about the application and the implications of the “pure economic loss” rule to the factual situation presented in that particular case.

**Question 7: Is there an international treaty or convention related to legal liability for agricultural biotechnology?**

**Answer:** Under the authority of Article 27 of the Cartagena Protocol on Biosafety, there are ongoing negotiations about an international liability and redress regime. These negotiations began in 2004 with a (now) deadline of 2010 for the completion of the negotiations. Thus, as of April 2009, there is not any international treaty or convention related to legal liability for agricultural biotechnology.

At the end of the May 2008 negotiations about Article 27, the consensus appeared to be that nations would seek to create an international system for administrative liability for environmental harms, while adopting non-binding guidelines for a civil legal liability system.

In light of the difficulties and differences that have emerged during these Article 27 negotiations, it is not possible to predict the outcome by the deadline of 2010.

**Question 8: Are there cases against the United States Department of Agriculture that are relevant to legal liability for agricultural biotechnology?**

**Answer:** Three federal agencies regulate agricultural biotechnology — United States Department of Agriculture, Animal Plant Health Inspection Service [USDA-APHIS], the Environmental Protection Agency [EPA], and the Food and Drug Administration [FDA]. Since the early 1980s, these agencies have been involved in a number of lawsuits relating to their administrative regulations and administrative decisions about agricultural biotechnology. However, these lawsuits are not about the imposition of civil legal liability upon farmers or biotechnology companies. These lawsuits are about administrative procedures and administrative compliance.


Of these three cases, the *Geertson Seed Farms* case has the clearest indirect implications for civil legal liability in agricultural biotechnology. In the *Geertson* decision, the trial court issued an
injunction against the further planting of glyphosate-tolerant alfalfa until such time as USDA-APHIS prepares an environmental impact statement (EIS) relating to the commercial release of transgenic alfalfa. As part of the EIS, the trial court ordered APHIS to consider the economic consequences of the commercial production of transgenic alfalfa upon other alfalfa growers (organic and conventional, hay and seed). The trial court particularly wanted APHIS to look for coexistence measures that would assure that organic and conventional growers would be able to continue their operations without harm coming from transgenic alfalfa. While the Geertson case is about a proper administrative EIS and does not raise civil legal liability issues, the court’s concerns about harms (damages) from transgenic crops can be read as indirectly implying exposure to legal liability for farmers and agricultural biotechnology companies.

In 2008, another case, Center for Food Safety v. Connor, has been filed seeking injunctive relief calling for an EIS related to transgenic sugarbeets. As this Connor case is in the very early stages of litigation, one cannot predict what decisions the court will render and what the implications of those yet-to-be-issued decisions will be. The Connor case presents claims and raises arguments that are similar to the claims and arguments of the Geertson case.

**Question 9: Are not there a number of cases between farmers and agricultural biotechnology companies about saving seed and replanting saved seed that are relevant to legal liability in agricultural biotechnology?**

**Answer:** There are a number of cases brought by seed companies, both conventional and biotech seed companies, against farmers to protect their intellectual property rights in seeds. The intellectual property is most often a patent or a plant variety certificate. Monsanto Company has been the most active company in bringing lawsuits against farmers who have planted patented seed without permission from Monsanto — a permission that is given through a technology use agreement between the particular farmer and Monsanto Company.

These lawsuits against farmers relating to intellectual property rights are about the legal concept of infringement under intellectual property laws. These infringement lawsuits are not about civil legal liability for damages allegedly caused by transgenic crops. Hence, these infringement lawsuits are important, but infringement lawsuits and civil legal liability lawsuits are separate and distinct types of lawsuits.

The most famous of these infringement lawsuits is the case from Canada where Monsanto Canada sued Percy Schmeiser. The Canadian Federal Trial Court, the Canadian Federal Appeals Court, and the Supreme Court of Canada each issued a published opinion in this infringement lawsuit. The Supreme Court of Canada affirmed that Mr. Schmeiser had infringed the patent rights that Monsanto Canada validly held in transgenic canola. The Supreme Court of Canada also ruled, however, that Mr. Schmeiser did not owe monetary damages to Monsanto Canada, Inc. for his infringement.

After this infringement litigation ended, Mr. Schmeiser more recently sued Monsanto Canada alleging harms to his land from the presence of volunteer transgenic canola plants. He sued in the small claims court of the Province of Saskatchewan. Mr. Schmeiser and Monsanto Canada
ultimately reached a settlement to this small claims case whereby Monsanto paid for the removal of the volunteer plants. However, Monsanto Canada has a program to pay for the removal of volunteer plants available to all Canadian farmers who request this assistance. This latter small claims case was a civil legal liability lawsuit.

**Question 10: Is there legal liability arising from the existence of agricultural biotechnology that may be owed to transgenic farmers, agricultural biotechnology companies, or others?**

**Answer:** There are several possible scenarios of legal liability owed to transgenic farmers, agricultural biotechnology companies, and others (consumers in particular).

With respect to consumers, under certain environmental conditions, Bt-maize has significantly reduced contamination by a mycotoxin known as fumonisin. Fumonisin is known to cause serious health conditions among animals and humans (cancers and neural tube defects). Companies must be very careful in testing for and eliminating fumonisin. Failure to use Bt-maize could possibly be considered a product defect for seed companies or food companies, if the non-Bt maize caused an animal or human health problem. Companies with defective products are exposed to civil legal liability for the harms caused by defective products.

Protestors opposed to transgenic crops have engaged in farm invasions to destroy field trials or commercial fields of transgenic crops. Protestors who engage in destructive activity on farmlands are open to civil legal liability for trespass and to criminal legal liability for vandalism. In Canada and the United States, farm invasions have been rare. Europe has seen a goodly number of farm invasions with varying responses from farmers, biotechnology companies, and police-prosecutorial authorities.

**References for Questions**

**Question 2:**


**Question 7:**
Earth Negotiations Bulletin, vol. 9, no. 441 (Monday, 19 May 2008) pp. 7-11 *Liability and Redress.* [http://www.iisd.ca/biodiv/gs-copmop4/](http://www.iisd.ca/biodiv/gs-copmop4/) (By going to this URL, readers can locate future issues of the ENB about the Cartagena Protocol negotiations. By so doing a reader will have a way of keeping the answer to this question up-to-date with the negotiations.)
Question 9 — the official citation to the three published opinions in *Monsanto Canada, Inc. v. Schmeiser*:

  Federal Court Trial — 2001 FCT 256 (Date: 2001-03-29);
  Federal Court Appeal — 2002 FCA 309 (Date: 2002-09-04);
  Supreme Court of Canada — 2004 SCC 34 (Date: 2004-01-20)

Question 10: